# Supplementary material for "Massive: A brute force partial training evolutionary approach for multi-label learning to find them all"

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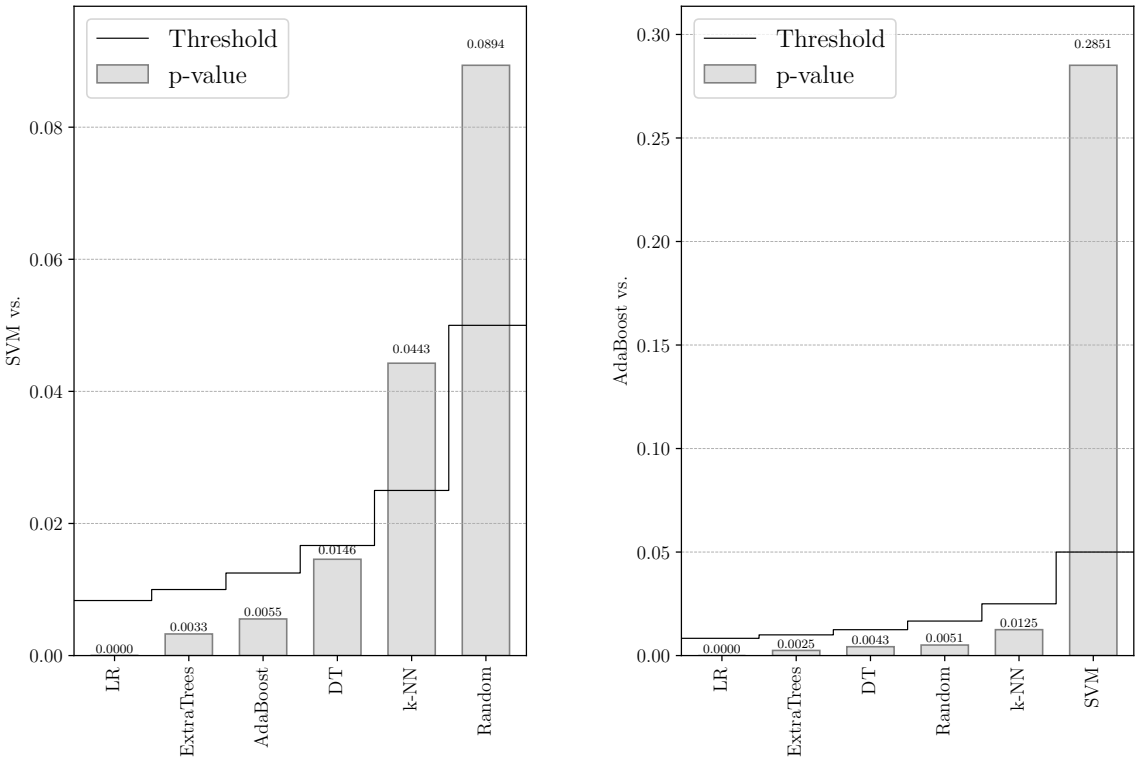
# 1 Datasets

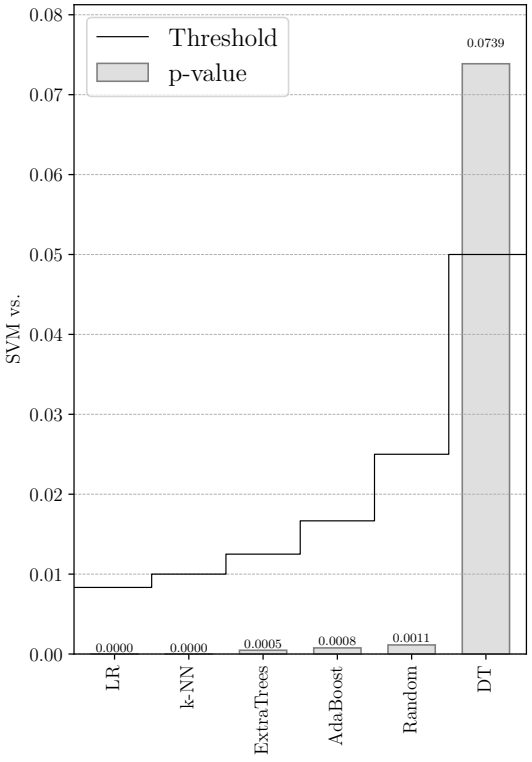
## 2 Supplementary figures



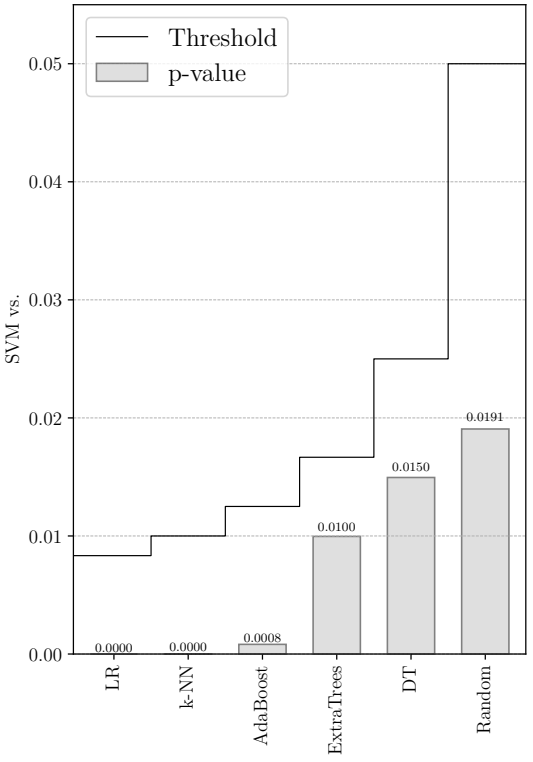

(a) Subset accuracy




(b) Hamming loss

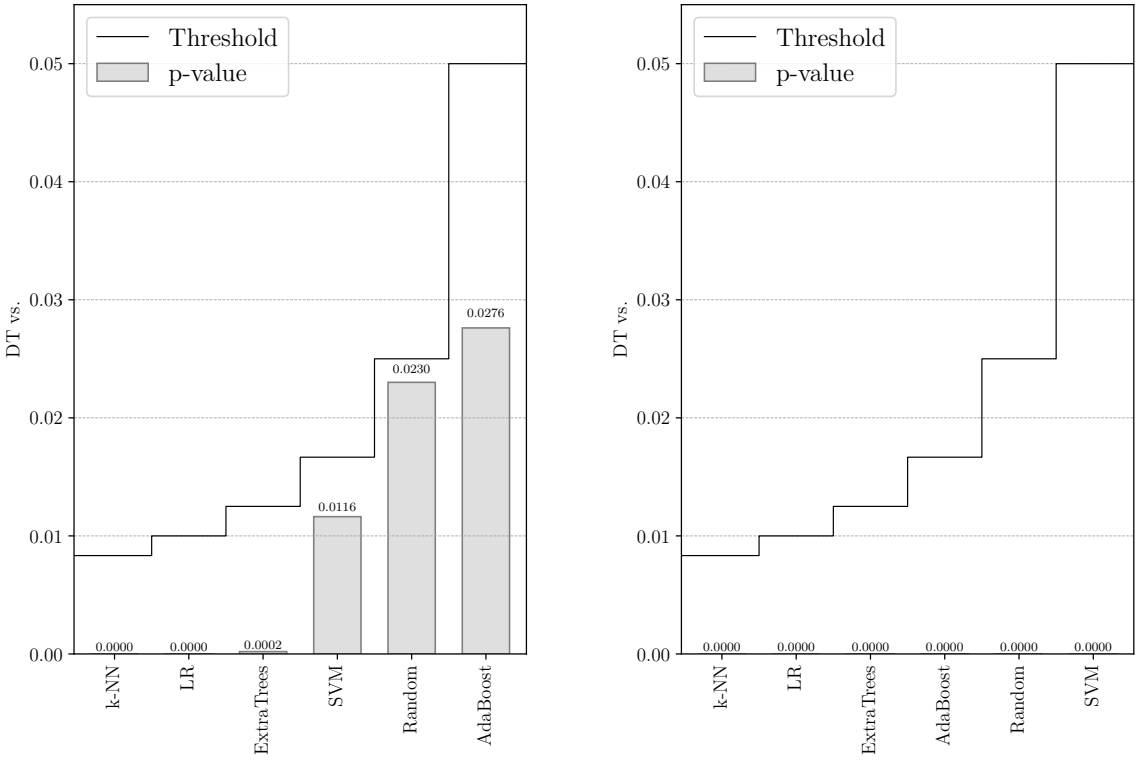



(c) Accuracy




(d) F1

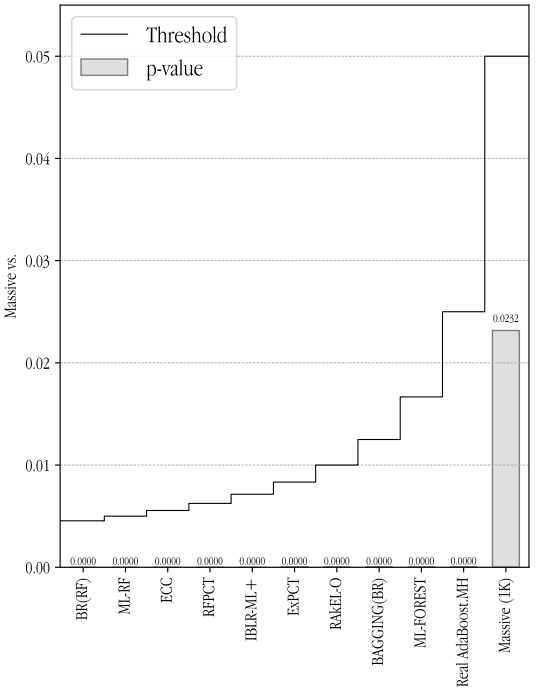
Figure 1: Holm test results for all the classification models for classification performance metrics.



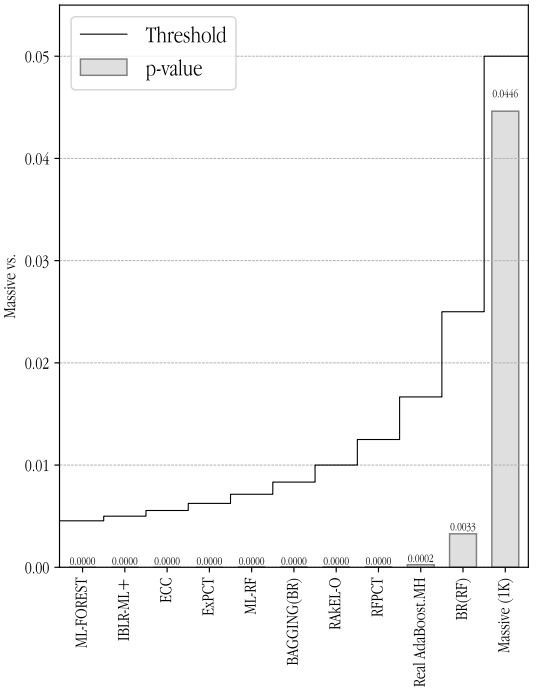

(a) Ranking-loss

(b) Average-precision

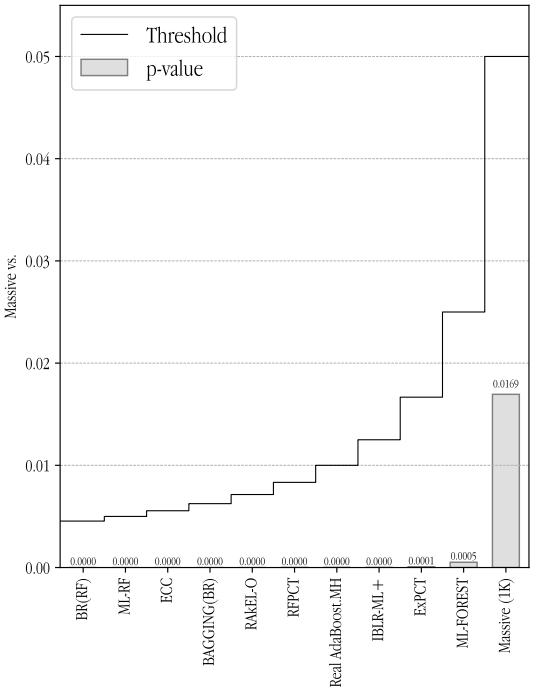
Figure 2: Holm test results for all the classification models for ranking performance metrics.



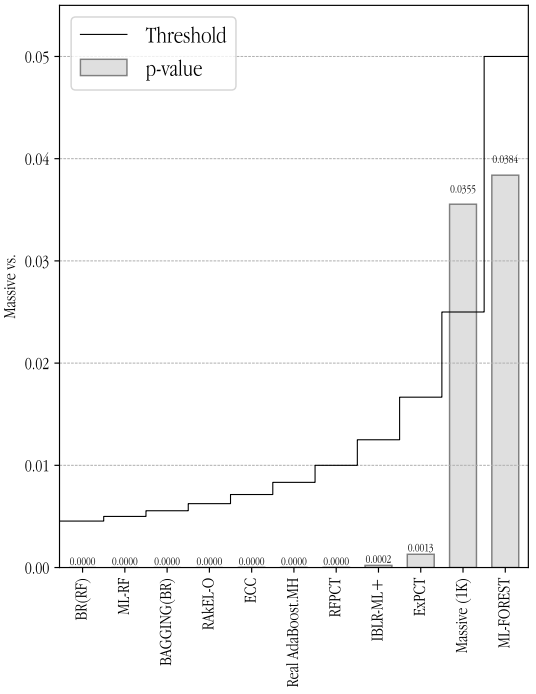

(a) Subset accuracy




(b) Hamming loss

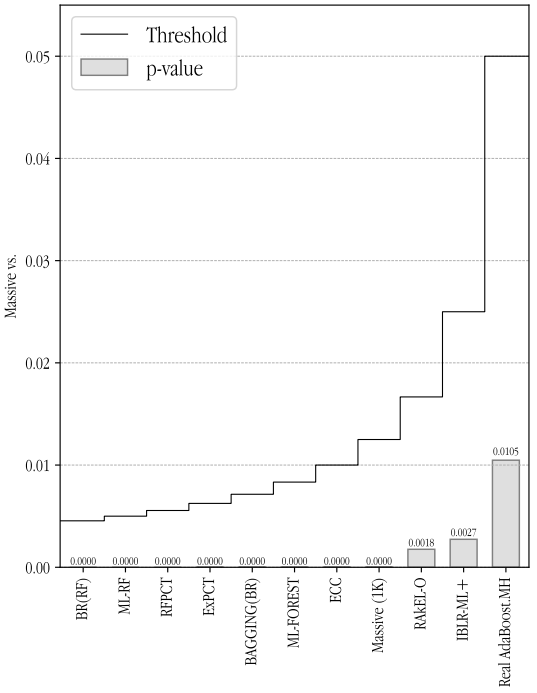



(c) Accuracy

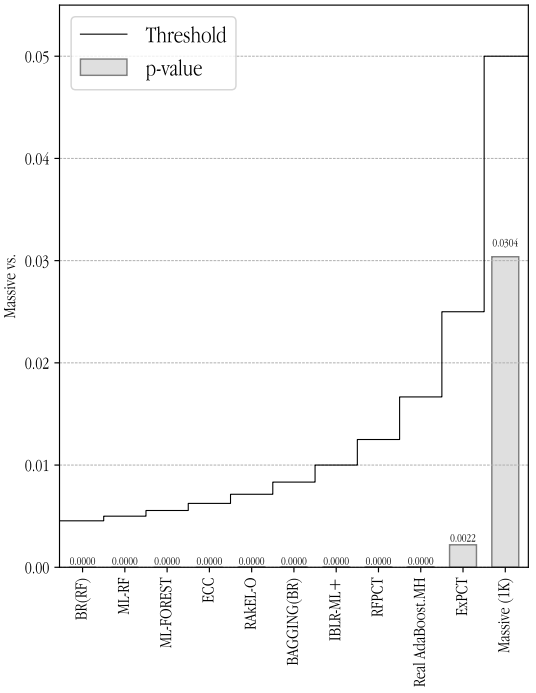



(d) F1

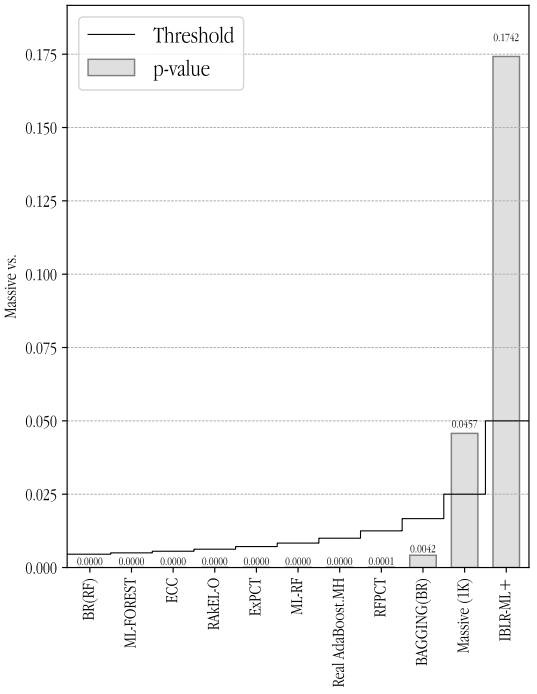
Figure 3: Holm test results for all the multi-label classification methods.



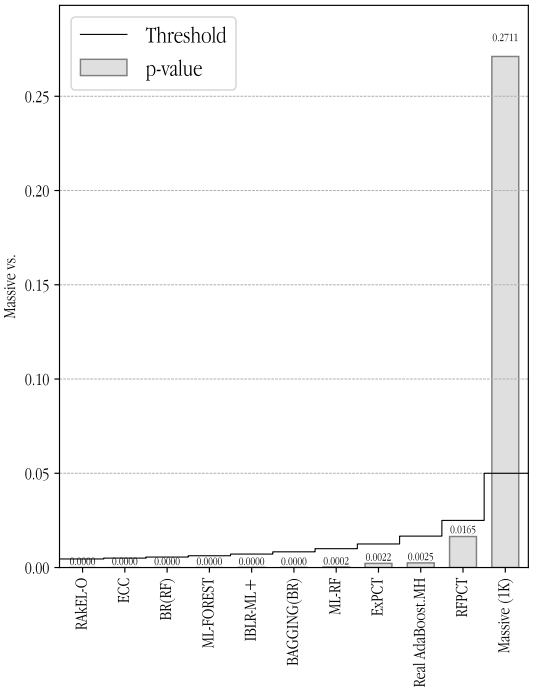

(a) F1-macro




(b) F1-micro

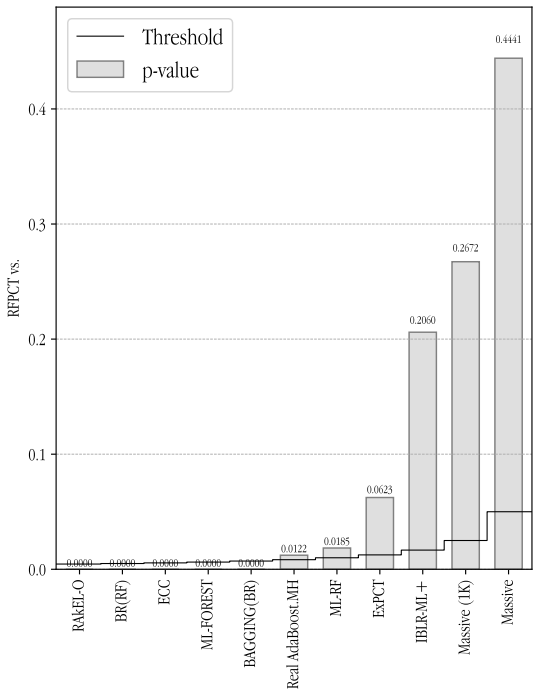



(c) One-error

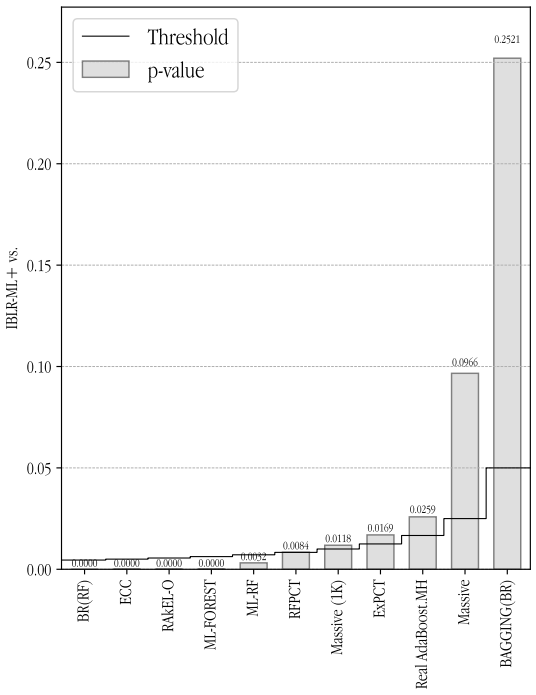



(d) Coverage

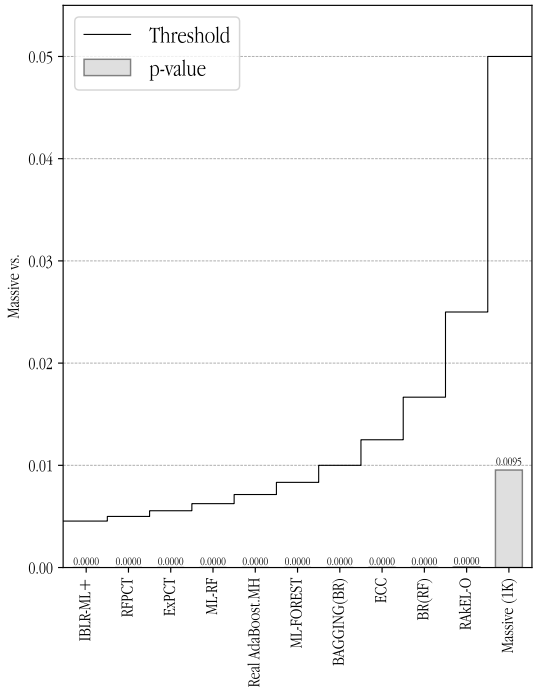
Figure 4: Holm test results for all the multi-label classification methods.



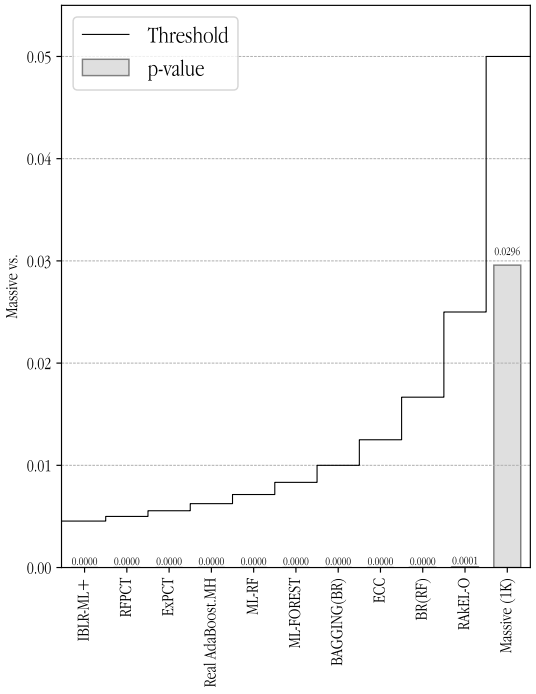

(a) Ranking-loss




(b) Average-precision




(c) AUC-macro




(d) AUC-micro

Figure 5: Holm test results for all the multi-label classification methods.

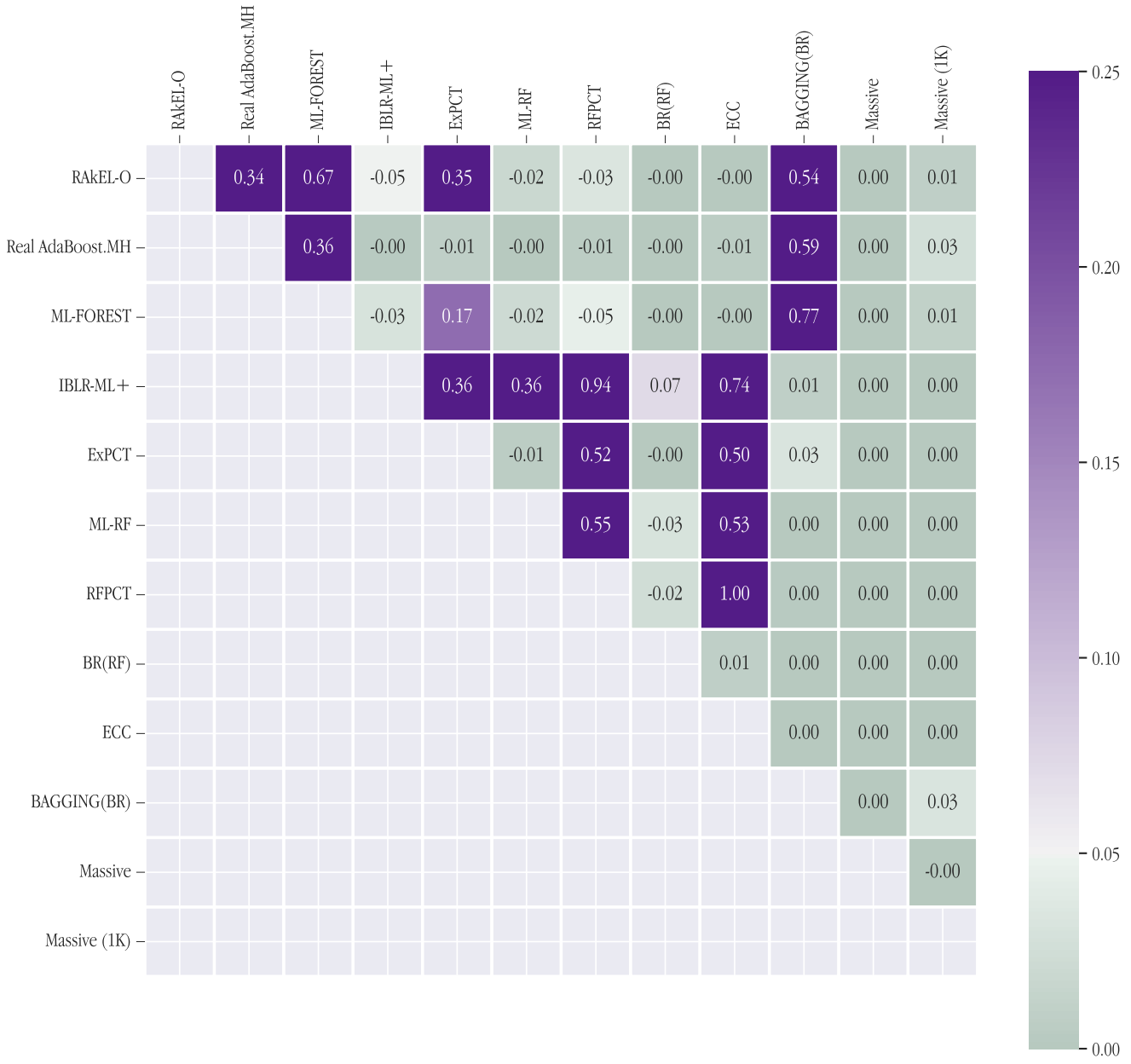



Figure 6: Wilcoxon test results for all the methods for subset accuracy metric.

Figure 7: Wilcoxon test results for all the methods for Hamming loss metric.

Figure 8: Wilcoxon test results for all the methods for accuracy metric.

Figure 9: Wilcoxon test results for all the methods for F1 metric.

Figure 10: Wilcoxon test results for all the methods for F1-macro metric.

Figure 11: Wilcoxon test results for all the methods for F1-micro metric.

Figure 12: Wilcoxon test results for all the methods for one-error metric.

Figure 13: Wilcoxon test results for all the methods for ranking loss metric.

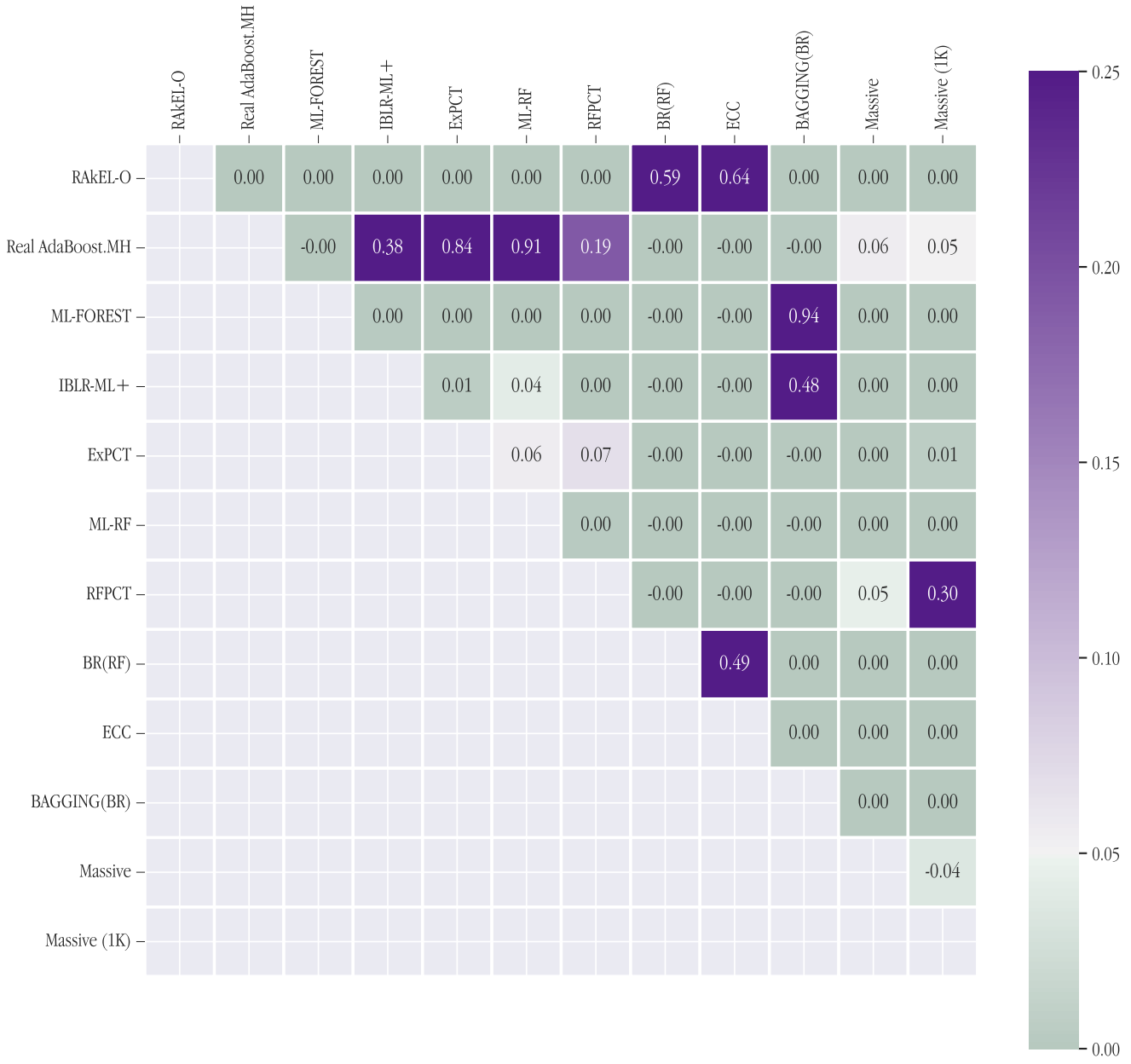



Figure 14: Wilcoxon test results for all the methods for coverage metric.

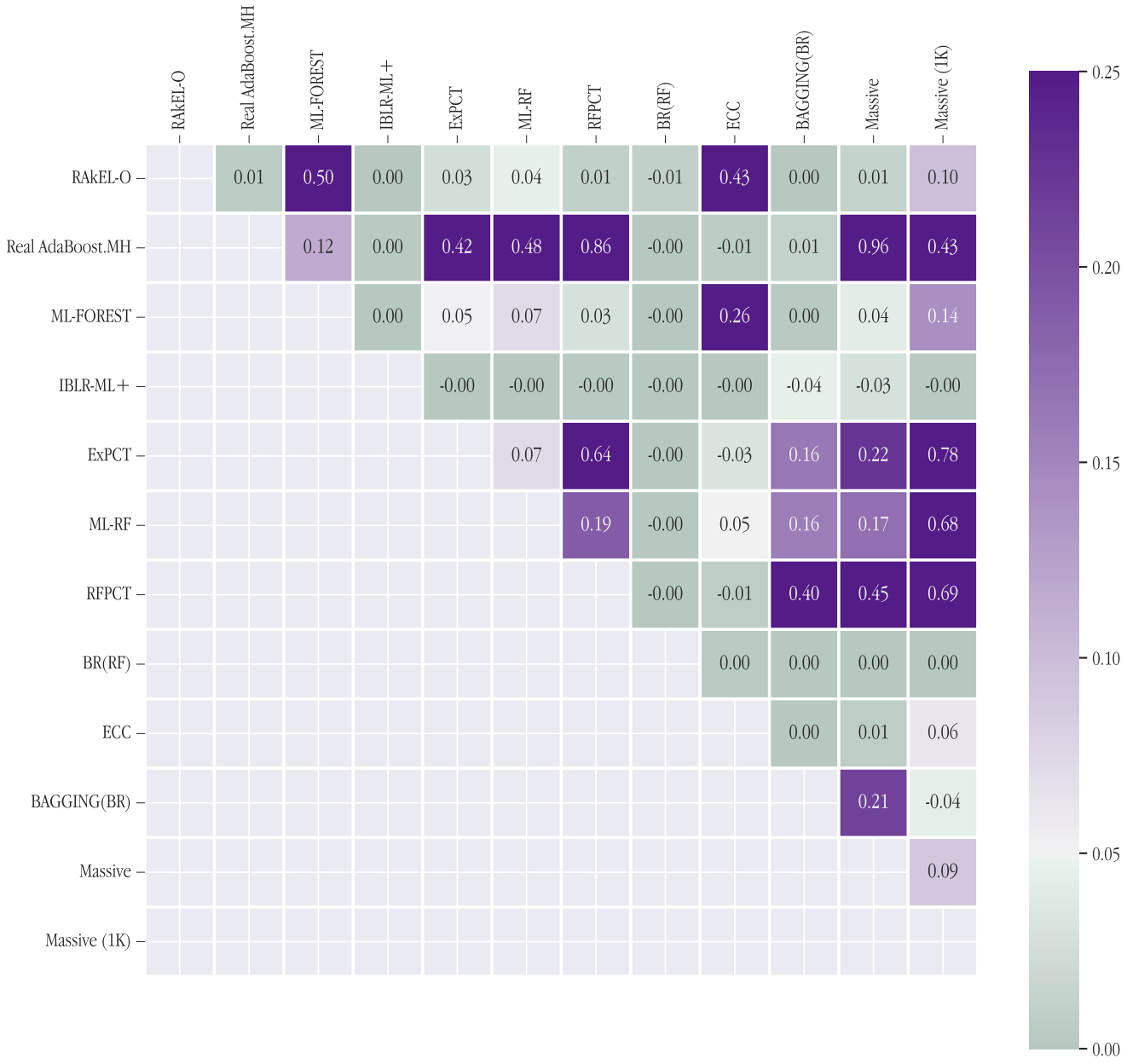
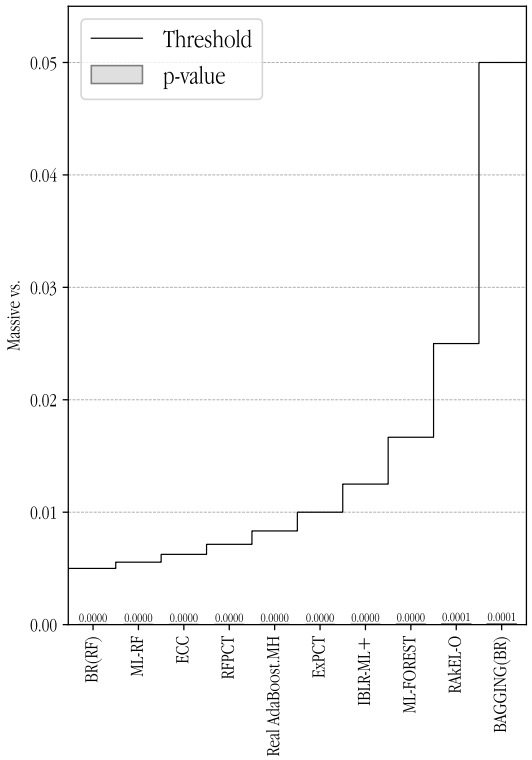


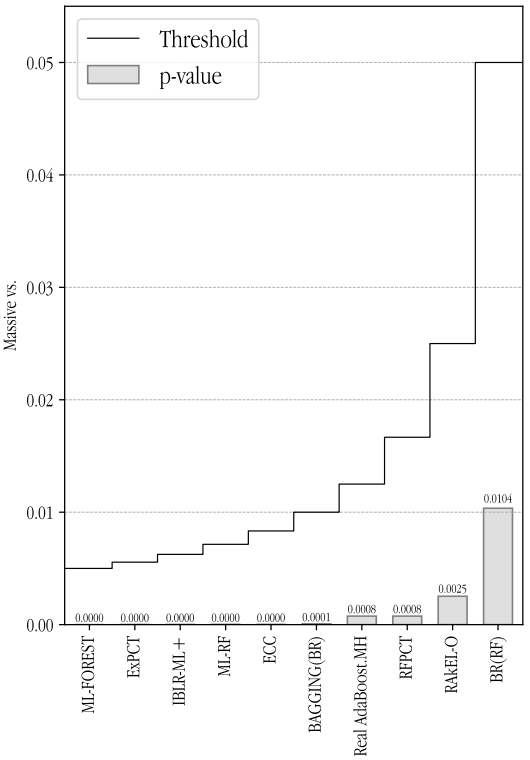

Figure 15: Wilcoxon test results for all the methods for average precision metric.

Figure 16: Wilcoxon test results for all the methods for AUC-macro metric.

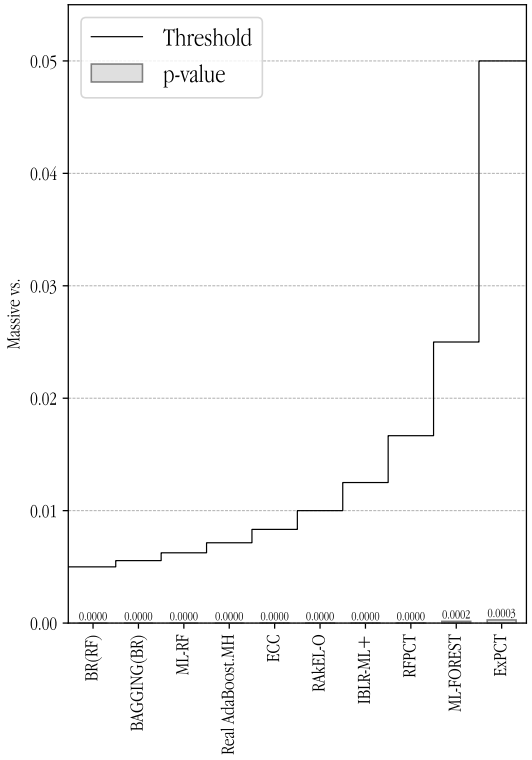
Figure 17: Wilcoxon test results for all the methods for AUC-micro metric.



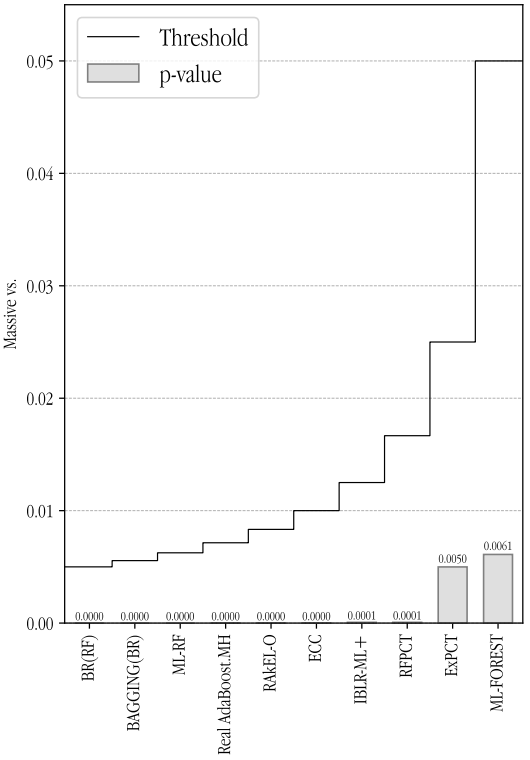

(a) Subset accuracy




(b) Hamming loss

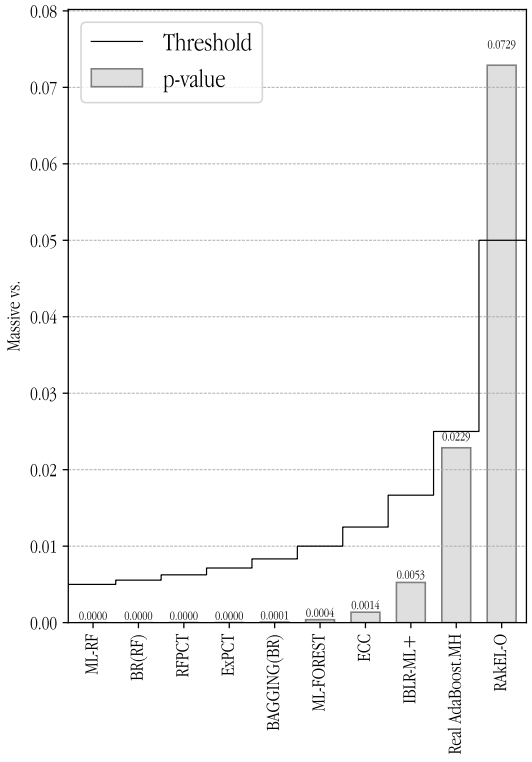



(c) Accuracy

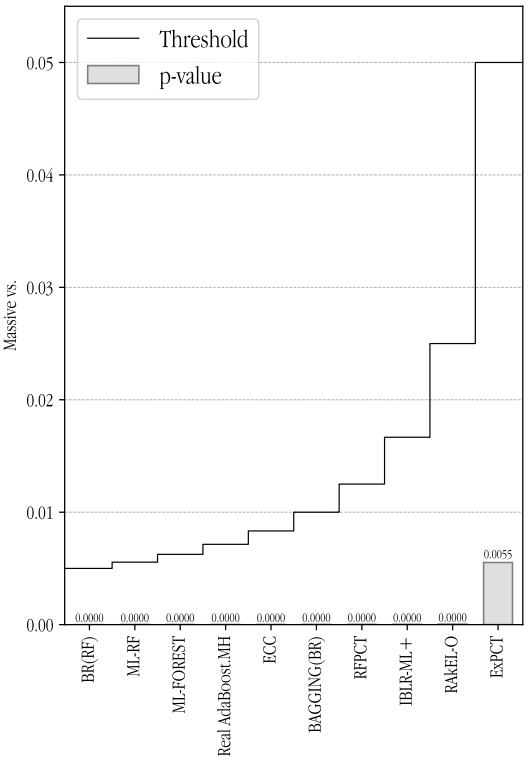



(d) F1

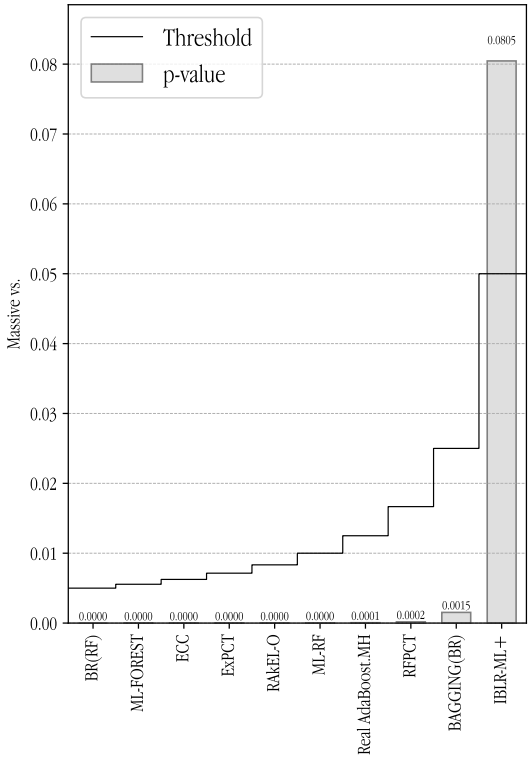
Figure 18: Holm test results for all the multi-label classification methods for class-imbalanced datasets.



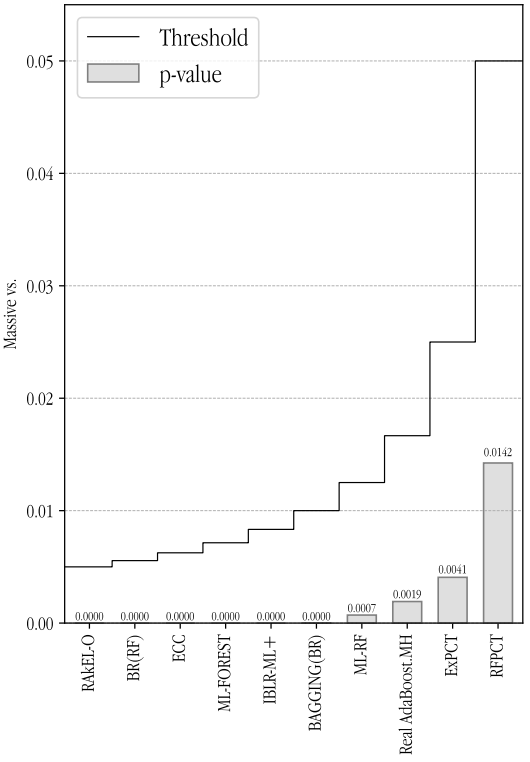

(a) F1-macro




(b) F1-micro

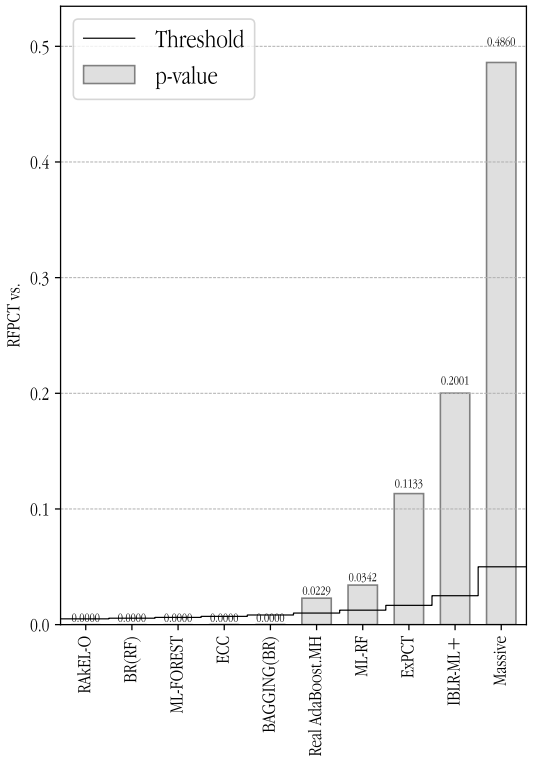



(c) One-error

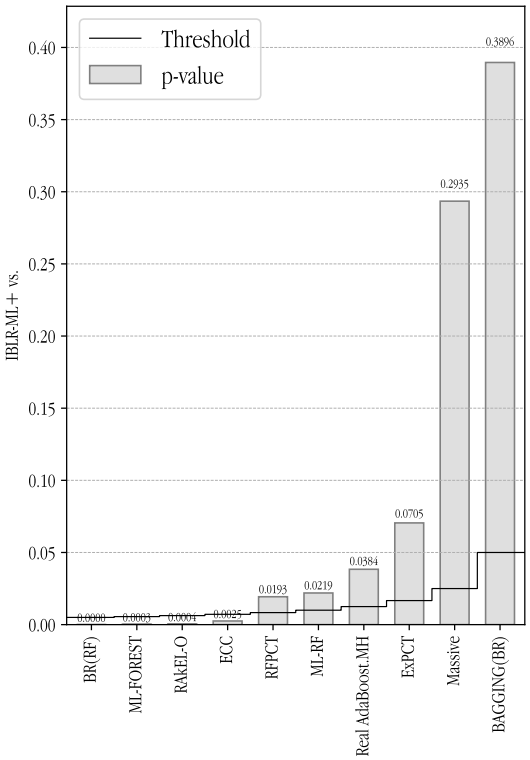



(d) Coverage

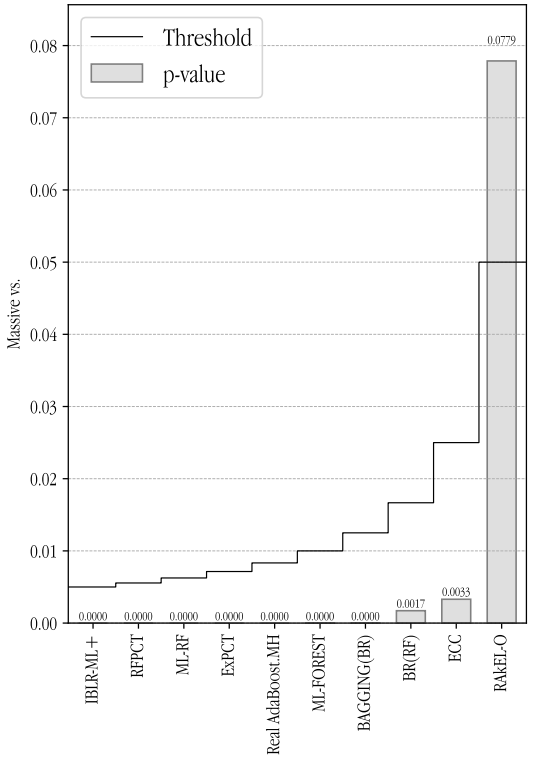
Figure 19: Holm test results for all the multi-label classification methods for class-imbalanced datasets.



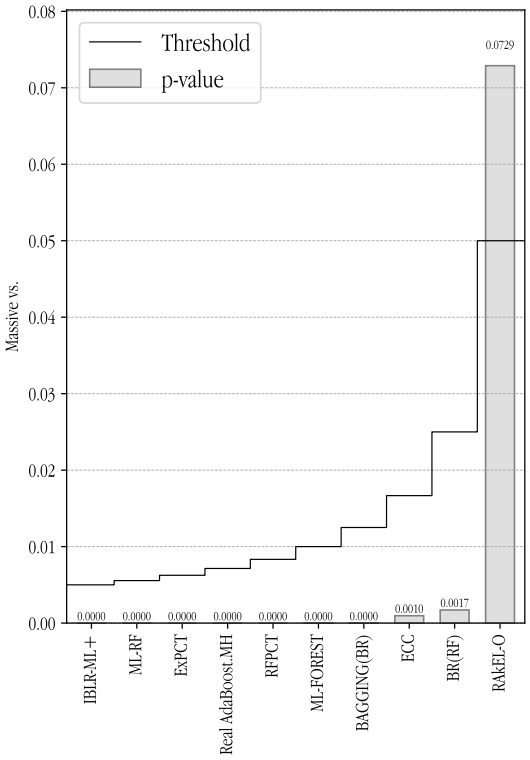

(a) Ranking-loss




(b) Average-precision

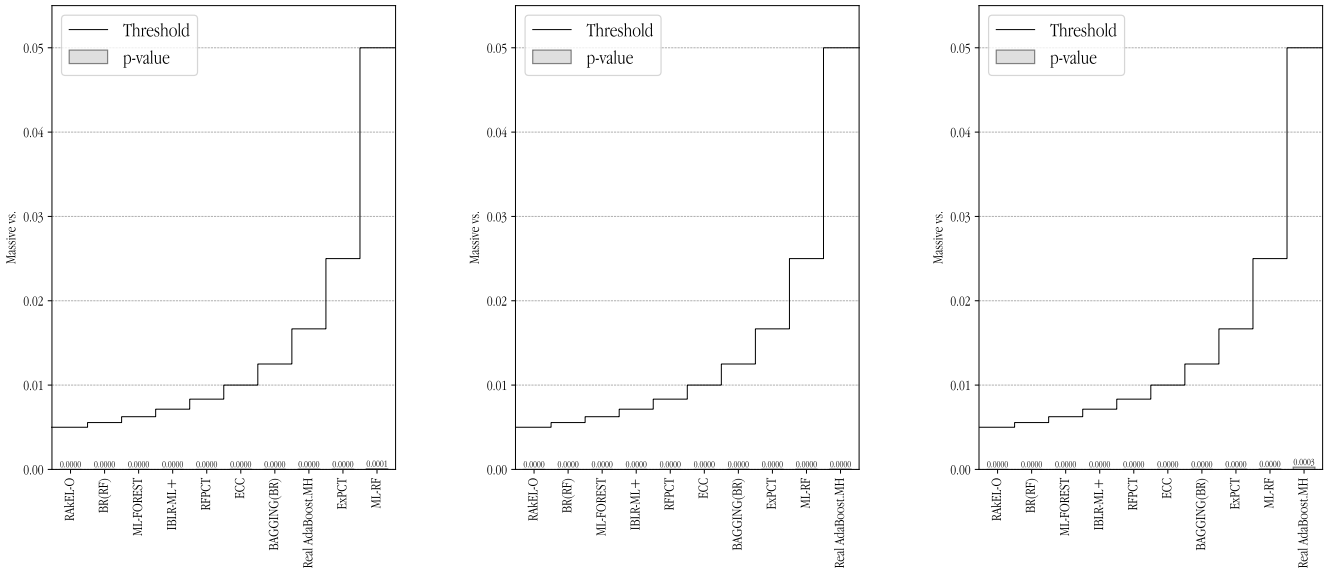



(c) AUC-macro




(d) AUC-micro

Figure 20: Holm test results for all the multi-label classification methods for class-imbalanced datasets.



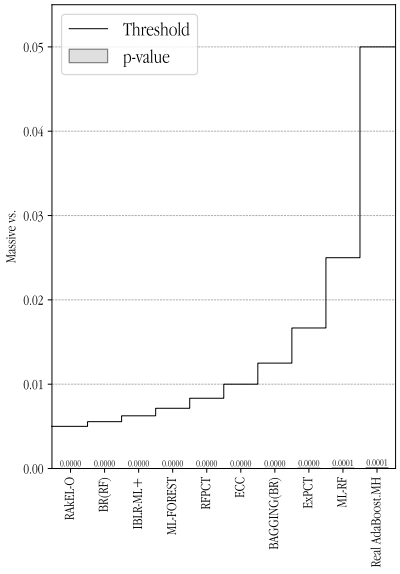

(a) 1%



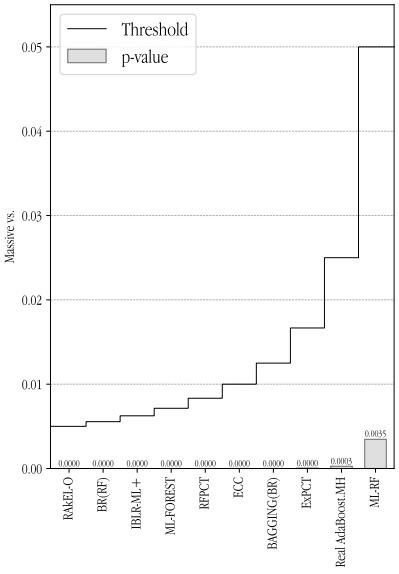

(b) 2.5%




(c) 5%

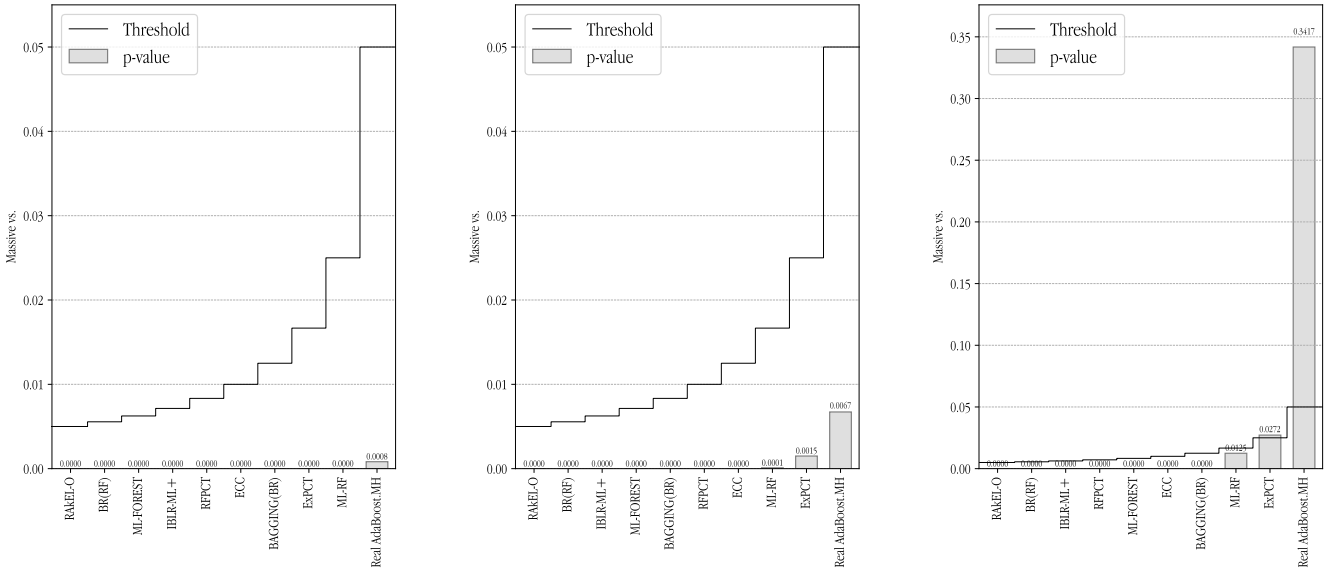



(d) 10%

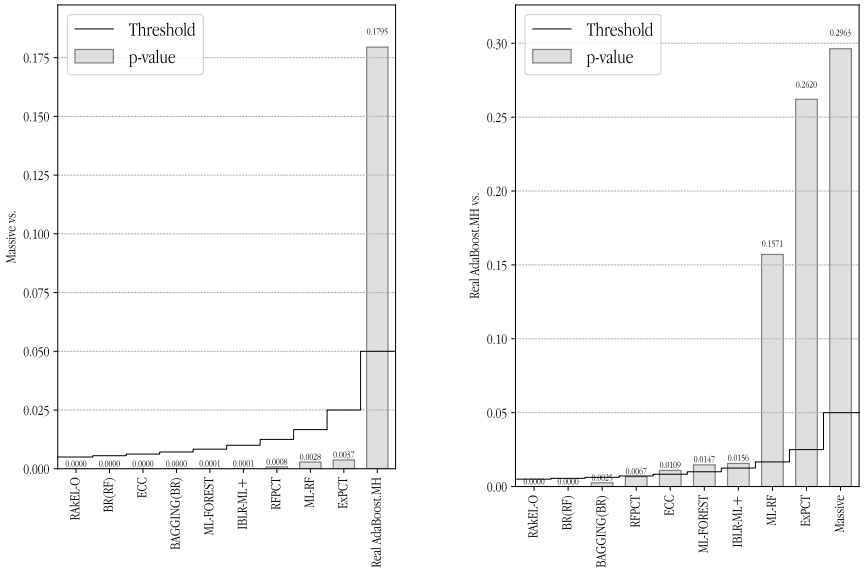



(e) 25%

Figure 21: Holm test results for all the multi-label classification methods and F1 metric for the five missing label ratios.




(a) 1% (b) 5% (c) 10%




(d) 15% (e) 20%

Figure 22: Holm test results for all the multi-label classification methods and F1 metric for the five noise ratios.

# 3 Detailed results

Detailed results for all experiments and the following metrics: Subset accuracy (SA), Hamming loss (HL), Accuracy (A), F1, F1 macro averaged (F1-mac), F1 micro averaged (F1-mic), One-error (OE), Coverage (C), Ranking loss (RL), Average precision (AP), AUC macro averaged (AUC-mac), and AUC micro averaged (AUC-mic).

### 3.0.1 Classification methods

Table 1: Detailed results for SVM for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5628 | 0.0260 | 0.6010 | 0.6199 | 0.7099 | 0.7150 | 0.3268 | 2.8345 | 0.2742 | 0.7373 | 0.9922 | 0.9922 |
| 3s-bbc1000 | 0.1111 | 0.2963 | 0.1667 | 0.2037 | 0.1722 | 0.2195 | 0.7778 | 3.0000 | 0.7019 | 0.4241 | 0.7818 | 0.7305 |
| 3s-guardian1000 | 0.2903 | 0.2204 | 0.3978 | 0.4510 | 0.2865 | 0.4384 | 0.5161 | 2.2258 | 0.5290 | 0.5978 | 0.8749 | 0.8588 |
| 3s-inter3000 | 0.2941 | 0.2353 | 0.3235 | 0.3376 | 0.0870 | 0.3333 | 0.7647 | 2.7059 | 0.9529 | 0.4510 | 0.7734 | 0.9411 |
| 3s-reuters1000 | 0.1333 | 0.3111 | 0.1333 | 0.1333 | 0.0670 | 0.1250 | 0.8667 | 2.6667 | 0.8000 | 0.3833 | 0.8355 | 0.7542 |
| amphibians | 0.0556 | 0.3095 | 0.4452 | 0.6732 | 0.2792 | 0.5714 | 0.2222 | 2.5000 | 0.1167 | 0.8570 | 0.7364 | 0.8030 |
| bibtex | 0.1838 | 0.0120 | 0.3547 | 0.4451 | 0.3074 | 0.4724 | 0.4311 | 72.7608 | 0.5786 | 0.4289 | 0.9977 | 0.9977 |
| birds | 0.1795 | 0.0864 | 0.3226 | 0.3930 | 0.2697 | 0.4182 | 0.5128 | 7.8462 | 0.5060 | 0.5024 | 0.8441 | 0.9359 |
| bookmarks10% | 0.1834 | 0.0088 | 0.2150 | 0.2373 | 0.1118 | 0.2626 | 0.7255 | 105.0171 | 0.7631 | 0.2604 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1601 | 0.1562 | 0.2719 | 0.0430 | 0.2664 | 0.5098 | 151.0588 | 0.7115 | 0.3898 | 0.8475 | 0.9597 |
| corel16k001 | 0.0051 | 0.0189 | 0.0471 | 0.0699 | 0.0305 | 0.0893 | 0.8744 | 114.6253 | 0.9426 | 0.0895 | 0.9989 | 0.9989 |
| Corel5k | 0.0100 | 0.0091 | 0.0500 | 0.0713 | 0.0196 | 0.1003 | 0.8460 | 164.6020 | 0.9346 | 0.1630 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.6084 | 0.0213 | 0.0418 | 0.0488 | 0.0418 | 0.6967 | 920.1815 | 0.9614 | 0.0574 | 0.9945 | 0.9996 |
| emotions | 0.3167 | 0.1944 | 0.5847 | 0.7062 | 0.6785 | 0.6983 | 0.3000 | 1.7833 | 0.2448 | 0.7869 | 0.9006 | 0.8901 |
| enron | 0.1813 | 0.0522 | 0.4449 | 0.5669 | 0.1351 | 0.5439 | 0.2807 | 23.7895 | 0.3654 | 0.6072 | 0.8255 | 0.9809 |
| EukaryoteGO | 0.7101 | 0.0188 | 0.7889 | 0.8283 | 0.7341 | 0.8224 | 0.1701 | 0.8969 | 0.0525 | 0.8918 | 0.9933 | 0.9948 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.1500 | 0.2571 | 0.5750 | 0.7091 | 0.5478 | 0.7143 | 0.4000 | 3.4500 | 0.2817 | 0.7815 | 0.7472 | 0.8164 |
| foodtruck | 0.3659 | 0.1402 | 0.4917 | 0.6008 | 0.1075 | 0.4889 | 0.2439 | 4.6098 | 0.4729 | 0.7172 | 0.8604 | 0.9604 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0149 | 0.2985 | 0.0024 | 0.9885 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9357 | 0.0125 | 0.9500 | 0.9571 | 0.8192 | 0.9517 | 0.0357 | 0.1214 | 0.0245 | 0.9768 | 0.8740 | 0.9981 |
| GnegativePseAAC | 0.7714 | 0.0509 | 0.7952 | 0.8071 | 0.4683 | 0.8014 | 0.1714 | 0.6214 | 0.1515 | 0.8772 | 0.8629 | 0.9903 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8699 | 0.9333 | 0.0577 | 0.1538 | 0.0449 | 0.9615 | 0.9986 | 0.9983 |
| GpositivePseAAC | 0.7500 | 0.1250 | 0.7500 | 0.7500 | 0.5688 | 0.7500 | 0.2500 | 0.5385 | 0.2500 | 0.8365 | 0.9841 | 0.9760 |
| HumanGO | 0.7010 | 0.0358 | 0.7629 | 0.7959 | 0.7029 | 0.7726 | 0.1608 | 1.0643 | 0.0996 | 0.8818 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.3537 | 0.0914 | 0.4068 | 0.4347 | 0.1844 | 0.4265 | 0.5434 | 3.6109 | 0.5035 | 0.5704 | 0.9581 | 0.9589 |
| Image | 0.5450 | 0.1690 | 0.6175 | 0.6545 | 0.6308 | 0.6253 | 0.3050 | 1.0200 | 0.2850 | 0.7959 | 0.9347 | 0.9312 |
| IMDB-ECC-F10% | 0.0597 | 0.0844 | 0.1470 | 0.1947 | 0.0277 | 0.1938 | 0.6321 | 12.3386 | 0.7342 | 0.3751 | 0.9907 | 0.9763 |
| IMDB-F10% | 0.0522 | 0.0904 | 0.1408 | 0.1910 | 0.0279 | 0.1925 | 0.5857 | 12.7755 | 0.7197 | 0.3867 | 0.9855 | 0.9750 |
| LLOG-F | 0.1639 | 0.0158 | 0.1933 | 0.2109 | 0.0521 | 0.2857 | 0.7459 | 28.7049 | 0.7876 | 0.2752 | 0.5982 | 0.9978 |
| mediamill10% | 0.0879 | 0.0317 | 0.4129 | 0.5683 | 0.0370 | 0.5116 | 0.2399 | 57.9976 | 0.4335 | 0.5504 | 0.8123 | 0.9932 |
| medical | 0.6633 | 0.0100 | 0.7662 | 0.8162 | 0.3063 | 0.8240 | 0.1735 | 5.0510 | 0.1336 | 0.8325 | 0.5526 | 0.9975 |
| Music | 0.2833 | 0.1694 | 0.5861 | 0.7192 | 0.7288 | 0.7359 | 0.3167 | 2.0000 | 0.2543 | 0.7904 | 0.9088 | 0.8972 |
| NUS-WIDE-bow10% | 0.1836 | 0.0250 | 0.3109 | 0.3772 | 0.0418 | 0.3791 | 0.5219 | 34.2350 | 0.5868 | 0.4398 | 0.8803 | 0.9913 |
| NUS-WIDE-cVLADplus10% | 0.1970 | 0.0296 | 0.3220 | 0.3867 | 0.0416 | 0.3527 | 0.6327 | 38.3635 | 0.7183 | 0.3576 | 0.8856 | 0.9967 |
| OHSUMED-F | 0.2340 | 0.0569 | 0.4327 | 0.5372 | 0.4387 | 0.5582 | 0.3575 | 7.6382 | 0.4113 | 0.6145 | 0.9765 | 0.9795 |
| PlantGO | 0.6979 | 0.0443 | 0.7240 | 0.7370 | 0.6173 | 0.7463 | 0.2292 | 0.9479 | 0.0957 | 0.8527 | 0.9895 | 0.9843 |
| PlantPseAAC | 0.2653 | 0.1114 | 0.3197 | 0.3485 | 0.1915 | 0.3610 | 0.6020 | 3.2653 | 0.5468 | 0.5340 | 0.9503 | 0.9440 |
| rcv1subset1 | 0.1150 | 0.0306 | 0.3271 | 0.4323 | 0.2374 | 0.4350 | 0.4100 | 38.4417 | 0.4071 | 0.5133 | 0.9261 | 0.9867 |
| REUTERS-K500-EX2 | 0.3333 | 0.0117 | 0.4060 | 0.4497 | 0.2318 | 0.4924 | 0.5258 | 32.0979 | 0.5321 | 0.4838 | 0.7839 | 0.9972 |
| scene | 0.7012 | 0.0809 | 0.7531 | 0.7786 | 0.7795 | 0.7683 | 0.1992 | 0.9544 | 0.2000 | 0.8373 | 0.9774 | 0.9792 |
| sider_CDK_ECFP4 | 0.0141 | 0.2546 | 0.6488 | 0.7955 | 0.6205 | 0.7930 | 0.2324 | 19.0352 | 0.1617 | 0.7985 | 0.5797 | 0.7717 |
| sider_MordredDesc | 0.0141 | 0.2681 | 0.6151 | 0.7774 | 0.6106 | 0.7782 | 0.3169 | 19.4085 | 0.1817 | 0.7627 | 0.5686 | 0.7624 |
| sider_RDKit_desc | 0.0141 | 0.2848 | 0.6273 | 0.7796 | 0.5943 | 0.7745 | 0.2535 | 20.0141 | 0.2104 | 0.7390 | 0.5873 | 0.7505 |
| SLASHDOT-F | 0.3995 | 0.0420 | 0.5064 | 0.5638 | 0.3643 | 0.5880 | 0.4048 | 5.7910 | 0.3764 | 0.6339 | 0.7581 | 0.9849 |
| solar_flare-L3 | 0.8000 | 0.1333 | 0.8000 | 0.8000 | 0.5333 | 0.8000 | 0.2000 | 0.2000 | 0.2000 | 0.9000 | 0.6667 | 0.9800 |
| Stackex_chemistry | 0.0389 | 0.0120 | 0.0991 | 0.1347 | 0.0535 | 0.1684 | 0.7925 | 105.9726 | 0.8776 | 0.1538 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0298 | 0.0100 | 0.1373 | 0.1921 | 0.0497 | 0.2563 | 0.6548 | 137.7798 | 0.8088 | 0.2050 | 0.5490 | 0.9981 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0507 | 0.0732 | 0.0221 | 0.1159 | 0.7391 | 72.3043 | 0.8229 | 0.1898 | 0.2549 | 0.9871 |
| Stackex_cooking | 0.0589 | 0.0052 | 0.1915 | 0.2597 | 0.1002 | 0.3072 | 0.6406 | 223.4725 | 0.7720 | 0.2311 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0678 | 0.0092 | 0.1701 | 0.2285 | 0.0550 | 0.2685 | 0.6834 | 134.9121 | 0.7897 | 0.2140 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2930 | 0.0620 | 0.5604 | 0.6922 | 0.5671 | 0.6697 | 0.2517 | 4.1269 | 0.1467 | 0.7761 | 0.9583 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1575 | 0.1632 | 0.3243 | 0.4099 | 0.3492 | 0.4280 | 0.4726 | 5.4007 | 0.4838 | 0.5688 | 0.8987 | 0.8990 |
| tox21_RDKit_desc | 0.1575 | 0.1732 | 0.2887 | 0.3766 | 0.2566 | 0.3684 | 0.4966 | 5.4521 | 0.4993 | 0.5586 | 0.9004 | 0.9013 |
| VirusGO | 0.7143 | 0.0556 | 0.8175 | 0.8607 | 0.6894 | 0.8511 | 0.2381 | 0.6667 | 0.1135 | 0.8587 | 0.8176 | 0.9790 |
| VirusPseAAC | 0.5714 | 0.1032 | 0.5952 | 0.6069 | 0.3833 | 0.6829 | 0.3333 | 1.0476 | 0.2524 | 0.7667 | 0.7592 | 0.9337 |
| Water-quality | 0.0094 | 0.3255 | 0.2704 | 0.4183 | 0.2612 | 0.4117 | 0.2642 | 9.0377 | 0.3439 | 0.6913 | 0.7708 | 0.7588 |
| Yahoo_Arts | 0.2003 | 0.0637 | 0.2876 | 0.3439 | 0.2097 | 0.3680 | 0.5180 | 10.4152 | 0.6266 | 0.4939 | 0.9390 | 0.9785 |
| Yahoo_Business | 0.5793 | 0.0256 | 0.7334 | 0.8194 | 0.2952 | 0.7354 | 0.0882 | 3.1907 | 0.2239 | 0.8874 | 0.8569 | 0.9952 |
| Yahoo_Computers | 0.3920 | 0.0410 | 0.4780 | 0.5378 | 0.2522 | 0.5085 | 0.3831 | 6.5799 | 0.4260 | 0.6112 | 0.8897 | 0.9823 |
| Yahoo_Education | 0.1463 | 0.0457 | 0.2027 | 0.2431 | 0.1515 | 0.3118 | 0.6160 | 9.3067 | 0.6590 | 0.4864 | 0.8866 | 0.9795 |
| Yahoo_Entertainment | 0.4184 | 0.0743 | 0.5347 | 0.5793 | 0.3536 | 0.5342 | 0.3891 | 3.9963 | 0.3942 | 0.6735 | 0.9767 | 0.9757 |
| Yahoo_Health | 0.4104 | 0.0392 | 0.5493 | 0.6289 | 0.2476 | 0.5895 | 0.3105 | 6.4235 | 0.3456 | 0.6967 | 0.8294 | 0.9855 |
| Yahoo_Recreation | 0.2377 | 0.0599 | 0.2948 | 0.3333 | 0.3080 | 0.3954 | 0.5152 | 6.4973 | 0.5465 | 0.5640 | 0.9606 | 0.9621 |
| Yahoo_Reference | 0.4508 | 0.0308 | 0.5126 | 0.5513 | 0.1769 | 0.5411 | 0.4035 | 5.4707 | 0.4356 | 0.6373 | 0.8089 | 0.9906 |
| Yahoo_Science | 0.2053 | 0.0383 | 0.2613 | 0.3035 | 0.1578 | 0.3349 | 0.6407 | 13.8989 | 0.6690 | 0.4129 | 0.9578 | 0.9843 |
| Yahoo_Social | 0.4785 | 0.0274 | 0.5385 | 0.5760 | 0.1629 | 0.5440 | 0.3696 | 7.3960 | 0.3816 | 0.6518 | 0.9133 | 0.9898 |
| Yahoo_Society | 0.3238 | 0.0840 | 0.4556 | 0.5531 | 0.2266 | 0.4651 | 0.3610 | 8.3493 | 0.4732 | 0.5868 | 0.9487 | 0.9836 |
| yeast | 0.2273 | 0.1942 | 0.5444 | 0.6690 | 0.3953 | 0.6643 | 0.2562 | 6.2025 | 0.2344 | 0.7530 | 0.8266 | 0.8841 |
| Yelp | 0.4187 | 0.1886 | 0.6332 | 0.7290 | 0.6715 | 0.7239 | 0.1974 | 1.3689 | 0.2289 | 0.8636 | 0.8774 | 0.9012 |

Table 2: Detailed results for DT for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5197 | 0.0295 | 0.5832 | 0.6145 | 0.6875 | 0.6901 | 0.2588 | 0.9362 | 0.0596 | 0.8311 | 0.9644 | 0.9660 |
| 3s-bbc1000 | 0.0833 | 0.2500 | 0.0972 | 0.1037 | 0.0905 | 0.1290 | 0.7500 | 2.3611 | 0.4458 | 0.5028 | 0.5774 | 0.5886 |
| 3s-guardian1000 | 0.0968 | 0.2043 | 0.1613 | 0.1882 | 0.2052 | 0.2692 | 0.7742 | 2.2581 | 0.4411 | 0.4860 | 0.5241 | 0.6168 |
| 3s-inter3000 | 0.0000 | 0.1961 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.7059 | 0.5250 | 0.3255 | 0.4245 | 0.5417 |
| 3s-reuters1000 | 0.0667 | 0.2167 | 0.0667 | 0.0667 | 0.0810 | 0.0930 | 0.8667 | 2.6000 | 0.5633 | 0.4019 | 0.5497 | 0.5082 |
| amphibians | 0.1667 | 0.2937 | 0.5123 | 0.6713 | 0.5673 | 0.6783 | 0.2222 | 2.6667 | 0.1102 | 0.8519 | 0.6664 | 0.7747 |
| bibtex | 0.1730 | 0.0137 | 0.3566 | 0.4551 | 0.3270 | 0.4640 | 0.3851 | 38.1986 | 0.2432 | 0.5713 | 0.9666 | 0.9739 |
| birds | 0.1282 | 0.0783 | 0.2923 | 0.3662 | 0.2718 | 0.4423 | 0.3333 | 3.5897 | 0.1223 | 0.7032 | 0.8004 | 0.8966 |
| bookmarks10% | 0.1686 | 0.0175 | 0.2495 | 0.3147 | 0.1253 | 0.2333 | 0.6378 | 71.6458 | 0.4332 | 0.3873 | 0.9398 | 0.9598 |
| CAL500 | 0.0000 | 0.1449 | 0.0651 | 0.1271 | 0.0206 | 0.1192 | 0.2941 | 143.7843 | 0.2551 | 0.4556 | 0.5786 | 0.8078 |
| corel16k001 | 0.0065 | 0.0261 | 0.0989 | 0.1589 | 0.0493 | 0.1685 | 0.6892 | 71.0545 | 0.4269 | 0.2851 | 0.9095 | 0.9263 |
| Corel5k | 0.0040 | 0.0137 | 0.0775 | 0.1273 | 0.0345 | 0.1320 | 0.7960 | 159.8380 | 0.7015 | 0.1917 | 0.6599 | 0.9813 |
| delicious | 0.0000 | 0.6829 | 0.0212 | 0.0416 | 0.0582 | 0.0416 | 0.6830 | 921.0746 | 0.9332 | 0.0676 | 0.9922 | 0.9973 |
| emotions | 0.3500 | 0.1917 | 0.5736 | 0.6819 | 0.6754 | 0.6878 | 0.2333 | 1.6333 | 0.1565 | 0.8231 | 0.8626 | 0.8800 |
| enron | 0.1462 | 0.0545 | 0.4598 | 0.5947 | 0.1919 | 0.5659 | 0.2456 | 13.6842 | 0.1369 | 0.6961 | 0.7337 | 0.9360 |
| EukaryoteGO | 0.6997 | 0.0201 | 0.7777 | 0.8161 | 0.7348 | 0.8112 | 0.1830 | 0.4356 | 0.0148 | 0.8975 | 0.9928 | 0.9950 |
| EukaryotePseAAC | 0.1519 | 0.0490 | 0.1624 | 0.1679 | 0.0950 | 0.2437 | 0.5328 | 2.3153 | 0.1008 | 0.6335 | 0.8076 | 0.9159 |
| flags | 0.3500 | 0.2286 | 0.6425 | 0.7411 | 0.6080 | 0.7419 | 0.2500 | 3.4500 | 0.1967 | 0.8267 | 0.6955 | 0.8181 |
| foodtruck | 0.3171 | 0.1504 | 0.4972 | 0.5888 | 0.3017 | 0.5595 | 0.2439 | 2.6585 | 0.1092 | 0.7892 | 0.6751 | 0.8298 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9357 | 0.0098 | 0.9607 | 0.9732 | 0.8378 | 0.9625 | 0.0357 | 0.1429 | 0.0255 | 0.9752 | 0.8745 | 0.9996 |
| GnegativePseAAC | 0.6071 | 0.0670 | 0.6143 | 0.6178 | 0.3916 | 0.6988 | 0.2714 | 0.7000 | 0.0968 | 0.8255 | 0.7855 | 0.9443 |
| GpositiveGO | 0.9038 | 0.0433 | 0.9038 | 0.9038 | 0.8489 | 0.9143 | 0.0769 | 0.1346 | 0.0641 | 0.9567 | 0.9982 | 0.9971 |
| GpositivePseAAC | 0.5192 | 0.2163 | 0.5288 | 0.5336 | 0.4146 | 0.5545 | 0.4615 | 0.8077 | 0.3141 | 0.7196 | 0.8087 | 0.8400 |
| HumanGO | 0.6720 | 0.0384 | 0.7519 | 0.7927 | 0.7078 | 0.7728 | 0.1897 | 0.6431 | 0.0399 | 0.8841 | 0.9796 | 0.9861 |
| HumanPseAAC | 0.1029 | 0.0792 | 0.1077 | 0.1101 | 0.0722 | 0.1687 | 0.5531 | 2.1125 | 0.1405 | 0.6178 | 0.7820 | 0.8690 |
| Image | 0.4950 | 0.1560 | 0.6117 | 0.6683 | 0.6678 | 0.6652 | 0.2750 | 0.8100 | 0.1638 | 0.8231 | 0.8793 | 0.8866 |
| IMDB-ECC-F10% | 0.0503 | 0.0787 | 0.1321 | 0.1814 | 0.0629 | 0.1995 | 0.6331 | 7.6132 | 0.2058 | 0.4752 | 0.6694 | 0.8117 |
| IMDB-F10% | 0.0439 | 0.0815 | 0.1217 | 0.1694 | 0.0744 | 0.1937 | 0.5783 | 7.8252 | 0.2029 | 0.4951 | 0.6728 | 0.8177 |
| LLOG-F | 0.1066 | 0.0178 | 0.1373 | 0.1542 | 0.0374 | 0.2049 | 0.5984 | 14.8279 | 0.2541 | 0.4470 | 0.5170 | 0.9132 |
| mediamill10% | 0.7292 | 0.0044 | 0.9199 | 0.9561 | 0.4135 | 0.9476 | 0.0000 | 3.4988 | 0.0001 | 0.9987 | 0.8214 | 0.9997 |
| medical | 0.6633 | 0.0104 | 0.7568 | 0.7985 | 0.3120 | 0.8115 | 0.1531 | 2.2449 | 0.0694 | 0.8853 | 0.5512 | 0.9966 |
| Music | 0.1833 | 0.2167 | 0.5194 | 0.6649 | 0.6653 | 0.6609 | 0.2333 | 1.8167 | 0.1550 | 0.8157 | 0.8629 | 0.8712 |
| NUS-WIDE-bow10% | 0.1365 | 0.0264 | 0.2312 | 0.2916 | 0.0260 | 0.2982 | 0.5514 | 19.1061 | 0.1803 | 0.4930 | 0.7044 | 0.8915 |
| NUS-WIDE-cVLADplus10% | 0.1356 | 0.0260 | 0.2058 | 0.2521 | 0.0306 | 0.2602 | 0.5647 | 20.0048 | 0.2078 | 0.4669 | 0.7436 | 0.9089 |
| OHSUMED-F | 0.2297 | 0.0558 | 0.4351 | 0.5436 | 0.4638 | 0.5620 | 0.3151 | 3.5312 | 0.1033 | 0.7310 | 0.8717 | 0.9135 |
| PlantGO | 0.6771 | 0.0425 | 0.7257 | 0.7482 | 0.6560 | 0.7633 | 0.2083 | 0.9375 | 0.1005 | 0.8569 | 0.9844 | 0.9834 |
| PlantPseAAC | 0.0102 | 0.0935 | 0.0102 | 0.0102 | 0.0238 | 0.0179 | 0.6224 | 2.0612 | 0.1748 | 0.5840 | 0.7976 | 0.8451 |
| rcv1subset1 | 0.0900 | 0.0279 | 0.2824 | 0.3889 | 0.1534 | 0.3840 | 0.4233 | 16.4550 | 0.1042 | 0.6040 | 0.8961 | 0.9648 |
| REUTERS-K500-EX2 | 0.3144 | 0.0127 | 0.4276 | 0.4871 | 0.2364 | 0.4984 | 0.4278 | 14.6323 | 0.2087 | 0.6400 | 0.7653 | 0.9821 |
| scene | 0.5145 | 0.1127 | 0.6494 | 0.7164 | 0.7234 | 0.7052 | 0.2116 | 0.4606 | 0.0790 | 0.8739 | 0.9477 | 0.9505 |
| sider_CDK_ECFP4 | 0.0211 | 0.2593 | 0.5723 | 0.7422 | 0.6275 | 0.7597 | 0.0986 | 18.6197 | 0.1226 | 0.8428 | 0.5949 | 0.8080 |
| sider_MordredDesc | 0.0070 | 0.2598 | 0.5606 | 0.7278 | 0.6107 | 0.7508 | 0.0986 | 19.0704 | 0.1254 | 0.8414 | 0.5732 | 0.8024 |
| sider_RDKit_desc | 0.0141 | 0.2577 | 0.5795 | 0.7448 | 0.6200 | 0.7595 | 0.1056 | 18.9155 | 0.1250 | 0.8433 | 0.5825 | 0.8040 |
| SLASHDOT-F | 0.3677 | 0.0447 | 0.4566 | 0.5042 | 0.3826 | 0.5385 | 0.4021 | 3.2487 | 0.1850 | 0.6851 | 0.7091 | 0.9458 |
| solar_flare-L3 | 0.4000 | 0.2000 | 0.7000 | 0.8235 | 0.5079 | 0.7692 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.6667 | 0.9800 |
| Stackex_chemistry | 0.0418 | 0.0165 | 0.1681 | 0.2527 | 0.1210 | 0.2655 | 0.6268 | 65.5562 | 0.4335 | 0.3641 | 0.8868 | 0.9700 |
| Stackex_chess | 0.0179 | 0.0130 | 0.1714 | 0.2727 | 0.0862 | 0.2910 | 0.5952 | 102.4524 | 0.5051 | 0.3423 | 0.5360 | 0.9836 |
| Stackex_coffee | 0.0435 | 0.0237 | 0.1043 | 0.1675 | 0.0434 | 0.1728 | 0.6522 | 57.6957 | 0.4774 | 0.3599 | 0.2504 | 0.9748 |
| Stackex_cooking | 0.0483 | 0.0079 | 0.2377 | 0.3599 | 0.1465 | 0.3309 | 0.5072 | 162.2068 | 0.4746 | 0.3986 | 0.9149 | 0.9909 |
| Stackex_philosophy | 0.0628 | 0.0130 | 0.2178 | 0.3223 | 0.0976 | 0.3121 | 0.5452 | 92.4899 | 0.4543 | 0.3914 | 0.7312 | 0.9814 |
| tmc2007-500 | 0.2573 | 0.0655 | 0.5153 | 0.6442 | 0.5493 | 0.6256 | 0.2497 | 2.6161 | 0.0491 | 0.7996 | 0.9295 | 0.9534 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1638 | 0.2909 | 0.3656 | 0.4142 | 0.4438 | 0.4829 | 3.9658 | 0.2120 | 0.6306 | 0.7228 | 0.7823 |
| tox21_RDKit_desc | 0.1678 | 0.1598 | 0.3614 | 0.4534 | 0.4320 | 0.5018 | 0.4281 | 3.7705 | 0.1882 | 0.6531 | 0.7387 | 0.7932 |
| VirusGO | 0.7619 | 0.0556 | 0.8254 | 0.8633 | 0.6641 | 0.8444 | 0.0476 | 0.4762 | 0.0694 | 0.9500 | 0.8212 | 0.9909 |
| VirusPseAAC | 0.3810 | 0.1508 | 0.4048 | 0.4163 | 0.3079 | 0.4865 | 0.3333 | 0.7619 | 0.1321 | 0.7968 | 0.6064 | 0.8957 |
| Water-quality | 0.0283 | 0.2837 | 0.4432 | 0.6099 | 0.5634 | 0.6120 | 0.1887 | 8.5094 | 0.2297 | 0.7357 | 0.7307 | 0.7627 |
| Yahoo_Arts | 0.3164 | 0.0497 | 0.4150 | 0.4694 | 0.3744 | 0.5021 | 0.3525 | 4.1068 | 0.1032 | 0.7067 | 0.8213 | 0.8982 |
| Yahoo_Business | 0.5065 | 0.0291 | 0.6921 | 0.7914 | 0.2872 | 0.7025 | 0.1171 | 1.8755 | 0.1293 | 0.8904 | 0.7294 | 0.9560 |
| Yahoo_Computers | 0.1961 | 0.0414 | 0.2392 | 0.2629 | 0.1651 | 0.3143 | 0.4808 | 3.1646 | 0.1945 | 0.6715 | 0.7381 | 0.9084 |
| Yahoo_Education | 0.1683 | 0.0501 | 0.3103 | 0.3803 | 0.2195 | 0.3900 | 0.5612 | 3.3689 | 0.4888 | 0.5836 | 0.7771 | 0.9227 |
| Yahoo_Entertainment | 0.2803 | 0.0581 | 0.3484 | 0.3949 | 0.2001 | 0.4356 | 0.4456 | 2.7821 | 0.0801 | 0.6568 | 0.8489 | 0.8846 |
| Yahoo_Health | 0.3461 | 0.0412 | 0.4745 | 0.5518 | 0.2406 | 0.5198 | 0.3603 | 2.6969 | 0.2045 | 0.7296 | 0.7397 | 0.9450 |
| Yahoo_Recreation | 0.2072 | 0.0549 | 0.2413 | 0.2602 | 0.2309 | 0.3259 | 0.5081 | 3.6510 | 0.4697 | 0.6154 | 0.8075 | 0.8656 |
| Yahoo_Reference | 0.4153 | 0.0335 | 0.4914 | 0.5241 | 0.1835 | 0.5095 | 0.4657 | 2.4630 | 0.0808 | 0.6752 | 0.7259 | 0.9523 |
| Yahoo_Science | 0.1850 | 0.0342 | 0.2273 | 0.2516 | 0.2114 | 0.3001 | 0.5832 | 5.1267 | 0.0777 | 0.5502 | 0.8214 | 0.8891 |
| Yahoo_Social | 0.4472 | 0.0243 | 0.5223 | 0.5530 | 0.2647 | 0.5650 | 0.3562 | 2.5370 | 0.0720 | 0.7334 | 0.7627 | 0.9357 |
| Yahoo_Society | 0.0199 | 0.1610 | 0.1520 | 0.2515 | 0.2089 | 0.2281 | 0.7262 | 8.1452 | 0.2706 | 0.3771 | 0.6258 | 0.7693 |
| yeast | 0.1612 | 0.1989 | 0.5141 | 0.6559 | 0.4268 | 0.6426 | 0.2355 | 5.9917 | 0.1528 | 0.7699 | 0.7445 | 0.8585 |
| Yelp | 0.5573 | 0.1294 | 0.7532 | 0.8341 | 0.7696 | 0.8143 | 0.0917 | 1.1306 | 0.0919 | 0.9273 | 0.8927 | 0.9218 |

Table 3: Detailed results for ExtraTrees for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5639 | 0.0258 | 0.5923 | 0.6286 | 0.7025 | 0.7174 | 0.3230 | 2.8074 | 0.2748 | 0.7301 | 0.9869 | 0.9915 |
| 3s-bbc1000 | 0.0833 | 0.2917 | 0.1620 | 0.1966 | 0.0667 | 0.2222 | 0.7500 | 3.2222 | 0.8380 | 0.4102 | 0.9943 | 0.8690 |
| 3s-guardian1000 | 0.2903 | 0.2204 | 0.3710 | 0.4073 | 0.1037 | 0.4058 | 0.5484 | 2.4194 | 0.6129 | 0.5704 | 0.9881 | 0.9244 |
| 3s-inter3000 | 0.2353 | 0.1863 | 0.2647 | 0.2786 | 0.0980 | 0.3448 | 0.6471 | 1.8824 | 0.4603 | 0.5627 | 0.6864 | 0.8135 |
| 3s-reuters1000 | 0.1333 | 0.3000 | 0.1333 | 0.1333 | 0.0392 | 0.1290 | 0.8667 | 2.6333 | 0.8667 | 0.3950 | 1.0000 | 0.8463 |
| amphibians | 0.1111 | 0.2937 | 0.4812 | 0.6985 | 0.6115 | 0.6667 | 0.2222 | 2.5556 | 0.1333 | 0.8519 | 0.7667 | 0.8130 |
| bibtex | 0.1839 | 0.0119 | 0.3505 | 0.4473 | 0.3111 | 0.4738 | 0.4304 | 71.8989 | 0.5816 | 0.4330 | 1.0000 | 1.0000 |
| birds | 0.1538 | 0.0837 | 0.2812 | 0.3323 | 0.2545 | 0.4038 | 0.5641 | 8.0769 | 0.5938 | 0.4774 | 0.8681 | 0.9697 |
| bookmarks10% | 0.1843 | 0.0088 | 0.2130 | 0.2366 | 0.1112 | 0.2650 | 0.7316 | 105.7233 | 0.7595 | 0.2612 | 0.9756 | 0.9956 |
| CAL500 | 0.0000 | 0.1393 | 0.1688 | 0.2882 | 0.0370 | 0.2831 | 0.3529 | 151.0784 | 0.6306 | 0.4236 | 0.8392 | 0.9428 |
| corel16k001 | 0.0065 | 0.0200 | 0.0451 | 0.0677 | 0.0384 | 0.0841 | 0.8170 | 111.8439 | 0.8984 | 0.1236 | 0.9959 | 0.9960 |
| Corel5k | 0.0000 | 0.3233 | 0.0110 | 0.0216 | 0.0135 | 0.0216 | 0.9460 | 166.8620 | 0.9833 | 0.1250 | 0.6791 | 1.0000 |
| delicious | 0.0000 | 0.6032 | 0.0213 | 0.0417 | 0.0492 | 0.0422 | 0.6934 | 920.4615 | 0.9531 | 0.0582 | 1.0000 | 0.9979 |
| emotions | 0.2333 | 0.1806 | 0.4917 | 0.6002 | 0.5700 | 0.6486 | 0.4167 | 2.5833 | 0.3013 | 0.6817 | 0.8490 | 0.7338 |
| enron | 0.1696 | 0.0612 | 0.4035 | 0.5153 | 0.1295 | 0.4904 | 0.3509 | 23.0585 | 0.3337 | 0.5659 | 0.8135 | 0.9697 |
| EukaryoteGO | 0.7003 | 0.0185 | 0.7989 | 0.8309 | 0.7336 | 0.8196 | 0.1690 | 0.9069 | 0.0517 | 0.8843 | 0.9870 | 0.9835 |
| EukaryotePseAAC | 0.2725 | 0.0554 | 0.3636 | 0.4018 | 0.1448 | 0.4383 | 0.5748 | 6.3090 | 0.5306 | 0.5025 | 0.9619 | 0.9646 |
| flags | 0.2000 | 0.3143 | 0.5161 | 0.6350 | 0.5380 | 0.6562 | 0.1500 | 3.6000 | 0.2158 | 0.8176 | 0.6877 | 0.8059 |
| foodtruck | 0.3171 | 0.1362 | 0.5108 | 0.6442 | 0.1567 | 0.5442 | 0.2439 | 4.0488 | 0.3667 | 0.7523 | 0.8262 | 0.9324 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0149 | 0.2239 | 0.0006 | 0.9938 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.7861 | 0.9556 | 0.0286 | 0.1000 | 0.0112 | 0.9827 | 0.8746 | 0.9987 |
| GnegativePseAAC | 0.5857 | 0.0982 | 0.6107 | 0.6232 | 0.1878 | 0.6181 | 0.3429 | 1.4857 | 0.3020 | 0.7406 | 0.8476 | 0.9449 |
| GpositiveGO | 0.8846 | 0.0481 | 0.8942 | 0.8990 | 0.8390 | 0.9038 | 0.0962 | 0.1154 | 0.0449 | 0.9519 | 0.9961 | 0.9954 |
| GpositivePseAAC | 0.5385 | 0.2260 | 0.5385 | 0.5385 | 0.3388 | 0.5437 | 0.4423 | 1.0192 | 0.4487 | 0.7035 | 0.9851 | 0.9234 |
| HumanGO | 0.7081 | 0.0355 | 0.7594 | 0.8058 | 0.6973 | 0.7684 | 0.1597 | 1.0484 | 0.0982 | 0.8773 | 0.9807 | 0.9742 |
| HumanPseAAC | 0.0225 | 0.1509 | 0.0279 | 0.0312 | 0.0049 | 0.0324 | 0.6913 | 5.1222 | 0.7334 | 0.4206 | 0.9994 | 0.9598 |
| Image | 0.1850 | 0.3400 | 0.2233 | 0.2424 | 0.1286 | 0.2377 | 0.6350 | 1.8050 | 0.4483 | 0.5695 | 0.9552 | 0.7051 |
| IMDB-ECC-F10% | 0.0587 | 0.0851 | 0.1463 | 0.1953 | 0.0292 | 0.1936 | 0.6310 | 12.5734 | 0.7504 | 0.3656 | 0.9928 | 0.9764 |
| IMDB-F10% | 0.0528 | 0.0912 | 0.1408 | 0.1936 | 0.0280 | 0.1900 | 0.5894 | 12.6368 | 0.7132 | 0.3860 | 0.9798 | 0.9634 |
| LLOG-F | 0.0902 | 0.0183 | 0.1230 | 0.1427 | 0.0567 | 0.2010 | 0.7951 | 31.3852 | 0.8307 | 0.2239 | 0.5965 | 0.9961 |
| mediamill10% | 0.1710 | 0.0266 | 0.5094 | 0.6468 | 0.1558 | 0.6185 | 0.2542 | 55.4656 | 0.3978 | 0.5848 | 0.8162 | 0.9959 |
| medical | 0.6939 | 0.0098 | 0.7823 | 0.8214 | 0.3087 | 0.8273 | 0.1429 | 4.9898 | 0.1422 | 0.8550 | 0.5539 | 0.9979 |
| Music | 0.1833 | 0.2167 | 0.4708 | 0.5963 | 0.5826 | 0.6321 | 0.3500 | 2.7500 | 0.3102 | 0.6966 | 0.8331 | 0.7356 |
| NUS-WIDE-bow10% | 0.1810 | 0.0248 | 0.3133 | 0.3773 | 0.0417 | 0.3794 | 0.5261 | 33.7816 | 0.5785 | 0.4408 | 0.8873 | 0.9787 |
| NUS-WIDE-cVLADplus10% | 0.0471 | 0.0339 | 0.1016 | 0.1331 | 0.0040 | 0.1233 | 0.9748 | 47.6004 | 0.9999 | 0.1069 | 0.8889 | 1.0000 |
| OHSUMED-F | 0.2364 | 0.0574 | 0.4384 | 0.5414 | 0.4402 | 0.5581 | 0.3557 | 7.5371 | 0.4114 | 0.6153 | 0.9870 | 0.9850 |
| PlantGO | 0.5208 | 0.0564 | 0.5573 | 0.5754 | 0.4017 | 0.6448 | 0.4167 | 2.0000 | 0.2518 | 0.7032 | 0.9819 | 0.9420 |
| PlantPseAAC | 0.2755 | 0.1301 | 0.2755 | 0.2755 | 0.0360 | 0.2609 | 0.7347 | 4.1837 | 0.7171 | 0.4272 | 0.9823 | 0.9418 |
| rcv1subset1 | 0.1145 | 0.0310 | 0.3232 | 0.4345 | 0.2384 | 0.4409 | 0.4082 | 38.7877 | 0.4017 | 0.5105 | 0.9360 | 0.9843 |
| REUTERS-K500-EX2 | 0.1753 | 0.0127 | 0.2001 | 0.2146 | 0.1282 | 0.2718 | 0.7577 | 47.4948 | 0.7785 | 0.2691 | 0.7854 | 0.9989 |
| scene | 0.4481 | 0.1584 | 0.5477 | 0.5970 | 0.6172 | 0.5859 | 0.4855 | 0.9627 | 0.2380 | 0.7133 | 0.9198 | 0.9020 |
| sider_CDK_ECFP4 | 0.0141 | 0.2911 | 0.6238 | 0.7762 | 0.5988 | 0.7722 | 0.3451 | 20.4296 | 0.2462 | 0.7034 | 0.5965 | 0.7106 |
| sider_MordredDesc | 0.0141 | 0.2869 | 0.6265 | 0.7781 | 0.5938 | 0.7740 | 0.3380 | 21.0070 | 0.2469 | 0.7204 | 0.8300 | 0.7488 |
| sider_RDKit_desc | 0.0141 | 0.2859 | 0.6248 | 0.7786 | 0.5819 | 0.7731 | 0.1761 | 19.9930 | 0.2190 | 0.7296 | 0.8909 | 0.7634 |
| SLASHDOT-F | 0.2460 | 0.0449 | 0.2976 | 0.3246 | 0.2992 | 0.4253 | 0.6243 | 8.9894 | 0.6605 | 0.4150 | 0.7674 | 0.9944 |
| solar_flare-L3 | 0.2000 | 0.4000 | 0.4000 | 0.4800 | 0.3238 | 0.5000 | 0.6000 | 0.6000 | 0.5000 | 0.7000 | 0.2222 | 0.7000 |
| Stackex_chemistry | 0.0504 | 0.0158 | 0.1127 | 0.1498 | 0.0151 | 0.1353 | 0.9107 | 112.2810 | 0.9690 | 0.0771 | 0.9194 | 0.9994 |
| Stackex_chess | 0.0179 | 0.0101 | 0.0767 | 0.1073 | 0.0321 | 0.1538 | 0.8214 | 149.4524 | 0.9167 | 0.1047 | 0.5502 | 0.9993 |
| Stackex_coffee | 0.0000 | 0.0191 | 0.0145 | 0.0217 | 0.0081 | 0.0357 | 0.9565 | 81.8696 | 0.9855 | 0.0471 | 0.2590 | 0.9972 |
| Stackex_cooking | 0.0583 | 0.0052 | 0.1912 | 0.2608 | 0.0998 | 0.3047 | 0.6426 | 226.4388 | 0.7724 | 0.2298 | 0.9339 | 0.9850 |
| Stackex_philosophy | 0.0628 | 0.0122 | 0.1397 | 0.1873 | 0.0320 | 0.1628 | 0.8819 | 147.6256 | 0.9372 | 0.0799 | 0.7508 | 0.9996 |
| tmc2007-500 | 0.2944 | 0.0614 | 0.5659 | 0.6906 | 0.5648 | 0.6755 | 0.2482 | 4.1616 | 0.1446 | 0.7645 | 0.9674 | 0.9672 |
| tox21_CDK_ECFP4 | 0.0171 | 0.2397 | 0.0648 | 0.0873 | 0.1241 | 0.1250 | 0.6233 | 6.0514 | 0.5778 | 0.4827 | 0.9115 | 0.8724 |
| tox21_RDKit_desc | 0.0205 | 0.2457 | 0.0509 | 0.0670 | 0.0670 | 0.0831 | 0.6404 | 6.3664 | 0.6408 | 0.4535 | 0.9710 | 0.8832 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8999 | 0.6472 | 0.8511 | 0.0476 | 0.3810 | 0.0631 | 0.9563 | 0.8176 | 0.9905 |
| VirusPseAAC | 0.4286 | 0.1429 | 0.5714 | 0.6393 | 0.3850 | 0.6400 | 0.5238 | 1.0000 | 0.2048 | 0.6976 | 0.7551 | 0.8894 |
| Water-quality | 0.0000 | 0.3383 | 0.2793 | 0.4318 | 0.1653 | 0.4122 | 0.3302 | 10.4528 | 0.4399 | 0.6274 | 0.7791 | 0.7301 |
| Yahoo_Arts | 0.1974 | 0.0646 | 0.2914 | 0.3444 | 0.2120 | 0.3673 | 0.5214 | 10.4756 | 0.6269 | 0.4997 | 0.9448 | 0.9736 |
| Yahoo_Business | 0.5061 | 0.0290 | 0.6998 | 0.7837 | 0.2901 | 0.6963 | 0.1162 | 1.8869 | 0.1293 | 0.8966 | 0.7225 | 0.9613 |
| Yahoo_Computers | 0.1970 | 0.0412 | 0.2397 | 0.2618 | 0.1640 | 0.3154 | 0.4801 | 3.1469 | 0.1958 | 0.6673 | 0.7349 | 0.9073 |
| Yahoo_Education | 0.1672 | 0.0505 | 0.3097 | 0.3834 | 0.2190 | 0.3956 | 0.5633 | 3.3840 | 0.4823 | 0.5912 | 0.7756 | 0.9272 |
| Yahoo_Entertainment | 0.2802 | 0.0584 | 0.3496 | 0.3918 | 0.2013 | 0.4382 | 0.4403 | 2.7870 | 0.0801 | 0.6536 | 0.8426 | 0.8907 |
| Yahoo_Health | 0.3466 | 0.0414 | 0.4727 | 0.5581 | 0.2412 | 0.5261 | 0.3607 | 2.7072 | 0.2043 | 0.7360 | 0.7392 | 0.9429 |
| Yahoo_Recreation | 0.2103 | 0.0541 | 0.2401 | 0.2588 | 0.2333 | 0.3278 | 0.5035 | 3.6799 | 0.4635 | 0.6160 | 0.8148 | 0.8596 |
| Yahoo_Reference | 0.4185 | 0.0333 | 0.4953 | 0.5315 | 0.1839 | 0.5092 | 0.4626 | 2.4488 | 0.0798 | 0.6776 | 0.7267 | 0.9515 |
| Yahoo_Science | 0.1868 | 0.0342 | 0.2266 | 0.2501 | 0.2135 | 0.3031 | 0.5772 | 5.0752 | 0.0767 | 0.5537 | 0.8263 | 0.8997 |
| Yahoo_Social | 0.4501 | 0.0239 | 0.5223 | 0.5608 | 0.2683 | 0.5674 | 0.3549 | 2.5260 | 0.0724 | 0.7352 | 0.7700 | 0.9416 |
| Yahoo_Society | 0.0200 | 0.1614 | 0.1506 | 0.2503 | 0.2090 | 0.2285 | 0.7205 | 8.2010 | 0.2686 | 0.3803 | 0.6201 | 0.7688 |
| yeast | 0.0950 | 0.2674 | 0.4127 | 0.5414 | 0.2005 | 0.5452 | 0.2603 | 6.8595 | 0.2786 | 0.6998 | 0.8580 | 0.8333 |
| Yelp | 0.3011 | 0.2381 | 0.5410 | 0.6573 | 0.5674 | 0.6457 | 0.3579 | 1.7039 | 0.3566 | 0.7704 | 0.8725 | 0.8699 |

Table 4: Detailed results for LR for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0150 | 0.1709 | 0.0553 | 0.0759 | 0.0146 | 0.0660 | 0.9533 | 9.8060 | 0.5187 | 0.1696 | 0.2473 | 0.4594 |
| 3s-bbc1000 | 0.1111 | 0.3241 | 0.1829 | 0.2243 | 0.1565 | 0.2391 | 0.8056 | 2.8611 | 0.5279 | 0.4211 | 0.5000 | 0.5098 |
| 3s-guardian1000 | 0.0645 | 0.3710 | 0.1022 | 0.1204 | 0.0875 | 0.1481 | 0.8387 | 3.0000 | 0.5556 | 0.3914 | 0.4796 | 0.4616 |
| 3s-inter3000 | 0.1176 | 0.3137 | 0.1176 | 0.1176 | 0.0351 | 0.1111 | 1.0000 | 2.4118 | 0.4735 | 0.3706 | 0.3451 | 0.5608 |
| 3s-reuters1000 | 0.1000 | 0.3278 | 0.1000 | 0.1000 | 0.0303 | 0.0923 | 0.9000 | 3.3667 | 0.6725 | 0.3297 | 0.2735 | 0.3216 |
| amphibians | 0.0556 | 0.3254 | 0.4618 | 0.7213 | 0.3687 | 0.5941 | 0.3333 | 3.4444 | 0.2417 | 0.7469 | 0.4087 | 0.6132 |
| bibtex | 0.0000 | 0.0217 | 0.0044 | 0.0070 | 0.0004 | 0.0070 | 0.9892 | 113.8027 | 0.6160 | 0.0372 | 0.2288 | 0.4094 |
| birds | 0.0769 | 0.1323 | 0.0897 | 0.0957 | 0.0111 | 0.0755 | 0.9744 | 12.0513 | 0.5463 | 0.1850 | 0.3074 | 0.4891 |
| bookmarks10% | 0.1671 | 0.0176 | 0.2469 | 0.3145 | 0.1238 | 0.2335 | 0.6447 | 71.7996 | 0.4329 | 0.3851 | 0.9263 | 0.9551 |
| CAL500 | 0.0000 | 0.1746 | 0.1006 | 0.1828 | 0.0524 | 0.1747 | 0.5294 | 160.5686 | 0.4505 | 0.2778 | 0.4174 | 0.6199 |
| corel16k001 | 0.0000 | 0.0280 | 0.0016 | 0.0027 | 0.0006 | 0.0030 | 0.9499 | 99.3638 | 0.4387 | 0.0982 | 0.3537 | 0.5781 |
| Corel5k | 0.0040 | 0.0138 | 0.0764 | 0.1257 | 0.0340 | 0.1311 | 0.7974 | 161.1507 | 0.7048 | 0.1924 | 0.6506 | 0.9778 |
| delicious | 0.0000 | 0.6852 | 0.0211 | 0.0415 | 0.0573 | 0.0418 | 0.6840 | 922.2843 | 0.9289 | 0.0675 | 0.9904 | 0.9888 |
| emotions | 0.0333 | 0.5167 | 0.1825 | 0.2739 | 0.1375 | 0.2560 | 0.9833 | 4.2500 | 0.8662 | 0.3207 | 0.2141 | 0.2161 |
| enron | 0.0000 | 0.0737 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9825 | 41.7836 | 0.6012 | 0.0839 | 0.2959 | 0.3964 |
| EukaryoteGO | 0.6950 | 0.0201 | 0.7708 | 0.8201 | 0.7306 | 0.8090 | 0.1825 | 0.4341 | 0.0150 | 0.8888 | 0.9825 | 0.9910 |
| EukaryotePseAAC | 0.0167 | 0.0961 | 0.0193 | 0.0205 | 0.0020 | 0.0203 | 0.7992 | 6.7400 | 0.3005 | 0.3171 | 0.3274 | 0.7083 |
| flags | 0.0000 | 0.5643 | 0.0325 | 0.0563 | 0.0722 | 0.0706 | 0.9000 | 5.4000 | 0.6975 | 0.4544 | 0.4300 | 0.3063 |
| foodtruck | 0.0000 | 0.2947 | 0.0393 | 0.0722 | 0.0423 | 0.0764 | 0.9756 | 8.4878 | 0.6606 | 0.2404 | 0.3394 | 0.3606 |
| genbase | 0.0000 | 0.1183 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 | 20.5373 | 0.7814 | 0.0561 | 0.1413 | 0.2165 |
| GnegativeGO | 0.0143 | 0.3589 | 0.0536 | 0.0699 | 0.0227 | 0.0651 | 1.0000 | 6.6357 | 0.9474 | 0.1383 | 0.0850 | 0.0619 |
| GnegativePseAAC | 0.0429 | 0.2500 | 0.0429 | 0.0429 | 0.0230 | 0.0411 | 0.9357 | 4.2286 | 0.5979 | 0.2496 | 0.2574 | 0.3871 |
| GpositiveGO | 0.0577 | 0.5385 | 0.0641 | 0.0699 | 0.0567 | 0.0667 | 0.9615 | 2.2885 | 0.8846 | 0.3365 | 0.2795 | 0.2045 |
| GpositivePseAAC | 0.3846 | 0.2019 | 0.4038 | 0.4132 | 0.3224 | 0.5116 | 0.6538 | 1.3846 | 0.4679 | 0.5785 | 0.7936 | 0.6250 |
| HumanGO | 0.0000 | 0.2221 | 0.0019 | 0.0029 | 0.0012 | 0.0041 | 0.9871 | 9.4212 | 0.7006 | 0.1364 | 0.0887 | 0.3049 |
| HumanPseAAC | 0.0932 | 0.1362 | 0.1104 | 0.1188 | 0.0165 | 0.1189 | 0.9550 | 5.6913 | 0.4113 | 0.2361 | 0.3821 | 0.6001 |
| Image | 0.0300 | 0.5150 | 0.1846 | 0.2541 | 0.1532 | 0.2611 | 0.9650 | 3.2250 | 0.8542 | 0.2953 | 0.2496 | 0.2570 |
| IMDB-ECC-F10% | 0.0000 | 0.1034 | 0.0032 | 0.0048 | 0.0006 | 0.0058 | 0.9570 | 15.5314 | 0.4756 | 0.1535 | 0.4902 | 0.5447 |
| IMDB-F10% | 0.0000 | 0.1074 | 0.0062 | 0.0088 | 0.0011 | 0.0104 | 0.9486 | 15.7026 | 0.4556 | 0.1906 | 0.4354 | 0.5623 |
| LLOG-F | 0.1055 | 0.0177 | 0.1371 | 0.1539 | 0.0369 | 0.2030 | 0.6036 | 15.0120 | 0.2562 | 0.4467 | 0.5135 | 0.9111 |
| mediamill10% | 0.0000 | 0.0692 | 0.0784 | 0.1353 | 0.0147 | 0.1398 | 0.7815 | 82.2969 | 0.6114 | 0.1584 | 0.3455 | 0.4866 |
| medical | 0.6570 | 0.0105 | 0.7481 | 0.7947 | 0.3131 | 0.8022 | 0.1523 | 2.2370 | 0.0704 | 0.8877 | 0.5508 | 1.0000 |
| Music | 0.0167 | 0.5361 | 0.0681 | 0.0903 | 0.0971 | 0.1023 | 0.8667 | 4.2167 | 0.8161 | 0.3761 | 0.2428 | 0.2655 |
| NUS-WIDE-bow10% | 0.1364 | 0.0268 | 0.2297 | 0.2906 | 0.0260 | 0.2976 | 0.5554 | 19.0570 | 0.1804 | 0.4949 | 0.7037 | 0.8855 |
| NUS-WIDE-cVLADplus10% | 0.1337 | 0.0264 | 0.2049 | 0.2518 | 0.0302 | 0.2564 | 0.5633 | 20.0668 | 0.2091 | 0.4645 | 0.7351 | 0.9085 |
| OHSUMED-F | 0.2273 | 0.0566 | 0.4312 | 0.5432 | 0.4623 | 0.5633 | 0.3197 | 3.5751 | 0.1035 | 0.7255 | 0.8729 | 0.9143 |
| PlantGO | 0.0208 | 0.2005 | 0.0339 | 0.0403 | 0.0165 | 0.0415 | 0.9896 | 8.5521 | 0.7662 | 0.1366 | 0.1009 | 0.2366 |
| PlantPseAAC | 0.0510 | 0.1913 | 0.0663 | 0.0732 | 0.0186 | 0.0664 | 0.9592 | 6.3571 | 0.5520 | 0.2091 | 0.3261 | 0.4455 |
| rcv1subset1 | 0.0887 | 0.0278 | 0.2826 | 0.3861 | 0.1527 | 0.3821 | 0.4261 | 16.6688 | 0.1053 | 0.5950 | 0.8951 | 0.9535 |
| REUTERS-K500-EX2 | 0.3158 | 0.0127 | 0.4254 | 0.4884 | 0.2360 | 0.4981 | 0.4294 | 14.5760 | 0.2101 | 0.6354 | 0.7615 | 0.9716 |
| scene | 0.0498 | 0.3893 | 0.0892 | 0.1054 | 0.0439 | 0.0992 | 0.9917 | 3.9378 | 0.9052 | 0.2254 | 0.2375 | 0.2360 |
| sider_CDK_ECFP4 | 0.0000 | 0.5498 | 0.0125 | 0.0257 | 0.0264 | 0.0259 | 0.8732 | 25.4789 | 0.8116 | 0.4248 | 0.4731 | 0.2539 |
| sider_MordredDesc | 0.0000 | 0.5412 | 0.0191 | 0.0362 | 0.0210 | 0.0433 | 0.6690 | 25.5986 | 0.8224 | 0.4271 | 0.4481 | 0.2402 |
| sider_RDKit_desc | 0.0000 | 0.5449 | 0.0101 | 0.0192 | 0.0185 | 0.0225 | 0.8592 | 25.6479 | 0.7789 | 0.4368 | 0.4684 | 0.2754 |
| SLASHDOT-F | 0.3677 | 0.0452 | 0.4510 | 0.5004 | 0.3814 | 0.5331 | 0.4031 | 3.2416 | 0.1850 | 0.6844 | 0.7017 | 0.9479 |
| solar_flare-L3 | 0.4000 | 0.4000 | 0.4000 | 0.4000 | 0.1905 | 0.4000 | 0.8000 | 1.0000 | 0.8000 | 0.5667 | 0.5556 | 0.4800 |
| Stackex_chemistry | 0.0029 | 0.0221 | 0.0119 | 0.0173 | 0.0014 | 0.0147 | 0.9914 | 103.8170 | 0.4718 | 0.0502 | 0.2328 | 0.5528 |
| Stackex_chess | 0.0000 | 0.0588 | 0.0005 | 0.0009 | 0.0001 | 0.0009 | 1.0000 | 171.0893 | 0.6556 | 0.0158 | 0.1477 | 0.4003 |
| Stackex_coffee | 0.0435 | 0.0238 | 0.1032 | 0.1667 | 0.0430 | 0.1729 | 0.6493 | 58.2107 | 0.4773 | 0.3554 | 0.2514 | 0.9602 |
| Stackex_cooking | 0.0480 | 0.0079 | 0.2345 | 0.3609 | 0.1448 | 0.3267 | 0.5142 | 162.7200 | 0.4759 | 0.3956 | 0.9025 | 0.9874 |
| Stackex_philosophy | 0.0000 | 0.0285 | 0.0052 | 0.0089 | 0.0010 | 0.0075 | 0.9975 | 143.4322 | 0.4943 | 0.0296 | 0.2004 | 0.5343 |
| tmc2007-500 | 0.2552 | 0.0663 | 0.5096 | 0.6366 | 0.5501 | 0.6187 | 0.2504 | 2.6428 | 0.0489 | 0.7987 | 0.9242 | 0.9418 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1659 | 0.2892 | 0.3671 | 0.4133 | 0.4454 | 0.4815 | 4.0136 | 0.2115 | 0.6337 | 0.7252 | 0.7805 |
| tox21_RDKit_desc | 0.0000 | 0.3810 | 0.0531 | 0.1045 | 0.0939 | 0.1106 | 0.9521 | 8.3459 | 0.6532 | 0.2365 | 0.4415 | 0.3505 |
| VirusGO | 0.0476 | 0.3968 | 0.0794 | 0.1007 | 0.0417 | 0.1071 | 1.0000 | 3.9524 | 0.7645 | 0.2582 | 0.1895 | 0.2345 |
| VirusPseAAC | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9524 | 3.1905 | 0.6440 | 0.2988 | 0.3742 | 0.3968 |
| Water-quality | 0.0000 | 0.4326 | 0.0871 | 0.1567 | 0.1104 | 0.1530 | 0.6415 | 11.8302 | 0.6051 | 0.4404 | 0.3697 | 0.4009 |
| Yahoo_Arts | 0.3123 | 0.0502 | 0.4109 | 0.4649 | 0.3707 | 0.4956 | 0.3559 | 4.1422 | 0.1046 | 0.7041 | 0.8234 | 0.8897 |
| Yahoo_Business | 0.5070 | 0.0292 | 0.6882 | 0.7900 | 0.2875 | 0.6957 | 0.1170 | 1.8730 | 0.1295 | 0.8854 | 0.7204 | 0.9607 |
| Yahoo_Computers | 0.1938 | 0.0416 | 0.2378 | 0.2637 | 0.1659 | 0.3153 | 0.4834 | 3.2029 | 0.1974 | 0.6658 | 0.7292 | 0.9122 |
| Yahoo_Education | 0.1665 | 0.0508 | 0.3068 | 0.3806 | 0.2185 | 0.3888 | 0.5610 | 3.3571 | 0.4921 | 0.5849 | 0.7775 | 0.9210 |
| Yahoo_Entertainment | 0.2773 | 0.0590 | 0.3471 | 0.3965 | 0.1999 | 0.4367 | 0.4449 | 2.8123 | 0.0805 | 0.6581 | 0.8437 | 0.8835 |
| Yahoo_Health | 0.3428 | 0.0410 | 0.4768 | 0.5536 | 0.2404 | 0.5142 | 0.3607 | 2.7242 | 0.2072 | 0.7200 | 0.7406 | 0.9339 |
| Yahoo_Recreation | 0.2054 | 0.0553 | 0.2413 | 0.2608 | 0.2281 | 0.3235 | 0.5128 | 3.6874 | 0.4716 | 0.6071 | 0.8015 | 0.8695 |
| Yahoo_Reference | 0.4148 | 0.0334 | 0.4842 | 0.5228 | 0.1832 | 0.5031 | 0.4668 | 2.4868 | 0.0813 | 0.6724 | 0.7278 | 0.9404 |
| Yahoo_Science | 0.1830 | 0.0346 | 0.2239 | 0.2509 | 0.2092 | 0.2967 | 0.5856 | 5.1569 | 0.0787 | 0.5488 | 0.8156 | 0.8884 |
| Yahoo_Social | 0.4448 | 0.0245 | 0.5219 | 0.5543 | 0.2645 | 0.5578 | 0.3601 | 2.5480 | 0.0722 | 0.7278 | 0.7604 | 0.9295 |
| Yahoo_Society | 0.0200 | 0.1618 | 0.1511 | 0.2495 | 0.2063 | 0.2291 | 0.7234 | 8.2090 | 0.2721 | 0.3782 | 0.6203 | 0.7673 |
| yeast | 0.1602 | 0.1985 | 0.5140 | 0.6529 | 0.4280 | 0.6356 | 0.2361 | 6.0683 | 0.1525 | 0.7697 | 0.7481 | 0.8627 |
| Yelp | 0.5505 | 0.1297 | 0.7481 | 0.8350 | 0.7669 | 0.8151 | 0.0922 | 1.1431 | 0.0926 | 0.9239 | 0.8817 | 0.9199 |

Table 5: Detailed results for Random for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5667 | 0.0263 | 0.6037 | 0.6185 | 0.7130 | 0.7127 | 0.3307 | 2.8096 | 0.2734 | 0.7399 | 0.9990 | 0.9829 |
| 3s-bbc1000 | 0.0833 | 0.2685 | 0.1829 | 0.2272 | 0.2195 | 0.2750 | 0.8056 | 2.4722 | 0.4742 | 0.4543 | 0.6642 | 0.6291 |
| 3s-guardian1000 | 0.1290 | 0.2419 | 0.1774 | 0.1987 | 0.2080 | 0.2623 | 0.6129 | 1.9032 | 0.3395 | 0.6000 | 0.6300 | 0.7237 |
| 3s-inter3000 | 0.0000 | 0.2745 | 0.0294 | 0.0392 | 0.0833 | 0.0667 | 0.8824 | 2.4118 | 0.4824 | 0.3961 | 0.3663 | 0.6270 |
| 3s-reuters1000 | 0.1333 | 0.2667 | 0.1500 | 0.1579 | 0.1343 | 0.1724 | 0.8333 | 2.3000 | 0.5017 | 0.4419 | 0.6901 | 0.6077 |
| amphibians | 0.1111 | 0.2778 | 0.5298 | 0.7266 | 0.5962 | 0.7059 | 0.1667 | 2.4444 | 0.0843 | 0.9000 | 0.7095 | 0.8014 |
| bibtex | 0.1828 | 0.0121 | 0.3523 | 0.4397 | 0.3061 | 0.4719 | 0.4352 | 73.2775 | 0.5745 | 0.4276 | 1.0000 | 1.0000 |
| birds | 0.2051 | 0.0729 | 0.3889 | 0.4738 | 0.3759 | 0.5345 | 0.3590 | 4.0769 | 0.1514 | 0.6775 | 0.8049 | 0.8975 |
| bookmarks10% | 0.1838 | 0.0087 | 0.2149 | 0.2382 | 0.1127 | 0.2587 | 0.7244 | 105.9906 | 0.7620 | 0.2616 | 0.9887 | 0.9874 |
| CAL500 | 0.0000 | 0.1423 | 0.1242 | 0.2240 | 0.0393 | 0.2160 | 0.2941 | 148.1176 | 0.3301 | 0.4580 | 0.6501 | 0.8342 |
| corel16k001 | 0.0051 | 0.0190 | 0.0465 | 0.0705 | 0.0300 | 0.0885 | 0.8749 | 115.9017 | 0.9413 | 0.0903 | 0.9882 | 0.9874 |
| Corel5k | 0.0099 | 0.0091 | 0.0502 | 0.0716 | 0.0195 | 0.0994 | 0.8566 | 165.9734 | 0.9462 | 0.1627 | 0.6714 | 0.9877 |
| delicious | 0.0000 | 0.6092 | 0.0213 | 0.0413 | 0.0481 | 0.0418 | 0.6956 | 919.6228 | 0.9645 | 0.0567 | 0.9903 | 1.0000 |
| emotions | 0.2667 | 0.2111 | 0.5389 | 0.6640 | 0.6366 | 0.6637 | 0.2167 | 1.4500 | 0.1192 | 0.8489 | 0.8715 | 0.8855 |
| enron | 0.1806 | 0.0517 | 0.4399 | 0.5606 | 0.1346 | 0.5483 | 0.2793 | 23.9707 | 0.3684 | 0.5993 | 0.8287 | 0.9789 |
| EukaryoteGO | 0.7166 | 0.0190 | 0.7792 | 0.8178 | 0.7393 | 0.8162 | 0.1692 | 0.8979 | 0.0532 | 0.8844 | 0.9975 | 0.9886 |
| EukaryotePseAAC | 0.2680 | 0.0561 | 0.3611 | 0.4027 | 0.1449 | 0.4382 | 0.5787 | 6.3616 | 0.5321 | 0.5015 | 0.9637 | 0.9722 |
| flags | 0.3500 | 0.2214 | 0.6483 | 0.7544 | 0.5998 | 0.7520 | 0.1000 | 3.4500 | 0.1808 | 0.8551 | 0.7497 | 0.8178 |
| foodtruck | 0.2439 | 0.1667 | 0.4759 | 0.6334 | 0.2773 | 0.5287 | 0.2439 | 2.5366 | 0.1092 | 0.8024 | 0.6768 | 0.8436 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 1.0000 |
| GnegativeGO | 0.9286 | 0.0125 | 0.9500 | 0.9607 | 0.8228 | 0.9521 | 0.0214 | 0.0786 | 0.0082 | 0.9881 | 0.8738 | 0.9991 |
| GnegativePseAAC | 0.7357 | 0.0536 | 0.7571 | 0.7678 | 0.4489 | 0.7842 | 0.2143 | 0.6786 | 0.0980 | 0.8536 | 0.8082 | 0.9527 |
| GpositiveGO | 0.8846 | 0.0481 | 0.8942 | 0.8990 | 0.8390 | 0.9038 | 0.0769 | 0.1346 | 0.0385 | 0.9567 | 0.9975 | 0.9966 |
| GpositivePseAAC | 0.5962 | 0.1827 | 0.6154 | 0.6249 | 0.4811 | 0.6346 | 0.3462 | 0.6731 | 0.2692 | 0.7821 | 0.8620 | 0.8681 |
| HumanGO | 0.6990 | 0.0359 | 0.7696 | 0.7901 | 0.6994 | 0.7797 | 0.1622 | 1.0683 | 0.0987 | 0.8695 | 0.9802 | 0.9826 |
| HumanPseAAC | 0.3527 | 0.0917 | 0.4029 | 0.4380 | 0.1817 | 0.4216 | 0.5470 | 3.6129 | 0.5073 | 0.5717 | 0.9659 | 0.9519 |
| Image | 0.5500 | 0.1520 | 0.6383 | 0.6817 | 0.6717 | 0.6667 | 0.2650 | 0.7950 | 0.1717 | 0.8315 | 0.8968 | 0.8903 |
| IMDB-ECC-F10% | 0.0603 | 0.0851 | 0.1457 | 0.1941 | 0.0275 | 0.1943 | 0.6314 | 12.5172 | 0.7404 | 0.3743 | 0.9983 | 0.9691 |
| IMDB-F10% | 0.0516 | 0.0902 | 0.1410 | 0.1900 | 0.0277 | 0.1899 | 0.5941 | 12.8377 | 0.7215 | 0.3879 | 0.9906 | 0.9640 |
| LLOG-F | 0.1642 | 0.0158 | 0.1906 | 0.2103 | 0.0516 | 0.2841 | 0.7508 | 28.7662 | 0.7946 | 0.2734 | 0.6033 | 0.9971 |
| mediamill10% | 0.0641 | 0.0361 | 0.4425 | 0.6115 | 0.1192 | 0.5776 | 0.2138 | 34.8456 | 0.1679 | 0.6813 | 0.7565 | 0.9649 |
| medical | 0.6531 | 0.0111 | 0.7457 | 0.7908 | 0.3209 | 0.7967 | 0.1429 | 2.1837 | 0.0693 | 0.8931 | 0.5519 | 0.9971 |
| Music | 0.2500 | 0.1972 | 0.5500 | 0.6748 | 0.6897 | 0.6926 | 0.2167 | 1.8667 | 0.1542 | 0.8215 | 0.8702 | 0.8704 |
| NUS-WIDE-bow10% | 0.1844 | 0.0249 | 0.3066 | 0.3756 | 0.0413 | 0.3772 | 0.5288 | 34.1354 | 0.5827 | 0.4350 | 0.8708 | 0.9865 |
| NUS-WIDE-cVLADplus10% | 0.1986 | 0.0298 | 0.3223 | 0.3865 | 0.0414 | 0.3524 | 0.6265 | 38.5425 | 0.7243 | 0.3578 | 0.8810 | 1.0000 |
| OHSUMED-F | 0.2343 | 0.0575 | 0.4353 | 0.5314 | 0.4333 | 0.5611 | 0.3599 | 7.6266 | 0.4142 | 0.6150 | 0.9797 | 0.9799 |
| PlantGO | 0.6904 | 0.0442 | 0.7154 | 0.7352 | 0.6121 | 0.7452 | 0.2275 | 0.9551 | 0.0956 | 0.8585 | 0.9813 | 0.9900 |
| PlantPseAAC | 0.2347 | 0.0859 | 0.2602 | 0.2729 | 0.1800 | 0.3567 | 0.6020 | 2.1122 | 0.1842 | 0.5898 | 0.7921 | 0.8437 |
| rcv1subset1 | 0.1158 | 0.0308 | 0.3232 | 0.4287 | 0.2357 | 0.4392 | 0.4065 | 38.4075 | 0.4109 | 0.5111 | 0.9310 | 0.9954 |
| REUTERS-K500-EX2 | 0.3346 | 0.0117 | 0.4079 | 0.4533 | 0.2286 | 0.4925 | 0.5218 | 32.0870 | 0.5388 | 0.4873 | 0.7881 | 0.9901 |
| scene | 0.6598 | 0.0795 | 0.7116 | 0.7374 | 0.7765 | 0.7629 | 0.1867 | 0.4398 | 0.0709 | 0.8880 | 0.9510 | 0.9590 |
| sider_CDK_ECFP4 | 0.0141 | 0.2544 | 0.6434 | 0.7914 | 0.6149 | 0.7935 | 0.2320 | 19.2366 | 0.1636 | 0.7973 | 0.5827 | 0.7712 |
| sider_MordredDesc | 0.0140 | 0.2680 | 0.6110 | 0.7703 | 0.6107 | 0.7754 | 0.3146 | 19.6379 | 0.1808 | 0.7630 | 0.5661 | 0.7530 |
| sider_RDKit_desc | 0.0142 | 0.2856 | 0.6209 | 0.7860 | 0.5940 | 0.7725 | 0.2513 | 20.0315 | 0.2121 | 0.7405 | 0.5852 | 0.7543 |
| SLASHDOT-F | 0.4034 | 0.0419 | 0.5037 | 0.5624 | 0.3626 | 0.5904 | 0.4088 | 5.8033 | 0.3770 | 0.6379 | 0.7617 | 0.9820 |
| solar_flare-L3 | 0.8072 | 0.1333 | 0.8053 | 0.7946 | 0.5321 | 0.7923 | 0.2011 | 0.2029 | 0.1982 | 0.9029 | 0.6663 | 0.9661 |
| Stackex_chemistry | 0.0393 | 0.0122 | 0.0988 | 0.1354 | 0.0538 | 0.1667 | 0.8016 | 106.2674 | 0.8730 | 0.1532 | 0.9207 | 0.9861 |
| Stackex_chess | 0.0295 | 0.0100 | 0.1385 | 0.1893 | 0.0498 | 0.2536 | 0.6493 | 138.9978 | 0.8184 | 0.2030 | 0.5469 | 1.0000 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0504 | 0.0726 | 0.0218 | 0.1147 | 0.7374 | 72.2769 | 0.8165 | 0.1886 | 0.2560 | 0.9905 |
| Stackex_cooking | 0.0592 | 0.0052 | 0.1888 | 0.2574 | 0.1011 | 0.3042 | 0.6458 | 222.6879 | 0.7650 | 0.2287 | 0.9133 | 0.9988 |
| Stackex_philosophy | 0.0677 | 0.0093 | 0.1678 | 0.2285 | 0.0546 | 0.2661 | 0.6797 | 134.8750 | 0.7931 | 0.2150 | 0.7507 | 0.9850 |
| tmc2007-500 | 0.2958 | 0.0628 | 0.5652 | 0.6935 | 0.5683 | 0.6686 | 0.2552 | 4.1564 | 0.1484 | 0.7645 | 0.9599 | 0.9761 |
| tox21_CDK_ECFP4 | 0.1585 | 0.1650 | 0.3202 | 0.4061 | 0.3521 | 0.4303 | 0.4726 | 5.4396 | 0.4882 | 0.5609 | 0.8876 | 0.8928 |
| tox21_RDKit_desc | 0.1585 | 0.1734 | 0.2892 | 0.3803 | 0.2530 | 0.3633 | 0.5012 | 5.4333 | 0.4975 | 0.5520 | 0.9054 | 0.8904 |
| VirusGO | 0.7057 | 0.0551 | 0.8240 | 0.8606 | 0.6818 | 0.8594 | 0.2372 | 0.6741 | 0.1132 | 0.8460 | 0.8087 | 0.9707 |
| VirusPseAAC | 0.5668 | 0.1029 | 0.5922 | 0.6085 | 0.3830 | 0.6874 | 0.3337 | 1.0458 | 0.2550 | 0.7723 | 0.7620 | 0.9292 |
| Water-quality | 0.0095 | 0.3276 | 0.2727 | 0.4206 | 0.2632 | 0.4138 | 0.2675 | 9.0023 | 0.3422 | 0.6862 | 0.7764 | 0.7493 |
| Yahoo_Arts | 0.2019 | 0.0635 | 0.2837 | 0.3474 | 0.2072 | 0.3662 | 0.5166 | 10.3588 | 0.6258 | 0.4911 | 0.9442 | 0.9826 |
| Yahoo_Business | 0.5771 | 0.0258 | 0.7347 | 0.8189 | 0.2969 | 0.7336 | 0.0895 | 3.2366 | 0.2261 | 0.8750 | 0.8575 | 1.0000 |
| Yahoo_Computers | 0.3946 | 0.0411 | 0.4720 | 0.5301 | 0.2528 | 0.5090 | 0.3830 | 6.5838 | 0.4321 | 0.6074 | 0.8926 | 0.9762 |
| Yahoo_Education | 0.1473 | 0.0461 | 0.2034 | 0.2441 | 0.1523 | 0.3082 | 0.6199 | 9.2403 | 0.6535 | 0.4890 | 0.8779 | 0.9820 |
| Yahoo_Entertainment | 0.4154 | 0.0737 | 0.5279 | 0.5794 | 0.3519 | 0.5388 | 0.3872 | 3.9931 | 0.3922 | 0.6779 | 0.9822 | 0.9656 |
| Yahoo_Health | 0.4134 | 0.0397 | 0.5522 | 0.6275 | 0.2488 | 0.5899 | 0.3113 | 6.4930 | 0.3486 | 0.6920 | 0.8254 | 0.9751 |
| Yahoo_Recreation | 0.2386 | 0.0608 | 0.2919 | 0.3296 | 0.3083 | 0.3982 | 0.5202 | 6.5402 | 0.5502 | 0.5664 | 0.9469 | 0.9683 |
| Yahoo_Reference | 0.4534 | 0.0307 | 0.5098 | 0.5434 | 0.1745 | 0.5426 | 0.4032 | 5.4888 | 0.4346 | 0.6402 | 0.8119 | 0.9870 |
| Yahoo_Science | 0.2038 | 0.0379 | 0.2621 | 0.3056 | 0.1561 | 0.3375 | 0.6346 | 13.8118 | 0.6685 | 0.4115 | 0.9574 | 0.9849 |
| Yahoo_Social | 0.4715 | 0.0274 | 0.5424 | 0.5684 | 0.1615 | 0.5359 | 0.3724 | 7.4230 | 0.3860 | 0.6470 | 0.9172 | 0.9895 |
| Yahoo_Society | 0.3198 | 0.0846 | 0.4569 | 0.5569 | 0.2247 | 0.4600 | 0.3613 | 8.3262 | 0.4788 | 0.5849 | 0.9551 | 0.9711 |
| yeast | 0.2251 | 0.1969 | 0.5431 | 0.6667 | 0.3929 | 0.6605 | 0.2541 | 6.2434 | 0.2324 | 0.7502 | 0.8279 | 0.8729 |
| Yelp | 0.4129 | 0.1902 | 0.6360 | 0.7203 | 0.6739 | 0.7224 | 0.1960 | 1.3604 | 0.2276 | 0.8562 | 0.8667 | 0.8975 |

Table 6: Detailed results for AdaBoost for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5121 | 0.0297 | 0.5883 | 0.6075 | 0.6958 | 0.6920 | 0.2564 | 0.9346 | 0.0595 | 0.8420 | 0.9537 | 0.9778 |
| 3s-bbc1000 | 0.1111 | 0.2083 | 0.1111 | 0.1111 | 0.1346 | 0.1509 | 0.5000 | 1.7778 | 0.3771 | 0.6565 | 0.7715 | 0.7670 |
| 3s-guardian1000 | 0.0323 | 0.2151 | 0.0323 | 0.0323 | 0.0278 | 0.0476 | 0.6452 | 2.0645 | 0.4210 | 0.5581 | 0.6270 | 0.6757 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7647 | 2.5294 | 0.5176 | 0.4520 | 0.4746 | 0.6627 |
| 3s-reuters1000 | 0.0333 | 0.1722 | 0.0333 | 0.0333 | 0.0476 | 0.0606 | 0.8000 | 2.2000 | 0.4942 | 0.4617 | 0.6952 | 0.6356 |
| amphibians | 0.0000 | 0.3492 | 0.3296 | 0.5161 | 0.4095 | 0.5510 | 0.2222 | 3.0556 | 0.1731 | 0.8098 | 0.6165 | 0.7361 |
| bibtex | 0.1720 | 0.0136 | 0.3579 | 0.4512 | 0.3296 | 0.4677 | 0.3795 | 38.1641 | 0.2444 | 0.5716 | 0.9606 | 0.9758 |
| birds | 0.1282 | 0.0783 | 0.2316 | 0.2836 | 0.1843 | 0.3556 | 0.2821 | 4.3846 | 0.2290 | 0.7083 | 0.8415 | 0.9384 |
| bookmarks10% | 0.1707 | 0.0174 | 0.2521 | 0.3159 | 0.1248 | 0.2302 | 0.6344 | 71.9104 | 0.4281 | 0.3836 | 0.9353 | 0.9476 |
| CAL500 | 0.0000 | 0.1416 | 0.1250 | 0.2286 | 0.0406 | 0.2188 | 0.2353 | 149.8235 | 0.3758 | 0.4664 | 0.7189 | 0.8722 |
| corel16k001 | 0.0065 | 0.0262 | 0.0991 | 0.1607 | 0.0490 | 0.1664 | 0.6885 | 70.9001 | 0.4242 | 0.2886 | 0.8985 | 0.9334 |
| Corel5k | 0.0040 | 0.0139 | 0.0766 | 0.1287 | 0.0340 | 0.1301 | 0.8021 | 157.4720 | 0.7048 | 0.1889 | 0.6661 | 0.9791 |
| delicious | 0.0000 | 0.6823 | 0.0213 | 0.0420 | 0.0586 | 0.0411 | 0.6794 | 929.2917 | 0.9315 | 0.0667 | 0.9776 | 1.0000 |
| emotions | 0.3000 | 0.1889 | 0.4917 | 0.5732 | 0.6015 | 0.6344 | 0.2167 | 1.5833 | 0.1805 | 0.8325 | 0.8704 | 0.8822 |
| enron | 0.1465 | 0.0545 | 0.4541 | 0.6004 | 0.1895 | 0.5643 | 0.2490 | 13.6912 | 0.1378 | 0.7050 | 0.7255 | 0.9253 |
| EukaryoteGO | 0.7006 | 0.0201 | 0.7787 | 0.8113 | 0.7303 | 0.8186 | 0.1827 | 0.4327 | 0.0147 | 0.8880 | 0.9928 | 0.9919 |
| EukaryotePseAAC | 0.1507 | 0.0491 | 0.1642 | 0.1661 | 0.0950 | 0.2434 | 0.5357 | 2.3008 | 0.1013 | 0.6414 | 0.8134 | 0.9224 |
| flags | 0.3500 | 0.2286 | 0.6008 | 0.7288 | 0.5965 | 0.7143 | 0.1000 | 3.3000 | 0.1758 | 0.8823 | 0.7777 | 0.8649 |
| foodtruck | 0.2683 | 0.1382 | 0.3852 | 0.4850 | 0.1289 | 0.4688 | 0.2683 | 2.7561 | 0.1398 | 0.7766 | 0.6949 | 0.8397 |
| genbase | 0.9552 | 0.0017 | 0.9826 | 0.9913 | 0.6222 | 0.9814 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9357 | 0.0107 | 0.9571 | 0.9678 | 0.8357 | 0.9586 | 0.0214 | 0.1571 | 0.0199 | 0.9815 | 0.8746 | 0.9995 |
| GnegativePseAAC | 0.6071 | 0.0589 | 0.6107 | 0.6125 | 0.2808 | 0.7227 | 0.2357 | 0.6429 | 0.1151 | 0.8464 | 0.8418 | 0.9713 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9038 | 0.9135 | 0.9255 | 0.9143 | 0.0769 | 0.1346 | 0.0513 | 0.9567 | 0.9974 | 0.9974 |
| GpositivePseAAC | 0.4808 | 0.1635 | 0.4808 | 0.4808 | 0.3906 | 0.5952 | 0.2308 | 0.4423 | 0.1987 | 0.8558 | 0.9529 | 0.9427 |
| HumanGO | 0.6808 | 0.0378 | 0.7449 | 0.7966 | 0.7144 | 0.7640 | 0.1897 | 0.6460 | 0.0401 | 0.8765 | 0.9725 | 0.9856 |
| HumanPseAAC | 0.1044 | 0.0788 | 0.1086 | 0.1092 | 0.0719 | 0.1708 | 0.5540 | 2.0923 | 0.1420 | 0.6109 | 0.7842 | 0.8626 |
| Image | 0.5100 | 0.1270 | 0.5675 | 0.5953 | 0.6574 | 0.6631 | 0.1850 | 0.6850 | 0.1521 | 0.8725 | 0.9440 | 0.9440 |
| IMDB-ECC-F10% | 0.0508 | 0.0777 | 0.1316 | 0.1836 | 0.0636 | 0.1985 | 0.6403 | 7.5282 | 0.2032 | 0.4785 | 0.6679 | 0.8197 |
| IMDB-F10% | 0.0443 | 0.0806 | 0.1208 | 0.1714 | 0.0750 | 0.1911 | 0.5776 | 7.8397 | 0.2008 | 0.4909 | 0.6666 | 0.8290 |
| LLOG-F | 0.0410 | 0.0172 | 0.0533 | 0.0588 | 0.0282 | 0.0925 | 0.6721 | 27.0820 | 0.7221 | 0.3319 | 0.5976 | 0.9972 |
| mediamill10% | 1.0000 | 0.0000 | 1.0000 | 1.0000 | 0.8218 | 1.0000 | 0.0000 | 3.4537 | 0.0000 | 1.0000 | 0.8218 | 1.0000 |
| medical | 0.6837 | 0.0093 | 0.7730 | 0.8174 | 0.3345 | 0.8285 | 0.1020 | 3.1327 | 0.0882 | 0.8988 | 0.5530 | 0.9980 |
| Music | 0.2000 | 0.1778 | 0.4917 | 0.6188 | 0.6643 | 0.6800 | 0.1500 | 1.8167 | 0.1630 | 0.8494 | 0.8888 | 0.8914 |
| NUS-WIDE-bow10% | 0.1368 | 0.0267 | 0.2307 | 0.2924 | 0.0259 | 0.2966 | 0.5541 | 18.9488 | 0.1819 | 0.4956 | 0.7140 | 0.8936 |
| NUS-WIDE-cVLADplus10% | 0.1579 | 0.0232 | 0.2713 | 0.3290 | 0.0507 | 0.3860 | 0.4943 | 30.7426 | 0.5149 | 0.4770 | 0.8773 | 0.9876 |
| OHSUMED-F | 0.2310 | 0.0554 | 0.4288 | 0.5503 | 0.4582 | 0.5594 | 0.3151 | 3.5282 | 0.1030 | 0.7276 | 0.8641 | 0.9249 |
| PlantGO | 0.6686 | 0.0425 | 0.7217 | 0.7518 | 0.6645 | 0.7608 | 0.2052 | 0.9291 | 0.0990 | 0.8573 | 0.9899 | 0.9796 |
| PlantPseAAC | 0.0612 | 0.0893 | 0.0663 | 0.0688 | 0.0515 | 0.1176 | 0.5816 | 2.1837 | 0.2453 | 0.5952 | 0.8587 | 0.8615 |
| rcv1subset1 | 0.0908 | 0.0276 | 0.2820 | 0.3864 | 0.1556 | 0.3859 | 0.4268 | 16.5622 | 0.1026 | 0.5982 | 0.9030 | 0.9569 |
| REUTERS-K500-EX2 | 0.3121 | 0.0127 | 0.4311 | 0.4894 | 0.2338 | 0.4964 | 0.4336 | 14.5593 | 0.2077 | 0.6363 | 0.7671 | 0.9762 |
| scene | 0.6183 | 0.0754 | 0.6473 | 0.6616 | 0.7512 | 0.7494 | 0.1494 | 0.4357 | 0.0717 | 0.9044 | 0.9696 | 0.9764 |
| sider_CDK_ECFP4 | 0.0212 | 0.2568 | 0.5721 | 0.7516 | 0.6241 | 0.7583 | 0.0983 | 18.6720 | 0.1218 | 0.8463 | 0.5905 | 0.8044 |
| sider_MordredDesc | 0.0070 | 0.2615 | 0.5603 | 0.7265 | 0.6166 | 0.7561 | 0.0978 | 19.1824 | 0.1272 | 0.8424 | 0.5665 | 0.7906 |
| sider_RDKit_desc | 0.0142 | 0.2610 | 0.5851 | 0.7443 | 0.6203 | 0.7708 | 0.1068 | 18.7767 | 0.1247 | 0.8443 | 0.5803 | 0.8102 |
| SLASHDOT-F | 0.3624 | 0.0453 | 0.4621 | 0.4991 | 0.3830 | 0.5414 | 0.4062 | 3.2697 | 0.1875 | 0.6783 | 0.7153 | 0.9317 |
| solar_flare-L3 | 0.3987 | 0.1980 | 0.6912 | 0.8222 | 0.5079 | 0.7785 | 0.2026 | 0.1979 | 0.0998 | 0.8995 | 0.6658 | 0.9858 |
| Stackex_chemistry | 0.0412 | 0.0165 | 0.1663 | 0.2559 | 0.1225 | 0.2666 | 0.6233 | 66.4109 | 0.4286 | 0.3619 | 0.8863 | 0.9790 |
| Stackex_chess | 0.0180 | 0.0129 | 0.1720 | 0.2752 | 0.0857 | 0.2916 | 0.5940 | 102.3576 | 0.5038 | 0.3437 | 0.5325 | 0.9920 |
| Stackex_coffee | 0.0440 | 0.0236 | 0.1042 | 0.1680 | 0.0437 | 0.1743 | 0.6433 | 57.6834 | 0.4767 | 0.3610 | 0.2531 | 0.9728 |
| Stackex_cooking | 0.0479 | 0.0080 | 0.2363 | 0.3549 | 0.1479 | 0.3343 | 0.5004 | 161.9805 | 0.4795 | 0.3973 | 0.9182 | 1.0000 |
| Stackex_philosophy | 0.0633 | 0.0132 | 0.2154 | 0.3198 | 0.0982 | 0.3089 | 0.5466 | 93.7106 | 0.4539 | 0.3874 | 0.7362 | 0.9826 |
| tmc2007-500 | 0.2609 | 0.0652 | 0.5100 | 0.6386 | 0.5441 | 0.6179 | 0.2477 | 2.6508 | 0.0487 | 0.7957 | 0.9316 | 0.9507 |
| tox21_CDK_ECFP4 | 0.1399 | 0.1646 | 0.2867 | 0.3704 | 0.4193 | 0.4487 | 0.4788 | 4.0002 | 0.2121 | 0.6359 | 0.7235 | 0.7905 |
| tox21_RDKit_desc | 0.1682 | 0.1586 | 0.3632 | 0.4564 | 0.4297 | 0.5050 | 0.4261 | 3.8258 | 0.1905 | 0.6626 | 0.7492 | 0.7921 |
| VirusGO | 0.7682 | 0.0551 | 0.8146 | 0.8640 | 0.6579 | 0.8358 | 0.0470 | 0.4788 | 0.0693 | 0.9617 | 0.8210 | 0.9938 |
| VirusPseAAC | 0.3771 | 0.1528 | 0.4064 | 0.4172 | 0.3111 | 0.4805 | 0.3356 | 0.7551 | 0.1314 | 0.7929 | 0.6083 | 0.8975 |
| Water-quality | 0.0285 | 0.2839 | 0.4381 | 0.6037 | 0.5585 | 0.6033 | 0.1893 | 8.6114 | 0.2310 | 0.7370 | 0.7220 | 0.7707 |
| Yahoo_Arts | 0.3158 | 0.0502 | 0.4096 | 0.4697 | 0.3741 | 0.4987 | 0.3477 | 4.1547 | 0.1024 | 0.7014 | 0.8151 | 0.9014 |
| Yahoo_Business | 0.5010 | 0.0294 | 0.6920 | 0.7889 | 0.2859 | 0.7047 | 0.1186 | 1.8864 | 0.1300 | 0.8821 | 0.7239 | 0.9630 |
| Yahoo_Computers | 0.1953 | 0.0413 | 0.2361 | 0.2644 | 0.1639 | 0.3118 | 0.4814 | 3.1563 | 0.1942 | 0.6733 | 0.7414 | 0.9027 |
| Yahoo_Education | 0.1675 | 0.0505 | 0.3133 | 0.3755 | 0.2194 | 0.3899 | 0.5614 | 3.3851 | 0.4897 | 0.5827 | 0.7714 | 0.9172 |
| Yahoo_Entertainment | 0.2773 | 0.0581 | 0.3470 | 0.3905 | 0.1973 | 0.4388 | 0.4450 | 2.7626 | 0.0807 | 0.6631 | 0.8377 | 0.8887 |
| Yahoo_Health | 0.3430 | 0.0411 | 0.4809 | 0.5445 | 0.2401 | 0.5248 | 0.3651 | 2.6601 | 0.2026 | 0.7339 | 0.7436 | 0.9493 |
| Yahoo_Recreation | 0.2064 | 0.0552 | 0.2380 | 0.2640 | 0.2289 | 0.3259 | 0.5006 | 3.6492 | 0.4719 | 0.6167 | 0.8103 | 0.8619 |
| Yahoo_Reference | 0.4136 | 0.0333 | 0.4945 | 0.5250 | 0.1836 | 0.5096 | 0.4590 | 2.4434 | 0.0811 | 0.6691 | 0.7163 | 0.9492 |
| Yahoo_Science | 0.1857 | 0.0339 | 0.2275 | 0.2485 | 0.2105 | 0.2964 | 0.5795 | 5.1494 | 0.0777 | 0.5542 | 0.8271 | 0.8813 |
| Yahoo_Social | 0.4456 | 0.0241 | 0.5173 | 0.5525 | 0.2665 | 0.5705 | 0.3546 | 2.5224 | 0.0724 | 0.7226 | 0.7616 | 0.9249 |
| Yahoo_Society | 0.0199 | 0.1615 | 0.1517 | 0.2491 | 0.2101 | 0.2249 | 0.7294 | 8.1686 | 0.2735 | 0.3817 | 0.6240 | 0.7606 |
| yeast | 0.1596 | 0.1987 | 0.5138 | 0.6530 | 0.4221 | 0.6441 | 0.2333 | 5.9275 | 0.1509 | 0.7782 | 0.7456 | 0.8510 |
| Yelp | 0.5610 | 0.1308 | 0.7607 | 0.8315 | 0.7693 | 0.8065 | 0.0909 | 1.1258 | 0.0925 | 0.9189 | 0.8976 | 0.9339 |

Table 7: Detailed results for k-NN for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3688 | 0.0475 | 0.3749 | 0.3780 | 0.4484 | 0.4493 | 0.5887 | 6.0654 | 0.6000 | 0.4903 | 0.9886 | 0.9868 |
| 3s-bbc1000 | 0.2500 | 0.2731 | 0.2731 | 0.2884 | 0.2062 | 0.2716 | 0.6944 | 2.7222 | 0.7269 | 0.4995 | 0.9021 | 0.8807 |
| 3s-guardian1000 | 0.1290 | 0.2903 | 0.2043 | 0.2409 | 0.2230 | 0.2500 | 0.5484 | 2.0968 | 0.6306 | 0.6051 | 0.8775 | 0.8542 |
| 3s-inter3000 | 0.2353 | 0.2353 | 0.2647 | 0.2786 | 0.1155 | 0.2941 | 0.7059 | 2.4706 | 0.6368 | 0.4902 | 0.7086 | 0.8585 |
| 3s-reuters1000 | 0.2000 | 0.2667 | 0.2000 | 0.2000 | 0.1259 | 0.2000 | 0.8000 | 2.5000 | 0.7733 | 0.4328 | 0.8991 | 0.8307 |
| amphibians | 0.1111 | 0.3413 | 0.4238 | 0.6100 | 0.4232 | 0.5743 | 0.2222 | 2.8889 | 0.1870 | 0.8344 | 0.6184 | 0.7274 |
| bibtex | 0.0662 | 0.0195 | 0.1211 | 0.1551 | 0.0357 | 0.1450 | 0.7973 | 91.3824 | 0.9049 | 0.1342 | 0.9993 | 0.9993 |
| birds | 0.1538 | 0.0999 | 0.2872 | 0.3544 | 0.2050 | 0.3833 | 0.5897 | 7.8205 | 0.5973 | 0.4642 | 0.8325 | 0.9364 |
| bookmarks10% | 0.1708 | 0.0089 | 0.1808 | 0.1860 | 0.0476 | 0.1952 | 0.8052 | 110.4305 | 0.8165 | 0.2097 | 0.9854 | 0.9998 |
| CAL500 | 0.0000 | 0.1404 | 0.1685 | 0.2886 | 0.0623 | 0.2888 | 0.3333 | 151.4118 | 0.5309 | 0.4102 | 0.7625 | 0.9048 |
| corel16k001 | 0.0051 | 0.0202 | 0.0388 | 0.0584 | 0.0211 | 0.0740 | 0.9034 | 117.0951 | 0.9553 | 0.0749 | 0.9976 | 0.9977 |
| Corel5k | 0.0020 | 0.0139 | 0.0455 | 0.0720 | 0.0054 | 0.0721 | 0.9440 | 168.9520 | 0.9830 | 0.1227 | 0.6790 | 0.9999 |
| delicious | 0.0000 | 0.6002 | 0.0214 | 0.0412 | 0.0484 | 0.0423 | 0.7056 | 920.9838 | 0.9693 | 0.0577 | 0.9978 | 0.9906 |
| emotions | 0.3833 | 0.1861 | 0.6069 | 0.7132 | 0.6786 | 0.7022 | 0.2667 | 1.7500 | 0.2574 | 0.8078 | 0.8831 | 0.8935 |
| enron | 0.1345 | 0.0596 | 0.3323 | 0.4441 | 0.0941 | 0.4118 | 0.3626 | 28.5848 | 0.5656 | 0.4707 | 0.8303 | 0.9814 |
| EukaryoteGO | 0.7003 | 0.0189 | 0.7869 | 0.8323 | 0.7329 | 0.8192 | 0.1709 | 0.9086 | 0.0525 | 0.8834 | 0.9882 | 1.0000 |
| EukaryotePseAAC | 0.2667 | 0.0560 | 0.3615 | 0.4053 | 0.1435 | 0.4413 | 0.5700 | 6.3944 | 0.5263 | 0.5087 | 0.9666 | 0.9652 |
| flags | 0.1500 | 0.2786 | 0.5558 | 0.6881 | 0.5521 | 0.6880 | 0.2500 | 3.8000 | 0.3358 | 0.7775 | 0.7442 | 0.8222 |
| foodtruck | 0.3171 | 0.1443 | 0.5007 | 0.6221 | 0.1836 | 0.5419 | 0.2439 | 3.7073 | 0.3815 | 0.7505 | 0.8238 | 0.9329 |
| genbase | 0.9254 | 0.0033 | 0.9552 | 0.9699 | 0.4802 | 0.9620 | 0.0149 | 1.4478 | 0.0448 | 0.9603 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0143 | 0.9429 | 0.9535 | 0.7759 | 0.9444 | 0.0357 | 0.2286 | 0.0571 | 0.9654 | 0.8748 | 0.9995 |
| GnegativePseAAC | 0.6214 | 0.0893 | 0.6393 | 0.6482 | 0.2775 | 0.6479 | 0.3429 | 1.4571 | 0.3265 | 0.7423 | 0.8541 | 0.9755 |
| GpositiveGO | 0.9038 | 0.0337 | 0.9135 | 0.9182 | 0.9516 | 0.9320 | 0.0769 | 0.2885 | 0.0865 | 0.9375 | 0.9986 | 0.9976 |
| GpositivePseAAC | 0.7308 | 0.1298 | 0.7308 | 0.7308 | 0.5660 | 0.7379 | 0.2500 | 0.5192 | 0.2500 | 0.8381 | 0.9860 | 0.9792 |
| HumanGO | 0.6968 | 0.0353 | 0.7649 | 0.8059 | 0.7130 | 0.7622 | 0.1625 | 1.0658 | 0.0992 | 0.8748 | 0.9709 | 0.9769 |
| HumanPseAAC | 0.2315 | 0.1100 | 0.2789 | 0.3054 | 0.0958 | 0.3108 | 0.6817 | 5.0418 | 0.6511 | 0.4351 | 0.9433 | 0.9405 |
| Image | 0.5550 | 0.1710 | 0.6100 | 0.6379 | 0.6101 | 0.6157 | 0.3300 | 1.1350 | 0.3513 | 0.7682 | 0.9476 | 0.9438 |
| IMDB-ECC-F10% | 0.0776 | 0.0800 | 0.1484 | 0.1903 | 0.0285 | 0.1889 | 0.6625 | 12.5933 | 0.7091 | 0.3666 | 0.9695 | 0.9654 |
| IMDB-F10% | 0.0528 | 0.0907 | 0.1416 | 0.1889 | 0.0283 | 0.1926 | 0.5772 | 12.8136 | 0.7183 | 0.3832 | 0.9755 | 0.9655 |
| LLOG-F | 0.0328 | 0.0199 | 0.0396 | 0.0439 | 0.0100 | 0.0619 | 0.9344 | 37.4180 | 0.9604 | 0.1105 | 0.5985 | 0.9974 |
| mediamill10% | 0.0974 | 0.0326 | 0.4442 | 0.6049 | 0.0629 | 0.5552 | 0.2399 | 55.5226 | 0.4033 | 0.5579 | 0.8063 | 0.9904 |
| medical | 0.5510 | 0.0159 | 0.6310 | 0.6722 | 0.1994 | 0.6875 | 0.2857 | 11.3776 | 0.3288 | 0.6967 | 0.5533 | 0.9970 |
| Music | 0.2333 | 0.1861 | 0.5889 | 0.7372 | 0.7115 | 0.7149 | 0.2833 | 2.0833 | 0.2930 | 0.7898 | 0.9052 | 0.9110 |
| NUS-WIDE-bow10% | 0.1855 | 0.0247 | 0.3099 | 0.3721 | 0.0414 | 0.3822 | 0.5217 | 34.2618 | 0.5912 | 0.4442 | 0.8781 | 0.9957 |
| NUS-WIDE-cVLADplus10% | 0.1953 | 0.0293 | 0.3208 | 0.3869 | 0.0421 | 0.3541 | 0.6397 | 38.4853 | 0.7259 | 0.3545 | 0.8961 | 1.0000 |
| OHSUMED-F | 0.2307 | 0.0572 | 0.4389 | 0.5367 | 0.4431 | 0.5584 | 0.3620 | 7.5724 | 0.4166 | 0.6148 | 0.9779 | 0.9826 |
| PlantGO | 0.5729 | 0.0573 | 0.6181 | 0.6418 | 0.5224 | 0.6598 | 0.2917 | 2.2292 | 0.3351 | 0.7341 | 0.9953 | 0.9886 |
| PlantPseAAC | 0.2041 | 0.1216 | 0.2432 | 0.2645 | 0.1154 | 0.2886 | 0.7347 | 4.0000 | 0.7257 | 0.4171 | 0.9528 | 0.9341 |
| rcv1subset1 | 0.1160 | 0.0304 | 0.3291 | 0.4386 | 0.2377 | 0.4358 | 0.4123 | 38.0075 | 0.4040 | 0.5192 | 0.9244 | 0.9818 |
| REUTERS-K500-EX2 | 0.3196 | 0.0120 | 0.3609 | 0.3852 | 0.1422 | 0.4114 | 0.5842 | 38.0430 | 0.6216 | 0.4167 | 0.7851 | 0.9983 |
| scene | 0.6681 | 0.0996 | 0.7006 | 0.7165 | 0.7296 | 0.7143 | 0.2614 | 1.0622 | 0.2860 | 0.8007 | 0.9819 | 0.9793 |
| sider_CDK_ECFP4 | 0.0211 | 0.3383 | 0.4169 | 0.6283 | 0.4769 | 0.6139 | 0.1056 | 19.3310 | 0.1478 | 0.8361 | 0.6272 | 0.7987 |
| sider_MordredDesc | 0.0070 | 0.2843 | 0.5567 | 0.7295 | 0.6072 | 0.7422 | 0.1127 | 19.8380 | 0.1591 | 0.8239 | 0.6008 | 0.7944 |
| sider_RDKit_desc | 0.0211 | 0.2822 | 0.5927 | 0.7595 | 0.6130 | 0.7567 | 0.1831 | 19.5563 | 0.1636 | 0.7975 | 0.5936 | 0.7833 |
| SLASHDOT-F | 0.1878 | 0.0750 | 0.2139 | 0.2274 | 0.0644 | 0.2296 | 0.7619 | 10.9735 | 0.7698 | 0.3060 | 0.7585 | 0.9700 |
| solar_flare-L3 | 0.0000 | 0.6000 | 0.1000 | 0.1333 | 0.1111 | 0.1818 | 1.0000 | 1.0000 | 0.7000 | 0.5000 | 0.0000 | 0.5200 |
| Stackex_chemistry | 0.0101 | 0.0172 | 0.0349 | 0.0498 | 0.0029 | 0.0501 | 0.9078 | 111.8372 | 0.9707 | 0.0785 | 0.9195 | 0.9995 |
| Stackex_chess | 0.0179 | 0.0139 | 0.0720 | 0.1039 | 0.0055 | 0.1079 | 0.8988 | 152.3929 | 0.9619 | 0.0635 | 0.5503 | 0.9997 |
| Stackex_coffee | 0.0000 | 0.0230 | 0.0906 | 0.1279 | 0.0029 | 0.1333 | 1.0000 | 81.6957 | 1.0000 | 0.0364 | 0.2602 | 1.0000 |
| Stackex_cooking | 0.0589 | 0.0051 | 0.1941 | 0.2597 | 0.1015 | 0.3032 | 0.6468 | 225.5535 | 0.7701 | 0.2313 | 0.9221 | 0.9873 |
| Stackex_philosophy | 0.0251 | 0.0128 | 0.0767 | 0.1068 | 0.0022 | 0.1014 | 0.9472 | 152.8015 | 0.9794 | 0.0426 | 0.7509 | 0.9999 |
| tmc2007-500 | 0.2943 | 0.0619 | 0.5589 | 0.6929 | 0.5681 | 0.6726 | 0.2535 | 4.0974 | 0.1475 | 0.7783 | 0.9605 | 0.9702 |
| tox21_CDK_ECFP4 | 0.1438 | 0.1758 | 0.3043 | 0.3878 | 0.3505 | 0.4221 | 0.5205 | 5.7192 | 0.5374 | 0.5356 | 0.8900 | 0.8918 |
| tox21_RDKit_desc | 0.1747 | 0.1658 | 0.3487 | 0.4410 | 0.4011 | 0.4713 | 0.4760 | 5.4795 | 0.4921 | 0.5649 | 0.8909 | 0.8977 |
| VirusGO | 0.7143 | 0.0873 | 0.7698 | 0.8055 | 0.6126 | 0.7755 | 0.2381 | 1.0000 | 0.2139 | 0.8254 | 0.8241 | 0.9810 |
| VirusPseAAC | 0.4286 | 0.1825 | 0.4762 | 0.4989 | 0.2970 | 0.5106 | 0.5714 | 1.3333 | 0.3048 | 0.6508 | 0.6635 | 0.9000 |
| Water-quality | 0.0094 | 0.3147 | 0.3598 | 0.5346 | 0.4479 | 0.5220 | 0.2547 | 8.7736 | 0.2905 | 0.7075 | 0.7154 | 0.7527 |
| Yahoo_Arts | 0.2031 | 0.0640 | 0.2881 | 0.3490 | 0.2076 | 0.3694 | 0.5224 | 10.3525 | 0.6242 | 0.4912 | 0.9515 | 0.9859 |
| Yahoo_Business | 0.5089 | 0.0297 | 0.6731 | 0.7667 | 0.0957 | 0.6719 | 0.1239 | 3.9314 | 0.2980 | 0.8493 | 0.8609 | 0.9966 |
| Yahoo_Computers | 0.3892 | 0.0414 | 0.4796 | 0.5441 | 0.2485 | 0.5089 | 0.3796 | 6.4867 | 0.4321 | 0.6045 | 0.8895 | 0.9849 |
| Yahoo_Education | 0.1779 | 0.0503 | 0.2168 | 0.2408 | 0.0869 | 0.2591 | 0.6949 | 10.5328 | 0.7396 | 0.4125 | 0.8927 | 0.9828 |
| Yahoo_Entertainment | 0.2616 | 0.0781 | 0.3149 | 0.3474 | 0.1693 | 0.3364 | 0.6229 | 5.1885 | 0.6139 | 0.4865 | 0.9635 | 0.9661 |
| Yahoo_Health | 0.3084 | 0.0503 | 0.4108 | 0.4722 | 0.1451 | 0.4337 | 0.4864 | 8.5092 | 0.5137 | 0.5621 | 0.8253 | 0.9817 |
| Yahoo_Recreation | 0.1863 | 0.0789 | 0.2351 | 0.2620 | 0.1940 | 0.2719 | 0.7007 | 8.2642 | 0.7126 | 0.4179 | 0.9658 | 0.9655 |
| Yahoo_Reference | 0.4197 | 0.0342 | 0.4682 | 0.4930 | 0.0448 | 0.4802 | 0.4720 | 6.8917 | 0.5254 | 0.5695 | 0.8174 | 0.9915 |
| Yahoo_Science | 0.1540 | 0.0513 | 0.1987 | 0.2235 | 0.0220 | 0.1981 | 0.8351 | 16.7030 | 0.8712 | 0.2576 | 0.9668 | 0.9917 |
| Yahoo_Social | 0.3977 | 0.0330 | 0.4601 | 0.4943 | 0.0837 | 0.4588 | 0.4851 | 9.5908 | 0.5174 | 0.5378 | 0.9147 | 0.9909 |
| Yahoo_Society | 0.3202 | 0.0831 | 0.4538 | 0.5560 | 0.2244 | 0.4705 | 0.3578 | 8.2716 | 0.4732 | 0.5933 | 0.9536 | 0.9946 |
| yeast | 0.2107 | 0.2090 | 0.5295 | 0.6581 | 0.4434 | 0.6439 | 0.2190 | 6.0165 | 0.2526 | 0.7720 | 0.8348 | 0.8895 |
| Yelp | 0.3260 | 0.2427 | 0.5278 | 0.6372 | 0.4879 | 0.5856 | 0.2672 | 1.6251 | 0.4293 | 0.8151 | 0.9118 | 0.9084 |

Table 8: Detailed results for SVM for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5633 | 0.0254 | 0.5957 | 0.6118 | 0.7121 | 0.7161 | 0.2930 | 2.4015 | 0.2273 | 0.7693 | 0.9900 | 0.9904 |
| 3s-bbc1000 | 0.1667 | 0.2176 | 0.2315 | 0.2684 | 0.2801 | 0.3188 | 0.7222 | 2.6944 | 0.6935 | 0.4699 | 0.8773 | 0.8295 |
| 3s-guardian1000 | 0.1290 | 0.2527 | 0.2376 | 0.2980 | 0.2609 | 0.3380 | 0.5161 | 2.0323 | 0.4976 | 0.6183 | 0.8442 | 0.8419 |
| 3s-inter3000 | 0.0000 | 0.1961 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.5882 | 0.8118 | 0.3755 | 0.6110 | 0.7817 |
| 3s-reuters1000 | 0.0000 | 0.2389 | 0.0167 | 0.0222 | 0.0556 | 0.0444 | 0.9000 | 2.3667 | 0.7200 | 0.4083 | 0.8353 | 0.7627 |
| amphibians | 0.1111 | 0.2619 | 0.5757 | 0.7796 | 0.5485 | 0.7179 | 0.3333 | 2.6111 | 0.1148 | 0.8126 | 0.7674 | 0.8061 |
| bibtex | 0.1851 | 0.0120 | 0.3562 | 0.4465 | 0.3072 | 0.4744 | 0.4405 | 72.2851 | 0.5818 | 0.4259 | 0.9977 | 0.9978 |
| birds | 0.1795 | 0.0931 | 0.3391 | 0.4115 | 0.2703 | 0.4103 | 0.4872 | 7.7436 | 0.5208 | 0.5088 | 0.8404 | 0.9349 |
| bookmarks10% | 0.1879 | 0.0088 | 0.2175 | 0.2392 | 0.1100 | 0.2617 | 0.7244 | 105.2403 | 0.7626 | 0.2589 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1398 | 0.2214 | 0.3660 | 0.0725 | 0.3573 | 0.3725 | 151.1176 | 0.5721 | 0.4383 | 0.8215 | 0.9334 |
| corel16k001 | 0.0087 | 0.0188 | 0.0439 | 0.0631 | 0.0327 | 0.0824 | 0.8824 | 115.2622 | 0.9461 | 0.0863 | 0.9990 | 0.9991 |
| Corel5k | 0.0060 | 0.0091 | 0.0567 | 0.0834 | 0.0235 | 0.1145 | 0.8460 | 163.4020 | 0.9382 | 0.1610 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0252 | 0.0929 | 0.1613 | 0.0835 | 0.1716 | 0.5357 | 906.4891 | 0.8490 | 0.1489 | 0.9934 | 0.9986 |
| emotions | 0.2833 | 0.1889 | 0.5667 | 0.6956 | 0.6557 | 0.6881 | 0.2833 | 1.7500 | 0.2454 | 0.8004 | 0.8866 | 0.8932 |
| enron | 0.1871 | 0.0487 | 0.4713 | 0.6055 | 0.1688 | 0.5859 | 0.3041 | 23.9825 | 0.3603 | 0.6047 | 0.8246 | 0.9802 |
| EukaryoteGO | 0.7242 | 0.0190 | 0.7848 | 0.8155 | 0.6970 | 0.8157 | 0.1701 | 0.8570 | 0.0500 | 0.8930 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.1892 | 0.0510 | 0.2192 | 0.2341 | 0.1125 | 0.3090 | 0.5380 | 6.2021 | 0.4996 | 0.5262 | 0.9741 | 0.9765 |
| flags | 0.2000 | 0.2357 | 0.6002 | 0.7259 | 0.5930 | 0.7402 | 0.2000 | 3.7000 | 0.2958 | 0.7894 | 0.6871 | 0.8111 |
| foodtruck | 0.2927 | 0.1545 | 0.4612 | 0.6031 | 0.1245 | 0.4933 | 0.2439 | 4.4390 | 0.4354 | 0.7207 | 0.8544 | 0.9573 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2985 | 0.0018 | 0.9922 | 0.6667 | 0.9994 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8741 | 0.9981 |
| GnegativePseAAC | 0.7429 | 0.0482 | 0.7607 | 0.7695 | 0.4536 | 0.8015 | 0.1786 | 0.6214 | 0.1526 | 0.8742 | 0.8632 | 0.9902 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.6923 | 0.1154 | 0.6923 | 0.6923 | 0.5556 | 0.7500 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6881 | 0.0358 | 0.7663 | 0.8059 | 0.6960 | 0.7790 | 0.1576 | 1.0740 | 0.1010 | 0.8831 | 0.9846 | 0.9883 |
| HumanPseAAC | 0.2733 | 0.0852 | 0.3012 | 0.3160 | 0.1618 | 0.3592 | 0.5273 | 3.3794 | 0.4662 | 0.5885 | 0.9534 | 0.9539 |
| Image | 0.5500 | 0.1580 | 0.6083 | 0.6379 | 0.6349 | 0.6326 | 0.3000 | 1.0500 | 0.2917 | 0.7935 | 0.9339 | 0.9298 |
| IMDB-ECC-F10% | 0.0304 | 0.0690 | 0.0575 | 0.0730 | 0.0326 | 0.0962 | 0.6342 | 12.3197 | 0.7278 | 0.3762 | 0.9876 | 0.9750 |
| IMDB-F10% | 0.0199 | 0.0727 | 0.0499 | 0.0659 | 0.0315 | 0.0890 | 0.5899 | 12.7531 | 0.7194 | 0.3837 | 0.9868 | 0.9750 |
| LLOG-F | 0.1721 | 0.0161 | 0.2015 | 0.2187 | 0.0533 | 0.2899 | 0.7295 | 28.5984 | 0.7781 | 0.2847 | 0.5982 | 0.9978 |
| mediamill10% | 0.0879 | 0.0295 | 0.4653 | 0.6266 | 0.0881 | 0.5814 | 0.1615 | 59.6366 | 0.4481 | 0.5501 | 0.8131 | 0.9938 |
| medical | 0.6633 | 0.0104 | 0.7526 | 0.7993 | 0.2863 | 0.8130 | 0.1735 | 5.0306 | 0.1329 | 0.8368 | 0.5527 | 0.9974 |
| Music | 0.2500 | 0.1806 | 0.5583 | 0.6878 | 0.7045 | 0.7137 | 0.3000 | 1.9833 | 0.2712 | 0.7884 | 0.9207 | 0.9109 |
| NUS-WIDE-bow10% | 0.1180 | 0.0248 | 0.2243 | 0.2782 | 0.0452 | 0.3345 | 0.5442 | 35.1289 | 0.6004 | 0.4253 | 0.8806 | 0.9914 |
| NUS-WIDE-cVLADplus10% | 0.1418 | 0.0235 | 0.2496 | 0.3053 | 0.0536 | 0.3673 | 0.5485 | 35.4358 | 0.6363 | 0.4177 | 0.8835 | 0.9946 |
| OHSUMED-F | 0.2319 | 0.0567 | 0.4292 | 0.5327 | 0.4335 | 0.5556 | 0.3561 | 7.6698 | 0.4119 | 0.6159 | 0.9768 | 0.9797 |
| PlantGO | 0.7083 | 0.0408 | 0.7396 | 0.7535 | 0.6399 | 0.7707 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9884 | 0.9843 |
| PlantPseAAC | 0.2449 | 0.0901 | 0.2738 | 0.2898 | 0.2090 | 0.3614 | 0.6020 | 3.3469 | 0.5649 | 0.5273 | 0.9524 | 0.9445 |
| rcv1subset1 | 0.1217 | 0.0307 | 0.3238 | 0.4299 | 0.2556 | 0.4323 | 0.4317 | 38.0800 | 0.4266 | 0.4998 | 0.9262 | 0.9869 |
| REUTERS-K500-EX2 | 0.3076 | 0.0112 | 0.3766 | 0.4134 | 0.2349 | 0.4839 | 0.5069 | 32.3900 | 0.5342 | 0.4910 | 0.7839 | 0.9972 |
| scene | 0.6888 | 0.0809 | 0.7407 | 0.7662 | 0.7750 | 0.7655 | 0.2033 | 0.9046 | 0.1838 | 0.8403 | 0.9754 | 0.9780 |
| sider_CDK_ECFP4 | 0.0141 | 0.2431 | 0.6522 | 0.7977 | 0.6281 | 0.7978 | 0.0986 | 19.1056 | 0.1362 | 0.8306 | 0.5956 | 0.7950 |
| sider_MordredDesc | 0.0141 | 0.2564 | 0.6260 | 0.7841 | 0.6114 | 0.7842 | 0.1408 | 19.9085 | 0.1811 | 0.7867 | 0.5776 | 0.7692 |
| sider_RDKit_desc | 0.0141 | 0.2801 | 0.6300 | 0.7821 | 0.5951 | 0.7770 | 0.3239 | 20.2746 | 0.2339 | 0.7148 | 0.5848 | 0.7335 |
| SLASHDOT-F | 0.4021 | 0.0397 | 0.4852 | 0.5305 | 0.3868 | 0.5823 | 0.4021 | 5.5556 | 0.3668 | 0.6405 | 0.7571 | 0.9841 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0461 | 0.0120 | 0.1055 | 0.1416 | 0.0659 | 0.1787 | 0.7867 | 105.2104 | 0.8745 | 0.1573 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0298 | 0.0100 | 0.1309 | 0.1844 | 0.0554 | 0.2539 | 0.6726 | 137.4881 | 0.8052 | 0.2032 | 0.5493 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0533 | 0.0900 | 0.0172 | 0.1159 | 0.8261 | 73.8696 | 0.8247 | 0.1573 | 0.2564 | 0.9874 |
| Stackex_cooking | 0.0667 | 0.0052 | 0.2018 | 0.2710 | 0.1090 | 0.3157 | 0.6367 | 224.2184 | 0.7726 | 0.2322 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0553 | 0.0093 | 0.1705 | 0.2386 | 0.0650 | 0.2775 | 0.6809 | 134.6357 | 0.7823 | 0.2203 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2850 | 0.0614 | 0.5578 | 0.6908 | 0.5705 | 0.6695 | 0.2538 | 4.0867 | 0.1450 | 0.7759 | 0.9586 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1572 | 0.2846 | 0.3570 | 0.3706 | 0.4132 | 0.4726 | 5.3527 | 0.4770 | 0.5724 | 0.8971 | 0.8969 |
| tox21_RDKit_desc | 0.0959 | 0.1621 | 0.1916 | 0.2526 | 0.2172 | 0.2918 | 0.5000 | 5.4932 | 0.4999 | 0.5574 | 0.8995 | 0.9004 |
| VirusGO | 0.7619 | 0.0476 | 0.8492 | 0.8768 | 0.7283 | 0.8800 | 0.0952 | 0.6190 | 0.1171 | 0.9143 | 0.8080 | 0.9814 |
| VirusPseAAC | 0.4762 | 0.1190 | 0.5238 | 0.5476 | 0.3295 | 0.6154 | 0.3333 | 0.9048 | 0.1952 | 0.7754 | 0.7121 | 0.9139 |
| Water-quality | 0.0094 | 0.3160 | 0.3636 | 0.5254 | 0.4177 | 0.5333 | 0.2925 | 9.1509 | 0.3542 | 0.6877 | 0.7696 | 0.7563 |
| Yahoo_Arts | 0.1802 | 0.0631 | 0.2615 | 0.3156 | 0.2136 | 0.3555 | 0.5020 | 10.3792 | 0.6090 | 0.5016 | 0.9374 | 0.9770 |
| Yahoo_Business | 0.5731 | 0.0265 | 0.7307 | 0.8194 | 0.3200 | 0.7298 | 0.0891 | 3.1604 | 0.2225 | 0.8873 | 0.8566 | 0.9951 |
| Yahoo_Computers | 0.3847 | 0.0371 | 0.4604 | 0.5108 | 0.2407 | 0.5137 | 0.3831 | 6.5839 | 0.4216 | 0.6125 | 0.8889 | 0.9817 |
| Yahoo_Education | 0.1397 | 0.0417 | 0.1825 | 0.2117 | 0.1536 | 0.2942 | 0.5495 | 9.1579 | 0.5635 | 0.5264 | 0.8887 | 0.9768 |
| Yahoo_Entertainment | 0.2765 | 0.0559 | 0.3293 | 0.3620 | 0.2424 | 0.4309 | 0.4368 | 4.1815 | 0.3822 | 0.6370 | 0.9667 | 0.9637 |
| Yahoo_Health | 0.4202 | 0.0382 | 0.5384 | 0.6098 | 0.2428 | 0.5848 | 0.3105 | 6.5190 | 0.3491 | 0.6932 | 0.8292 | 0.9853 |
| Yahoo_Recreation | 0.2778 | 0.0210 | 0.4000 | 0.4295 | 0.4058 | 0.5034 | 0.4776 | 6.1482 | 0.4855 | 0.6065 | 0.9655 | 0.9705 |
| Yahoo_Reference | 0.4134 | 0.0294 | 0.4590 | 0.4870 | 0.1711 | 0.5180 | 0.3923 | 5.4296 | 0.4257 | 0.6441 | 0.8090 | 0.9903 |
| Yahoo_Science | 0.2271 | 0.0394 | 0.2830 | 0.3277 | 0.1742 | 0.3433 | 0.6190 | 13.6796 | 0.6455 | 0.4273 | 0.9575 | 0.9840 |
| Yahoo_Social | 0.4398 | 0.0236 | 0.4848 | 0.5118 | 0.1596 | 0.5489 | 0.3721 | 7.5792 | 0.3928 | 0.6463 | 0.9132 | 0.9896 |
| Yahoo_Society | 0.3153 | 0.0802 | 0.4385 | 0.5541 | 0.2054 | 0.4627 | 0.3731 | 8.3514 | 0.4842 | 0.5898 | 0.9421 | 0.9714 |
| yeast | 0.2025 | 0.1898 | 0.5290 | 0.6629 | 0.3834 | 0.6571 | 0.2603 | 6.1901 | 0.2385 | 0.7566 | 0.8287 | 0.8854 |
| Yelp | 0.4317 | 0.1862 | 0.6527 | 0.7506 | 0.6708 | 0.7321 | 0.2014 | 1.3819 | 0.2495 | 0.8619 | 0.8926 | 0.9130 |

Table 9: Detailed results for DT for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5415 | 0.0282 | 0.5960 | 0.6230 | 0.6956 | 0.7009 | 0.2650 | 0.9061 | 0.0584 | 0.8272 | 0.9657 | 0.9671 |
| 3s-bbc1000 | 0.1389 | 0.2361 | 0.1528 | 0.1594 | 0.1614 | 0.1905 | 0.7500 | 2.3611 | 0.4485 | 0.4988 | 0.5934 | 0.5935 |
| 3s-guardian1000 | 0.1290 | 0.2043 | 0.1452 | 0.1528 | 0.1870 | 0.2692 | 0.7419 | 2.1935 | 0.4194 | 0.5059 | 0.5099 | 0.6309 |
| 3s-inter3000 | 0.0000 | 0.2255 | 0.0294 | 0.0392 | 0.0303 | 0.0800 | 0.9412 | 2.6471 | 0.5206 | 0.3353 | 0.3839 | 0.5470 |
| 3s-reuters1000 | 0.1333 | 0.2556 | 0.1333 | 0.1333 | 0.0917 | 0.1481 | 0.8667 | 2.5333 | 0.5633 | 0.4075 | 0.5600 | 0.5156 |
| amphibians | 0.1111 | 0.2857 | 0.5012 | 0.6661 | 0.5706 | 0.6897 | 0.2222 | 2.6667 | 0.1315 | 0.8542 | 0.6597 | 0.7749 |
| bibtex | 0.1649 | 0.0141 | 0.3645 | 0.4699 | 0.3586 | 0.4690 | 0.3649 | 38.3203 | 0.2439 | 0.5743 | 0.9673 | 0.9745 |
| birds | 0.1795 | 0.0783 | 0.3244 | 0.4027 | 0.3402 | 0.4727 | 0.2821 | 3.6154 | 0.1183 | 0.7184 | 0.8024 | 0.8982 |
| bookmarks10% | 0.1936 | 0.0108 | 0.2478 | 0.2838 | 0.1329 | 0.2704 | 0.6492 | 79.5296 | 0.4939 | 0.3608 | 0.9509 | 0.9690 |
| CAL500 | 0.0000 | 0.1562 | 0.1970 | 0.3282 | 0.1056 | 0.3252 | 0.2157 | 144.0000 | 0.2525 | 0.4603 | 0.5735 | 0.8093 |
| corel16k001 | 0.0109 | 0.0223 | 0.1005 | 0.1546 | 0.0626 | 0.1735 | 0.7044 | 72.0022 | 0.4182 | 0.2774 | 0.9060 | 0.9238 |
| Corel5k | 0.0020 | 0.0143 | 0.0842 | 0.1410 | 0.0325 | 0.1436 | 0.7660 | 159.0180 | 0.6923 | 0.1985 | 0.6605 | 0.9818 |
| delicious | 0.0000 | 0.0253 | 0.0927 | 0.1594 | 0.0826 | 0.1723 | 0.5327 | 915.8720 | 0.8545 | 0.1468 | 0.9997 | 1.0000 |
| emotions | 0.3500 | 0.1972 | 0.5875 | 0.6997 | 0.6714 | 0.6872 | 0.2333 | 1.5333 | 0.1346 | 0.8321 | 0.8755 | 0.8908 |
| enron | 0.1637 | 0.0519 | 0.4691 | 0.6021 | 0.1997 | 0.5735 | 0.2222 | 14.3860 | 0.1430 | 0.6997 | 0.7340 | 0.9353 |
| EukaryoteGO | 0.7088 | 0.0199 | 0.7831 | 0.8199 | 0.7444 | 0.8134 | 0.1791 | 0.4253 | 0.0144 | 0.8998 | 0.9928 | 0.9949 |
| EukaryotePseAAC | 0.1995 | 0.0499 | 0.2394 | 0.2599 | 0.1057 | 0.3454 | 0.5290 | 2.3205 | 0.1008 | 0.6352 | 0.7984 | 0.9147 |
| flags | 0.3000 | 0.2571 | 0.6083 | 0.7152 | 0.5597 | 0.7097 | 0.2500 | 3.4500 | 0.2008 | 0.8244 | 0.6989 | 0.8090 |
| foodtruck | 0.1951 | 0.1809 | 0.4135 | 0.5482 | 0.3136 | 0.4972 | 0.2195 | 2.8049 | 0.1239 | 0.7886 | 0.6508 | 0.8215 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9286 | 0.0098 | 0.9571 | 0.9714 | 0.8376 | 0.9622 | 0.0357 | 0.1429 | 0.0255 | 0.9752 | 0.8745 | 0.9995 |
| GnegativePseAAC | 0.5571 | 0.0813 | 0.5929 | 0.6106 | 0.3626 | 0.6592 | 0.2786 | 0.6786 | 0.0946 | 0.8241 | 0.7867 | 0.9444 |
| GpositiveGO | 0.9038 | 0.0433 | 0.9038 | 0.9038 | 0.8489 | 0.9143 | 0.0769 | 0.1346 | 0.0641 | 0.9567 | 0.9982 | 0.9971 |
| GpositivePseAAC | 0.5000 | 0.1923 | 0.5000 | 0.5000 | 0.3985 | 0.5652 | 0.4423 | 0.8269 | 0.3333 | 0.7228 | 0.8152 | 0.8396 |
| HumanGO | 0.6431 | 0.0397 | 0.7438 | 0.7954 | 0.7081 | 0.7684 | 0.1994 | 0.6559 | 0.0424 | 0.8788 | 0.9791 | 0.9862 |
| HumanPseAAC | 0.1190 | 0.0785 | 0.1222 | 0.1238 | 0.0919 | 0.1857 | 0.5691 | 2.2283 | 0.1494 | 0.6049 | 0.7521 | 0.8634 |
| Image | 0.5200 | 0.1480 | 0.6271 | 0.6808 | 0.6669 | 0.6754 | 0.2800 | 0.8300 | 0.1596 | 0.8193 | 0.8779 | 0.8853 |
| IMDB-ECC-F10% | 0.0577 | 0.0779 | 0.1377 | 0.1841 | 0.0646 | 0.1981 | 0.6122 | 7.5996 | 0.2052 | 0.4831 | 0.6774 | 0.8147 |
| IMDB-F10% | 0.0439 | 0.0794 | 0.1308 | 0.1807 | 0.0716 | 0.2050 | 0.5990 | 7.8534 | 0.2032 | 0.4877 | 0.6730 | 0.8175 |
| LLOG-F | 0.1230 | 0.0184 | 0.1708 | 0.1956 | 0.0793 | 0.2432 | 0.5656 | 14.6967 | 0.2384 | 0.4936 | 0.5206 | 0.9209 |
| mediamill10% | 0.9810 | 0.0002 | 0.9962 | 0.9981 | 0.8191 | 0.9979 | 0.0024 | 3.4964 | 0.0001 | 0.9976 | 0.8214 | 0.9996 |
| medical | 0.6735 | 0.0109 | 0.7687 | 0.8142 | 0.3518 | 0.8065 | 0.1429 | 2.0714 | 0.0649 | 0.8945 | 0.5519 | 0.9971 |
| Music | 0.2167 | 0.2139 | 0.5403 | 0.6916 | 0.6875 | 0.6805 | 0.2333 | 1.8333 | 0.1469 | 0.8179 | 0.8613 | 0.8692 |
| NUS-WIDE-bow10% | 0.0885 | 0.0286 | 0.2113 | 0.2820 | 0.0552 | 0.3325 | 0.5504 | 18.5723 | 0.1734 | 0.4813 | 0.6984 | 0.8938 |
| NUS-WIDE-cVLADplus10% | 0.1085 | 0.0279 | 0.2516 | 0.3278 | 0.0668 | 0.3814 | 0.5561 | 17.4962 | 0.1625 | 0.4968 | 0.7168 | 0.9063 |
| OHSUMED-F | 0.2340 | 0.0570 | 0.4444 | 0.5543 | 0.4623 | 0.5683 | 0.3173 | 3.3130 | 0.0910 | 0.7351 | 0.8802 | 0.9169 |
| PlantGO | 0.6562 | 0.0425 | 0.7153 | 0.7430 | 0.7420 | 0.7633 | 0.2083 | 0.9688 | 0.1052 | 0.8554 | 0.9844 | 0.9836 |
| PlantPseAAC | 0.0306 | 0.0969 | 0.0306 | 0.0306 | 0.0472 | 0.0500 | 0.5918 | 2.0102 | 0.1725 | 0.6002 | 0.7857 | 0.8451 |
| rcv1subset1 | 0.1100 | 0.0283 | 0.3247 | 0.4333 | 0.2338 | 0.4357 | 0.3950 | 15.9583 | 0.1000 | 0.6176 | 0.8960 | 0.9650 |
| REUTERS-K500-EX2 | 0.3095 | 0.0113 | 0.3720 | 0.4171 | 0.2317 | 0.4836 | 0.5093 | 32.6607 | 0.5357 | 0.4865 | 0.7816 | 0.9947 |
| scene | 0.5021 | 0.1100 | 0.6411 | 0.7101 | 0.7166 | 0.7083 | 0.2116 | 0.4440 | 0.0750 | 0.8750 | 0.9503 | 0.9532 |
| sider_CDK_ECFP4 | 0.0211 | 0.2585 | 0.5800 | 0.7537 | 0.6418 | 0.7644 | 0.0986 | 18.6901 | 0.1266 | 0.8416 | 0.5888 | 0.8025 |
| sider_MordredDesc | 0.0282 | 0.2478 | 0.5992 | 0.7606 | 0.6364 | 0.7740 | 0.0775 | 19.0211 | 0.1261 | 0.8430 | 0.5764 | 0.7982 |
| sider_RDKit_desc | 0.0070 | 0.2681 | 0.5663 | 0.7383 | 0.6166 | 0.7495 | 0.0915 | 18.8169 | 0.1217 | 0.8463 | 0.5898 | 0.8049 |
| SLASHDOT-F | 0.3677 | 0.0445 | 0.4647 | 0.5171 | 0.3934 | 0.5488 | 0.3995 | 3.2540 | 0.1898 | 0.6844 | 0.7117 | 0.9471 |
| solar_flare-L3 | 0.4000 | 0.2000 | 0.7000 | 0.8235 | 0.5079 | 0.7692 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.5556 | 0.9000 |
| Stackex_chemistry | 0.0490 | 0.0145 | 0.1636 | 0.2377 | 0.1180 | 0.2651 | 0.6124 | 66.2205 | 0.4440 | 0.3593 | 0.8884 | 0.9709 |
| Stackex_chess | 0.0357 | 0.0126 | 0.1910 | 0.2852 | 0.0856 | 0.3084 | 0.6131 | 104.3333 | 0.5165 | 0.3360 | 0.5349 | 0.9819 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0531 | 0.0901 | 0.0172 | 0.1163 | 0.8346 | 74.7734 | 0.8235 | 0.1562 | 0.2553 | 0.9744 |
| Stackex_cooking | 0.0667 | 0.0062 | 0.2410 | 0.3393 | 0.1502 | 0.3469 | 0.5121 | 166.9643 | 0.4839 | 0.3895 | 0.9149 | 0.9911 |
| Stackex_philosophy | 0.0503 | 0.0124 | 0.2100 | 0.3211 | 0.0940 | 0.3151 | 0.5704 | 94.4673 | 0.4524 | 0.3800 | 0.7315 | 0.9814 |
| tmc2007-500 | 0.2664 | 0.0642 | 0.5310 | 0.6614 | 0.5696 | 0.6429 | 0.2462 | 2.5906 | 0.0484 | 0.8034 | 0.9309 | 0.9539 |
| tox21_CDK_ECFP4 | 0.1438 | 0.1615 | 0.2874 | 0.3584 | 0.4115 | 0.4440 | 0.4760 | 3.8527 | 0.2071 | 0.6421 | 0.7233 | 0.7846 |
| tox21_RDKit_desc | 0.1747 | 0.1575 | 0.3669 | 0.4604 | 0.4439 | 0.5106 | 0.4110 | 3.7089 | 0.1830 | 0.6625 | 0.7368 | 0.7946 |
| VirusGO | 0.8571 | 0.0397 | 0.8968 | 0.9238 | 0.6806 | 0.8936 | 0.0476 | 0.4762 | 0.0694 | 0.9500 | 0.8212 | 0.9917 |
| VirusPseAAC | 0.3810 | 0.1349 | 0.5000 | 0.5593 | 0.3819 | 0.6047 | 0.3333 | 0.7619 | 0.1321 | 0.7968 | 0.6157 | 0.9025 |
| Water-quality | 0.0189 | 0.2783 | 0.4552 | 0.6226 | 0.5807 | 0.6249 | 0.1981 | 8.4811 | 0.2240 | 0.7463 | 0.7290 | 0.7632 |
| Yahoo_Arts | 0.1808 | 0.0636 | 0.2623 | 0.3110 | 0.2157 | 0.3539 | 0.4971 | 10.2773 | 0.6121 | 0.5063 | 0.9461 | 0.9858 |
| Yahoo_Business | 0.5647 | 0.0267 | 0.7293 | 0.8072 | 0.3156 | 0.7348 | 0.0889 | 3.1508 | 0.2231 | 0.8766 | 0.8517 | 0.9916 |
| Yahoo_Computers | 0.3874 | 0.0376 | 0.4549 | 0.5099 | 0.2416 | 0.5116 | 0.3875 | 6.5506 | 0.4204 | 0.6125 | 0.8890 | 0.9720 |
| Yahoo_Education | 0.1384 | 0.0423 | 0.1799 | 0.2122 | 0.1549 | 0.2928 | 0.5567 | 9.1056 | 0.5625 | 0.5199 | 0.8926 | 0.9719 |
| Yahoo_Entertainment | 0.2726 | 0.0557 | 0.3290 | 0.3645 | 0.2391 | 0.4260 | 0.4423 | 4.1539 | 0.3787 | 0.6406 | 0.9558 | 0.9640 |
| Yahoo_Health | 0.4231 | 0.0378 | 0.5320 | 0.6052 | 0.2410 | 0.5813 | 0.3090 | 6.6018 | 0.3540 | 0.6840 | 0.8283 | 0.9744 |
| Yahoo_Recreation | 0.2737 | 0.0212 | 0.3956 | 0.4275 | 0.4074 | 0.4988 | 0.4743 | 6.2395 | 0.4812 | 0.6005 | 0.9616 | 0.9774 |
| Yahoo_Reference | 0.4131 | 0.0295 | 0.4584 | 0.4803 | 0.1711 | 0.5220 | 0.3893 | 5.4056 | 0.4270 | 0.6500 | 0.8049 | 0.9979 |
| Yahoo_Science | 0.2242 | 0.0393 | 0.2801 | 0.3275 | 0.1729 | 0.3399 | 0.6135 | 13.6312 | 0.6433 | 0.4213 | 0.9434 | 0.9705 |
| Yahoo_Social | 0.4249 | 0.0235 | 0.4699 | 0.4956 | 0.1608 | 0.5399 | 0.3985 | 8.0470 | 0.4312 | 0.6232 | 0.9184 | 0.9937 |
| Yahoo_Society | 0.2617 | 0.0566 | 0.3524 | 0.4139 | 0.1516 | 0.4093 | 0.4167 | 8.7410 | 0.5202 | 0.5599 | 0.9472 | 0.9803 |
| yeast | 0.1653 | 0.1981 | 0.4976 | 0.6343 | 0.4189 | 0.6278 | 0.2025 | 5.9876 | 0.1481 | 0.7838 | 0.7478 | 0.8600 |
| Yelp | 0.5384 | 0.1342 | 0.7490 | 0.8306 | 0.7756 | 0.8113 | 0.0897 | 1.1266 | 0.0896 | 0.9288 | 0.8950 | 0.9234 |

Table 10: Detailed results for ExtraTrees for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3084 | 0.0399 | 0.3131 | 0.3238 | 0.4330 | 0.4490 | 0.5992 | 6.2111 | 0.6082 | 0.4890 | 0.9983 | 0.9925 |
| 3s-bbc1000 | 0.0000 | 0.2130 | 0.0139 | 0.0185 | 0.0370 | 0.0417 | 0.7500 | 3.1667 | 0.8213 | 0.4171 | 0.9887 | 0.8646 |
| 3s-guardian1000 | 0.0323 | 0.1935 | 0.0484 | 0.0553 | 0.1222 | 0.1000 | 0.5484 | 2.4194 | 0.5871 | 0.5704 | 0.9888 | 0.9246 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6471 | 1.8824 | 0.4838 | 0.5627 | 0.7073 | 0.8241 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.6333 | 0.8667 | 0.3950 | 1.0000 | 0.8463 |
| amphibians | 0.0556 | 0.2698 | 0.5403 | 0.7450 | 0.5556 | 0.6964 | 0.1667 | 2.3889 | 0.1222 | 0.9006 | 0.7391 | 0.8125 |
| bibtex | 0.0356 | 0.0143 | 0.0916 | 0.1248 | 0.0430 | 0.1604 | 0.7886 | 90.4707 | 0.8908 | 0.1398 | 0.9861 | 1.0000 |
| birds | 0.1282 | 0.0864 | 0.3084 | 0.3977 | 0.2983 | 0.4286 | 0.5128 | 8.3333 | 0.5983 | 0.4855 | 0.8653 | 0.9713 |
| bookmarks10% | 0.1926 | 0.0108 | 0.2543 | 0.2858 | 0.1329 | 0.2713 | 0.6636 | 79.5978 | 0.4954 | 0.3612 | 0.9474 | 0.9823 |
| CAL500 | 0.0000 | 0.1451 | 0.1853 | 0.3270 | 0.0581 | 0.3068 | 0.3922 | 151.1765 | 0.6277 | 0.4232 | 0.8400 | 0.9419 |
| corel16k001 | 0.0087 | 0.0200 | 0.0454 | 0.0667 | 0.0406 | 0.0821 | 0.8163 | 111.7945 | 0.9001 | 0.1233 | 0.9963 | 0.9964 |
| Corel5k | 0.0040 | 0.0092 | 0.0445 | 0.0687 | 0.0153 | 0.0924 | 0.8620 | 166.7020 | 0.9508 | 0.1460 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0247 | 0.0915 | 0.1608 | 0.0832 | 0.1726 | 0.5280 | 902.6534 | 0.8430 | 0.1482 | 1.0000 | 1.0000 |
| emotions | 0.2167 | 0.1806 | 0.4639 | 0.5634 | 0.5720 | 0.6486 | 0.4333 | 2.6167 | 0.3111 | 0.6759 | 0.8104 | 0.7303 |
| enron | 0.0468 | 0.0564 | 0.3118 | 0.4434 | 0.1653 | 0.4966 | 0.4269 | 24.8655 | 0.4742 | 0.4917 | 0.8150 | 0.9737 |
| EukaryoteGO | 0.7122 | 0.0201 | 0.7823 | 0.8286 | 0.7485 | 0.8308 | 0.1788 | 0.4205 | 0.0142 | 0.8770 | 0.9890 | 1.0000 |
| EukaryotePseAAC | 0.0193 | 0.0525 | 0.0199 | 0.0203 | 0.0123 | 0.0344 | 0.9704 | 10.7941 | 0.9744 | 0.1667 | 0.9986 | 0.9987 |
| flags | 0.2000 | 0.3000 | 0.5461 | 0.6723 | 0.5494 | 0.6769 | 0.1000 | 3.6500 | 0.2492 | 0.8219 | 0.7177 | 0.8129 |
| foodtruck | 0.3171 | 0.1484 | 0.5214 | 0.6593 | 0.2274 | 0.5409 | 0.2439 | 3.8537 | 0.3456 | 0.7560 | 0.8396 | 0.9392 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0149 | 0.2239 | 0.0006 | 0.9938 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8244 | 0.9559 | 0.0286 | 0.1000 | 0.0112 | 0.9827 | 0.8745 | 0.9987 |
| GnegativePseAAC | 0.3357 | 0.0902 | 0.3357 | 0.3357 | 0.1384 | 0.4821 | 0.3429 | 1.4929 | 0.3071 | 0.7400 | 0.8471 | 0.9452 |
| GpositiveGO | 0.8846 | 0.0481 | 0.8942 | 0.8990 | 0.9144 | 0.9038 | 0.0962 | 0.1538 | 0.0577 | 0.9471 | 0.9952 | 0.9940 |
| GpositivePseAAC | 0.4615 | 0.1635 | 0.4615 | 0.4615 | 0.3714 | 0.5854 | 0.4423 | 1.0192 | 0.4487 | 0.7035 | 1.0000 | 0.9291 |
| HumanGO | 0.5962 | 0.0469 | 0.6798 | 0.7159 | 0.4859 | 0.7149 | 0.2581 | 2.0340 | 0.2420 | 0.7923 | 1.0000 | 0.9989 |
| HumanPseAAC | 0.0064 | 0.0843 | 0.0064 | 0.0064 | 0.0047 | 0.0108 | 0.6913 | 5.1222 | 0.7334 | 0.4206 | 0.9997 | 0.9599 |
| Image | 0.0450 | 0.2260 | 0.0750 | 0.0899 | 0.1279 | 0.1567 | 0.6400 | 1.7050 | 0.4525 | 0.5756 | 0.8910 | 0.7172 |
| IMDB-ECC-F10% | 0.0220 | 0.0698 | 0.0432 | 0.0564 | 0.0230 | 0.0754 | 0.6363 | 12.5388 | 0.7487 | 0.3655 | 0.9922 | 0.9759 |
| IMDB-F10% | 0.0368 | 0.0789 | 0.0885 | 0.1164 | 0.0258 | 0.1352 | 0.6724 | 12.6618 | 0.6513 | 0.3823 | 0.9552 | 0.9472 |
| LLOG-F | 0.0984 | 0.0176 | 0.1291 | 0.1444 | 0.0497 | 0.1990 | 0.7869 | 31.1557 | 0.8422 | 0.2259 | 0.5976 | 0.9971 |
| mediamill10% | 0.0641 | 0.0336 | 0.3892 | 0.5248 | 0.0316 | 0.4896 | 0.2043 | 68.2732 | 0.5895 | 0.4483 | 0.8182 | 0.9953 |
| medical | 0.6735 | 0.0111 | 0.7517 | 0.7874 | 0.2954 | 0.8032 | 0.1735 | 5.7653 | 0.1677 | 0.8299 | 0.5539 | 0.9978 |
| Music | 0.1833 | 0.2194 | 0.4472 | 0.5668 | 0.5454 | 0.6146 | 0.4333 | 2.8833 | 0.3315 | 0.6661 | 0.8009 | 0.7193 |
| NUS-WIDE-bow10% | 0.0892 | 0.0286 | 0.2109 | 0.2802 | 0.0552 | 0.3311 | 0.5519 | 18.8727 | 0.1748 | 0.4775 | 0.7112 | 0.8981 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.0264 | 0.0006 | 0.0010 | 0.0019 | 0.0027 | 0.9738 | 47.6009 | 0.9993 | 0.1073 | 0.8888 | 0.9999 |
| OHSUMED-F | 0.2347 | 0.0568 | 0.4426 | 0.5620 | 0.4636 | 0.5678 | 0.3158 | 3.3427 | 0.0901 | 0.7350 | 0.8689 | 0.8911 |
| PlantGO | 0.5417 | 0.0530 | 0.5938 | 0.6213 | 0.4228 | 0.6872 | 0.4062 | 2.0625 | 0.2561 | 0.7006 | 0.9807 | 0.9324 |
| PlantPseAAC | 0.0000 | 0.0969 | 0.0051 | 0.0068 | 0.0208 | 0.0172 | 0.7347 | 4.1122 | 0.7078 | 0.4312 | 0.9794 | 0.9413 |
| rcv1subset1 | 0.1069 | 0.0286 | 0.3294 | 0.4336 | 0.2338 | 0.4250 | 0.3964 | 15.8356 | 0.1004 | 0.6167 | 0.9161 | 0.9524 |
| REUTERS-K500-EX2 | 0.1649 | 0.0127 | 0.1847 | 0.1964 | 0.1307 | 0.2544 | 0.7715 | 48.6340 | 0.7916 | 0.2571 | 0.7857 | 0.9992 |
| scene | 0.4191 | 0.1176 | 0.4502 | 0.4657 | 0.5434 | 0.5813 | 0.4689 | 0.9668 | 0.2276 | 0.7192 | 0.9168 | 0.9048 |
| sider_CDK_ECFP4 | 0.0141 | 0.2916 | 0.6238 | 0.7762 | 0.6102 | 0.7721 | 0.3310 | 19.9155 | 0.1947 | 0.7387 | 0.6979 | 0.7671 |
| sider_MordredDesc | 0.0000 | 0.2796 | 0.6237 | 0.7794 | 0.5750 | 0.7736 | 0.3592 | 20.3873 | 0.2144 | 0.7427 | 0.8371 | 0.7530 |
| sider_RDKit_desc | 0.0141 | 0.2872 | 0.6241 | 0.7779 | 0.5879 | 0.7726 | 0.3380 | 20.4296 | 0.2471 | 0.7056 | 0.8588 | 0.7325 |
| SLASHDOT-F | 0.2566 | 0.0446 | 0.3047 | 0.3299 | 0.2937 | 0.4301 | 0.6217 | 8.8175 | 0.6565 | 0.4187 | 0.7669 | 0.9937 |
| solar_flare-L3 | 0.2000 | 0.4000 | 0.4000 | 0.4800 | 0.3238 | 0.5000 | 0.4000 | 0.4000 | 0.5000 | 0.8000 | 0.3333 | 0.7600 |
| Stackex_chemistry | 0.0115 | 0.0122 | 0.0256 | 0.0331 | 0.0199 | 0.0440 | 0.9020 | 112.7810 | 0.9724 | 0.0775 | 0.9196 | 0.9996 |
| Stackex_chess | 0.0179 | 0.0102 | 0.0704 | 0.0979 | 0.0397 | 0.1410 | 0.8452 | 148.4226 | 0.9251 | 0.0958 | 0.5503 | 0.9995 |
| Stackex_coffee | 0.0000 | 0.0194 | 0.0145 | 0.0217 | 0.0081 | 0.0351 | 0.8696 | 78.6522 | 0.9275 | 0.1041 | 0.2587 | 0.9963 |
| Stackex_cooking | 0.0662 | 0.0063 | 0.2383 | 0.3356 | 0.1527 | 0.3472 | 0.5202 | 164.0897 | 0.4924 | 0.4003 | 0.9074 | 0.9848 |
| Stackex_philosophy | 0.0151 | 0.0095 | 0.0517 | 0.0755 | 0.0458 | 0.1037 | 0.8869 | 148.2613 | 0.9399 | 0.0784 | 0.7508 | 0.9996 |
| tmc2007-500 | 0.2659 | 0.0635 | 0.5216 | 0.6594 | 0.5601 | 0.6532 | 0.2456 | 2.5750 | 0.0495 | 0.7922 | 0.9127 | 0.9568 |
| tox21_CDK_ECFP4 | 0.0342 | 0.1650 | 0.0842 | 0.1120 | 0.2087 | 0.2104 | 0.6233 | 6.1267 | 0.5879 | 0.4772 | 0.9328 | 0.8763 |
| tox21_RDKit_desc | 0.0068 | 0.1761 | 0.0314 | 0.0424 | 0.1192 | 0.0940 | 0.6370 | 6.3733 | 0.6401 | 0.4545 | 0.9708 | 0.8831 |
| VirusGO | 0.8095 | 0.0397 | 0.8889 | 0.9206 | 0.7154 | 0.8980 | 0.0476 | 0.3810 | 0.0536 | 0.9563 | 0.8176 | 0.9905 |
| VirusPseAAC | 0.2381 | 0.1746 | 0.2857 | 0.3095 | 0.2451 | 0.3889 | 0.5238 | 1.0000 | 0.2048 | 0.6976 | 0.7121 | 0.8797 |
| Water-quality | 0.0094 | 0.3288 | 0.2328 | 0.3694 | 0.1835 | 0.3562 | 0.3208 | 10.5094 | 0.4917 | 0.6282 | 0.8078 | 0.7497 |
| Yahoo_Arts | 0.1797 | 0.0632 | 0.2593 | 0.3141 | 0.2184 | 0.3567 | 0.4981 | 10.3556 | 0.6211 | 0.5097 | 0.9571 | 0.9894 |
| Yahoo_Business | 0.5635 | 0.0265 | 0.7308 | 0.7931 | 0.3144 | 0.7428 | 0.0881 | 3.1208 | 0.2201 | 0.8692 | 0.8600 | 1.0000 |
| Yahoo_Computers | 0.3878 | 0.0373 | 0.4604 | 0.5124 | 0.2436 | 0.5165 | 0.3804 | 6.4781 | 0.4171 | 0.6099 | 0.8998 | 0.9796 |
| Yahoo_Education | 0.1393 | 0.0417 | 0.1806 | 0.2100 | 0.1558 | 0.2922 | 0.5567 | 9.0686 | 0.5552 | 0.5181 | 0.9027 | 0.9844 |
| Yahoo_Entertainment | 0.2725 | 0.0558 | 0.3264 | 0.3712 | 0.2421 | 0.4266 | 0.4437 | 4.1108 | 0.3746 | 0.6345 | 0.9483 | 0.9676 |
| Yahoo_Health | 0.4277 | 0.0380 | 0.5412 | 0.6046 | 0.2419 | 0.5783 | 0.3054 | 6.5298 | 0.3514 | 0.6826 | 0.8439 | 0.9757 |
| Yahoo_Recreation | 0.2751 | 0.0209 | 0.4003 | 0.4383 | 0.4149 | 0.5014 | 0.4704 | 6.2952 | 0.4823 | 0.6067 | 0.9725 | 0.9801 |
| Yahoo_Reference | 0.4126 | 0.0293 | 0.4578 | 0.4855 | 0.1750 | 0.5303 | 0.3836 | 5.3301 | 0.4219 | 0.6555 | 0.8108 | 0.9923 |
| Yahoo_Science | 0.2292 | 0.0389 | 0.2758 | 0.3307 | 0.1715 | 0.3396 | 0.6194 | 13.6040 | 0.6344 | 0.4240 | 0.9330 | 0.9800 |
| Yahoo_Social | 0.4228 | 0.0233 | 0.4658 | 0.4941 | 0.1594 | 0.5484 | 0.4011 | 8.1638 | 0.4327 | 0.6321 | 0.9330 | 0.9805 |
| Yahoo_Society | 0.2635 | 0.0562 | 0.3491 | 0.4055 | 0.1520 | 0.4119 | 0.4144 | 8.7662 | 0.5207 | 0.5524 | 0.9465 | 0.9791 |
| yeast | 0.0165 | 0.2329 | 0.3348 | 0.4628 | 0.1335 | 0.4792 | 0.2686 | 6.8595 | 0.2812 | 0.6961 | 0.8968 | 0.8336 |
| Yelp | 0.2881 | 0.2383 | 0.5454 | 0.6660 | 0.5723 | 0.6559 | 0.3539 | 1.7358 | 0.3805 | 0.7676 | 0.8777 | 0.8739 |

Table 11: Detailed results for LR for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0062 | 0.0579 | 0.0065 | 0.0066 | 0.0049 | 0.0115 | 0.9611 | 9.9310 | 0.5278 | 0.1626 | 0.2572 | 0.4461 |
| 3s-bbc1000 | 0.0833 | 0.3056 | 0.1458 | 0.1782 | 0.1351 | 0.1951 | 0.8333 | 2.8333 | 0.5324 | 0.4144 | 0.4856 | 0.5044 |
| 3s-guardian1000 | 0.0323 | 0.3495 | 0.0806 | 0.1042 | 0.1281 | 0.1558 | 0.7097 | 2.8710 | 0.5331 | 0.4457 | 0.4894 | 0.5238 |
| 3s-inter3000 | 0.0000 | 0.2353 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.2941 | 0.4971 | 0.4147 | 0.3263 | 0.5390 |
| 3s-reuters1000 | 0.1000 | 0.3278 | 0.1000 | 0.1000 | 0.0303 | 0.0923 | 0.9000 | 3.3333 | 0.6725 | 0.3314 | 0.2749 | 0.3260 |
| amphibians | 0.1111 | 0.3016 | 0.5226 | 0.7377 | 0.4162 | 0.6724 | 0.3333 | 3.4444 | 0.3056 | 0.7395 | 0.3705 | 0.5931 |
| bibtex | 0.0000 | 0.0256 | 0.0033 | 0.0072 | 0.0002 | 0.0066 | 0.9824 | 110.4419 | 0.5997 | 0.0398 | 0.2289 | 0.4187 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8974 | 11.3590 | 0.5158 | 0.2282 | 0.3024 | 0.5174 |
| bookmarks10% | 0.1910 | 0.0110 | 0.2448 | 0.2837 | 0.1346 | 0.2708 | 0.6422 | 78.3955 | 0.4874 | 0.3619 | 0.9381 | 0.9568 |
| CAL500 | 0.0000 | 0.1658 | 0.2226 | 0.3648 | 0.0761 | 0.3557 | 0.8039 | 160.3333 | 0.4620 | 0.2578 | 0.4109 | 0.6148 |
| corel16k001 | 0.0000 | 0.0272 | 0.0027 | 0.0042 | 0.0005 | 0.0038 | 0.9782 | 102.1394 | 0.4745 | 0.0663 | 0.3439 | 0.5480 |
| Corel5k | 0.0020 | 0.0144 | 0.0836 | 0.1416 | 0.0325 | 0.1420 | 0.7582 | 160.7225 | 0.6885 | 0.1960 | 0.6593 | 0.9836 |
| delicious | 0.0000 | 0.0256 | 0.0918 | 0.1606 | 0.0838 | 0.1705 | 0.5420 | 920.4310 | 0.8605 | 0.1468 | 0.9892 | 0.9942 |
| emotions | 0.0167 | 0.4889 | 0.1700 | 0.2579 | 0.1243 | 0.2479 | 0.9667 | 4.2167 | 0.8531 | 0.3286 | 0.2200 | 0.2242 |
| enron | 0.0000 | 0.0779 | 0.1226 | 0.2029 | 0.0136 | 0.2014 | 0.9942 | 40.7778 | 0.5932 | 0.0841 | 0.3045 | 0.4207 |
| EukaryoteGO | 0.7030 | 0.0200 | 0.7857 | 0.8115 | 0.7514 | 0.8101 | 0.1782 | 0.4287 | 0.0142 | 0.8886 | 1.0000 | 0.9884 |
| EukaryotePseAAC | 0.0000 | 0.0528 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7439 | 5.3295 | 0.2397 | 0.4293 | 0.3337 | 0.7689 |
| flags | 0.0000 | 0.4286 | 0.3642 | 0.5340 | 0.3117 | 0.5161 | 0.9000 | 5.4000 | 0.6933 | 0.4516 | 0.4275 | 0.3059 |
| foodtruck | 0.0000 | 0.2642 | 0.2420 | 0.3977 | 0.0969 | 0.3500 | 0.9512 | 8.6341 | 0.6810 | 0.2536 | 0.3485 | 0.3446 |
| genbase | 0.0000 | 0.0824 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 | 20.7463 | 0.7849 | 0.0568 | 0.1356 | 0.2063 |
| GnegativeGO | 0.0000 | 0.2384 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 | 6.7071 | 0.9588 | 0.1360 | 0.0735 | 0.0505 |
| GnegativePseAAC | 0.0143 | 0.2223 | 0.0143 | 0.0143 | 0.0051 | 0.0158 | 0.9429 | 4.2286 | 0.6009 | 0.2475 | 0.2546 | 0.3866 |
| GpositiveGO | 0.1923 | 0.4375 | 0.2596 | 0.2894 | 0.2177 | 0.2720 | 0.9615 | 2.2308 | 0.8718 | 0.3429 | 0.2299 | 0.2127 |
| GpositivePseAAC | 0.4038 | 0.2308 | 0.5385 | 0.5983 | 0.4549 | 0.5932 | 0.5769 | 1.3269 | 0.4615 | 0.6154 | 0.7574 | 0.6472 |
| HumanGO | 0.0000 | 0.1325 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9936 | 9.4309 | 0.7047 | 0.1301 | 0.0804 | 0.2925 |
| HumanPseAAC | 0.0000 | 0.0850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8232 | 4.5273 | 0.3213 | 0.3591 | 0.4320 | 0.6828 |
| Image | 0.0050 | 0.3760 | 0.0125 | 0.0154 | 0.0213 | 0.0208 | 0.9700 | 3.2250 | 0.8571 | 0.2934 | 0.2466 | 0.2533 |
| IMDB-ECC-F10% | 0.0000 | 0.0679 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9036 | 14.0042 | 0.4074 | 0.2066 | 0.4755 | 0.6031 |
| IMDB-F10% | 0.0000 | 0.0724 | 0.0008 | 0.0011 | 0.0005 | 0.0016 | 0.9561 | 15.9478 | 0.4933 | 0.1476 | 0.4521 | 0.5309 |
| LLOG-F | 0.1231 | 0.0182 | 0.1729 | 0.1951 | 0.0784 | 0.2397 | 0.5652 | 14.5245 | 0.2371 | 0.4942 | 0.5194 | 0.9135 |
| mediamill10% | 0.0000 | 0.0647 | 0.2689 | 0.4385 | 0.0320 | 0.4044 | 0.8931 | 82.4822 | 0.5931 | 0.1220 | 0.3393 | 0.4909 |
| medical | 0.6697 | 0.0107 | 0.7618 | 0.8080 | 0.3549 | 0.8012 | 0.1441 | 2.0694 | 0.0649 | 0.8819 | 0.5574 | 0.9900 |
| Music | 0.0167 | 0.4694 | 0.1844 | 0.2722 | 0.1668 | 0.2809 | 0.9167 | 4.1833 | 0.7907 | 0.3675 | 0.2493 | 0.2570 |
| NUS-WIDE-bow10% | 0.0875 | 0.0290 | 0.2095 | 0.2855 | 0.0560 | 0.3358 | 0.5534 | 18.7875 | 0.1751 | 0.4754 | 0.6898 | 0.9021 |
| NUS-WIDE-cVLADplus10% | 0.0029 | 0.0478 | 0.0929 | 0.1610 | 0.0090 | 0.1572 | 0.9643 | 58.3135 | 0.6564 | 0.0817 | 0.2807 | 0.3674 |
| OHSUMED-F | 0.2372 | 0.0577 | 0.4480 | 0.5614 | 0.4571 | 0.5657 | 0.3153 | 3.2847 | 0.0899 | 0.7266 | 0.8689 | 0.9258 |
| PlantGO | 0.0104 | 0.1372 | 0.0104 | 0.0104 | 0.0083 | 0.0125 | 0.9896 | 8.6875 | 0.7771 | 0.1303 | 0.1013 | 0.2226 |
| PlantPseAAC | 0.0306 | 0.1352 | 0.0306 | 0.0306 | 0.0083 | 0.0364 | 0.9592 | 6.6327 | 0.5759 | 0.2054 | 0.3123 | 0.4219 |
| rcv1subset1 | 0.1092 | 0.0285 | 0.3284 | 0.4366 | 0.2326 | 0.4367 | 0.3893 | 15.8530 | 0.1011 | 0.6250 | 0.9026 | 0.9684 |
| REUTERS-K500-EX2 | 0.3022 | 0.0114 | 0.3775 | 0.4099 | 0.2339 | 0.4819 | 0.5138 | 32.5142 | 0.5325 | 0.4827 | 0.7706 | 0.9800 |
| scene | 0.0041 | 0.3160 | 0.0041 | 0.0041 | 0.0056 | 0.0044 | 0.9917 | 3.9212 | 0.9012 | 0.2262 | 0.2419 | 0.2368 |
| sider_CDK_ECFP4 | 0.0000 | 0.3033 | 0.6079 | 0.7638 | 0.5894 | 0.7621 | 0.8592 | 25.5704 | 0.7857 | 0.4415 | 0.4844 | 0.2774 |
| sider_MordredDesc | 0.0070 | 0.2929 | 0.6197 | 0.7738 | 0.5847 | 0.7693 | 0.6620 | 25.3592 | 0.8244 | 0.4236 | 0.4634 | 0.2365 |
| sider_RDKit_desc | 0.0000 | 0.2861 | 0.6203 | 0.7761 | 0.5745 | 0.7705 | 0.8873 | 25.6338 | 0.7767 | 0.4393 | 0.4611 | 0.2809 |
| SLASHDOT-F | 0.3634 | 0.0443 | 0.4710 | 0.5214 | 0.3954 | 0.5435 | 0.4016 | 3.2053 | 0.1909 | 0.6752 | 0.7064 | 0.9606 |
| solar_flare-L3 | 0.0000 | 0.6667 | 0.3333 | 0.5000 | 0.4405 | 0.5000 | 0.8000 | 1.0000 | 0.6000 | 0.5667 | 0.6111 | 0.5000 |
| Stackex_chemistry | 0.0000 | 0.0226 | 0.0033 | 0.0056 | 0.0008 | 0.0058 | 0.9928 | 106.9640 | 0.4844 | 0.0476 | 0.2471 | 0.5393 |
| Stackex_chess | 0.0000 | 0.0582 | 0.0005 | 0.0010 | 0.0001 | 0.0009 | 1.0000 | 169.1607 | 0.6594 | 0.0152 | 0.1612 | 0.4013 |
| Stackex_coffee | 0.0000 | 0.0218 | 0.0526 | 0.0901 | 0.0171 | 0.1142 | 0.8332 | 74.5890 | 0.8356 | 0.1573 | 0.2538 | 0.9837 |
| Stackex_cooking | 0.0675 | 0.0062 | 0.2416 | 0.3368 | 0.1519 | 0.3504 | 0.5084 | 168.1711 | 0.4767 | 0.3845 | 0.9237 | 0.9932 |
| Stackex_philosophy | 0.0000 | 0.0265 | 0.0015 | 0.0026 | 0.0003 | 0.0032 | 0.9925 | 143.8141 | 0.4795 | 0.0413 | 0.2040 | 0.5337 |
| tmc2007-500 | 0.2680 | 0.0647 | 0.5332 | 0.6609 | 0.5663 | 0.6469 | 0.2444 | 2.6231 | 0.0483 | 0.7958 | 0.9379 | 0.9475 |
| tox21_CDK_ECFP4 | 0.1456 | 0.1634 | 0.2886 | 0.3576 | 0.4105 | 0.4394 | 0.4692 | 3.8319 | 0.2073 | 0.6492 | 0.7247 | 0.7802 |
| tox21_RDKit_desc | 0.0000 | 0.4269 | 0.0711 | 0.1347 | 0.1190 | 0.1373 | 0.9315 | 8.1507 | 0.6366 | 0.2496 | 0.4316 | 0.3527 |
| VirusGO | 0.0000 | 0.3254 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 | 4.0476 | 0.7853 | 0.2467 | 0.2018 | 0.2420 |
| VirusPseAAC | 0.0000 | 0.2460 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 | 3.1905 | 0.6631 | 0.2885 | 0.3626 | 0.3685 |
| Water-quality | 0.0000 | 0.3942 | 0.2253 | 0.3784 | 0.1778 | 0.3464 | 0.7264 | 11.7547 | 0.5880 | 0.4384 | 0.3717 | 0.4036 |
| Yahoo_Arts | 0.1807 | 0.0634 | 0.2580 | 0.3157 | 0.2124 | 0.3552 | 0.5078 | 10.5353 | 0.6117 | 0.4972 | 0.9404 | 0.9703 |
| Yahoo_Business | 0.5697 | 0.0268 | 0.7278 | 0.8193 | 0.3153 | 0.7334 | 0.0905 | 3.1621 | 0.2253 | 0.8891 | 0.8422 | 0.9955 |
| Yahoo_Computers | 0.3828 | 0.0376 | 0.4570 | 0.5078 | 0.2378 | 0.5112 | 0.3885 | 6.6447 | 0.4278 | 0.6078 | 0.8820 | 0.9701 |
| Yahoo_Education | 0.1386 | 0.0416 | 0.1810 | 0.2098 | 0.1524 | 0.2913 | 0.5549 | 9.3166 | 0.5726 | 0.5284 | 0.8754 | 0.9761 |
| Yahoo_Entertainment | 0.2774 | 0.0562 | 0.3274 | 0.3559 | 0.2426 | 0.4243 | 0.4419 | 4.2084 | 0.3857 | 0.6376 | 0.9632 | 0.9670 |
| Yahoo_Health | 0.4154 | 0.0382 | 0.5409 | 0.6088 | 0.2421 | 0.5844 | 0.3150 | 6.5086 | 0.3537 | 0.6915 | 0.8286 | 0.9760 |
| Yahoo_Recreation | 0.2746 | 0.0210 | 0.3985 | 0.4281 | 0.4069 | 0.4973 | 0.4859 | 6.2420 | 0.4848 | 0.5970 | 0.9517 | 0.9727 |
| Yahoo_Reference | 0.4097 | 0.0295 | 0.4571 | 0.4877 | 0.1686 | 0.5113 | 0.3954 | 5.4304 | 0.4255 | 0.6400 | 0.8024 | 0.9860 |
| Yahoo_Science | 0.2279 | 0.0393 | 0.2793 | 0.3241 | 0.1715 | 0.3409 | 0.6249 | 13.7733 | 0.6522 | 0.4221 | 0.9615 | 0.9763 |
| Yahoo_Social | 0.4274 | 0.0234 | 0.4647 | 0.5028 | 0.1606 | 0.5441 | 0.3991 | 7.9627 | 0.4363 | 0.6213 | 0.9047 | 1.0000 |
| Yahoo_Society | 0.2644 | 0.0567 | 0.3538 | 0.4174 | 0.1533 | 0.4065 | 0.4175 | 8.7820 | 0.5274 | 0.5599 | 0.9513 | 0.9882 |
| yeast | 0.1632 | 0.2006 | 0.4974 | 0.6405 | 0.4175 | 0.6326 | 0.1996 | 6.0262 | 0.1493 | 0.7758 | 0.7477 | 0.8517 |
| Yelp | 0.5354 | 0.1323 | 0.7503 | 0.8397 | 0.7851 | 0.8133 | 0.0890 | 1.1133 | 0.0884 | 0.9255 | 0.8961 | 0.9319 |

Table 12: Detailed results for Random for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5244 | 0.0276 | 0.5659 | 0.5868 | 0.6852 | 0.6916 | 0.2863 | 1.7137 | 0.1514 | 0.7954 | 0.9736 | 0.9743 |
| 3s-bbc1000 | 0.1944 | 0.2454 | 0.2500 | 0.2771 | 0.3073 | 0.3291 | 0.6944 | 2.5278 | 0.5410 | 0.4912 | 0.6746 | 0.6500 |
| 3s-guardian1000 | 0.0645 | 0.2688 | 0.1559 | 0.1962 | 0.2064 | 0.2647 | 0.5806 | 1.9032 | 0.3702 | 0.6118 | 0.6730 | 0.7441 |
| 3s-inter3000 | 0.0588 | 0.2451 | 0.0588 | 0.0588 | 0.0303 | 0.0741 | 0.8235 | 2.0588 | 0.4691 | 0.4608 | 0.3245 | 0.6224 |
| 3s-reuters1000 | 0.1667 | 0.2444 | 0.1667 | 0.1667 | 0.1479 | 0.1852 | 0.8667 | 2.4000 | 0.5683 | 0.4136 | 0.7029 | 0.6290 |
| amphibians | 0.1111 | 0.2698 | 0.4684 | 0.6427 | 0.6626 | 0.6964 | 0.2222 | 2.6111 | 0.1046 | 0.8570 | 0.6880 | 0.7958 |
| bibtex | 0.1770 | 0.0132 | 0.3692 | 0.4688 | 0.3581 | 0.4791 | 0.3541 | 51.2500 | 0.3550 | 0.5516 | 0.9824 | 0.9855 |
| birds | 0.1795 | 0.0702 | 0.3910 | 0.4745 | 0.3567 | 0.5357 | 0.3333 | 4.1282 | 0.1588 | 0.6875 | 0.7804 | 0.8893 |
| bookmarks10% | 0.1917 | 0.0109 | 0.2446 | 0.2834 | 0.1315 | 0.2711 | 0.6533 | 78.4217 | 0.5003 | 0.3592 | 0.9393 | 0.9654 |
| CAL500 | 0.0000 | 0.1624 | 0.2214 | 0.3645 | 0.1274 | 0.3638 | 0.3333 | 151.6863 | 0.3173 | 0.4582 | 0.6458 | 0.8323 |
| corel16k001 | 0.0087 | 0.0206 | 0.0648 | 0.0967 | 0.0537 | 0.1175 | 0.7850 | 105.2128 | 0.7750 | 0.1780 | 0.9760 | 0.9772 |
| Corel5k | 0.0020 | 0.0144 | 0.0841 | 0.1414 | 0.0323 | 0.1444 | 0.7717 | 161.3700 | 0.6979 | 0.2007 | 0.6531 | 0.9801 |
| delicious | 0.0000 | 0.0255 | 0.0925 | 0.1595 | 0.0823 | 0.1710 | 0.5429 | 912.8623 | 0.8593 | 0.1489 | 0.9965 | 0.9846 |
| emotions | 0.3333 | 0.1944 | 0.5653 | 0.6713 | 0.6643 | 0.6875 | 0.2000 | 1.5167 | 0.1294 | 0.8448 | 0.8754 | 0.8863 |
| enron | 0.1228 | 0.0540 | 0.4537 | 0.6043 | 0.2015 | 0.5699 | 0.1988 | 16.8538 | 0.1993 | 0.6918 | 0.7706 | 0.9511 |
| EukaryoteGO | 0.7107 | 0.0199 | 0.7732 | 0.8278 | 0.7524 | 0.8035 | 0.1772 | 0.4192 | 0.0146 | 0.9048 | 1.0000 | 0.9937 |
| EukaryotePseAAC | 0.2317 | 0.0515 | 0.2870 | 0.3163 | 0.1447 | 0.3852 | 0.5290 | 2.6100 | 0.1313 | 0.6337 | 0.8474 | 0.9178 |
| flags | 0.3500 | 0.2643 | 0.6186 | 0.7142 | 0.5843 | 0.7132 | 0.1000 | 3.4500 | 0.1800 | 0.8557 | 0.7312 | 0.8302 |
| foodtruck | 0.1707 | 0.1646 | 0.4519 | 0.6275 | 0.3005 | 0.5424 | 0.2439 | 2.4878 | 0.1009 | 0.8034 | 0.6827 | 0.8426 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 1.0000 |
| GnegativeGO | 0.9357 | 0.0089 | 0.9643 | 0.9786 | 0.8416 | 0.9660 | 0.0286 | 0.1000 | 0.0088 | 0.9827 | 0.8739 | 0.9986 |
| GnegativePseAAC | 0.7429 | 0.0536 | 0.7643 | 0.7750 | 0.4483 | 0.7887 | 0.2071 | 0.6286 | 0.0966 | 0.8590 | 0.8113 | 0.9532 |
| GpositiveGO | 0.8846 | 0.0529 | 0.8942 | 0.8990 | 0.8311 | 0.8952 | 0.0769 | 0.0962 | 0.0321 | 0.9615 | 0.9959 | 0.9961 |
| GpositivePseAAC | 0.5769 | 0.1587 | 0.5769 | 0.5769 | 0.4635 | 0.6452 | 0.2308 | 0.4615 | 0.1987 | 0.8510 | 0.9012 | 0.9197 |
| HumanGO | 0.6720 | 0.0377 | 0.7666 | 0.8147 | 0.7382 | 0.7807 | 0.1704 | 0.5659 | 0.0378 | 0.8966 | 0.9808 | 0.9853 |
| HumanPseAAC | 0.2508 | 0.0857 | 0.3108 | 0.3427 | 0.1873 | 0.3895 | 0.5531 | 2.1511 | 0.1548 | 0.6177 | 0.7809 | 0.8675 |
| Image | 0.4950 | 0.1600 | 0.5925 | 0.6419 | 0.6371 | 0.6380 | 0.2650 | 0.8350 | 0.1675 | 0.8229 | 0.8874 | 0.8844 |
| IMDB-ECC-F10% | 0.0168 | 0.0749 | 0.0469 | 0.0683 | 0.0577 | 0.0942 | 0.6247 | 10.6771 | 0.5011 | 0.4314 | 0.8686 | 0.8929 |
| IMDB-F10% | 0.0157 | 0.0820 | 0.0631 | 0.0954 | 0.0659 | 0.1250 | 0.5990 | 10.3165 | 0.4670 | 0.4476 | 0.8650 | 0.8937 |
| LLOG-F | 0.1242 | 0.0184 | 0.1692 | 0.1977 | 0.0801 | 0.2409 | 0.5608 | 14.7782 | 0.2401 | 0.4985 | 0.5194 | 0.9264 |
| mediamill10% | 0.0760 | 0.0366 | 0.4386 | 0.6046 | 0.1390 | 0.5679 | 0.1853 | 34.4822 | 0.1650 | 0.6837 | 0.7564 | 0.9645 |
| medical | 0.6782 | 0.0108 | 0.7651 | 0.8241 | 0.3569 | 0.8158 | 0.1442 | 2.0567 | 0.0657 | 0.9049 | 0.5493 | 0.9839 |
| Music | 0.2667 | 0.2028 | 0.5292 | 0.6346 | 0.6787 | 0.6812 | 0.2167 | 2.0167 | 0.1667 | 0.8070 | 0.8708 | 0.8624 |
| NUS-WIDE-bow10% | 0.0896 | 0.0285 | 0.2082 | 0.2828 | 0.0547 | 0.3277 | 0.5538 | 18.4342 | 0.1714 | 0.4827 | 0.7001 | 0.8804 |
| NUS-WIDE-cVLADplus10% | 0.1342 | 0.0272 | 0.2843 | 0.3649 | 0.0651 | 0.3921 | 0.4933 | 20.4819 | 0.2396 | 0.5194 | 0.7925 | 0.9347 |
| OHSUMED-F | 0.2366 | 0.0570 | 0.4405 | 0.5503 | 0.4662 | 0.5686 | 0.3171 | 3.3319 | 0.0915 | 0.7281 | 0.8709 | 0.9267 |
| PlantGO | 0.6667 | 0.0408 | 0.7240 | 0.7507 | 0.6833 | 0.7751 | 0.2083 | 0.8229 | 0.0758 | 0.8658 | 0.9865 | 0.9767 |
| PlantPseAAC | 0.1837 | 0.0901 | 0.1939 | 0.1988 | 0.1286 | 0.2740 | 0.6122 | 2.0612 | 0.1798 | 0.5891 | 0.8036 | 0.8457 |
| rcv1subset1 | 0.1099 | 0.0283 | 0.3255 | 0.4375 | 0.2367 | 0.4373 | 0.3981 | 15.9252 | 0.1003 | 0.6180 | 0.8831 | 0.9701 |
| REUTERS-K500-EX2 | 0.3045 | 0.0112 | 0.3761 | 0.4149 | 0.2336 | 0.4790 | 0.5085 | 32.5109 | 0.5398 | 0.4869 | 0.7801 | 0.9845 |
| scene | 0.6888 | 0.0761 | 0.7510 | 0.7821 | 0.7957 | 0.7826 | 0.1867 | 0.4274 | 0.0654 | 0.8882 | 0.9505 | 0.9603 |
| sider_CDK_ECFP4 | 0.0211 | 0.2462 | 0.6210 | 0.7794 | 0.6644 | 0.7872 | 0.1549 | 18.9366 | 0.1444 | 0.8109 | 0.5610 | 0.7799 |
| sider_MordredDesc | 0.0141 | 0.2426 | 0.5983 | 0.7644 | 0.6177 | 0.7776 | 0.1268 | 19.1197 | 0.1375 | 0.8261 | 0.5579 | 0.7863 |
| sider_RDKit_desc | 0.0141 | 0.2488 | 0.6093 | 0.7748 | 0.6282 | 0.7771 | 0.2394 | 19.3662 | 0.1658 | 0.7735 | 0.5853 | 0.7673 |
| SLASHDOT-F | 0.3682 | 0.0450 | 0.4624 | 0.5096 | 0.3922 | 0.5448 | 0.4011 | 3.2931 | 0.1911 | 0.6817 | 0.7097 | 0.9404 |
| solar_flare-L3 | 0.4000 | 0.2000 | 0.7000 | 0.8235 | 0.5079 | 0.7692 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.5000 | 0.8800 |
| Stackex_chemistry | 0.0432 | 0.0138 | 0.1559 | 0.2263 | 0.1232 | 0.2609 | 0.6599 | 88.5504 | 0.6651 | 0.2856 | 0.9076 | 0.9880 |
| Stackex_chess | 0.0476 | 0.0122 | 0.1932 | 0.2888 | 0.0963 | 0.3172 | 0.5714 | 118.7857 | 0.6316 | 0.3102 | 0.5434 | 0.9915 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0530 | 0.0888 | 0.0172 | 0.1156 | 0.8347 | 74.2583 | 0.8317 | 0.1575 | 0.2553 | 0.9903 |
| Stackex_cooking | 0.0677 | 0.0063 | 0.2422 | 0.3411 | 0.1522 | 0.3469 | 0.5161 | 165.3130 | 0.4790 | 0.3902 | 0.9148 | 0.9838 |
| Stackex_philosophy | 0.0553 | 0.0114 | 0.2160 | 0.3193 | 0.0976 | 0.3269 | 0.5377 | 113.7839 | 0.5834 | 0.3498 | 0.7432 | 0.9922 |
| tmc2007-500 | 0.2664 | 0.0639 | 0.5333 | 0.6681 | 0.5621 | 0.6447 | 0.2464 | 2.6122 | 0.0486 | 0.7977 | 0.9185 | 0.9491 |
| tox21_CDK_ECFP4 | 0.1443 | 0.1592 | 0.2865 | 0.3549 | 0.4053 | 0.4465 | 0.4813 | 3.8341 | 0.2091 | 0.6401 | 0.7254 | 0.7891 |
| tox21_RDKit_desc | 0.1610 | 0.1652 | 0.3460 | 0.4402 | 0.4172 | 0.4826 | 0.4349 | 3.8459 | 0.1988 | 0.6507 | 0.7387 | 0.7941 |
| VirusGO | 0.8095 | 0.0397 | 0.8889 | 0.9206 | 0.7154 | 0.8980 | 0.0476 | 0.4286 | 0.0589 | 0.9524 | 0.8153 | 0.9901 |
| VirusPseAAC | 0.2857 | 0.1429 | 0.5000 | 0.5957 | 0.3771 | 0.6400 | 0.3810 | 0.8571 | 0.1607 | 0.7698 | 0.5475 | 0.8641 |
| Water-quality | 0.0189 | 0.2844 | 0.4442 | 0.6171 | 0.5740 | 0.6184 | 0.2453 | 8.5943 | 0.2400 | 0.7220 | 0.7249 | 0.7524 |
| Yahoo_Arts | 0.1795 | 0.0636 | 0.2623 | 0.3158 | 0.2143 | 0.3510 | 0.5053 | 10.3946 | 0.6134 | 0.5021 | 0.9259 | 0.9720 |
| Yahoo_Business | 0.5742 | 0.0264 | 0.7294 | 0.8075 | 0.3181 | 0.7189 | 0.0896 | 3.1751 | 0.2218 | 0.8858 | 0.8457 | 0.9881 |
| Yahoo_Computers | 0.3790 | 0.0371 | 0.4557 | 0.5064 | 0.2374 | 0.5126 | 0.3820 | 6.6000 | 0.4242 | 0.6140 | 0.8866 | 0.9711 |
| Yahoo_Education | 0.1395 | 0.0418 | 0.1829 | 0.2101 | 0.1540 | 0.2927 | 0.5472 | 9.1398 | 0.5643 | 0.5258 | 0.8900 | 0.9751 |
| Yahoo_Entertainment | 0.2727 | 0.0561 | 0.3285 | 0.3569 | 0.2394 | 0.4245 | 0.4374 | 4.1859 | 0.3838 | 0.6389 | 0.9648 | 0.9584 |
| Yahoo_Health | 0.4145 | 0.0387 | 0.5316 | 0.6032 | 0.2393 | 0.5764 | 0.3132 | 6.5291 | 0.3529 | 0.6939 | 0.8272 | 0.9731 |
| Yahoo_Recreation | 0.2738 | 0.0210 | 0.3955 | 0.4236 | 0.4052 | 0.5024 | 0.4756 | 6.1702 | 0.4851 | 0.6041 | 0.9577 | 0.9682 |
| Yahoo_Reference | 0.4104 | 0.0295 | 0.4538 | 0.4885 | 0.1717 | 0.5200 | 0.3954 | 5.4069 | 0.4296 | 0.6403 | 0.8060 | 0.9882 |
| Yahoo_Science | 0.2260 | 0.0394 | 0.2827 | 0.3244 | 0.1724 | 0.3397 | 0.6253 | 13.7221 | 0.6485 | 0.4288 | 0.9605 | 0.9831 |
| Yahoo_Social | 0.4188 | 0.0237 | 0.4735 | 0.4883 | 0.1590 | 0.5333 | 0.3972 | 7.9355 | 0.4302 | 0.6151 | 0.9152 | 0.9799 |
| Yahoo_Society | 0.2585 | 0.0565 | 0.3484 | 0.4200 | 0.1499 | 0.4151 | 0.4161 | 8.7628 | 0.5263 | 0.5592 | 0.9503 | 0.9833 |
| yeast | 0.1671 | 0.1954 | 0.4943 | 0.6364 | 0.4211 | 0.6326 | 0.2018 | 6.0527 | 0.1478 | 0.7723 | 0.7582 | 0.8696 |
| Yelp | 0.5360 | 0.1336 | 0.7553 | 0.8328 | 0.7700 | 0.8011 | 0.0903 | 1.1285 | 0.0888 | 0.9213 | 0.8972 | 0.9230 |

Table 13: Detailed results for AdaBoost for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5587 | 0.0252 | 0.5953 | 0.6162 | 0.7052 | 0.7136 | 0.2913 | 2.4058 | 0.2263 | 0.7772 | 0.9976 | 0.9964 |
| 3s-bbc1000 | 0.0556 | 0.2130 | 0.0556 | 0.0556 | 0.0694 | 0.0800 | 0.5833 | 1.8333 | 0.4049 | 0.6150 | 0.7773 | 0.7715 |
| 3s-guardian1000 | 0.0323 | 0.1935 | 0.0484 | 0.0553 | 0.0593 | 0.1000 | 0.6129 | 2.0000 | 0.4016 | 0.5796 | 0.6271 | 0.6792 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7647 | 2.2353 | 0.4706 | 0.4627 | 0.4735 | 0.6329 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 2.2000 | 0.4742 | 0.4694 | 0.6978 | 0.6451 |
| amphibians | 0.0556 | 0.3095 | 0.3634 | 0.5501 | 0.3031 | 0.5412 | 0.2222 | 2.8333 | 0.1370 | 0.8311 | 0.6254 | 0.7523 |
| bibtex | 0.1865 | 0.0120 | 0.3581 | 0.4448 | 0.3099 | 0.4745 | 0.4353 | 71.4685 | 0.5864 | 0.4219 | 0.9872 | 0.9958 |
| birds | 0.1282 | 0.0769 | 0.2402 | 0.2983 | 0.1876 | 0.3736 | 0.2564 | 3.8462 | 0.1887 | 0.7197 | 0.8474 | 0.9422 |
| bookmarks10% | 0.1891 | 0.0088 | 0.2194 | 0.2416 | 0.1103 | 0.2623 | 0.7188 | 105.5091 | 0.7715 | 0.2575 | 0.9704 | 1.0000 |
| CAL500 | 0.0000 | 0.1416 | 0.1212 | 0.2242 | 0.0440 | 0.2139 | 0.2157 | 150.0000 | 0.3734 | 0.4686 | 0.7111 | 0.8686 |
| corel16k001 | 0.0088 | 0.0188 | 0.0434 | 0.0637 | 0.0328 | 0.0834 | 0.8848 | 116.1337 | 0.9409 | 0.0852 | 1.0000 | 0.9982 |
| Corel5k | 0.0059 | 0.0091 | 0.0560 | 0.0830 | 0.0236 | 0.1141 | 0.8417 | 164.2496 | 0.9469 | 0.1592 | 0.6864 | 0.9907 |
| delicious | 0.0000 | 0.0250 | 0.0940 | 0.1595 | 0.0834 | 0.1724 | 0.5357 | 904.7766 | 0.8608 | 0.1506 | 0.9866 | 0.9933 |
| emotions | 0.3167 | 0.1806 | 0.5028 | 0.5903 | 0.6201 | 0.6561 | 0.2167 | 1.5500 | 0.1755 | 0.8406 | 0.8747 | 0.8895 |
| enron | 0.1856 | 0.0490 | 0.4686 | 0.6045 | 0.1697 | 0.5889 | 0.3039 | 24.0953 | 0.3642 | 0.6094 | 0.8338 | 0.9691 |
| EukaryoteGO | 0.7183 | 0.0191 | 0.7786 | 0.8176 | 0.6903 | 0.8248 | 0.1723 | 0.8645 | 0.0494 | 0.8930 | 0.9820 | 1.0000 |
| EukaryotePseAAC | 0.1867 | 0.0506 | 0.2170 | 0.2329 | 0.1124 | 0.3047 | 0.5423 | 6.1365 | 0.5067 | 0.5270 | 0.9815 | 0.9724 |
| flags | 0.3000 | 0.2429 | 0.5842 | 0.7115 | 0.5705 | 0.6964 | 0.1000 | 3.5500 | 0.2117 | 0.8587 | 0.7628 | 0.8423 |
| foodtruck | 0.2927 | 0.1341 | 0.4096 | 0.5105 | 0.1463 | 0.4844 | 0.2683 | 3.0000 | 0.1737 | 0.7714 | 0.6845 | 0.8362 |
| genbase | 0.9552 | 0.0017 | 0.9826 | 0.9913 | 0.6222 | 0.9814 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9357 | 0.0107 | 0.9571 | 0.9678 | 0.8357 | 0.9586 | 0.0214 | 0.1571 | 0.0199 | 0.9815 | 0.8745 | 0.9995 |
| GnegativePseAAC | 0.6000 | 0.0589 | 0.6036 | 0.6054 | 0.2563 | 0.7203 | 0.2500 | 0.6071 | 0.1069 | 0.8447 | 0.8420 | 0.9715 |
| GpositiveGO | 0.8846 | 0.0433 | 0.8942 | 0.8990 | 0.9224 | 0.9126 | 0.0577 | 0.1154 | 0.0449 | 0.9663 | 0.9956 | 0.9961 |
| GpositivePseAAC | 0.5577 | 0.1442 | 0.5577 | 0.5577 | 0.5015 | 0.6591 | 0.2885 | 0.5385 | 0.2115 | 0.8221 | 0.9476 | 0.9381 |
| HumanGO | 0.6903 | 0.0359 | 0.7710 | 0.8027 | 0.6975 | 0.7853 | 0.1594 | 1.0815 | 0.1005 | 0.8918 | 0.9827 | 0.9758 |
| HumanPseAAC | 0.2698 | 0.0849 | 0.3013 | 0.3118 | 0.1618 | 0.3613 | 0.5324 | 3.3993 | 0.4662 | 0.5834 | 0.9451 | 0.9503 |
| Image | 0.5300 | 0.1210 | 0.5875 | 0.6151 | 0.6740 | 0.6807 | 0.1950 | 0.7050 | 0.1442 | 0.8653 | 0.9396 | 0.9395 |
| IMDB-ECC-F10% | 0.0300 | 0.0689 | 0.0568 | 0.0726 | 0.0327 | 0.0958 | 0.6410 | 12.4870 | 0.7281 | 0.3730 | 0.9803 | 0.9687 |
| IMDB-F10% | 0.0200 | 0.0725 | 0.0497 | 0.0662 | 0.0312 | 0.0894 | 0.5910 | 12.9158 | 0.7171 | 0.3845 | 0.9751 | 0.9681 |
| LLOG-F | 0.0410 | 0.0172 | 0.0533 | 0.0588 | 0.0159 | 0.0925 | 0.6475 | 25.8525 | 0.6992 | 0.3522 | 0.5967 | 0.9963 |
| mediamill10% | 1.0000 | 0.0000 | 1.0000 | 1.0000 | 0.8218 | 1.0000 | 0.0000 | 3.4537 | 0.0000 | 1.0000 | 0.8218 | 1.0000 |
| medical | 0.6939 | 0.0093 | 0.7815 | 0.8252 | 0.3353 | 0.8299 | 0.1429 | 3.1429 | 0.0887 | 0.8835 | 0.5533 | 0.9979 |
| Music | 0.2333 | 0.1778 | 0.4778 | 0.5910 | 0.6549 | 0.6701 | 0.1833 | 1.8333 | 0.1622 | 0.8406 | 0.8893 | 0.8890 |
| NUS-WIDE-bow10% | 0.1169 | 0.0252 | 0.2263 | 0.2787 | 0.0450 | 0.3321 | 0.5396 | 35.3339 | 0.5964 | 0.4272 | 0.8715 | 0.9855 |
| NUS-WIDE-cVLADplus10% | 0.1430 | 0.0233 | 0.2479 | 0.3017 | 0.0532 | 0.3658 | 0.5439 | 35.3339 | 0.6370 | 0.4195 | 0.8705 | 0.9942 |
| OHSUMED-F | 0.2341 | 0.0562 | 0.4263 | 0.5361 | 0.4317 | 0.5609 | 0.3588 | 7.6776 | 0.4175 | 0.6105 | 0.9840 | 0.9717 |
| PlantGO | 0.7113 | 0.0407 | 0.7447 | 0.7524 | 0.6393 | 0.7784 | 0.2292 | 0.9767 | 0.0973 | 0.8594 | 0.9759 | 0.9934 |
| PlantPseAAC | 0.0510 | 0.0893 | 0.0561 | 0.0586 | 0.0474 | 0.1026 | 0.5816 | 2.3367 | 0.2480 | 0.5929 | 0.8634 | 0.8634 |
| rcv1subset1 | 0.1211 | 0.0310 | 0.3209 | 0.4236 | 0.2566 | 0.4288 | 0.4290 | 37.9606 | 0.4289 | 0.4985 | 0.9377 | 0.9934 |
| REUTERS-K500-EX2 | 0.3072 | 0.0114 | 0.3805 | 0.4134 | 0.2368 | 0.4787 | 0.5089 | 32.0540 | 0.5321 | 0.4845 | 0.7745 | 0.9923 |
| scene | 0.6307 | 0.0740 | 0.6556 | 0.6678 | 0.7589 | 0.7540 | 0.1701 | 0.4606 | 0.0762 | 0.8949 | 0.9693 | 0.9764 |
| sider_CDK_ECFP4 | 0.0140 | 0.2417 | 0.6587 | 0.7963 | 0.6196 | 0.7888 | 0.0990 | 19.2917 | 0.1349 | 0.8199 | 0.5966 | 0.7953 |
| sider_MordredDesc | 0.0139 | 0.2547 | 0.6170 | 0.7726 | 0.6169 | 0.7889 | 0.1398 | 20.0135 | 0.1798 | 0.7857 | 0.5795 | 0.7645 |
| sider_RDKit_desc | 0.0070 | 0.2590 | 0.5636 | 0.7396 | 0.5750 | 0.7449 | 0.1268 | 19.5000 | 0.1668 | 0.7920 | 0.6002 | 0.7808 |
| SLASHDOT-F | 0.4068 | 0.0402 | 0.4807 | 0.5233 | 0.3890 | 0.5848 | 0.4049 | 5.5691 | 0.3688 | 0.6408 | 0.7519 | 0.9936 |
| solar_flare-L3 | 0.2000 | 0.6000 | 0.2000 | 0.2000 | 0.1111 | 0.1818 | 0.8000 | 1.0000 | 0.6000 | 0.5667 | 0.2222 | 0.6000 |
| Stackex_chemistry | 0.0466 | 0.0121 | 0.1056 | 0.1413 | 0.0656 | 0.1762 | 0.7958 | 104.9429 | 0.8866 | 0.1591 | 0.9243 | 1.0000 |
| Stackex_chess | 0.0298 | 0.0100 | 0.1479 | 0.2202 | 0.0467 | 0.2597 | 0.5893 | 127.7619 | 0.6882 | 0.2786 | 0.5471 | 0.9960 |
| Stackex_coffee | 0.0000 | 0.0223 | 0.0341 | 0.0547 | 0.0244 | 0.0870 | 0.8261 | 69.5652 | 0.6602 | 0.2327 | 0.2558 | 0.9864 |
| Stackex_cooking | 0.0669 | 0.0052 | 0.1997 | 0.2689 | 0.1099 | 0.3145 | 0.6424 | 226.6404 | 0.7760 | 0.2336 | 0.9334 | 0.9949 |
| Stackex_philosophy | 0.0551 | 0.0093 | 0.1685 | 0.2391 | 0.0647 | 0.2773 | 0.6742 | 135.9811 | 0.7852 | 0.2185 | 0.7559 | 0.9984 |
| tmc2007-500 | 0.2853 | 0.0607 | 0.5647 | 0.6982 | 0.5621 | 0.6726 | 0.2570 | 4.1343 | 0.1461 | 0.7682 | 0.9549 | 0.9554 |
| tox21_CDK_ECFP4 | 0.1397 | 0.1564 | 0.2881 | 0.3535 | 0.3683 | 0.4080 | 0.4723 | 5.3908 | 0.4804 | 0.5715 | 0.8886 | 0.8977 |
| tox21_RDKit_desc | 0.0947 | 0.1623 | 0.1897 | 0.2545 | 0.2158 | 0.2896 | 0.5026 | 5.4260 | 0.5008 | 0.5642 | 0.8919 | 0.8923 |
| VirusGO | 0.7143 | 0.0635 | 0.8016 | 0.8523 | 0.6394 | 0.8261 | 0.0476 | 0.4286 | 0.0730 | 0.9579 | 0.8117 | 0.9893 |
| VirusPseAAC | 0.3810 | 0.1190 | 0.4524 | 0.4855 | 0.3148 | 0.5946 | 0.3333 | 0.7143 | 0.1357 | 0.7952 | 0.7381 | 0.9325 |
| Water-quality | 0.0094 | 0.3059 | 0.2718 | 0.4222 | 0.3251 | 0.4119 | 0.1792 | 8.3962 | 0.2171 | 0.7580 | 0.7452 | 0.7750 |
| Yahoo_Arts | 0.1788 | 0.0633 | 0.2603 | 0.3166 | 0.2161 | 0.3512 | 0.5081 | 10.3591 | 0.6154 | 0.5026 | 0.9266 | 0.9632 |
| Yahoo_Business | 0.5725 | 0.0267 | 0.7211 | 0.8250 | 0.3232 | 0.7295 | 0.0884 | 3.1533 | 0.2220 | 0.8852 | 0.8558 | 1.0000 |
| Yahoo_Computers | 0.3802 | 0.0371 | 0.4597 | 0.5134 | 0.2406 | 0.5193 | 0.3820 | 6.5698 | 0.4194 | 0.6157 | 0.8841 | 0.9913 |
| Yahoo_Education | 0.1402 | 0.0422 | 0.1820 | 0.2092 | 0.1519 | 0.2930 | 0.5513 | 9.2783 | 0.5643 | 0.5329 | 0.8757 | 0.9851 |
| Yahoo_Entertainment | 0.2756 | 0.0565 | 0.3322 | 0.3649 | 0.2397 | 0.4282 | 0.4324 | 4.1933 | 0.3854 | 0.6320 | 0.9782 | 0.9670 |
| Yahoo_Health | 0.4246 | 0.0382 | 0.5450 | 0.6040 | 0.2402 | 0.5767 | 0.3097 | 6.4750 | 0.3512 | 0.6834 | 0.8269 | 0.9936 |
| Yahoo_Recreation | 0.2807 | 0.0212 | 0.4019 | 0.4259 | 0.4108 | 0.5056 | 0.4732 | 6.1013 | 0.4907 | 0.6023 | 0.9631 | 0.9596 |
| Yahoo_Reference | 0.4154 | 0.0293 | 0.4638 | 0.4797 | 0.1690 | 0.5201 | 0.3913 | 5.4355 | 0.4309 | 0.6510 | 0.8033 | 0.9841 |
| Yahoo_Science | 0.2292 | 0.0397 | 0.2830 | 0.3313 | 0.1762 | 0.3444 | 0.6159 | 13.7167 | 0.6385 | 0.4318 | 0.9445 | 0.9866 |
| Yahoo_Social | 0.4366 | 0.0236 | 0.4833 | 0.5117 | 0.1613 | 0.5444 | 0.3694 | 7.5228 | 0.3952 | 0.6402 | 0.9149 | 0.9981 |
| Yahoo_Society | 0.3126 | 0.0809 | 0.4392 | 0.5561 | 0.2039 | 0.4558 | 0.3747 | 8.2588 | 0.4788 | 0.5924 | 0.9383 | 0.9570 |
| yeast | 0.1488 | 0.1951 | 0.4282 | 0.5582 | 0.3113 | 0.5840 | 0.1818 | 5.7355 | 0.1466 | 0.7961 | 0.7831 | 0.8710 |
| Yelp | 0.4287 | 0.1873 | 0.6602 | 0.7413 | 0.6683 | 0.7240 | 0.2031 | 1.3821 | 0.2492 | 0.8591 | 0.8887 | 0.9239 |

Table 14: Detailed results for k-NN for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3107 | 0.0404 | 0.3164 | 0.3192 | 0.4321 | 0.4470 | 0.5949 | 6.2199 | 0.6106 | 0.4827 | 0.9907 | 0.9893 |
| 3s-bbc1000 | 0.1389 | 0.2269 | 0.1389 | 0.1389 | 0.1254 | 0.1695 | 0.6944 | 2.5556 | 0.6850 | 0.5088 | 0.8680 | 0.8321 |
| 3s-guardian1000 | 0.1613 | 0.2258 | 0.1935 | 0.2084 | 0.1948 | 0.2500 | 0.7097 | 2.1290 | 0.7226 | 0.5470 | 0.8965 | 0.8677 |
| 3s-inter3000 | 0.2353 | 0.1961 | 0.2353 | 0.2353 | 0.0833 | 0.2857 | 0.7059 | 2.4706 | 0.6368 | 0.4902 | 0.7485 | 0.8895 |
| 3s-reuters1000 | 0.2000 | 0.2000 | 0.2000 | 0.2000 | 0.2180 | 0.2500 | 0.6667 | 2.1667 | 0.6667 | 0.5150 | 0.9054 | 0.8457 |
| amphibians | 0.1667 | 0.2540 | 0.5848 | 0.7716 | 0.4443 | 0.6800 | 0.1667 | 2.6111 | 0.1546 | 0.8839 | 0.6841 | 0.7685 |
| bibtex | 0.0351 | 0.0142 | 0.0911 | 0.1248 | 0.0425 | 0.1604 | 0.7892 | 91.2541 | 0.9028 | 0.1381 | 0.9993 | 0.9993 |
| birds | 0.1795 | 0.0931 | 0.2708 | 0.3108 | 0.1996 | 0.3551 | 0.5641 | 7.8974 | 0.6173 | 0.4580 | 0.8411 | 0.9453 |
| bookmarks10% | 0.1917 | 0.0107 | 0.2514 | 0.2838 | 0.1316 | 0.2696 | 0.6560 | 79.4231 | 0.5003 | 0.3584 | 0.9452 | 0.9717 |
| CAL500 | 0.0000 | 0.1490 | 0.2016 | 0.3360 | 0.0816 | 0.3357 | 0.4510 | 151.4314 | 0.5286 | 0.4132 | 0.7633 | 0.9049 |
| corel16k001 | 0.0051 | 0.0192 | 0.0255 | 0.0360 | 0.0187 | 0.0479 | 0.9049 | 117.8003 | 0.9622 | 0.0710 | 0.9982 | 0.9982 |
| Corel5k | 0.0020 | 0.0143 | 0.0830 | 0.1405 | 0.0328 | 0.1419 | 0.7657 | 158.3205 | 0.6983 | 0.1981 | 0.6517 | 0.9766 |
| delicious | 0.0000 | 0.0250 | 0.0922 | 0.1591 | 0.0827 | 0.1743 | 0.5308 | 906.6078 | 0.8555 | 0.1472 | 0.9987 | 1.0000 |
| emotions | 0.3833 | 0.1917 | 0.5708 | 0.6597 | 0.6471 | 0.6730 | 0.2833 | 1.8000 | 0.2567 | 0.7950 | 0.8763 | 0.8754 |
| enron | 0.1228 | 0.0567 | 0.3363 | 0.4457 | 0.1060 | 0.4389 | 0.3626 | 28.1287 | 0.5629 | 0.4739 | 0.8296 | 0.9797 |
| EukaryoteGO | 0.7017 | 0.0200 | 0.7901 | 0.8265 | 0.7480 | 0.8250 | 0.1766 | 0.4222 | 0.0144 | 0.8887 | 1.0000 | 1.0000 |
| EukaryotePseAAC | 0.1454 | 0.0572 | 0.1737 | 0.1879 | 0.0731 | 0.2477 | 0.6461 | 7.0914 | 0.6506 | 0.4165 | 0.9725 | 0.9708 |
| flags | 0.2000 | 0.2500 | 0.5867 | 0.7112 | 0.5796 | 0.7200 | 0.2000 | 3.7500 | 0.3050 | 0.7942 | 0.7506 | 0.8316 |
| foodtruck | 0.3171 | 0.1423 | 0.4893 | 0.6045 | 0.1564 | 0.5395 | 0.2439 | 3.6829 | 0.3742 | 0.7525 | 0.8259 | 0.9347 |
| genbase | 0.9254 | 0.0033 | 0.9552 | 0.9699 | 0.4802 | 0.9620 | 0.0149 | 1.4478 | 0.0448 | 0.9603 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9143 | 0.0152 | 0.9357 | 0.9463 | 0.7713 | 0.9408 | 0.0357 | 0.2286 | 0.0571 | 0.9654 | 0.8748 | 0.9995 |
| GnegativePseAAC | 0.6000 | 0.0857 | 0.6107 | 0.6160 | 0.2751 | 0.6444 | 0.3429 | 1.4571 | 0.3265 | 0.7423 | 0.8541 | 0.9754 |
| GpositiveGO | 0.8846 | 0.0385 | 0.8942 | 0.8990 | 0.7016 | 0.9216 | 0.0962 | 0.3269 | 0.1058 | 0.9247 | 0.9982 | 0.9963 |
| GpositivePseAAC | 0.6923 | 0.1202 | 0.6923 | 0.6923 | 0.5670 | 0.7423 | 0.2692 | 0.5769 | 0.2692 | 0.8237 | 0.9786 | 0.9758 |
| HumanGO | 0.5884 | 0.0462 | 0.6766 | 0.7234 | 0.4828 | 0.7157 | 0.2572 | 2.0322 | 0.2453 | 0.7809 | 0.9872 | 0.9878 |
| HumanPseAAC | 0.1125 | 0.0914 | 0.1350 | 0.1468 | 0.0654 | 0.2008 | 0.6752 | 5.0868 | 0.6524 | 0.4364 | 0.9416 | 0.9391 |
| Image | 0.5250 | 0.1660 | 0.5808 | 0.6089 | 0.6064 | 0.6085 | 0.3250 | 1.1300 | 0.3508 | 0.7697 | 0.9467 | 0.9431 |
| IMDB-ECC-F10% | 0.0639 | 0.0746 | 0.1081 | 0.1333 | 0.0227 | 0.1421 | 0.6740 | 12.2296 | 0.6639 | 0.3773 | 0.9620 | 0.9596 |
| IMDB-F10% | 0.0365 | 0.0784 | 0.0894 | 0.1167 | 0.0256 | 0.1356 | 0.6661 | 12.8103 | 0.6564 | 0.3767 | 0.9486 | 0.9516 |
| LLOG-F | 0.1242 | 0.0184 | 0.1697 | 0.1973 | 0.0789 | 0.2412 | 0.5663 | 14.5734 | 0.2382 | 0.4998 | 0.5152 | 0.9286 |
| mediamill10% | 0.0855 | 0.0313 | 0.4481 | 0.6148 | 0.0664 | 0.5622 | 0.2304 | 56.1900 | 0.4049 | 0.5657 | 0.8074 | 0.9908 |
| medical | 0.6733 | 0.0110 | 0.7742 | 0.8179 | 0.3527 | 0.8182 | 0.1433 | 2.0650 | 0.0643 | 0.8939 | 0.5542 | 0.9848 |
| Music | 0.2667 | 0.1889 | 0.5889 | 0.7315 | 0.7078 | 0.7094 | 0.2500 | 1.9667 | 0.2489 | 0.8125 | 0.9035 | 0.9042 |
| NUS-WIDE-bow10% | 0.0890 | 0.0285 | 0.2140 | 0.2782 | 0.0558 | 0.3277 | 0.5485 | 18.7033 | 0.1740 | 0.4843 | 0.7039 | 0.8902 |
| NUS-WIDE-cVLADplus10% | 0.1351 | 0.0250 | 0.2310 | 0.2815 | 0.0563 | 0.3333 | 0.5699 | 35.5476 | 0.6473 | 0.3977 | 0.8809 | 0.9926 |
| OHSUMED-F | 0.2350 | 0.0571 | 0.4419 | 0.5572 | 0.4587 | 0.5698 | 0.3168 | 3.3210 | 0.0913 | 0.7459 | 0.8798 | 0.9045 |
| PlantGO | 0.5417 | 0.0556 | 0.5816 | 0.6025 | 0.4846 | 0.6522 | 0.3229 | 2.4167 | 0.3483 | 0.7116 | 0.9930 | 0.9863 |
| PlantPseAAC | 0.1837 | 0.0952 | 0.1939 | 0.1988 | 0.1203 | 0.2727 | 0.7245 | 4.0204 | 0.7239 | 0.4203 | 0.9442 | 0.9302 |
| rcv1subset1 | 0.1085 | 0.0284 | 0.3251 | 0.4386 | 0.2358 | 0.4307 | 0.3906 | 15.7661 | 0.1011 | 0.6159 | 0.9068 | 0.9632 |
| REUTERS-K500-EX2 | 0.2990 | 0.0116 | 0.3377 | 0.3594 | 0.1507 | 0.4082 | 0.5876 | 37.8694 | 0.6184 | 0.4173 | 0.7850 | 0.9983 |
| scene | 0.6556 | 0.0947 | 0.6888 | 0.7051 | 0.7319 | 0.7210 | 0.2490 | 1.0788 | 0.2769 | 0.8037 | 0.9829 | 0.9794 |
| sider_CDK_ECFP4 | 0.0070 | 0.2796 | 0.5779 | 0.7547 | 0.5854 | 0.7463 | 0.1056 | 19.4296 | 0.1655 | 0.8171 | 0.6174 | 0.7836 |
| sider_MordredDesc | 0.0070 | 0.2598 | 0.5937 | 0.7586 | 0.5903 | 0.7654 | 0.0915 | 19.7042 | 0.1795 | 0.7969 | 0.5922 | 0.7783 |
| sider_RDKit_desc | 0.0141 | 0.2462 | 0.6136 | 0.7769 | 0.5954 | 0.7763 | 0.2676 | 19.8521 | 0.1706 | 0.7955 | 0.6036 | 0.7903 |
| SLASHDOT-F | 0.3680 | 0.0450 | 0.4626 | 0.5237 | 0.3985 | 0.5440 | 0.3999 | 3.2780 | 0.1893 | 0.6783 | 0.7134 | 0.9366 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.8000 | 0.8000 | 0.5000 | 0.6000 | 0.2222 | 0.6400 |
| Stackex_chemistry | 0.0058 | 0.0121 | 0.0142 | 0.0186 | 0.0040 | 0.0252 | 0.9135 | 112.1916 | 0.9764 | 0.0734 | 0.9195 | 0.9995 |
| Stackex_chess | 0.0060 | 0.0104 | 0.0326 | 0.0478 | 0.0052 | 0.0703 | 0.8452 | 150.4048 | 0.9316 | 0.0933 | 0.5504 | 0.9995 |
| Stackex_coffee | 0.0000 | 0.0198 | 0.0145 | 0.0217 | 0.0018 | 0.0345 | 0.9565 | 81.6957 | 0.9855 | 0.0491 | 0.2591 | 0.9982 |
| Stackex_cooking | 0.0659 | 0.0063 | 0.2384 | 0.3379 | 0.1522 | 0.3485 | 0.5157 | 164.9560 | 0.4892 | 0.3953 | 0.9104 | 0.9851 |
| Stackex_philosophy | 0.0050 | 0.0097 | 0.0157 | 0.0212 | 0.0014 | 0.0280 | 0.9598 | 153.0603 | 0.9843 | 0.0378 | 0.7509 | 0.9999 |
| tmc2007-500 | 0.2691 | 0.0635 | 0.5287 | 0.6655 | 0.5641 | 0.6491 | 0.2436 | 2.5542 | 0.0488 | 0.7926 | 0.9220 | 0.9434 |
| tox21_CDK_ECFP4 | 0.1450 | 0.1637 | 0.2838 | 0.3609 | 0.4084 | 0.4417 | 0.4692 | 3.8769 | 0.2099 | 0.6489 | 0.7305 | 0.7846 |
| tox21_RDKit_desc | 0.1404 | 0.1590 | 0.2805 | 0.3546 | 0.3700 | 0.4240 | 0.4623 | 5.5205 | 0.4958 | 0.5688 | 0.8933 | 0.8996 |
| VirusGO | 0.6667 | 0.0952 | 0.7222 | 0.7579 | 0.5471 | 0.7500 | 0.1905 | 1.0952 | 0.2234 | 0.8333 | 0.8148 | 0.9770 |
| VirusPseAAC | 0.4286 | 0.1349 | 0.4762 | 0.4989 | 0.4719 | 0.5641 | 0.4286 | 1.2381 | 0.2619 | 0.7143 | 0.6792 | 0.9088 |
| Water-quality | 0.0189 | 0.2999 | 0.3852 | 0.5572 | 0.4869 | 0.5519 | 0.2736 | 8.8491 | 0.2869 | 0.7073 | 0.7187 | 0.7506 |
| Yahoo_Arts | 0.1801 | 0.0635 | 0.2616 | 0.3126 | 0.2176 | 0.3572 | 0.4954 | 10.3176 | 0.6130 | 0.5041 | 0.9598 | 0.9959 |
| Yahoo_Business | 0.5680 | 0.0264 | 0.7320 | 0.8049 | 0.3186 | 0.7442 | 0.0885 | 3.1590 | 0.2212 | 0.8815 | 0.8532 | 1.0000 |
| Yahoo_Computers | 0.3888 | 0.0374 | 0.4563 | 0.5090 | 0.2445 | 0.5098 | 0.3847 | 6.5492 | 0.4146 | 0.6169 | 0.9020 | 0.9847 |
| Yahoo_Education | 0.1402 | 0.0416 | 0.1806 | 0.2122 | 0.1572 | 0.2960 | 0.5518 | 9.0108 | 0.5548 | 0.5246 | 0.8895 | 0.9848 |
| Yahoo_Entertainment | 0.2762 | 0.0552 | 0.3288 | 0.3691 | 0.2419 | 0.4309 | 0.4406 | 4.0964 | 0.3785 | 0.6394 | 0.9609 | 0.9757 |
| Yahoo_Health | 0.4227 | 0.0377 | 0.5337 | 0.6069 | 0.2444 | 0.5862 | 0.3083 | 6.5314 | 0.3548 | 0.6845 | 0.8326 | 0.9781 |
| Yahoo_Recreation | 0.2759 | 0.0212 | 0.3997 | 0.4327 | 0.4130 | 0.5050 | 0.4765 | 6.2664 | 0.4797 | 0.6035 | 0.9706 | 0.9825 |
| Yahoo_Reference | 0.4133 | 0.0291 | 0.4582 | 0.4784 | 0.1728 | 0.5238 | 0.3865 | 5.3330 | 0.4241 | 0.6524 | 0.8143 | 1.0000 |
| Yahoo_Science | 0.2269 | 0.0394 | 0.2787 | 0.3266 | 0.1730 | 0.3397 | 0.6155 | 13.5896 | 0.6397 | 0.4235 | 0.9450 | 0.9820 |
| Yahoo_Social | 0.4253 | 0.0235 | 0.4655 | 0.4942 | 0.1615 | 0.5418 | 0.3996 | 8.1675 | 0.4284 | 0.6236 | 0.9228 | 0.9929 |
| Yahoo_Society | 0.2601 | 0.0564 | 0.3513 | 0.4103 | 0.1501 | 0.4141 | 0.4126 | 8.8450 | 0.5210 | 0.5539 | 0.9367 | 0.9938 |
| yeast | 0.1639 | 0.2008 | 0.4903 | 0.6435 | 0.4183 | 0.6333 | 0.2042 | 6.0527 | 0.1500 | 0.7860 | 0.7377 | 0.8647 |
| Yelp | 0.5460 | 0.1355 | 0.7512 | 0.8287 | 0.7808 | 0.8170 | 0.0890 | 1.1370 | 0.0885 | 0.9338 | 0.8838 | 0.9185 |

Table 15: Detailed results for SVM for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5368 | 0.0306 | 0.6222 | 0.6662 | 0.7034 | 0.7049 | 0.3019 | 2.5057 | 0.2421 | 0.7604 | 0.9901 | 0.9904 |
| 3s-bbc1000 | 0.1111 | 0.3519 | 0.2162 | 0.2745 | 0.2328 | 0.2692 | 0.7222 | 2.7500 | 0.6324 | 0.4675 | 0.7753 | 0.7300 |
| 3s-guardian1000 | 0.1290 | 0.2957 | 0.2554 | 0.3254 | 0.2543 | 0.3373 | 0.5161 | 2.1290 | 0.5008 | 0.6118 | 0.8080 | 0.8266 |
| 3s-inter3000 | 0.0000 | 0.3137 | 0.3039 | 0.4287 | 0.2103 | 0.4286 | 0.8824 | 2.5294 | 0.6956 | 0.3951 | 0.4825 | 0.6700 |
| 3s-reuters1000 | 0.1333 | 0.2889 | 0.1833 | 0.2053 | 0.1758 | 0.2121 | 0.9333 | 2.5667 | 0.7733 | 0.3689 | 0.8342 | 0.7614 |
| amphibians | 0.0000 | 0.2619 | 0.5540 | 0.7626 | 0.5638 | 0.7227 | 0.3333 | 2.6111 | 0.1259 | 0.8126 | 0.7689 | 0.8187 |
| bibtex | 0.1919 | 0.0120 | 0.3673 | 0.4610 | 0.3257 | 0.4853 | 0.4324 | 72.3973 | 0.5751 | 0.4301 | 0.9977 | 0.9978 |
| birds | 0.1795 | 0.1012 | 0.3528 | 0.4478 | 0.3480 | 0.4444 | 0.4615 | 6.6410 | 0.3973 | 0.5683 | 0.8327 | 0.9241 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.2121 | 0.3160 | 0.4776 | 0.1442 | 0.4781 | 0.3529 | 151.0588 | 0.6057 | 0.4346 | 0.8233 | 0.9410 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1946 | 0.0408 | 0.1944 | 0.8751 | 115.1089 | 0.9440 | 0.0885 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0138 | 0.1438 | 0.2289 | 0.0265 | 0.2362 | 0.8500 | 163.3540 | 0.9344 | 0.1641 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.3333 | 0.1778 | 0.6097 | 0.7359 | 0.7134 | 0.7265 | 0.2833 | 1.7167 | 0.2209 | 0.8100 | 0.8949 | 0.8973 |
| enron | 0.1871 | 0.0516 | 0.4874 | 0.6162 | 0.1837 | 0.5952 | 0.2924 | 23.5848 | 0.3608 | 0.6091 | 0.8256 | 0.9809 |
| EukaryoteGO | 0.7139 | 0.0190 | 0.7912 | 0.8293 | 0.7279 | 0.8204 | 0.1637 | 0.8673 | 0.0510 | 0.8948 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.3063 | 0.0563 | 0.4008 | 0.4503 | 0.1481 | 0.4587 | 0.5380 | 6.1094 | 0.4983 | 0.5282 | 0.9744 | 0.9770 |
| flags | 0.2500 | 0.2286 | 0.6533 | 0.7664 | 0.6261 | 0.7647 | 0.3000 | 3.5000 | 0.2642 | 0.7969 | 0.7058 | 0.8092 |
| foodtruck | 0.2927 | 0.1565 | 0.4621 | 0.6010 | 0.1431 | 0.4967 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8553 | 0.9573 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6369 | 0.9989 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7643 | 0.0500 | 0.8060 | 0.8268 | 0.4948 | 0.8095 | 0.1857 | 0.6143 | 0.1470 | 0.8736 | 0.8626 | 0.9901 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9231 | 0.9326 | 0.8658 | 0.9259 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9968 |
| GpositivePseAAC | 0.7500 | 0.1202 | 0.7596 | 0.7644 | 0.5833 | 0.7619 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6785 | 0.0388 | 0.7666 | 0.8139 | 0.6950 | 0.7744 | 0.1704 | 1.0900 | 0.1057 | 0.8758 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.3087 | 0.0978 | 0.4070 | 0.4568 | 0.1915 | 0.4380 | 0.5370 | 3.3505 | 0.4701 | 0.5840 | 0.9527 | 0.9534 |
| Image | 0.5250 | 0.1740 | 0.6258 | 0.6779 | 0.6433 | 0.6345 | 0.2900 | 1.0050 | 0.2838 | 0.8026 | 0.9344 | 0.9316 |
| IMDB-ECC-F10% | 0.0000 | 0.2376 | 0.1474 | 0.2504 | 0.0847 | 0.2502 | 0.6331 | 12.3941 | 0.7320 | 0.3750 | 0.9883 | 0.9755 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1549 | 0.2640 | 0.0967 | 0.2638 | 0.5866 | 12.6819 | 0.7149 | 0.3875 | 0.9845 | 0.9741 |
| LLOG-F | 0.1721 | 0.0166 | 0.2001 | 0.2173 | 0.0526 | 0.2897 | 0.7377 | 28.5820 | 0.7822 | 0.2814 | 0.5984 | 0.9981 |
| mediamill10% | 0.0760 | 0.0302 | 0.4709 | 0.6365 | 0.0942 | 0.5882 | 0.1686 | 59.1829 | 0.4511 | 0.5468 | 0.8136 | 0.9940 |
| medical | 0.6735 | 0.0104 | 0.7747 | 0.8288 | 0.3108 | 0.8203 | 0.1735 | 4.9388 | 0.1278 | 0.8427 | 0.5527 | 0.9976 |
| Music | 0.2833 | 0.1889 | 0.5792 | 0.7041 | 0.7057 | 0.7143 | 0.2333 | 2.0667 | 0.2549 | 0.8015 | 0.9072 | 0.8981 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.2261 | 0.0592 | 0.4444 | 0.5574 | 0.4408 | 0.5686 | 0.3546 | 7.6497 | 0.4158 | 0.6150 | 0.9770 | 0.9800 |
| PlantGO | 0.7292 | 0.0365 | 0.7865 | 0.8133 | 0.6773 | 0.8037 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9888 | 0.9836 |
| PlantPseAAC | 0.2551 | 0.1190 | 0.3503 | 0.4049 | 0.2145 | 0.3966 | 0.6224 | 3.1633 | 0.4977 | 0.5348 | 0.9382 | 0.9327 |
| rcv1subset1 | 0.1000 | 0.0316 | 0.3562 | 0.4783 | 0.2658 | 0.4708 | 0.3933 | 37.5533 | 0.4104 | 0.5188 | 0.9255 | 0.9864 |
| REUTERS-K500-EX2 | 0.3402 | 0.0116 | 0.4244 | 0.4731 | 0.2553 | 0.5133 | 0.5052 | 31.1787 | 0.5163 | 0.5018 | 0.7839 | 0.9972 |
| scene | 0.6722 | 0.0858 | 0.7448 | 0.7811 | 0.7711 | 0.7615 | 0.1992 | 0.9004 | 0.1913 | 0.8426 | 0.9784 | 0.9802 |
| sider_CDK_ECFP4 | 0.0141 | 0.2415 | 0.6503 | 0.7981 | 0.6298 | 0.7976 | 0.2676 | 19.1620 | 0.1673 | 0.7814 | 0.5891 | 0.7700 |
| sider_MordredDesc | 0.0141 | 0.2713 | 0.6279 | 0.7815 | 0.6128 | 0.7799 | 0.3099 | 19.8803 | 0.2231 | 0.7418 | 0.5733 | 0.7340 |
| sider_RDKit_desc | 0.0141 | 0.2817 | 0.6302 | 0.7816 | 0.6048 | 0.7770 | 0.4366 | 20.1901 | 0.2124 | 0.7188 | 0.5680 | 0.7430 |
| SLASHDOT-F | 0.4048 | 0.0416 | 0.5226 | 0.5858 | 0.4132 | 0.6023 | 0.3942 | 5.5026 | 0.3613 | 0.6456 | 0.7563 | 0.9834 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.5556 | 0.8000 |
| Stackex_chemistry | 0.0447 | 0.0159 | 0.1454 | 0.2070 | 0.0565 | 0.2017 | 0.7983 | 105.5317 | 0.8778 | 0.1525 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0357 | 0.0102 | 0.1546 | 0.2204 | 0.0545 | 0.2788 | 0.6667 | 137.8571 | 0.8081 | 0.2036 | 0.5493 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0543 | 0.0915 | 0.0156 | 0.1159 | 0.8261 | 75.4348 | 0.8596 | 0.1437 | 0.2562 | 0.9893 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0094 | 0.1649 | 0.2302 | 0.0616 | 0.2718 | 0.6910 | 135.1181 | 0.7947 | 0.2115 | 0.7498 | 0.9987 |
| tmc2007-500 | 0.2584 | 0.0671 | 0.5720 | 0.7166 | 0.5985 | 0.6812 | 0.2559 | 4.1045 | 0.1458 | 0.7757 | 0.9585 | 0.9699 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1744 | 0.3474 | 0.4547 | 0.3847 | 0.4530 | 0.4726 | 5.3014 | 0.4819 | 0.5704 | 0.8999 | 0.8998 |
| tox21_RDKit_desc | 0.1062 | 0.1915 | 0.3377 | 0.4665 | 0.3235 | 0.4468 | 0.5103 | 5.5103 | 0.5054 | 0.5515 | 0.9005 | 0.9011 |
| VirusGO | 0.7619 | 0.0556 | 0.8413 | 0.8686 | 0.7005 | 0.8627 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.8034 | 0.9699 |
| VirusPseAAC | 0.5238 | 0.1190 | 0.6349 | 0.6897 | 0.3892 | 0.6809 | 0.2857 | 0.9048 | 0.2333 | 0.7968 | 0.7556 | 0.9379 |
| Water-quality | 0.0000 | 0.3336 | 0.4263 | 0.6046 | 0.4911 | 0.5953 | 0.2736 | 9.2170 | 0.3555 | 0.6840 | 0.7591 | 0.7537 |
| Yahoo_Arts | 0.2043 | 0.0686 | 0.3003 | 0.3653 | 0.2145 | 0.3734 | 0.4993 | 10.2163 | 0.5747 | 0.5043 | 0.9355 | 0.9738 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.1942 | 0.2081 | 0.5549 | 0.6878 | 0.4481 | 0.6756 | 0.2521 | 6.2025 | 0.2346 | 0.7556 | 0.8250 | 0.8836 |
| Yelp | 0.4566 | 0.1819 | 0.6612 | 0.7560 | 0.6758 | 0.7338 | 0.1795 | 1.4008 | 0.2710 | 0.8672 | 0.9082 | 0.9253 |

Table 16: Detailed results for DT for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4652 | 0.0359 | 0.5912 | 0.6546 | 0.6737 | 0.6754 | 0.2676 | 0.9678 | 0.0632 | 0.8248 | 0.9641 | 0.9651 |
| 3s-bbc1000 | 0.1389 | 0.2454 | 0.1528 | 0.1594 | 0.1550 | 0.1846 | 0.7778 | 2.2500 | 0.4305 | 0.4949 | 0.6034 | 0.6012 |
| 3s-guardian1000 | 0.0968 | 0.2204 | 0.1290 | 0.1434 | 0.1532 | 0.2264 | 0.7742 | 2.1935 | 0.4234 | 0.4957 | 0.5006 | 0.6332 |
| 3s-inter3000 | 0.0000 | 0.2451 | 0.0294 | 0.0392 | 0.0303 | 0.0741 | 0.8235 | 2.4706 | 0.4897 | 0.4039 | 0.4476 | 0.5919 |
| 3s-reuters1000 | 0.1333 | 0.2556 | 0.1333 | 0.1333 | 0.0943 | 0.1481 | 0.8667 | 2.6333 | 0.5700 | 0.3908 | 0.5442 | 0.5011 |
| amphibians | 0.1667 | 0.2698 | 0.5925 | 0.7761 | 0.6054 | 0.7258 | 0.2222 | 2.8333 | 0.1463 | 0.8334 | 0.6934 | 0.7760 |
| bibtex | 0.1338 | 0.0175 | 0.3545 | 0.4794 | 0.3837 | 0.4528 | 0.4108 | 45.4865 | 0.3029 | 0.5469 | 0.9771 | 0.9813 |
| birds | 0.1795 | 0.0783 | 0.3244 | 0.4027 | 0.3460 | 0.4727 | 0.3077 | 3.5897 | 0.1209 | 0.7162 | 0.8015 | 0.8956 |
| bookmarks10% | 0.1686 | 0.0202 | 0.2408 | 0.3082 | 0.1438 | 0.2211 | 0.6572 | 80.6424 | 0.5012 | 0.3602 | 0.9488 | 0.9668 |
| CAL500 | 0.0000 | 0.1553 | 0.2162 | 0.3536 | 0.1203 | 0.3494 | 0.1373 | 144.1373 | 0.2462 | 0.4668 | 0.5810 | 0.8101 |
| corel16k001 | 0.0051 | 0.0335 | 0.1164 | 0.1959 | 0.0877 | 0.1926 | 0.7836 | 102.2571 | 0.7496 | 0.1812 | 0.9705 | 0.9723 |
| Corel5k | 0.0000 | 0.0138 | 0.1438 | 0.2289 | 0.0265 | 0.2362 | 0.8500 | 163.3540 | 0.9344 | 0.1641 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.3167 | 0.1972 | 0.5750 | 0.6935 | 0.6797 | 0.6844 | 0.2167 | 1.5500 | 0.1388 | 0.8382 | 0.8758 | 0.8892 |
| enron | 0.1462 | 0.0553 | 0.4641 | 0.6052 | 0.2243 | 0.5722 | 0.2398 | 14.0936 | 0.1391 | 0.6963 | 0.7284 | 0.9344 |
| EukaryoteGO | 0.7036 | 0.0203 | 0.7840 | 0.8242 | 0.7577 | 0.8119 | 0.1817 | 0.4188 | 0.0142 | 0.8995 | 0.9928 | 0.9949 |
| EukaryotePseAAC | 0.1840 | 0.0498 | 0.2102 | 0.2238 | 0.1125 | 0.3039 | 0.5199 | 2.2806 | 0.1006 | 0.6405 | 0.8062 | 0.9157 |
| flags | 0.3000 | 0.2500 | 0.6108 | 0.7066 | 0.6016 | 0.7244 | 0.2500 | 3.3500 | 0.1842 | 0.8375 | 0.7009 | 0.8166 |
| foodtruck | 0.2195 | 0.1646 | 0.4415 | 0.5609 | 0.2897 | 0.5318 | 0.2195 | 2.6098 | 0.1069 | 0.8046 | 0.6503 | 0.8293 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9357 | 0.0089 | 0.9643 | 0.9786 | 0.8416 | 0.9660 | 0.0214 | 0.1286 | 0.0235 | 0.9824 | 0.8745 | 0.9995 |
| GnegativePseAAC | 0.5786 | 0.0786 | 0.6107 | 0.6267 | 0.3883 | 0.6716 | 0.2786 | 0.6929 | 0.0968 | 0.8237 | 0.7863 | 0.9444 |
| GpositiveGO | 0.9038 | 0.0433 | 0.9038 | 0.9038 | 0.8489 | 0.9143 | 0.0769 | 0.1346 | 0.0641 | 0.9567 | 0.9982 | 0.9971 |
| GpositivePseAAC | 0.5000 | 0.2404 | 0.5192 | 0.5287 | 0.4092 | 0.5283 | 0.4615 | 0.8462 | 0.3333 | 0.7131 | 0.8170 | 0.8410 |
| HumanGO | 0.6495 | 0.0397 | 0.7476 | 0.7973 | 0.6973 | 0.7703 | 0.1961 | 0.6849 | 0.0435 | 0.8793 | 0.9796 | 0.9862 |
| HumanPseAAC | 0.0868 | 0.0790 | 0.0916 | 0.0940 | 0.0726 | 0.1485 | 0.5466 | 2.1576 | 0.1452 | 0.6182 | 0.7696 | 0.8660 |
| Image | 0.5100 | 0.1540 | 0.6292 | 0.6887 | 0.6633 | 0.6709 | 0.2850 | 0.8400 | 0.1671 | 0.8172 | 0.8762 | 0.8842 |
| IMDB-ECC-F10% | 0.0524 | 0.0781 | 0.1355 | 0.1860 | 0.0666 | 0.2019 | 0.6258 | 7.6677 | 0.2061 | 0.4777 | 0.6725 | 0.8116 |
| IMDB-F10% | 0.0389 | 0.0860 | 0.1501 | 0.2172 | 0.0900 | 0.2363 | 0.5940 | 7.7332 | 0.1988 | 0.4936 | 0.6779 | 0.8207 |
| LLOG-F | 0.1639 | 0.0184 | 0.2036 | 0.2233 | 0.0757 | 0.2632 | 0.6393 | 14.8115 | 0.2705 | 0.4462 | 0.5134 | 0.9167 |
| mediamill10% | 0.9596 | 0.0004 | 0.9927 | 0.9963 | 0.8162 | 0.9952 | 0.0000 | 3.4869 | 0.0001 | 0.9982 | 0.8213 | 0.9995 |
| medical | 0.6531 | 0.0109 | 0.7600 | 0.8102 | 0.3424 | 0.8080 | 0.1429 | 2.5000 | 0.0744 | 0.8921 | 0.5518 | 0.9969 |
| Music | 0.2000 | 0.2083 | 0.5444 | 0.6842 | 0.6968 | 0.6888 | 0.2500 | 1.9167 | 0.1656 | 0.8001 | 0.8583 | 0.8654 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.2032 | 0.0608 | 0.4447 | 0.5678 | 0.4734 | 0.5776 | 0.3087 | 3.3955 | 0.0929 | 0.7359 | 0.8742 | 0.9150 |
| PlantGO | 0.6250 | 0.0451 | 0.7153 | 0.7579 | 0.6710 | 0.7593 | 0.2083 | 0.9479 | 0.1042 | 0.8585 | 0.9845 | 0.9842 |
| PlantPseAAC | 0.0306 | 0.0935 | 0.0306 | 0.0306 | 0.0417 | 0.0517 | 0.6327 | 2.0714 | 0.1780 | 0.5803 | 0.8042 | 0.8447 |
| rcv1subset1 | 0.1317 | 0.0280 | 0.3351 | 0.4424 | 0.2718 | 0.4394 | 0.3850 | 14.8717 | 0.0947 | 0.6186 | 0.8978 | 0.9663 |
| REUTERS-K500-EX2 | 0.2749 | 0.0136 | 0.4211 | 0.4979 | 0.2594 | 0.5000 | 0.4330 | 14.8247 | 0.2093 | 0.6346 | 0.7646 | 0.9822 |
| scene | 0.5477 | 0.1093 | 0.6570 | 0.7103 | 0.7224 | 0.7074 | 0.2158 | 0.4315 | 0.0717 | 0.8750 | 0.9498 | 0.9531 |
| sider_CDK_ECFP4 | 0.0211 | 0.2582 | 0.5778 | 0.7453 | 0.6308 | 0.7643 | 0.1056 | 18.7465 | 0.1252 | 0.8395 | 0.5875 | 0.8034 |
| sider_MordredDesc | 0.0141 | 0.2561 | 0.5922 | 0.7517 | 0.6234 | 0.7683 | 0.0704 | 19.0634 | 0.1226 | 0.8532 | 0.5675 | 0.8049 |
| sider_RDKit_desc | 0.0070 | 0.2642 | 0.5772 | 0.7436 | 0.6335 | 0.7597 | 0.1268 | 19.1901 | 0.1254 | 0.8434 | 0.5796 | 0.8081 |
| SLASHDOT-F | 0.3783 | 0.0451 | 0.4813 | 0.5366 | 0.3969 | 0.5573 | 0.3995 | 3.3069 | 0.1927 | 0.6853 | 0.7096 | 0.9449 |
| solar_flare-L3 | 0.4000 | 0.2000 | 0.7000 | 0.8235 | 0.5079 | 0.7692 | 0.2000 | 0.2000 | 0.2000 | 0.9000 | 0.6667 | 0.9400 |
| Stackex_chemistry | 0.0447 | 0.0159 | 0.1454 | 0.2070 | 0.0565 | 0.2017 | 0.7983 | 105.5317 | 0.8778 | 0.1525 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0238 | 0.0141 | 0.1990 | 0.3069 | 0.0920 | 0.3099 | 0.6071 | 101.4345 | 0.5179 | 0.3381 | 0.5371 | 0.9848 |
| Stackex_coffee | 0.0435 | 0.0240 | 0.1297 | 0.2089 | 0.0528 | 0.2093 | 0.6957 | 58.9565 | 0.4567 | 0.3525 | 0.2495 | 0.9773 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0503 | 0.0141 | 0.2175 | 0.3261 | 0.1055 | 0.3151 | 0.5578 | 99.4950 | 0.4744 | 0.3725 | 0.7311 | 0.9814 |
| tmc2007-500 | 0.2479 | 0.0699 | 0.5571 | 0.7017 | 0.5807 | 0.6623 | 0.2388 | 2.6122 | 0.0494 | 0.8051 | 0.9300 | 0.9536 |
| tox21_CDK_ECFP4 | 0.1473 | 0.1630 | 0.2963 | 0.3715 | 0.4125 | 0.4451 | 0.4658 | 3.9521 | 0.2114 | 0.6360 | 0.7220 | 0.7837 |
| tox21_RDKit_desc | 0.1644 | 0.1553 | 0.3474 | 0.4374 | 0.4289 | 0.4954 | 0.4007 | 3.7295 | 0.1877 | 0.6653 | 0.7376 | 0.7963 |
| VirusGO | 0.8095 | 0.0476 | 0.8730 | 0.9124 | 0.6654 | 0.8750 | 0.0476 | 0.4762 | 0.0694 | 0.9500 | 0.8212 | 0.9917 |
| VirusPseAAC | 0.2857 | 0.1667 | 0.5000 | 0.6013 | 0.3723 | 0.5882 | 0.3333 | 0.7619 | 0.1321 | 0.7968 | 0.6064 | 0.8962 |
| Water-quality | 0.0377 | 0.2770 | 0.4614 | 0.6275 | 0.5874 | 0.6314 | 0.2075 | 8.5943 | 0.2280 | 0.7385 | 0.7297 | 0.7630 |
| Yahoo_Arts | 0.3151 | 0.0500 | 0.4190 | 0.4782 | 0.3813 | 0.5078 | 0.3578 | 4.0534 | 0.1020 | 0.7077 | 0.8220 | 0.8999 |
| Yahoo_Business | 0.5847 | 0.0243 | 0.7431 | 0.8286 | 0.4339 | 0.7607 | 0.0865 | 1.7291 | 0.0336 | 0.9206 | 0.7931 | 0.9768 |
| Yahoo_Computers | 0.4129 | 0.0344 | 0.5319 | 0.6012 | 0.3619 | 0.5951 | 0.2892 | 2.9149 | 0.0752 | 0.7658 | 0.8072 | 0.9432 |
| Yahoo_Education | 0.2045 | 0.0537 | 0.3547 | 0.4528 | 0.3241 | 0.4467 | 0.4555 | 5.4855 | 0.3117 | 0.6327 | 0.8498 | 0.9487 |
| Yahoo_Entertainment | 0.3181 | 0.0642 | 0.4621 | 0.5501 | 0.4312 | 0.5406 | 0.3386 | 2.8932 | 0.2191 | 0.7285 | 0.9294 | 0.9343 |
| Yahoo_Health | 0.4908 | 0.0288 | 0.6444 | 0.7234 | 0.3411 | 0.7026 | 0.1965 | 2.5364 | 0.0530 | 0.8353 | 0.7845 | 0.9661 |
| Yahoo_Recreation | 0.4271 | 0.0452 | 0.5568 | 0.6262 | 0.5454 | 0.6206 | 0.2892 | 2.5814 | 0.0843 | 0.7691 | 0.8957 | 0.9186 |
| Yahoo_Reference | 0.3724 | 0.0370 | 0.5347 | 0.6322 | 0.3150 | 0.5652 | 0.3026 | 2.7036 | 0.1656 | 0.7649 | 0.7772 | 0.9721 |
| Yahoo_Science | 0.2613 | 0.0415 | 0.3968 | 0.4913 | 0.3561 | 0.4570 | 0.4323 | 9.0249 | 0.3608 | 0.6043 | 0.9297 | 0.9581 |
| Yahoo_Social | 0.5594 | 0.0192 | 0.6730 | 0.7333 | 0.4293 | 0.6986 | 0.2219 | 2.4505 | 0.0649 | 0.8277 | 0.8617 | 0.9694 |
| Yahoo_Society | 0.2087 | 0.0714 | 0.4434 | 0.5882 | 0.3372 | 0.4965 | 0.3202 | 5.8285 | 0.2532 | 0.6955 | 0.8668 | 0.9306 |
| yeast | 0.1942 | 0.1886 | 0.5426 | 0.6759 | 0.4162 | 0.6635 | 0.2355 | 6.0124 | 0.1561 | 0.7694 | 0.7487 | 0.8563 |
| Yelp | 0.5434 | 0.1390 | 0.7489 | 0.8305 | 0.7695 | 0.8068 | 0.0907 | 1.1276 | 0.0867 | 0.9280 | 0.8948 | 0.9233 |

Table 17: Detailed results for ExtraTrees for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5368 | 0.0306 | 0.6222 | 0.6662 | 0.7034 | 0.7049 | 0.3019 | 2.5057 | 0.2421 | 0.7604 | 0.9901 | 0.9904 |
| 3s-bbc1000 | 0.1111 | 0.1991 | 0.1389 | 0.1528 | 0.1714 | 0.2182 | 0.5833 | 1.8611 | 0.4095 | 0.6144 | 0.8679 | 0.8313 |
| 3s-guardian1000 | 0.0323 | 0.1935 | 0.0806 | 0.0993 | 0.1810 | 0.1818 | 0.4516 | 1.6774 | 0.3411 | 0.6661 | 0.8386 | 0.8476 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5882 | 2.2941 | 0.5118 | 0.5500 | 0.5318 | 0.7097 |
| 3s-reuters1000 | 0.1000 | 0.1944 | 0.1000 | 0.1000 | 0.1209 | 0.1463 | 0.8667 | 2.8000 | 0.7867 | 0.3703 | 0.7122 | 0.6845 |
| amphibians | 0.1111 | 0.3016 | 0.4985 | 0.7140 | 0.6247 | 0.6833 | 0.2778 | 2.5556 | 0.1352 | 0.8449 | 0.7582 | 0.8151 |
| bibtex | 0.1919 | 0.0120 | 0.3673 | 0.4610 | 0.3257 | 0.4853 | 0.4324 | 72.3973 | 0.5751 | 0.4301 | 0.9977 | 0.9978 |
| birds | 0.2051 | 0.1053 | 0.4427 | 0.5520 | 0.3972 | 0.5244 | 0.3590 | 5.5641 | 0.2647 | 0.6560 | 0.8263 | 0.9227 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1857 | 0.2063 | 0.3649 | 0.1319 | 0.3284 | 0.4510 | 151.1373 | 0.4636 | 0.4141 | 0.7285 | 0.8752 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1946 | 0.0408 | 0.1944 | 0.8751 | 115.1089 | 0.9440 | 0.0885 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0124 | 0.1129 | 0.1803 | 0.0157 | 0.1865 | 0.8760 | 166.9980 | 0.9540 | 0.1446 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.4000 | 0.1917 | 0.6089 | 0.7052 | 0.6806 | 0.7013 | 0.2500 | 1.6333 | 0.1802 | 0.8250 | 0.8775 | 0.8914 |
| enron | 0.1345 | 0.0641 | 0.4152 | 0.5440 | 0.1709 | 0.5130 | 0.3743 | 23.7251 | 0.3338 | 0.5426 | 0.8112 | 0.9692 |
| EukaryoteGO | 0.7139 | 0.0190 | 0.7912 | 0.8293 | 0.7279 | 0.8204 | 0.1637 | 0.8673 | 0.0510 | 0.8948 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.3063 | 0.0563 | 0.4008 | 0.4503 | 0.1481 | 0.4587 | 0.5380 | 6.1094 | 0.4983 | 0.5282 | 0.9744 | 0.9770 |
| flags | 0.3500 | 0.2786 | 0.6027 | 0.7021 | 0.5690 | 0.6977 | 0.3000 | 3.5000 | 0.2500 | 0.8031 | 0.7532 | 0.8292 |
| foodtruck | 0.2683 | 0.1626 | 0.4869 | 0.6520 | 0.2652 | 0.5402 | 0.2195 | 3.5366 | 0.2811 | 0.7834 | 0.7991 | 0.9151 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9357 | 0.0089 | 0.9607 | 0.9732 | 0.8385 | 0.9660 | 0.0214 | 0.0929 | 0.0102 | 0.9863 | 0.8747 | 0.9996 |
| GnegativePseAAC | 0.5429 | 0.0991 | 0.5869 | 0.6098 | 0.2908 | 0.6159 | 0.3357 | 1.2000 | 0.2394 | 0.7663 | 0.7893 | 0.9377 |
| GpositiveGO | 0.8846 | 0.0481 | 0.9038 | 0.9135 | 0.8360 | 0.9057 | 0.0962 | 0.1923 | 0.0705 | 0.9423 | 0.9964 | 0.9960 |
| GpositivePseAAC | 0.5192 | 0.2019 | 0.5288 | 0.5336 | 0.4364 | 0.5714 | 0.4038 | 0.7692 | 0.3462 | 0.7468 | 0.8940 | 0.8981 |
| HumanGO | 0.6785 | 0.0388 | 0.7666 | 0.8139 | 0.6950 | 0.7744 | 0.1704 | 1.0900 | 0.1057 | 0.8758 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.0064 | 0.2166 | 0.1874 | 0.2744 | 0.0687 | 0.2763 | 0.6913 | 5.1222 | 0.7334 | 0.4206 | 0.9992 | 0.9596 |
| Image | 0.4550 | 0.1810 | 0.6129 | 0.6915 | 0.6493 | 0.6444 | 0.3150 | 0.9500 | 0.2217 | 0.7942 | 0.8914 | 0.8898 |
| IMDB-ECC-F10% | 0.0000 | 0.2376 | 0.1474 | 0.2504 | 0.0847 | 0.2502 | 0.6331 | 12.3941 | 0.7320 | 0.3750 | 0.9883 | 0.9755 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1549 | 0.2640 | 0.0967 | 0.2638 | 0.5866 | 12.6819 | 0.7149 | 0.3875 | 0.9845 | 0.9741 |
| LLOG-F | 0.0820 | 0.0210 | 0.1380 | 0.1738 | 0.0661 | 0.2258 | 0.7787 | 28.7377 | 0.7616 | 0.2597 | 0.5935 | 0.9934 |
| mediamill10% | 0.7126 | 0.0041 | 0.9195 | 0.9553 | 0.5218 | 0.9519 | 0.0119 | 17.5606 | 0.0699 | 0.9263 | 0.8204 | 0.9988 |
| medical | 0.6429 | 0.0107 | 0.7619 | 0.8136 | 0.3219 | 0.8142 | 0.1429 | 4.5000 | 0.1271 | 0.8643 | 0.5538 | 0.9979 |
| Music | 0.1833 | 0.2250 | 0.4931 | 0.6278 | 0.6427 | 0.6494 | 0.2167 | 2.1000 | 0.2238 | 0.8028 | 0.8536 | 0.8592 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.0505 | 0.2105 | 0.3492 | 0.0223 | 0.3344 | 0.9734 | 47.5366 | 0.9988 | 0.1077 | 0.8888 | 0.9999 |
| OHSUMED-F | 0.2261 | 0.0592 | 0.4444 | 0.5574 | 0.4408 | 0.5686 | 0.3546 | 7.6497 | 0.4158 | 0.6150 | 0.9770 | 0.9800 |
| PlantGO | 0.5312 | 0.0573 | 0.5729 | 0.5935 | 0.4550 | 0.6452 | 0.4167 | 1.8750 | 0.2171 | 0.7150 | 0.9822 | 0.9426 |
| PlantPseAAC | 0.0000 | 0.2049 | 0.1692 | 0.2275 | 0.0471 | 0.2201 | 0.7347 | 4.1837 | 0.7171 | 0.4272 | 0.9841 | 0.9432 |
| rcv1subset1 | 0.1000 | 0.0316 | 0.3562 | 0.4783 | 0.2658 | 0.4708 | 0.3933 | 37.5533 | 0.4104 | 0.5188 | 0.9255 | 0.9864 |
| REUTERS-K500-EX2 | 0.1770 | 0.0126 | 0.2018 | 0.2164 | 0.1346 | 0.2756 | 0.7646 | 48.6203 | 0.7896 | 0.2595 | 0.7857 | 0.9991 |
| scene | 0.6805 | 0.0816 | 0.7483 | 0.7822 | 0.7827 | 0.7713 | 0.2199 | 0.8008 | 0.1512 | 0.8429 | 0.9559 | 0.9663 |
| sider_CDK_ECFP4 | 0.0211 | 0.2916 | 0.6248 | 0.7766 | 0.6214 | 0.7725 | 0.2254 | 20.4648 | 0.2352 | 0.7378 | 0.6414 | 0.7306 |
| sider_MordredDesc | 0.0141 | 0.2877 | 0.6255 | 0.7769 | 0.5937 | 0.7735 | 0.3451 | 20.5352 | 0.2256 | 0.7381 | 0.7991 | 0.7593 |
| sider_RDKit_desc | 0.0141 | 0.2866 | 0.6250 | 0.7791 | 0.5903 | 0.7730 | 0.1761 | 20.2817 | 0.2138 | 0.7485 | 0.8032 | 0.7647 |
| SLASHDOT-F | 0.2540 | 0.0446 | 0.3080 | 0.3363 | 0.2975 | 0.4370 | 0.6138 | 8.8201 | 0.6512 | 0.4238 | 0.7669 | 0.9939 |
| solar_flare-L3 | 0.2000 | 0.4000 | 0.4000 | 0.4800 | 0.3238 | 0.5000 | 0.4000 | 0.4000 | 0.4000 | 0.8000 | 0.3333 | 0.7600 |
| Stackex_chemistry | 0.0000 | 0.0252 | 0.1030 | 0.1673 | 0.0351 | 0.1657 | 0.8948 | 112.3055 | 0.9626 | 0.0827 | 0.9194 | 0.9994 |
| Stackex_chess | 0.0298 | 0.0110 | 0.1763 | 0.2610 | 0.0610 | 0.3023 | 0.6310 | 132.3095 | 0.7624 | 0.2372 | 0.5484 | 0.9974 |
| Stackex_coffee | 0.0000 | 0.0187 | 0.0362 | 0.0512 | 0.0105 | 0.0702 | 0.8696 | 78.6957 | 0.9062 | 0.1026 | 0.2576 | 0.9960 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0000 | 0.0153 | 0.1390 | 0.2191 | 0.0497 | 0.2045 | 0.8719 | 147.8869 | 0.9336 | 0.0837 | 0.7508 | 0.9996 |
| tmc2007-500 | 0.2584 | 0.0671 | 0.5720 | 0.7166 | 0.5985 | 0.6812 | 0.2559 | 4.1045 | 0.1458 | 0.7757 | 0.9585 | 0.9699 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1744 | 0.3474 | 0.4547 | 0.3847 | 0.4530 | 0.4726 | 5.3014 | 0.4819 | 0.5704 | 0.8999 | 0.8998 |
| tox21_RDKit_desc | 0.0000 | 0.3750 | 0.2355 | 0.3846 | 0.2348 | 0.3767 | 0.6370 | 6.3904 | 0.6412 | 0.4535 | 0.9733 | 0.8840 |
| VirusGO | 0.8095 | 0.0397 | 0.8968 | 0.9244 | 0.7361 | 0.9020 | 0.0476 | 0.3810 | 0.0631 | 0.9563 | 0.8197 | 0.9909 |
| VirusPseAAC | 0.3810 | 0.1587 | 0.4762 | 0.5238 | 0.3886 | 0.5455 | 0.4286 | 0.8095 | 0.1810 | 0.7516 | 0.6905 | 0.8983 |
| Water-quality | 0.0000 | 0.4960 | 0.3955 | 0.5686 | 0.4926 | 0.5665 | 0.3302 | 9.9623 | 0.4520 | 0.6314 | 0.7836 | 0.7254 |
| Yahoo_Arts | 0.2043 | 0.0686 | 0.3003 | 0.3653 | 0.2145 | 0.3734 | 0.4993 | 10.2163 | 0.5747 | 0.5043 | 0.9355 | 0.9738 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.0041 | 0.2704 | 0.4421 | 0.5930 | 0.2468 | 0.5900 | 0.2686 | 6.7355 | 0.2788 | 0.6971 | 0.8929 | 0.8339 |
| Yelp | 0.5573 | 0.1326 | 0.7564 | 0.8403 | 0.7707 | 0.8084 | 0.1176 | 1.1496 | 0.1076 | 0.9178 | 0.9128 | 0.9307 |

Table 18: Detailed results for LR for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0000 | 0.8441 | 0.0511 | 0.0967 | 0.0874 | 0.0966 | 0.9787 | 9.9938 | 0.5291 | 0.1470 | 0.2762 | 0.4456 |
| 3s-bbc1000 | 0.0000 | 0.6019 | 0.2060 | 0.3191 | 0.2679 | 0.3158 | 0.8056 | 2.9167 | 0.5349 | 0.4162 | 0.4794 | 0.5044 |
| 3s-guardian1000 | 0.0000 | 0.5699 | 0.2285 | 0.3639 | 0.2517 | 0.3614 | 0.9355 | 3.0323 | 0.5919 | 0.3457 | 0.4377 | 0.4548 |
| 3s-inter3000 | 0.0000 | 0.4706 | 0.2108 | 0.3197 | 0.1720 | 0.3143 | 0.8824 | 2.2941 | 0.4971 | 0.4147 | 0.3152 | 0.5357 |
| 3s-reuters1000 | 0.0000 | 0.4389 | 0.1111 | 0.1505 | 0.0695 | 0.1505 | 0.8667 | 3.4667 | 0.6817 | 0.3242 | 0.2977 | 0.3142 |
| amphibians | 0.0556 | 0.3333 | 0.5089 | 0.7169 | 0.4677 | 0.6818 | 0.3889 | 3.5556 | 0.2870 | 0.7030 | 0.3769 | 0.6093 |
| bibtex | 0.1919 | 0.0120 | 0.3673 | 0.4610 | 0.3257 | 0.4853 | 0.4324 | 72.3973 | 0.5751 | 0.4301 | 0.9977 | 0.9978 |
| birds | 0.0000 | 0.3873 | 0.1370 | 0.2323 | 0.1032 | 0.2347 | 0.9744 | 12.5897 | 0.5716 | 0.1796 | 0.3109 | 0.4737 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.3162 | 0.2766 | 0.4324 | 0.1773 | 0.4327 | 0.8039 | 158.9412 | 0.4509 | 0.2602 | 0.4141 | 0.6143 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1946 | 0.0408 | 0.1944 | 0.8751 | 115.1089 | 0.9440 | 0.0885 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0138 | 0.1438 | 0.2289 | 0.0265 | 0.2362 | 0.8500 | 163.3540 | 0.9344 | 0.1641 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.0000 | 0.6944 | 0.3044 | 0.4675 | 0.4608 | 0.4658 | 0.9667 | 4.1833 | 0.8431 | 0.3319 | 0.2179 | 0.2225 |
| enron | 0.0000 | 0.1906 | 0.1980 | 0.3339 | 0.0696 | 0.3288 | 0.9942 | 41.7368 | 0.6267 | 0.0828 | 0.3107 | 0.4050 |
| EukaryoteGO | 0.0000 | 0.2483 | 0.1478 | 0.2510 | 0.0690 | 0.2507 | 0.9987 | 13.9588 | 0.6488 | 0.0948 | 0.0902 | 0.3651 |
| EukaryotePseAAC | 0.0000 | 0.1606 | 0.2007 | 0.3138 | 0.0597 | 0.3143 | 0.8031 | 6.8855 | 0.3026 | 0.3233 | 0.3237 | 0.7027 |
| flags | 0.0000 | 0.4714 | 0.4814 | 0.6511 | 0.5863 | 0.6452 | 0.9000 | 5.3500 | 0.6975 | 0.4575 | 0.4458 | 0.3191 |
| foodtruck | 0.0000 | 0.3740 | 0.2518 | 0.4292 | 0.1871 | 0.4140 | 0.9756 | 8.3902 | 0.6548 | 0.2415 | 0.3550 | 0.3590 |
| genbase | 0.0000 | 0.3217 | 0.1079 | 0.1957 | 0.1280 | 0.1939 | 1.0000 | 19.6567 | 0.7487 | 0.0626 | 0.1980 | 0.2487 |
| GnegativeGO | 0.0000 | 0.4152 | 0.1948 | 0.3079 | 0.1416 | 0.3091 | 1.0000 | 6.7214 | 0.9602 | 0.1352 | 0.0715 | 0.0484 |
| GnegativePseAAC | 0.0000 | 0.3545 | 0.2375 | 0.3638 | 0.1620 | 0.3607 | 0.9429 | 4.2357 | 0.5999 | 0.2475 | 0.2574 | 0.3875 |
| GpositiveGO | 0.0000 | 0.4375 | 0.3494 | 0.4926 | 0.3844 | 0.4859 | 0.9231 | 2.4423 | 0.8526 | 0.3446 | 0.2377 | 0.1872 |
| GpositivePseAAC | 0.4038 | 0.2308 | 0.5385 | 0.5983 | 0.4549 | 0.5932 | 0.5769 | 1.3269 | 0.4615 | 0.6154 | 0.7574 | 0.6472 |
| HumanGO | 0.6785 | 0.0388 | 0.7666 | 0.8139 | 0.6950 | 0.7744 | 0.1704 | 1.0900 | 0.1057 | 0.8758 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.0032 | 0.2023 | 0.2189 | 0.3229 | 0.0779 | 0.3239 | 0.9003 | 4.9871 | 0.3546 | 0.2950 | 0.4144 | 0.6449 |
| Image | 0.0000 | 0.7560 | 0.2395 | 0.3866 | 0.3863 | 0.3864 | 0.9700 | 3.0850 | 0.8058 | 0.3062 | 0.2996 | 0.2880 |
| IMDB-ECC-F10% | 0.0000 | 0.2910 | 0.1468 | 0.2550 | 0.0833 | 0.2538 | 0.9120 | 13.5744 | 0.3929 | 0.2205 | 0.4653 | 0.6024 |
| IMDB-F10% | 0.0000 | 0.2554 | 0.1704 | 0.2896 | 0.0845 | 0.2872 | 0.9254 | 14.7399 | 0.4344 | 0.1886 | 0.4377 | 0.5785 |
| LLOG-F | 0.0000 | 0.2321 | 0.0510 | 0.0960 | 0.0226 | 0.0954 | 0.9918 | 39.3525 | 0.5013 | 0.0588 | 0.2105 | 0.5144 |
| mediamill10% | 0.0760 | 0.0302 | 0.4709 | 0.6365 | 0.0942 | 0.5882 | 0.1686 | 59.1829 | 0.4511 | 0.5468 | 0.8136 | 0.9940 |
| medical | 0.6735 | 0.0104 | 0.7747 | 0.8288 | 0.3108 | 0.8203 | 0.1735 | 4.9388 | 0.1278 | 0.8427 | 0.5527 | 0.9976 |
| Music | 0.0000 | 0.6722 | 0.3256 | 0.4908 | 0.4881 | 0.4916 | 0.9167 | 4.2333 | 0.8163 | 0.3648 | 0.2445 | 0.2614 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.0000 | 0.2146 | 0.1591 | 0.2619 | 0.0632 | 0.2609 | 0.9799 | 14.9986 | 0.5950 | 0.1344 | 0.4009 | 0.4146 |
| PlantGO | 0.0000 | 0.3993 | 0.1520 | 0.2533 | 0.1198 | 0.2532 | 0.9896 | 8.5521 | 0.7704 | 0.1345 | 0.0915 | 0.2220 |
| PlantPseAAC | 0.0000 | 0.3461 | 0.1743 | 0.2807 | 0.1130 | 0.2771 | 0.9592 | 6.3673 | 0.5500 | 0.2129 | 0.3260 | 0.4556 |
| rcv1subset1 | 0.1000 | 0.0316 | 0.3562 | 0.4783 | 0.2658 | 0.4708 | 0.3933 | 37.5533 | 0.4104 | 0.5188 | 0.9255 | 0.9864 |
| REUTERS-K500-EX2 | 0.3402 | 0.0116 | 0.4244 | 0.4731 | 0.2553 | 0.5133 | 0.5052 | 31.1787 | 0.5163 | 0.5018 | 0.7839 | 0.9972 |
| scene | 0.0000 | 0.7953 | 0.1838 | 0.3100 | 0.3084 | 0.3097 | 0.9917 | 3.9170 | 0.9019 | 0.2266 | 0.2393 | 0.2388 |
| sider_CDK_ECFP4 | 0.0141 | 0.2415 | 0.6503 | 0.7981 | 0.6298 | 0.7976 | 0.2676 | 19.1620 | 0.1673 | 0.7814 | 0.5891 | 0.7700 |
| sider_MordredDesc | 0.0000 | 0.3195 | 0.6111 | 0.7635 | 0.6113 | 0.7599 | 0.6690 | 25.6268 | 0.8297 | 0.4259 | 0.4770 | 0.2329 |
| sider_RDKit_desc | 0.0141 | 0.3091 | 0.6173 | 0.7679 | 0.6093 | 0.7656 | 0.7324 | 25.6620 | 0.8032 | 0.4305 | 0.4590 | 0.2546 |
| SLASHDOT-F | 0.4048 | 0.0416 | 0.5226 | 0.5858 | 0.4132 | 0.6023 | 0.3942 | 5.5026 | 0.3613 | 0.6456 | 0.7563 | 0.9834 |
| solar_flare-L3 | 0.0000 | 0.6667 | 0.3333 | 0.5000 | 0.4405 | 0.5000 | 0.6000 | 1.2000 | 0.7000 | 0.6000 | 0.6111 | 0.4800 |
| Stackex_chemistry | 0.0447 | 0.0159 | 0.1454 | 0.2070 | 0.0565 | 0.2017 | 0.7983 | 105.5317 | 0.8778 | 0.1525 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0000 | 0.2562 | 0.0268 | 0.0523 | 0.0136 | 0.0520 | 0.9940 | 172.9048 | 0.6783 | 0.0170 | 0.2048 | 0.4265 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0543 | 0.0915 | 0.0156 | 0.1159 | 0.8261 | 75.4348 | 0.8596 | 0.1437 | 0.2562 | 0.9893 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0000 | 0.1672 | 0.0366 | 0.0706 | 0.0116 | 0.0699 | 0.9950 | 143.4925 | 0.4711 | 0.0402 | 0.2092 | 0.5491 |
| tmc2007-500 | 0.0000 | 0.2304 | 0.2326 | 0.3720 | 0.1030 | 0.3696 | 0.9790 | 17.7395 | 0.7144 | 0.1297 | 0.3579 | 0.3058 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1744 | 0.3474 | 0.4547 | 0.3847 | 0.4530 | 0.4726 | 5.3014 | 0.4819 | 0.5704 | 0.8999 | 0.8998 |
| tox21_RDKit_desc | 0.0000 | 0.5414 | 0.1968 | 0.3366 | 0.2563 | 0.3304 | 0.9075 | 8.3048 | 0.6516 | 0.2541 | 0.4335 | 0.3483 |
| VirusGO | 0.0000 | 0.7063 | 0.2000 | 0.3345 | 0.2560 | 0.3308 | 1.0000 | 4.0952 | 0.8120 | 0.2358 | 0.2021 | 0.2408 |
| VirusPseAAC | 0.0476 | 0.3095 | 0.3730 | 0.5025 | 0.1909 | 0.4658 | 1.0000 | 3.5714 | 0.7119 | 0.2627 | 0.2752 | 0.3217 |
| Water-quality | 0.0000 | 0.6186 | 0.3784 | 0.5495 | 0.5378 | 0.5491 | 0.6887 | 11.9434 | 0.6034 | 0.4370 | 0.3685 | 0.3997 |
| Yahoo_Arts | 0.2043 | 0.0686 | 0.3003 | 0.3653 | 0.2145 | 0.3734 | 0.4993 | 10.2163 | 0.5747 | 0.5043 | 0.9355 | 0.9738 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.0000 | 0.3613 | 0.4225 | 0.5925 | 0.3568 | 0.5882 | 0.6818 | 10.5331 | 0.4336 | 0.4894 | 0.4129 | 0.5746 |
| Yelp | 0.0030 | 0.6407 | 0.3593 | 0.5287 | 0.4990 | 0.5287 | 0.7976 | 3.3001 | 0.7393 | 0.4463 | 0.3648 | 0.2760 |

Table 19: Detailed results for Random for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5368 | 0.0306 | 0.6222 | 0.6662 | 0.7034 | 0.7049 | 0.3019 | 2.5057 | 0.2421 | 0.7604 | 0.9901 | 0.9904 |
| 3s-bbc1000 | 0.1389 | 0.1852 | 0.1898 | 0.2199 | 0.2881 | 0.3103 | 0.4722 | 1.6944 | 0.2941 | 0.6597 | 0.7843 | 0.7562 |
| 3s-guardian1000 | 0.0645 | 0.2151 | 0.1129 | 0.1366 | 0.2074 | 0.2000 | 0.3548 | 1.4194 | 0.2540 | 0.7298 | 0.6569 | 0.7569 |
| 3s-inter3000 | 0.0000 | 0.2157 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.2353 | 0.4809 | 0.4304 | 0.3194 | 0.5549 |
| 3s-reuters1000 | 0.0333 | 0.1778 | 0.0333 | 0.0333 | 0.0476 | 0.0588 | 0.8000 | 2.4333 | 0.5217 | 0.4392 | 0.6331 | 0.5629 |
| amphibians | 0.0556 | 0.2857 | 0.5012 | 0.6945 | 0.5696 | 0.6842 | 0.2778 | 2.6111 | 0.1000 | 0.8385 | 0.6385 | 0.7896 |
| bibtex | 0.0743 | 0.0204 | 0.2994 | 0.4374 | 0.3263 | 0.4053 | 0.5784 | 71.0257 | 0.3696 | 0.3141 | 0.8150 | 0.7604 |
| birds | 0.1538 | 0.1107 | 0.3435 | 0.4452 | 0.3285 | 0.4306 | 0.3846 | 6.3333 | 0.2274 | 0.6250 | 0.6727 | 0.7790 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1995 | 0.2155 | 0.3713 | 0.1444 | 0.3454 | 0.3333 | 150.7255 | 0.3479 | 0.4155 | 0.5680 | 0.7871 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1946 | 0.0408 | 0.1944 | 0.8751 | 115.1089 | 0.9440 | 0.0885 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0138 | 0.1438 | 0.2289 | 0.0265 | 0.2362 | 0.8500 | 163.3540 | 0.9344 | 0.1641 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.3333 | 0.1972 | 0.5681 | 0.6730 | 0.6560 | 0.6816 | 0.2500 | 1.9333 | 0.1973 | 0.8089 | 0.8158 | 0.8216 |
| enron | 0.1287 | 0.0531 | 0.4721 | 0.6179 | 0.2050 | 0.5982 | 0.2105 | 19.6374 | 0.1528 | 0.6570 | 0.5137 | 0.8486 |
| EukaryoteGO | 0.7139 | 0.0190 | 0.7912 | 0.8293 | 0.7279 | 0.8204 | 0.1637 | 0.8673 | 0.0510 | 0.8948 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.3063 | 0.0563 | 0.4008 | 0.4503 | 0.1481 | 0.4587 | 0.5380 | 6.1094 | 0.4983 | 0.5282 | 0.9744 | 0.9770 |
| flags | 0.3500 | 0.2714 | 0.6075 | 0.6958 | 0.6019 | 0.7031 | 0.1000 | 3.7000 | 0.2017 | 0.8367 | 0.6423 | 0.8166 |
| foodtruck | 0.1951 | 0.1606 | 0.4564 | 0.6334 | 0.3067 | 0.5486 | 0.2439 | 3.2195 | 0.1313 | 0.7853 | 0.5585 | 0.7961 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 1.0000 |
| GnegativeGO | 0.9286 | 0.0098 | 0.9607 | 0.9768 | 0.8014 | 0.9627 | 0.0286 | 0.1286 | 0.0082 | 0.9814 | 0.8679 | 0.9920 |
| GnegativePseAAC | 0.6214 | 0.0830 | 0.6774 | 0.7069 | 0.3849 | 0.6910 | 0.2714 | 0.8214 | 0.1078 | 0.8214 | 0.6721 | 0.9123 |
| GpositiveGO | 0.8654 | 0.0577 | 0.8750 | 0.8798 | 0.8260 | 0.8846 | 0.0962 | 0.1731 | 0.0577 | 0.9439 | 0.9596 | 0.9630 |
| GpositivePseAAC | 0.6154 | 0.1490 | 0.6346 | 0.6441 | 0.5379 | 0.6869 | 0.2692 | 0.5000 | 0.2051 | 0.8333 | 0.9241 | 0.9307 |
| HumanGO | 0.6785 | 0.0388 | 0.7666 | 0.8139 | 0.6950 | 0.7744 | 0.1704 | 1.0900 | 0.1057 | 0.8758 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.2379 | 0.0854 | 0.2765 | 0.2973 | 0.1425 | 0.3497 | 0.5723 | 2.9260 | 0.1994 | 0.5869 | 0.6578 | 0.8197 |
| Image | 0.5050 | 0.1710 | 0.6229 | 0.6833 | 0.6465 | 0.6430 | 0.3100 | 0.9450 | 0.2171 | 0.7985 | 0.8789 | 0.8782 |
| IMDB-ECC-F10% | 0.0000 | 0.3044 | 0.1346 | 0.2346 | 0.0992 | 0.2333 | 0.7107 | 12.3061 | 0.3525 | 0.3382 | 0.5123 | 0.6597 |
| IMDB-F10% | 0.0000 | 0.3492 | 0.1409 | 0.2469 | 0.1127 | 0.2445 | 0.7034 | 13.7871 | 0.4133 | 0.3461 | 0.5201 | 0.6324 |
| LLOG-F | 0.1148 | 0.0212 | 0.2052 | 0.2557 | 0.0833 | 0.3022 | 0.7213 | 28.8033 | 0.4062 | 0.2901 | 0.4229 | 0.6589 |
| mediamill10% | 0.0760 | 0.0302 | 0.4709 | 0.6365 | 0.0942 | 0.5882 | 0.1686 | 59.1829 | 0.4511 | 0.5468 | 0.8136 | 0.9940 |
| medical | 0.6429 | 0.0104 | 0.7730 | 0.8336 | 0.3011 | 0.8217 | 0.1429 | 4.4082 | 0.0880 | 0.8690 | 0.4713 | 0.9316 |
| Music | 0.2167 | 0.1972 | 0.5333 | 0.6653 | 0.6940 | 0.6953 | 0.2667 | 2.3333 | 0.2198 | 0.7747 | 0.8142 | 0.8082 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.2261 | 0.0592 | 0.4444 | 0.5574 | 0.4408 | 0.5686 | 0.3546 | 7.6497 | 0.4158 | 0.6150 | 0.9770 | 0.9800 |
| PlantGO | 0.6354 | 0.0451 | 0.7153 | 0.7508 | 0.6252 | 0.7593 | 0.2083 | 1.2396 | 0.0927 | 0.8476 | 0.8310 | 0.9123 |
| PlantPseAAC | 0.0816 | 0.1378 | 0.1619 | 0.2088 | 0.1633 | 0.2500 | 0.7143 | 3.5510 | 0.3062 | 0.4545 | 0.5835 | 0.7093 |
| rcv1subset1 | 0.1000 | 0.0316 | 0.3562 | 0.4783 | 0.2658 | 0.4708 | 0.3933 | 37.5533 | 0.4104 | 0.5188 | 0.9255 | 0.9864 |
| REUTERS-K500-EX2 | 0.3402 | 0.0116 | 0.4244 | 0.4731 | 0.2553 | 0.5133 | 0.5052 | 31.1787 | 0.5163 | 0.5018 | 0.7839 | 0.9972 |
| scene | 0.6515 | 0.0816 | 0.7303 | 0.7697 | 0.7856 | 0.7704 | 0.1992 | 0.6639 | 0.1070 | 0.8601 | 0.9199 | 0.9242 |
| sider_CDK_ECFP4 | 0.0070 | 0.2556 | 0.6075 | 0.7665 | 0.6412 | 0.7779 | 0.1338 | 19.3521 | 0.1478 | 0.8081 | 0.5545 | 0.7816 |
| sider_MordredDesc | 0.0211 | 0.2433 | 0.5993 | 0.7620 | 0.6374 | 0.7786 | 0.1197 | 19.6268 | 0.1493 | 0.8249 | 0.5472 | 0.7856 |
| sider_RDKit_desc | 0.0070 | 0.2786 | 0.5626 | 0.7431 | 0.6061 | 0.7408 | 0.1761 | 19.0986 | 0.1355 | 0.8320 | 0.5468 | 0.7900 |
| SLASHDOT-F | 0.4048 | 0.0416 | 0.5226 | 0.5858 | 0.4132 | 0.6023 | 0.3942 | 5.5026 | 0.3613 | 0.6456 | 0.7563 | 0.9834 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.4000 | 0.4000 | 0.4000 | 0.8000 | 0.4444 | 0.7600 |
| Stackex_chemistry | 0.0447 | 0.0159 | 0.1454 | 0.2070 | 0.0565 | 0.2017 | 0.7983 | 105.5317 | 0.8778 | 0.1525 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0298 | 0.0145 | 0.1521 | 0.2306 | 0.0652 | 0.2520 | 0.7083 | 139.5655 | 0.5811 | 0.1895 | 0.4128 | 0.7652 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0543 | 0.0915 | 0.0156 | 0.1159 | 0.8261 | 75.4348 | 0.8596 | 0.1437 | 0.2562 | 0.9893 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0000 | 0.0307 | 0.1278 | 0.2230 | 0.0825 | 0.2167 | 0.6834 | 122.4925 | 0.4853 | 0.2294 | 0.5708 | 0.7525 |
| tmc2007-500 | 0.2584 | 0.0671 | 0.5720 | 0.7166 | 0.5985 | 0.6812 | 0.2559 | 4.1045 | 0.1458 | 0.7757 | 0.9585 | 0.9699 |
| tox21_CDK_ECFP4 | 0.1575 | 0.1724 | 0.3363 | 0.4332 | 0.3818 | 0.4539 | 0.4555 | 5.1301 | 0.3021 | 0.5865 | 0.6514 | 0.6883 |
| tox21_RDKit_desc | 0.1918 | 0.1590 | 0.3755 | 0.4694 | 0.4232 | 0.4950 | 0.4281 | 4.3185 | 0.2181 | 0.6423 | 0.7003 | 0.7600 |
| VirusGO | 0.7619 | 0.0556 | 0.8333 | 0.8611 | 0.6949 | 0.8571 | 0.0952 | 0.4762 | 0.0458 | 0.9286 | 0.7820 | 0.9525 |
| VirusPseAAC | 0.3333 | 0.1429 | 0.3810 | 0.4048 | 0.2843 | 0.5000 | 0.3810 | 0.8571 | 0.1619 | 0.7714 | 0.6056 | 0.8742 |
| Water-quality | 0.0189 | 0.3053 | 0.3934 | 0.5666 | 0.5047 | 0.5665 | 0.2547 | 9.3774 | 0.2751 | 0.7014 | 0.6587 | 0.7046 |
| Yahoo_Arts | 0.2043 | 0.0686 | 0.3003 | 0.3653 | 0.2145 | 0.3734 | 0.4993 | 10.2163 | 0.5747 | 0.5043 | 0.9355 | 0.9738 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.2066 | 0.1851 | 0.5409 | 0.6716 | 0.4165 | 0.6649 | 0.2686 | 6.1653 | 0.1706 | 0.7513 | 0.7258 | 0.8329 |
| Yelp | 0.5573 | 0.1326 | 0.7602 | 0.8453 | 0.7728 | 0.8126 | 0.1027 | 1.1157 | 0.0936 | 0.9266 | 0.8760 | 0.9149 |

Table 20: Detailed results for AdaBoost for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5368 | 0.0306 | 0.6222 | 0.6662 | 0.7034 | 0.7049 | 0.3019 | 2.5057 | 0.2421 | 0.7604 | 0.9901 | 0.9904 |
| 3s-bbc1000 | 0.2222 | 0.1759 | 0.2361 | 0.2429 | 0.2934 | 0.3214 | 0.4444 | 1.2222 | 0.2382 | 0.7310 | 0.8835 | 0.8759 |
| 3s-guardian1000 | 0.2581 | 0.1559 | 0.3065 | 0.3289 | 0.4399 | 0.4314 | 0.4516 | 1.6129 | 0.3185 | 0.6780 | 0.7834 | 0.8128 |
| 3s-inter3000 | 0.0000 | 0.1961 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.3529 | 0.5000 | 0.4461 | 0.4303 | 0.6052 |
| 3s-reuters1000 | 0.1333 | 0.1778 | 0.1333 | 0.1333 | 0.1476 | 0.2000 | 0.6667 | 1.8000 | 0.4267 | 0.5578 | 0.7667 | 0.7147 |
| amphibians | 0.0000 | 0.3651 | 0.2833 | 0.4386 | 0.4136 | 0.5208 | 0.2778 | 3.1111 | 0.1852 | 0.7681 | 0.5945 | 0.7297 |
| bibtex | 0.1919 | 0.0120 | 0.3673 | 0.4610 | 0.3257 | 0.4853 | 0.4324 | 72.3973 | 0.5751 | 0.4301 | 0.9977 | 0.9978 |
| birds | 0.1026 | 0.0877 | 0.1880 | 0.2269 | 0.1665 | 0.2857 | 0.3846 | 5.2051 | 0.2451 | 0.6672 | 0.8321 | 0.9224 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1469 | 0.1342 | 0.2467 | 0.0519 | 0.2302 | 0.5098 | 148.4314 | 0.4043 | 0.4101 | 0.6959 | 0.8537 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1946 | 0.0408 | 0.1944 | 0.8751 | 115.1089 | 0.9440 | 0.0885 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0138 | 0.1438 | 0.2289 | 0.0265 | 0.2362 | 0.8500 | 163.3540 | 0.9344 | 0.1641 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.2500 | 0.1833 | 0.4528 | 0.5325 | 0.5968 | 0.6333 | 0.2333 | 1.5000 | 0.1439 | 0.8371 | 0.8679 | 0.8844 |
| enron | 0.1871 | 0.0516 | 0.4874 | 0.6162 | 0.1837 | 0.5952 | 0.2924 | 23.5848 | 0.3608 | 0.6091 | 0.8256 | 0.9809 |
| EukaryoteGO | 0.7139 | 0.0190 | 0.7912 | 0.8293 | 0.7279 | 0.8204 | 0.1637 | 0.8673 | 0.0510 | 0.8948 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.3063 | 0.0563 | 0.4008 | 0.4503 | 0.1481 | 0.4587 | 0.5380 | 6.1094 | 0.4983 | 0.5282 | 0.9744 | 0.9770 |
| flags | 0.3000 | 0.2357 | 0.5650 | 0.6852 | 0.5716 | 0.7027 | 0.1000 | 3.5500 | 0.1958 | 0.8563 | 0.7400 | 0.8394 |
| foodtruck | 0.2927 | 0.1402 | 0.4178 | 0.5306 | 0.1266 | 0.4812 | 0.3415 | 3.0976 | 0.1846 | 0.7370 | 0.7033 | 0.8429 |
| genbase | 0.9552 | 0.0017 | 0.9826 | 0.9913 | 0.6222 | 0.9814 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9536 | 0.9660 | 0.8335 | 0.9586 | 0.0286 | 0.1643 | 0.0209 | 0.9779 | 0.8743 | 0.9993 |
| GnegativePseAAC | 0.5286 | 0.0696 | 0.5321 | 0.5339 | 0.2181 | 0.6579 | 0.2714 | 0.8714 | 0.1484 | 0.8154 | 0.8260 | 0.9575 |
| GpositiveGO | 0.8846 | 0.0433 | 0.8942 | 0.8990 | 0.9272 | 0.9126 | 0.0577 | 0.1538 | 0.0609 | 0.9615 | 0.9945 | 0.9959 |
| GpositivePseAAC | 0.5577 | 0.1587 | 0.5577 | 0.5577 | 0.4872 | 0.6374 | 0.3846 | 0.7692 | 0.2949 | 0.7564 | 0.9121 | 0.9077 |
| HumanGO | 0.6785 | 0.0388 | 0.7666 | 0.8139 | 0.6950 | 0.7744 | 0.1704 | 1.0900 | 0.1057 | 0.8758 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.3087 | 0.0978 | 0.4070 | 0.4568 | 0.1915 | 0.4380 | 0.5370 | 3.3505 | 0.4701 | 0.5840 | 0.9527 | 0.9534 |
| Image | 0.4550 | 0.1500 | 0.4867 | 0.5029 | 0.5764 | 0.5833 | 0.2900 | 0.8950 | 0.1988 | 0.8093 | 0.9007 | 0.9006 |
| IMDB-ECC-F10% | 0.0000 | 0.2376 | 0.1474 | 0.2504 | 0.0847 | 0.2502 | 0.6331 | 12.3941 | 0.7320 | 0.3750 | 0.9883 | 0.9755 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1549 | 0.2640 | 0.0967 | 0.2638 | 0.5866 | 12.6819 | 0.7149 | 0.3875 | 0.9845 | 0.9741 |
| LLOG-F | 0.0492 | 0.0172 | 0.0676 | 0.0773 | 0.0311 | 0.1229 | 0.7377 | 27.9344 | 0.7407 | 0.2897 | 0.5913 | 0.9911 |
| mediamill10% | 1.0000 | 0.0000 | 1.0000 | 1.0000 | 0.8218 | 1.0000 | 0.0000 | 3.4537 | 0.0000 | 1.0000 | 0.8218 | 1.0000 |
| medical | 0.6429 | 0.0100 | 0.7415 | 0.7867 | 0.3237 | 0.8120 | 0.1020 | 3.1224 | 0.0887 | 0.8954 | 0.5534 | 0.9977 |
| Music | 0.1333 | 0.1944 | 0.4472 | 0.5793 | 0.6218 | 0.6354 | 0.1667 | 1.9500 | 0.1734 | 0.8258 | 0.8603 | 0.8629 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.2261 | 0.0592 | 0.4444 | 0.5574 | 0.4408 | 0.5686 | 0.3546 | 7.6497 | 0.4158 | 0.6150 | 0.9770 | 0.9800 |
| PlantGO | 0.7292 | 0.0365 | 0.7865 | 0.8133 | 0.6773 | 0.8037 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9888 | 0.9836 |
| PlantPseAAC | 0.1020 | 0.0893 | 0.1020 | 0.1020 | 0.0620 | 0.1600 | 0.6735 | 2.5918 | 0.2939 | 0.5299 | 0.8157 | 0.8336 |
| rcv1subset1 | 0.1000 | 0.0316 | 0.3562 | 0.4783 | 0.2658 | 0.4708 | 0.3933 | 37.5533 | 0.4104 | 0.5188 | 0.9255 | 0.9864 |
| REUTERS-K500-EX2 | 0.3402 | 0.0116 | 0.4244 | 0.4731 | 0.2553 | 0.5133 | 0.5052 | 31.1787 | 0.5163 | 0.5018 | 0.7839 | 0.9972 |
| scene | 0.4896 | 0.1017 | 0.5166 | 0.5297 | 0.6514 | 0.6406 | 0.2365 | 0.6307 | 0.1173 | 0.8508 | 0.9429 | 0.9541 |
| sider_CDK_ECFP4 | 0.0141 | 0.2415 | 0.6503 | 0.7981 | 0.6298 | 0.7976 | 0.2676 | 19.1620 | 0.1673 | 0.7814 | 0.5891 | 0.7700 |
| sider_MordredDesc | 0.0141 | 0.2713 | 0.6279 | 0.7815 | 0.6128 | 0.7799 | 0.3099 | 19.8803 | 0.2231 | 0.7418 | 0.5733 | 0.7340 |
| sider_RDKit_desc | 0.0000 | 0.2736 | 0.5406 | 0.7280 | 0.5602 | 0.7242 | 0.1479 | 19.3521 | 0.1644 | 0.8055 | 0.6001 | 0.7847 |
| SLASHDOT-F | 0.4048 | 0.0416 | 0.5226 | 0.5858 | 0.4132 | 0.6023 | 0.3942 | 5.5026 | 0.3613 | 0.6456 | 0.7563 | 0.9834 |
| solar_flare-L3 | 0.2000 | 0.5333 | 0.2667 | 0.3200 | 0.1905 | 0.3333 | 0.8000 | 1.0000 | 0.6000 | 0.5667 | 0.2222 | 0.6000 |
| Stackex_chemistry | 0.0447 | 0.0159 | 0.1454 | 0.2070 | 0.0565 | 0.2017 | 0.7983 | 105.5317 | 0.8778 | 0.1525 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0179 | 0.0105 | 0.1135 | 0.1717 | 0.0570 | 0.2269 | 0.6548 | 126.5417 | 0.7031 | 0.2484 | 0.5463 | 0.9951 |
| Stackex_coffee | 0.0000 | 0.0226 | 0.0435 | 0.0692 | 0.0244 | 0.0857 | 0.8696 | 74.3913 | 0.8352 | 0.1239 | 0.2547 | 0.9870 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0094 | 0.1649 | 0.2302 | 0.0616 | 0.2718 | 0.6910 | 135.1181 | 0.7947 | 0.2115 | 0.7498 | 0.9987 |
| tmc2007-500 | 0.2584 | 0.0671 | 0.5720 | 0.7166 | 0.5985 | 0.6812 | 0.2559 | 4.1045 | 0.1458 | 0.7757 | 0.9585 | 0.9699 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1744 | 0.3474 | 0.4547 | 0.3847 | 0.4530 | 0.4726 | 5.3014 | 0.4819 | 0.5704 | 0.8999 | 0.8998 |
| tox21_RDKit_desc | 0.1062 | 0.1915 | 0.3377 | 0.4665 | 0.3235 | 0.4468 | 0.5103 | 5.5103 | 0.5054 | 0.5515 | 0.9005 | 0.9011 |
| VirusGO | 0.7619 | 0.0476 | 0.8413 | 0.8729 | 0.7076 | 0.8750 | 0.0476 | 0.3333 | 0.0571 | 0.9643 | 0.8117 | 0.9893 |
| VirusPseAAC | 0.1905 | 0.1667 | 0.2381 | 0.2597 | 0.2381 | 0.3636 | 0.3333 | 0.8095 | 0.1679 | 0.7929 | 0.7140 | 0.9130 |
| Water-quality | 0.0000 | 0.3208 | 0.2255 | 0.3612 | 0.2568 | 0.3550 | 0.2264 | 8.7547 | 0.2395 | 0.7328 | 0.7143 | 0.7517 |
| Yahoo_Arts | 0.2043 | 0.0686 | 0.3003 | 0.3653 | 0.2145 | 0.3734 | 0.4993 | 10.2163 | 0.5747 | 0.5043 | 0.9355 | 0.9738 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.1942 | 0.2081 | 0.5549 | 0.6878 | 0.4481 | 0.6756 | 0.2521 | 6.2025 | 0.2346 | 0.7556 | 0.8250 | 0.8836 |
| Yelp | 0.5703 | 0.1334 | 0.7600 | 0.8460 | 0.7575 | 0.8046 | 0.0708 | 1.1535 | 0.0963 | 0.9334 | 0.9128 | 0.9331 |

Table 21: Detailed results for k-NN for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3485 | 0.0454 | 0.3551 | 0.3585 | 0.4392 | 0.4475 | 0.5928 | 6.0602 | 0.6036 | 0.4878 | 0.9906 | 0.9884 |
| 3s-bbc1000 | 0.0278 | 0.2963 | 0.1898 | 0.2754 | 0.1667 | 0.2889 | 0.6944 | 2.5833 | 0.7407 | 0.5042 | 0.9393 | 0.8851 |
| 3s-guardian1000 | 0.1935 | 0.2688 | 0.2688 | 0.3056 | 0.2765 | 0.3056 | 0.7419 | 2.0000 | 0.6944 | 0.5487 | 0.8805 | 0.8581 |
| 3s-inter3000 | 0.3529 | 0.2255 | 0.3725 | 0.3824 | 0.1323 | 0.3784 | 0.6471 | 2.4118 | 0.6250 | 0.5196 | 0.7485 | 0.8902 |
| 3s-reuters1000 | 0.2000 | 0.2722 | 0.2000 | 0.2000 | 0.1229 | 0.1967 | 0.8000 | 2.5333 | 0.7733 | 0.4300 | 0.8927 | 0.8254 |
| amphibians | 0.0000 | 0.3095 | 0.4970 | 0.7316 | 0.4645 | 0.6667 | 0.2222 | 2.8333 | 0.2102 | 0.8309 | 0.6814 | 0.7562 |
| bibtex | 0.0000 | 0.0920 | 0.0340 | 0.0651 | 0.0397 | 0.0653 | 0.8054 | 91.9270 | 0.9118 | 0.1293 | 0.9996 | 0.9996 |
| birds | 0.1795 | 0.1120 | 0.3002 | 0.3571 | 0.1927 | 0.3566 | 0.6154 | 7.6154 | 0.6016 | 0.4616 | 0.8390 | 0.9416 |
| bookmarks10% | 0.1697 | 0.0089 | 0.1799 | 0.1856 | 0.0482 | 0.1949 | 0.8087 | 110.6743 | 0.8182 | 0.2064 | 0.9854 | 0.9998 |
| CAL500 | 0.0000 | 0.1847 | 0.2796 | 0.4353 | 0.1515 | 0.4370 | 0.1961 | 151.3137 | 0.5273 | 0.4198 | 0.7602 | 0.9042 |
| corel16k001 | 0.0000 | 0.0525 | 0.1236 | 0.2116 | 0.0355 | 0.2106 | 0.9034 | 117.1678 | 0.9538 | 0.0764 | 0.9974 | 0.9973 |
| Corel5k | 0.0000 | 0.0209 | 0.1105 | 0.1844 | 0.0080 | 0.1858 | 0.9560 | 169.1540 | 0.9877 | 0.1194 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0858 | 0.0976 | 0.1766 | 0.0666 | 0.1775 | 0.4854 | 908.5078 | 0.8473 | 0.1501 | 0.9926 | 0.9980 |
| emotions | 0.3167 | 0.2222 | 0.5797 | 0.6967 | 0.6578 | 0.6694 | 0.2833 | 1.6833 | 0.2444 | 0.8100 | 0.8874 | 0.8908 |
| enron | 0.1228 | 0.0594 | 0.3632 | 0.4828 | 0.1211 | 0.4588 | 0.4444 | 28.2456 | 0.5592 | 0.4673 | 0.8313 | 0.9824 |
| EukaryoteGO | 0.6753 | 0.0240 | 0.7513 | 0.7888 | 0.3741 | 0.7745 | 0.2216 | 2.7139 | 0.1969 | 0.8026 | 0.9951 | 0.9948 |
| EukaryotePseAAC | 0.2201 | 0.0696 | 0.2988 | 0.3397 | 0.0846 | 0.3427 | 0.6448 | 7.1454 | 0.6532 | 0.4165 | 0.9729 | 0.9712 |
| flags | 0.1500 | 0.2857 | 0.5794 | 0.7092 | 0.5677 | 0.7101 | 0.3000 | 3.8500 | 0.3358 | 0.7653 | 0.7241 | 0.8181 |
| foodtruck | 0.2927 | 0.1606 | 0.4738 | 0.5998 | 0.1766 | 0.5269 | 0.3415 | 3.8293 | 0.3869 | 0.7038 | 0.8157 | 0.9270 |
| genbase | 0.9254 | 0.0033 | 0.9552 | 0.9699 | 0.4802 | 0.9620 | 0.0149 | 1.4478 | 0.0448 | 0.9603 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9143 | 0.0152 | 0.9357 | 0.9463 | 0.7741 | 0.9408 | 0.0357 | 0.2286 | 0.0571 | 0.9654 | 0.8748 | 0.9995 |
| GnegativePseAAC | 0.5786 | 0.0982 | 0.6107 | 0.6267 | 0.2694 | 0.6207 | 0.3714 | 1.4714 | 0.3332 | 0.7304 | 0.8506 | 0.9713 |
| GpositiveGO | 0.9423 | 0.0240 | 0.9519 | 0.9567 | 0.9625 | 0.9524 | 0.0385 | 0.1731 | 0.0481 | 0.9663 | 0.9996 | 0.9993 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5595 | 0.7308 | 0.2692 | 0.5769 | 0.2692 | 0.8221 | 0.9790 | 0.9758 |
| HumanGO | 0.6141 | 0.0464 | 0.7012 | 0.7470 | 0.4727 | 0.7218 | 0.2476 | 1.9743 | 0.2402 | 0.7888 | 0.9874 | 0.9883 |
| HumanPseAAC | 0.1961 | 0.1259 | 0.2816 | 0.3266 | 0.0926 | 0.3116 | 0.6785 | 4.9936 | 0.6514 | 0.4382 | 0.9426 | 0.9388 |
| Image | 0.5300 | 0.1800 | 0.6042 | 0.6420 | 0.6076 | 0.6087 | 0.3400 | 1.1450 | 0.3583 | 0.7636 | 0.9481 | 0.9409 |
| IMDB-ECC-F10% | 0.0797 | 0.0882 | 0.2132 | 0.2938 | 0.0407 | 0.2707 | 0.6887 | 12.3396 | 0.6770 | 0.3693 | 0.9612 | 0.9604 |
| IMDB-F10% | 0.0331 | 0.1064 | 0.2077 | 0.3109 | 0.0504 | 0.2982 | 0.6810 | 12.6761 | 0.6256 | 0.3735 | 0.9391 | 0.9407 |
| LLOG-F | 0.0000 | 0.0521 | 0.0854 | 0.1388 | 0.0103 | 0.1374 | 0.9344 | 37.3934 | 0.9604 | 0.1104 | 0.5988 | 0.9976 |
| mediamill10% | 0.1021 | 0.0316 | 0.4740 | 0.6337 | 0.0615 | 0.5868 | 0.2708 | 56.8337 | 0.4162 | 0.5561 | 0.8085 | 0.9918 |
| medical | 0.4490 | 0.0190 | 0.5476 | 0.5985 | 0.1458 | 0.6250 | 0.3163 | 13.7653 | 0.4050 | 0.6419 | 0.5525 | 0.9959 |
| Music | 0.2667 | 0.1806 | 0.6028 | 0.7444 | 0.7263 | 0.7280 | 0.2667 | 2.0000 | 0.2651 | 0.8030 | 0.9101 | 0.9051 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1508 | 0.0325 | 0.3253 | 0.4196 | 0.0659 | 0.3857 | 0.6161 | 37.0818 | 0.6828 | 0.3633 | 0.8809 | 0.9928 |
| OHSUMED-F | 0.0000 | 0.1977 | 0.1683 | 0.2749 | 0.1036 | 0.2730 | 0.7703 | 11.9411 | 0.8204 | 0.3035 | 0.9664 | 0.9653 |
| PlantGO | 0.5625 | 0.0599 | 0.6128 | 0.6393 | 0.4865 | 0.6497 | 0.3333 | 2.4896 | 0.3578 | 0.7011 | 0.9949 | 0.9859 |
| PlantPseAAC | 0.2041 | 0.1293 | 0.2432 | 0.2643 | 0.1047 | 0.2692 | 0.7041 | 3.9796 | 0.7271 | 0.4330 | 0.9551 | 0.9362 |
| rcv1subset1 | 0.0800 | 0.0350 | 0.1603 | 0.2055 | 0.0706 | 0.2400 | 0.7683 | 57.5417 | 0.8053 | 0.2284 | 0.9302 | 0.9887 |
| REUTERS-K500-EX2 | 0.3368 | 0.0118 | 0.3784 | 0.4020 | 0.1522 | 0.4294 | 0.5739 | 37.0911 | 0.6102 | 0.4284 | 0.7852 | 0.9984 |
| scene | 0.6515 | 0.1010 | 0.6943 | 0.7156 | 0.7240 | 0.7126 | 0.2697 | 1.0664 | 0.2786 | 0.7967 | 0.9814 | 0.9791 |
| sider_CDK_ECFP4 | 0.0070 | 0.2822 | 0.6127 | 0.7748 | 0.6147 | 0.7673 | 0.2113 | 19.3873 | 0.1584 | 0.8093 | 0.6241 | 0.7924 |
| sider_MordredDesc | 0.0000 | 0.2673 | 0.6220 | 0.7790 | 0.6173 | 0.7782 | 0.2746 | 19.8380 | 0.1851 | 0.7756 | 0.5905 | 0.7769 |
| sider_RDKit_desc | 0.0070 | 0.2645 | 0.6292 | 0.7843 | 0.6096 | 0.7798 | 0.2676 | 19.7254 | 0.1874 | 0.7695 | 0.5941 | 0.7751 |
| SLASHDOT-F | 0.1878 | 0.0706 | 0.2077 | 0.2175 | 0.0679 | 0.2286 | 0.7672 | 11.0106 | 0.7770 | 0.3024 | 0.7621 | 0.9739 |
| solar_flare-L3 | 0.0000 | 0.5333 | 0.2000 | 0.2667 | 0.1905 | 0.3333 | 0.8000 | 0.8000 | 0.7000 | 0.6000 | 0.0000 | 0.5200 |
| Stackex_chemistry | 0.0000 | 0.0392 | 0.0914 | 0.1607 | 0.0076 | 0.1580 | 0.9150 | 112.3271 | 0.9789 | 0.0726 | 0.9197 | 0.9998 |
| Stackex_chess | 0.0000 | 0.0233 | 0.1048 | 0.1774 | 0.0088 | 0.1759 | 0.8810 | 153.1607 | 0.9550 | 0.0704 | 0.5503 | 0.9996 |
| Stackex_coffee | 0.0000 | 0.0633 | 0.0946 | 0.1620 | 0.0098 | 0.1596 | 1.0000 | 81.6957 | 1.0000 | 0.0364 | 0.2597 | 0.9996 |
| Stackex_cooking | 0.0000 | 0.0143 | 0.0539 | 0.0923 | 0.0035 | 0.0918 | 0.9710 | 256.7865 | 0.9909 | 0.0298 | 0.9250 | 1.0000 |
| Stackex_philosophy | 0.0000 | 0.0297 | 0.0952 | 0.1692 | 0.0051 | 0.1641 | 0.9548 | 153.0628 | 0.9828 | 0.0392 | 0.7509 | 0.9999 |
| tmc2007-500 | 0.2420 | 0.0723 | 0.5162 | 0.6507 | 0.4319 | 0.6207 | 0.2972 | 6.6052 | 0.3223 | 0.6840 | 0.9654 | 0.9724 |
| tox21_CDK_ECFP4 | 0.1164 | 0.1958 | 0.3240 | 0.4342 | 0.3682 | 0.4405 | 0.5171 | 5.7158 | 0.5345 | 0.5338 | 0.8945 | 0.8949 |
| tox21_RDKit_desc | 0.1370 | 0.1864 | 0.3691 | 0.4932 | 0.4341 | 0.4973 | 0.4623 | 5.3390 | 0.4701 | 0.5766 | 0.8868 | 0.8946 |
| VirusGO | 0.7143 | 0.0873 | 0.7698 | 0.8055 | 0.6126 | 0.7755 | 0.1429 | 0.9524 | 0.2139 | 0.8611 | 0.8241 | 0.9834 |
| VirusPseAAC | 0.2857 | 0.1825 | 0.5000 | 0.5957 | 0.5067 | 0.5818 | 0.5238 | 1.3333 | 0.2810 | 0.6667 | 0.6792 | 0.9054 |
| Water-quality | 0.0283 | 0.3248 | 0.4415 | 0.6212 | 0.5663 | 0.6119 | 0.3302 | 8.8491 | 0.2961 | 0.6907 | 0.7108 | 0.7492 |
| Yahoo_Arts | 0.1589 | 0.0797 | 0.2364 | 0.2840 | 0.0841 | 0.2567 | 0.6729 | 12.7637 | 0.7241 | 0.3650 | 0.9382 | 0.9715 |
| Yahoo_Business | 0.5223 | 0.0289 | 0.6808 | 0.7703 | 0.1040 | 0.6764 | 0.1266 | 3.9581 | 0.3079 | 0.8467 | 0.8637 | 0.9973 |
| Yahoo_Computers | 0.3614 | 0.0418 | 0.4482 | 0.5037 | 0.1431 | 0.4697 | 0.4281 | 7.8908 | 0.5381 | 0.5404 | 0.9050 | 0.9904 |
| Yahoo_Education | 0.1172 | 0.0648 | 0.2623 | 0.3370 | 0.0975 | 0.3128 | 0.7190 | 10.4672 | 0.7532 | 0.3957 | 0.8870 | 0.9796 |
| Yahoo_Entertainment | 0.2490 | 0.0821 | 0.3176 | 0.3587 | 0.1713 | 0.3383 | 0.6198 | 5.2482 | 0.6286 | 0.4862 | 0.9662 | 0.9665 |
| Yahoo_Health | 0.2964 | 0.0514 | 0.4126 | 0.4793 | 0.1481 | 0.4412 | 0.4810 | 8.7470 | 0.5339 | 0.5586 | 0.8302 | 0.9838 |
| Yahoo_Recreation | 0.1910 | 0.0800 | 0.2390 | 0.2656 | 0.1975 | 0.2726 | 0.6991 | 8.1738 | 0.6992 | 0.4209 | 0.9636 | 0.9631 |
| Yahoo_Reference | 0.4197 | 0.0341 | 0.4674 | 0.4918 | 0.0438 | 0.4799 | 0.4732 | 6.9166 | 0.5266 | 0.5680 | 0.8172 | 0.9915 |
| Yahoo_Science | 0.1260 | 0.0533 | 0.2111 | 0.2541 | 0.0449 | 0.2283 | 0.8274 | 16.4837 | 0.8645 | 0.2655 | 0.9676 | 0.9924 |
| Yahoo_Social | 0.3795 | 0.0332 | 0.4445 | 0.4800 | 0.0854 | 0.4524 | 0.4959 | 9.8160 | 0.5288 | 0.5266 | 0.9143 | 0.9909 |
| Yahoo_Society | 0.2190 | 0.0688 | 0.3365 | 0.4090 | 0.0868 | 0.3631 | 0.5372 | 10.1667 | 0.5912 | 0.4746 | 0.9358 | 0.9747 |
| yeast | 0.2149 | 0.2128 | 0.5586 | 0.6862 | 0.4661 | 0.6651 | 0.2231 | 6.0579 | 0.2543 | 0.7646 | 0.8319 | 0.8858 |
| Yelp | 0.2971 | 0.2427 | 0.5348 | 0.6625 | 0.4941 | 0.6003 | 0.2463 | 1.6231 | 0.4381 | 0.8201 | 0.9345 | 0.9264 |

Table 22: Detailed results for SVM for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5073 | 0.0343 | 0.6156 | 0.6735 | 0.6889 | 0.6882 | 0.3013 | 2.4969 | 0.2422 | 0.7602 | 0.9904 | 0.9906 |
| 3s-bbc1000 | 0.1389 | 0.3380 | 0.2713 | 0.3648 | 0.3118 | 0.3423 | 0.6667 | 2.5833 | 0.6088 | 0.5056 | 0.8222 | 0.7771 |
| 3s-guardian1000 | 0.1935 | 0.2957 | 0.3086 | 0.3780 | 0.2560 | 0.3529 | 0.4839 | 2.0968 | 0.4790 | 0.6263 | 0.8581 | 0.8556 |
| 3s-inter3000 | 0.0000 | 0.5490 | 0.2382 | 0.3802 | 0.3281 | 0.3778 | 0.8824 | 2.1765 | 0.5662 | 0.4343 | 0.5299 | 0.7070 |
| 3s-reuters1000 | 0.0667 | 0.3667 | 0.0944 | 0.1106 | 0.1006 | 0.1081 | 0.9333 | 2.6667 | 0.7800 | 0.3594 | 0.7991 | 0.7331 |
| amphibians | 0.1111 | 0.2460 | 0.6054 | 0.7847 | 0.6087 | 0.7520 | 0.2222 | 2.5000 | 0.1111 | 0.8593 | 0.7629 | 0.8205 |
| bibtex | 0.1878 | 0.0120 | 0.3724 | 0.4665 | 0.3332 | 0.4902 | 0.4392 | 72.0892 | 0.5734 | 0.4287 | 0.9977 | 0.9977 |
| birds | 0.1282 | 0.1147 | 0.3319 | 0.4455 | 0.3492 | 0.4295 | 0.5385 | 7.3846 | 0.5038 | 0.4965 | 0.8445 | 0.9413 |
| bookmarks10% | 0.1891 | 0.0088 | 0.2195 | 0.2428 | 0.1118 | 0.2655 | 0.7369 | 105.1412 | 0.7645 | 0.2550 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.2107 | 0.3182 | 0.4805 | 0.1465 | 0.4806 | 0.3333 | 151.1176 | 0.5655 | 0.4423 | 0.8160 | 0.9335 |
| corel16k001 | 0.0000 | 0.0457 | 0.1311 | 0.2193 | 0.0336 | 0.2188 | 0.9477 | 117.8010 | 0.9764 | 0.0577 | 0.9996 | 0.9996 |
| Corel5k | 0.0000 | 0.0180 | 0.1384 | 0.2248 | 0.0274 | 0.2291 | 0.8480 | 163.0860 | 0.9351 | 0.1636 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0454 | 0.1387 | 0.2427 | 0.0890 | 0.2440 | 0.5482 | 906.3238 | 0.8450 | 0.1516 | 0.9927 | 0.9977 |
| emotions | 0.3500 | 0.1944 | 0.6083 | 0.7347 | 0.7020 | 0.7107 | 0.2667 | 1.8833 | 0.2536 | 0.7939 | 0.8879 | 0.8955 |
| enron | 0.1462 | 0.0521 | 0.4796 | 0.6192 | 0.1782 | 0.5931 | 0.3216 | 24.1345 | 0.3680 | 0.6036 | 0.8249 | 0.9804 |
| EukaryoteGO | 0.6611 | 0.0203 | 0.7960 | 0.8596 | 0.7575 | 0.8256 | 0.1688 | 0.8789 | 0.0524 | 0.8922 | 0.9933 | 0.9950 |
| EukaryotePseAAC | 0.1197 | 0.0737 | 0.3373 | 0.4379 | 0.1469 | 0.4392 | 0.5393 | 6.2780 | 0.5101 | 0.5224 | 0.9749 | 0.9775 |
| flags | 0.3000 | 0.2214 | 0.6652 | 0.7813 | 0.6339 | 0.7737 | 0.3500 | 3.7000 | 0.3083 | 0.7649 | 0.7336 | 0.8218 |
| foodtruck | 0.2927 | 0.1585 | 0.4539 | 0.5830 | 0.1349 | 0.4868 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8560 | 0.9574 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0116 | 0.9536 | 0.9696 | 0.8268 | 0.9562 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7714 | 0.0500 | 0.8131 | 0.8339 | 0.5033 | 0.8121 | 0.1857 | 0.6143 | 0.1470 | 0.8736 | 0.8635 | 0.9905 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0962 | 0.1538 | 0.0449 | 0.9471 | 0.9956 | 0.9948 |
| GpositivePseAAC | 0.7308 | 0.1202 | 0.7500 | 0.7595 | 0.5833 | 0.7619 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9841 | 0.9758 |
| HumanGO | 0.6431 | 0.0395 | 0.7618 | 0.8213 | 0.6965 | 0.7795 | 0.1576 | 1.0772 | 0.1016 | 0.8830 | 0.9848 | 0.9884 |
| HumanPseAAC | 0.2990 | 0.0994 | 0.4113 | 0.4678 | 0.1923 | 0.4470 | 0.5338 | 3.3859 | 0.4777 | 0.5839 | 0.9532 | 0.9541 |
| Image | 0.4300 | 0.1890 | 0.6025 | 0.6876 | 0.6468 | 0.6358 | 0.3100 | 1.0150 | 0.2821 | 0.7955 | 0.9331 | 0.9294 |
| IMDB-ECC-F10% | 0.0000 | 0.2672 | 0.1409 | 0.2428 | 0.0922 | 0.2429 | 0.6331 | 12.3302 | 0.7315 | 0.3754 | 0.9885 | 0.9751 |
| IMDB-F10% | 0.0000 | 0.2650 | 0.1544 | 0.2628 | 0.0951 | 0.2629 | 0.5915 | 12.6819 | 0.7184 | 0.3855 | 0.9861 | 0.9746 |
| LLOG-F | 0.1639 | 0.0168 | 0.1960 | 0.2166 | 0.0521 | 0.2870 | 0.7459 | 28.7131 | 0.7876 | 0.2742 | 0.5981 | 0.9978 |
| mediamill10% | 0.0736 | 0.0303 | 0.4723 | 0.6362 | 0.0895 | 0.5932 | 0.2518 | 58.7981 | 0.4434 | 0.5418 | 0.8127 | 0.9937 |
| medical | 0.6633 | 0.0107 | 0.7772 | 0.8345 | 0.3051 | 0.8185 | 0.1837 | 5.0204 | 0.1331 | 0.8342 | 0.5526 | 0.9976 |
| Music | 0.2833 | 0.1833 | 0.6069 | 0.7414 | 0.7343 | 0.7360 | 0.1667 | 2.0167 | 0.2562 | 0.8273 | 0.9145 | 0.9069 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0379 | 0.2690 | 0.4005 | 0.0571 | 0.3850 | 0.5595 | 35.5385 | 0.6571 | 0.4051 | 0.8836 | 0.9950 |
| OHSUMED-F | 0.2283 | 0.0584 | 0.4432 | 0.5542 | 0.4509 | 0.5682 | 0.3553 | 7.6892 | 0.4133 | 0.6154 | 0.9768 | 0.9798 |
| PlantGO | 0.6979 | 0.0399 | 0.7708 | 0.8051 | 0.6695 | 0.7909 | 0.2188 | 1.0833 | 0.1077 | 0.8501 | 0.9884 | 0.9843 |
| PlantPseAAC | 0.2449 | 0.1190 | 0.3520 | 0.4103 | 0.2173 | 0.4017 | 0.6122 | 3.1939 | 0.4989 | 0.5367 | 0.9410 | 0.9333 |
| rcv1subset1 | 0.1017 | 0.0315 | 0.3605 | 0.4876 | 0.2623 | 0.4817 | 0.4417 | 37.7800 | 0.4218 | 0.5022 | 0.9263 | 0.9868 |
| REUTERS-K500-EX2 | 0.3299 | 0.0119 | 0.4133 | 0.4631 | 0.2446 | 0.5007 | 0.5069 | 32.3299 | 0.5319 | 0.4912 | 0.7839 | 0.9972 |
| scene | 0.6017 | 0.0927 | 0.7358 | 0.8025 | 0.7777 | 0.7633 | 0.2033 | 0.8008 | 0.1622 | 0.8503 | 0.9707 | 0.9737 |
| sider_CDK_ECFP4 | 0.0070 | 0.2483 | 0.6479 | 0.7960 | 0.6241 | 0.7941 | 0.2746 | 19.3592 | 0.1585 | 0.7977 | 0.5827 | 0.7843 |
| sider_MordredDesc | 0.0141 | 0.2640 | 0.6275 | 0.7821 | 0.6158 | 0.7825 | 0.3169 | 19.7042 | 0.2028 | 0.7524 | 0.5873 | 0.7476 |
| sider_RDKit_desc | 0.0141 | 0.2799 | 0.6305 | 0.7822 | 0.6049 | 0.7774 | 0.2676 | 20.0986 | 0.2221 | 0.7267 | 0.5809 | 0.7340 |
| SLASHDOT-F | 0.4101 | 0.0417 | 0.5202 | 0.5802 | 0.3992 | 0.5988 | 0.3968 | 5.3624 | 0.3521 | 0.6489 | 0.7560 | 0.9830 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0115 | 0.0200 | 0.1366 | 0.2100 | 0.0677 | 0.2109 | 0.7896 | 105.6110 | 0.8749 | 0.1556 | 0.9188 | 0.9988 |
| Stackex_chess | 0.0357 | 0.0105 | 0.1515 | 0.2163 | 0.0532 | 0.2701 | 0.6786 | 137.8869 | 0.8103 | 0.2021 | 0.5491 | 0.9981 |
| Stackex_coffee | 0.0000 | 0.0212 | 0.0543 | 0.0915 | 0.0159 | 0.1176 | 0.7826 | 73.7826 | 0.8377 | 0.1619 | 0.2559 | 0.9893 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2029 | 0.2744 | 0.1115 | 0.3209 | 0.6357 | 222.6213 | 0.7694 | 0.2353 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0123 | 0.1935 | 0.2790 | 0.0607 | 0.2690 | 0.6809 | 134.8744 | 0.7895 | 0.2165 | 0.7497 | 0.9986 |
| tmc2007-500 | 0.2469 | 0.0692 | 0.5718 | 0.7214 | 0.6052 | 0.6811 | 0.2339 | 4.0486 | 0.1445 | 0.7875 | 0.9592 | 0.9703 |
| tox21_CDK_ECFP4 | 0.1233 | 0.1889 | 0.3505 | 0.4726 | 0.3904 | 0.4635 | 0.4658 | 5.3493 | 0.4885 | 0.5701 | 0.8999 | 0.9008 |
| tox21_RDKit_desc | 0.1164 | 0.1924 | 0.3413 | 0.4716 | 0.3280 | 0.4484 | 0.5000 | 5.5137 | 0.5053 | 0.5543 | 0.9018 | 0.9030 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7926 | 0.9632 |
| VirusPseAAC | 0.3810 | 0.1429 | 0.5635 | 0.6494 | 0.3709 | 0.6400 | 0.2857 | 0.8571 | 0.2048 | 0.8048 | 0.7459 | 0.9253 |
| Water-quality | 0.0000 | 0.4104 | 0.4111 | 0.5865 | 0.5203 | 0.5866 | 0.3113 | 9.1698 | 0.3628 | 0.6839 | 0.7621 | 0.7582 |
| Yahoo_Arts | 0.1909 | 0.0682 | 0.2891 | 0.3548 | 0.2100 | 0.3668 | 0.4993 | 10.0895 | 0.5572 | 0.5099 | 0.9341 | 0.9702 |
| Yahoo_Business | 0.5695 | 0.0271 | 0.7277 | 0.8179 | 0.3221 | 0.7253 | 0.0918 | 3.1720 | 0.2226 | 0.8869 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.4017 | 0.0416 | 0.5562 | 0.6456 | 0.2427 | 0.5888 | 0.3138 | 6.4365 | 0.3454 | 0.6951 | 0.8285 | 0.9848 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1570 | 0.2196 | 0.5548 | 0.7002 | 0.4597 | 0.6776 | 0.2521 | 6.1818 | 0.2340 | 0.7549 | 0.8234 | 0.8832 |
| Yelp | 0.4008 | 0.1898 | 0.6485 | 0.7569 | 0.6858 | 0.7387 | 0.2004 | 1.3659 | 0.2260 | 0.8633 | 0.8806 | 0.9033 |

Table 23: Detailed results for DT for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4300 | 0.0410 | 0.5806 | 0.6585 | 0.6535 | 0.6541 | 0.2578 | 0.9544 | 0.0610 | 0.8313 | 0.9645 | 0.9655 |
| 3s-bbc1000 | 0.1111 | 0.2454 | 0.1250 | 0.1316 | 0.1337 | 0.1587 | 0.7778 | 2.4167 | 0.4631 | 0.4822 | 0.6005 | 0.5961 |
| 3s-guardian1000 | 0.1290 | 0.2258 | 0.1613 | 0.1760 | 0.1716 | 0.2500 | 0.7419 | 2.2258 | 0.4323 | 0.5038 | 0.5182 | 0.6316 |
| 3s-inter3000 | 0.0000 | 0.2157 | 0.0294 | 0.0392 | 0.0303 | 0.0833 | 0.9412 | 2.7059 | 0.5250 | 0.3255 | 0.4248 | 0.5489 |
| 3s-reuters1000 | 0.1667 | 0.2611 | 0.1778 | 0.1833 | 0.1763 | 0.2034 | 0.8667 | 2.5333 | 0.5500 | 0.4081 | 0.5637 | 0.5188 |
| amphibians | 0.2222 | 0.2698 | 0.5962 | 0.7666 | 0.6061 | 0.7213 | 0.2222 | 2.6667 | 0.1250 | 0.8418 | 0.6785 | 0.7803 |
| bibtex | 0.1730 | 0.0148 | 0.3785 | 0.4922 | 0.3734 | 0.4746 | 0.3500 | 38.2230 | 0.2317 | 0.5859 | 0.9678 | 0.9752 |
| birds | 0.1282 | 0.0783 | 0.3060 | 0.3812 | 0.3351 | 0.4727 | 0.2821 | 3.5385 | 0.1111 | 0.7289 | 0.7944 | 0.8939 |
| bookmarks10% | 0.1788 | 0.0179 | 0.2576 | 0.3258 | 0.1624 | 0.2434 | 0.6253 | 73.3565 | 0.4414 | 0.3880 | 0.9392 | 0.9598 |
| CAL500 | 0.0000 | 0.1610 | 0.1950 | 0.3251 | 0.1106 | 0.3256 | 0.2157 | 147.1765 | 0.2533 | 0.4593 | 0.5638 | 0.8049 |
| corel16k001 | 0.0073 | 0.0286 | 0.0986 | 0.1610 | 0.0781 | 0.1682 | 0.7313 | 72.9797 | 0.4343 | 0.2683 | 0.9089 | 0.9250 |
| Corel5k | 0.0040 | 0.0160 | 0.0839 | 0.1392 | 0.0346 | 0.1439 | 0.7480 | 160.6820 | 0.7330 | 0.1992 | 0.6644 | 0.9854 |
| delicious | 0.0000 | 0.0672 | 0.1001 | 0.1816 | 0.1268 | 0.1840 | 0.5289 | 879.1914 | 0.6410 | 0.2163 | 0.9765 | 0.9832 |
| emotions | 0.3833 | 0.1861 | 0.6042 | 0.7083 | 0.6792 | 0.6996 | 0.2333 | 1.5500 | 0.1421 | 0.8326 | 0.8740 | 0.8868 |
| enron | 0.1462 | 0.0611 | 0.4559 | 0.6030 | 0.2122 | 0.5511 | 0.2164 | 14.6901 | 0.1405 | 0.6931 | 0.7277 | 0.9345 |
| EukaryoteGO | 0.7062 | 0.0195 | 0.7977 | 0.8423 | 0.7625 | 0.8233 | 0.1791 | 0.4240 | 0.0145 | 0.8997 | 0.9929 | 0.9950 |
| EukaryotePseAAC | 0.2111 | 0.0506 | 0.2578 | 0.2818 | 0.1208 | 0.3578 | 0.5444 | 2.3501 | 0.1033 | 0.6254 | 0.7980 | 0.9139 |
| flags | 0.3500 | 0.2643 | 0.6158 | 0.7162 | 0.5796 | 0.7132 | 0.2000 | 3.5500 | 0.2150 | 0.8186 | 0.6934 | 0.8090 |
| foodtruck | 0.1951 | 0.1748 | 0.3917 | 0.5076 | 0.2727 | 0.4941 | 0.2195 | 2.6341 | 0.1084 | 0.8054 | 0.6656 | 0.8285 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9357 | 0.0089 | 0.9643 | 0.9786 | 0.8416 | 0.9660 | 0.0357 | 0.1429 | 0.0255 | 0.9752 | 0.8745 | 0.9996 |
| GnegativePseAAC | 0.6143 | 0.0723 | 0.6917 | 0.7296 | 0.4297 | 0.7273 | 0.2714 | 0.6929 | 0.0957 | 0.8259 | 0.7869 | 0.9449 |
| GpositiveGO | 0.9231 | 0.0385 | 0.9231 | 0.9231 | 0.8538 | 0.9245 | 0.0769 | 0.1346 | 0.0385 | 0.9567 | 0.9989 | 0.9973 |
| GpositivePseAAC | 0.4808 | 0.2260 | 0.4808 | 0.4808 | 0.3444 | 0.5155 | 0.4423 | 0.8846 | 0.4167 | 0.7179 | 0.8315 | 0.8542 |
| HumanGO | 0.6399 | 0.0420 | 0.7503 | 0.8069 | 0.7198 | 0.7657 | 0.1961 | 0.6463 | 0.0400 | 0.8811 | 0.9796 | 0.9865 |
| HumanPseAAC | 0.1029 | 0.0788 | 0.1077 | 0.1101 | 0.0811 | 0.1695 | 0.5723 | 2.2122 | 0.1469 | 0.6038 | 0.7517 | 0.8646 |
| Image | 0.4950 | 0.1570 | 0.6083 | 0.6653 | 0.6582 | 0.6594 | 0.2550 | 0.7900 | 0.1579 | 0.8343 | 0.8788 | 0.8857 |
| IMDB-ECC-F10% | 0.0639 | 0.0790 | 0.1568 | 0.2128 | 0.0774 | 0.2248 | 0.6216 | 7.7096 | 0.2105 | 0.4756 | 0.6752 | 0.8095 |
| IMDB-F10% | 0.0481 | 0.0868 | 0.1478 | 0.2128 | 0.0875 | 0.2284 | 0.5824 | 7.8235 | 0.2008 | 0.5005 | 0.6789 | 0.8188 |
| LLOG-F | 0.1230 | 0.0191 | 0.1735 | 0.2005 | 0.0621 | 0.2424 | 0.6311 | 14.2541 | 0.2249 | 0.4570 | 0.5134 | 0.9176 |
| mediamill10% | 0.9644 | 0.0004 | 0.9928 | 0.9964 | 0.8139 | 0.9960 | 0.0024 | 3.4964 | 0.0001 | 0.9976 | 0.8214 | 0.9996 |
| medical | 0.6531 | 0.0113 | 0.7679 | 0.8227 | 0.3416 | 0.8016 | 0.1633 | 2.5102 | 0.0748 | 0.8810 | 0.5515 | 0.9967 |
| Music | 0.2167 | 0.2194 | 0.5361 | 0.6772 | 0.6854 | 0.6749 | 0.2167 | 1.8333 | 0.1521 | 0.8220 | 0.8637 | 0.8724 |
| NUS-WIDE-bow10% | 0.0466 | 0.0375 | 0.2406 | 0.3554 | 0.0556 | 0.3470 | 0.5514 | 18.7046 | 0.1793 | 0.4762 | 0.7050 | 0.8941 |
| NUS-WIDE-cVLADplus10% | 0.0771 | 0.0363 | 0.2852 | 0.4010 | 0.0911 | 0.3927 | 0.5400 | 16.9229 | 0.1560 | 0.5101 | 0.7218 | 0.9041 |
| OHSUMED-F | 0.2089 | 0.0597 | 0.4450 | 0.5673 | 0.4756 | 0.5746 | 0.3281 | 3.3223 | 0.0916 | 0.7290 | 0.8754 | 0.9150 |
| PlantGO | 0.6458 | 0.0443 | 0.7378 | 0.7843 | 0.7659 | 0.7713 | 0.1979 | 0.9062 | 0.0901 | 0.8648 | 0.9840 | 0.9841 |
| PlantPseAAC | 0.0408 | 0.0927 | 0.0408 | 0.0408 | 0.0528 | 0.0684 | 0.5612 | 1.9184 | 0.1670 | 0.6182 | 0.7831 | 0.8478 |
| rcv1subset1 | 0.1117 | 0.0286 | 0.3322 | 0.4466 | 0.2437 | 0.4443 | 0.4033 | 16.2067 | 0.1025 | 0.6143 | 0.8974 | 0.9659 |
| REUTERS-K500-EX2 | 0.2955 | 0.0135 | 0.4367 | 0.5119 | 0.2597 | 0.5082 | 0.4192 | 14.3093 | 0.2063 | 0.6442 | 0.7653 | 0.9821 |
| scene | 0.4855 | 0.1224 | 0.6459 | 0.7225 | 0.7230 | 0.6995 | 0.2116 | 0.4398 | 0.0750 | 0.8753 | 0.9504 | 0.9526 |
| sider_CDK_ECFP4 | 0.0211 | 0.2488 | 0.5892 | 0.7561 | 0.6367 | 0.7733 | 0.1056 | 18.8873 | 0.1287 | 0.8382 | 0.5870 | 0.8024 |
| sider_MordredDesc | 0.0070 | 0.2538 | 0.5958 | 0.7507 | 0.6359 | 0.7726 | 0.0915 | 18.8944 | 0.1227 | 0.8566 | 0.5710 | 0.8044 |
| sider_RDKit_desc | 0.0070 | 0.2613 | 0.5918 | 0.7600 | 0.6349 | 0.7659 | 0.1127 | 19.1408 | 0.1349 | 0.8352 | 0.5793 | 0.7965 |
| SLASHDOT-F | 0.3677 | 0.0462 | 0.4799 | 0.5395 | 0.3983 | 0.5556 | 0.3968 | 3.3466 | 0.1839 | 0.6870 | 0.7078 | 0.9440 |
| solar_flare-L3 | 0.4000 | 0.2000 | 0.7000 | 0.8235 | 0.5079 | 0.7692 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.6667 | 0.9400 |
| Stackex_chemistry | 0.0447 | 0.0171 | 0.1694 | 0.2586 | 0.1323 | 0.2728 | 0.6311 | 68.3775 | 0.4583 | 0.3519 | 0.8881 | 0.9705 |
| Stackex_chess | 0.0000 | 0.0535 | 0.0644 | 0.1172 | 0.0943 | 0.1229 | 0.6310 | 123.0238 | 0.6686 | 0.2787 | 0.5447 | 0.9931 |
| Stackex_coffee | 0.0870 | 0.0212 | 0.1913 | 0.2657 | 0.0581 | 0.2857 | 0.6087 | 55.7826 | 0.4136 | 0.4227 | 0.2514 | 0.9782 |
| Stackex_cooking | 0.0551 | 0.0084 | 0.2443 | 0.3693 | 0.1560 | 0.3358 | 0.5198 | 162.3507 | 0.4659 | 0.3982 | 0.9145 | 0.9909 |
| Stackex_philosophy | 0.0377 | 0.0150 | 0.1995 | 0.3171 | 0.1019 | 0.2955 | 0.5905 | 103.2060 | 0.5072 | 0.3534 | 0.7348 | 0.9845 |
| tmc2007-500 | 0.2266 | 0.0720 | 0.5554 | 0.7029 | 0.5886 | 0.6643 | 0.2413 | 2.6105 | 0.0492 | 0.8031 | 0.9305 | 0.9536 |
| tox21_CDK_ECFP4 | 0.1575 | 0.1630 | 0.3299 | 0.4173 | 0.4404 | 0.4688 | 0.4452 | 3.9452 | 0.2074 | 0.6457 | 0.7177 | 0.7815 |
| tox21_RDKit_desc | 0.1541 | 0.1607 | 0.3608 | 0.4641 | 0.4435 | 0.5092 | 0.3973 | 3.6678 | 0.1815 | 0.6710 | 0.7448 | 0.7979 |
| VirusGO | 0.8571 | 0.0317 | 0.9127 | 0.9325 | 0.7487 | 0.9200 | 0.0476 | 0.4762 | 0.0694 | 0.9500 | 0.8212 | 0.9917 |
| VirusPseAAC | 0.3810 | 0.1508 | 0.5159 | 0.5811 | 0.3704 | 0.5957 | 0.3333 | 0.7619 | 0.1321 | 0.7968 | 0.6079 | 0.8949 |
| Water-quality | 0.0189 | 0.2817 | 0.4522 | 0.6207 | 0.5776 | 0.6193 | 0.2358 | 8.6509 | 0.2297 | 0.7344 | 0.7268 | 0.7608 |
| Yahoo_Arts | 0.3204 | 0.0500 | 0.4285 | 0.4900 | 0.4245 | 0.5152 | 0.3632 | 4.0681 | 0.1071 | 0.7030 | 0.8295 | 0.9013 |
| Yahoo_Business | 0.5820 | 0.0242 | 0.7491 | 0.8389 | 0.4336 | 0.7652 | 0.0856 | 1.6774 | 0.0329 | 0.9199 | 0.7957 | 0.9773 |
| Yahoo_Computers | 0.3960 | 0.0377 | 0.5376 | 0.6218 | 0.3733 | 0.5872 | 0.3052 | 3.1936 | 0.0921 | 0.7549 | 0.8149 | 0.9438 |
| Yahoo_Education | 0.2984 | 0.0370 | 0.4318 | 0.5048 | 0.3232 | 0.5338 | 0.3932 | 2.8969 | 0.0716 | 0.7022 | 0.8238 | 0.9437 |
| Yahoo_Entertainment | 0.4171 | 0.0485 | 0.5577 | 0.6316 | 0.4747 | 0.6272 | 0.2742 | 1.9560 | 0.0666 | 0.7875 | 0.9075 | 0.9388 |
| Yahoo_Health | 0.4788 | 0.0294 | 0.6447 | 0.7306 | 0.3419 | 0.6997 | 0.2020 | 2.5820 | 0.0534 | 0.8342 | 0.7812 | 0.9651 |
| Yahoo_Recreation | 0.4334 | 0.0442 | 0.5549 | 0.6192 | 0.5661 | 0.6234 | 0.2822 | 2.4996 | 0.0832 | 0.7731 | 0.9028 | 0.9223 |
| Yahoo_Reference | 0.4907 | 0.0231 | 0.5618 | 0.6002 | 0.3071 | 0.6326 | 0.2727 | 2.0112 | 0.0778 | 0.7955 | 0.7514 | 0.9623 |
| Yahoo_Science | 0.3250 | 0.0287 | 0.4374 | 0.5013 | 0.4087 | 0.5220 | 0.3624 | 5.6781 | 0.1463 | 0.6905 | 0.8835 | 0.9275 |
| Yahoo_Social | 0.5503 | 0.0199 | 0.6698 | 0.7341 | 0.4257 | 0.6920 | 0.2211 | 2.5000 | 0.0653 | 0.8283 | 0.8628 | 0.9699 |
| Yahoo_Society | 0.3416 | 0.0483 | 0.5130 | 0.6132 | 0.3804 | 0.5621 | 0.2886 | 3.9539 | 0.0965 | 0.7384 | 0.7833 | 0.8987 |
| yeast | 0.1446 | 0.1992 | 0.5206 | 0.6613 | 0.4417 | 0.6504 | 0.2231 | 6.0620 | 0.1525 | 0.7772 | 0.7372 | 0.8567 |
| Yelp | 0.5125 | 0.1410 | 0.7367 | 0.8277 | 0.7652 | 0.8023 | 0.1007 | 1.1575 | 0.1022 | 0.9208 | 0.8950 | 0.9219 |

Table 24: Detailed results for ExtraTrees for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5073 | 0.0343 | 0.6156 | 0.6735 | 0.6889 | 0.6882 | 0.3013 | 2.4969 | 0.2422 | 0.7602 | 0.9904 | 0.9906 |
| 3s-bbc1000 | 0.1389 | 0.2083 | 0.1806 | 0.2011 | 0.2037 | 0.2623 | 0.5556 | 2.0278 | 0.4428 | 0.6083 | 0.8678 | 0.8237 |
| 3s-guardian1000 | 0.1290 | 0.2366 | 0.1774 | 0.1987 | 0.1995 | 0.2414 | 0.4839 | 1.8065 | 0.3677 | 0.6430 | 0.8202 | 0.8419 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6471 | 2.4706 | 0.5706 | 0.4971 | 0.5006 | 0.6911 |
| 3s-reuters1000 | 0.0667 | 0.3222 | 0.1167 | 0.1373 | 0.1021 | 0.1471 | 0.8667 | 2.5000 | 0.7267 | 0.4000 | 0.7464 | 0.7111 |
| amphibians | 0.0556 | 0.2698 | 0.5247 | 0.7321 | 0.5937 | 0.7069 | 0.1667 | 2.6111 | 0.1333 | 0.8635 | 0.7372 | 0.8120 |
| bibtex | 0.1878 | 0.0120 | 0.3724 | 0.4665 | 0.3332 | 0.4902 | 0.4392 | 72.0892 | 0.5734 | 0.4287 | 0.9977 | 0.9977 |
| birds | 0.1795 | 0.1215 | 0.3978 | 0.5072 | 0.3637 | 0.4828 | 0.3590 | 5.2051 | 0.2775 | 0.6621 | 0.8305 | 0.9219 |
| bookmarks10% | 0.1891 | 0.0088 | 0.2195 | 0.2428 | 0.1118 | 0.2655 | 0.7369 | 105.1412 | 0.7645 | 0.2550 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.1831 | 0.2083 | 0.3661 | 0.1417 | 0.3337 | 0.3137 | 150.9412 | 0.4929 | 0.4214 | 0.7467 | 0.8881 |
| corel16k001 | 0.0000 | 0.0457 | 0.1311 | 0.2193 | 0.0336 | 0.2188 | 0.9477 | 117.8010 | 0.9764 | 0.0577 | 0.9996 | 0.9996 |
| Corel5k | 0.0000 | 0.0180 | 0.1384 | 0.2248 | 0.0274 | 0.2291 | 0.8480 | 163.0860 | 0.9351 | 0.1636 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0454 | 0.1387 | 0.2427 | 0.0890 | 0.2440 | 0.5482 | 906.3238 | 0.8450 | 0.1516 | 0.9927 | 0.9977 |
| emotions | 0.3667 | 0.1889 | 0.6111 | 0.7251 | 0.7058 | 0.7119 | 0.2167 | 1.6333 | 0.1811 | 0.8356 | 0.8779 | 0.8935 |
| enron | 0.0117 | 0.0636 | 0.4202 | 0.5788 | 0.1766 | 0.5650 | 0.3684 | 23.6667 | 0.3313 | 0.5498 | 0.8142 | 0.9701 |
| EukaryoteGO | 0.6611 | 0.0203 | 0.7960 | 0.8596 | 0.7575 | 0.8256 | 0.1688 | 0.8789 | 0.0524 | 0.8922 | 0.9933 | 0.9950 |
| EukaryotePseAAC | 0.1197 | 0.0737 | 0.3373 | 0.4379 | 0.1469 | 0.4392 | 0.5393 | 6.2780 | 0.5101 | 0.5224 | 0.9749 | 0.9775 |
| flags | 0.3500 | 0.2786 | 0.6236 | 0.7178 | 0.6092 | 0.7111 | 0.2000 | 3.5500 | 0.2258 | 0.8177 | 0.7571 | 0.8269 |
| foodtruck | 0.2927 | 0.1585 | 0.5051 | 0.6650 | 0.2823 | 0.5618 | 0.2439 | 3.4146 | 0.2782 | 0.7807 | 0.8037 | 0.9150 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9357 | 0.0098 | 0.9571 | 0.9679 | 0.8349 | 0.9625 | 0.0214 | 0.0929 | 0.0102 | 0.9863 | 0.8747 | 0.9996 |
| GnegativePseAAC | 0.5429 | 0.1062 | 0.6048 | 0.6393 | 0.3009 | 0.6149 | 0.3286 | 1.1429 | 0.2162 | 0.7725 | 0.7910 | 0.9424 |
| GpositiveGO | 0.8846 | 0.0481 | 0.8942 | 0.8990 | 0.8390 | 0.9038 | 0.0962 | 0.1538 | 0.0577 | 0.9471 | 0.9960 | 0.9956 |
| GpositivePseAAC | 0.5577 | 0.1875 | 0.5673 | 0.5721 | 0.4683 | 0.6061 | 0.4038 | 0.7308 | 0.3141 | 0.7516 | 0.9111 | 0.9149 |
| HumanGO | 0.6431 | 0.0395 | 0.7618 | 0.8213 | 0.6965 | 0.7795 | 0.1576 | 1.0772 | 0.1016 | 0.8830 | 0.9848 | 0.9884 |
| HumanPseAAC | 0.0000 | 0.3213 | 0.1665 | 0.2730 | 0.0991 | 0.2725 | 0.6913 | 5.1222 | 0.7334 | 0.4206 | 0.9997 | 0.9599 |
| Image | 0.4700 | 0.1860 | 0.6004 | 0.6676 | 0.6275 | 0.6265 | 0.2950 | 0.9450 | 0.2238 | 0.8035 | 0.8851 | 0.8847 |
| IMDB-ECC-F10% | 0.0000 | 0.2672 | 0.1409 | 0.2428 | 0.0922 | 0.2429 | 0.6331 | 12.3302 | 0.7315 | 0.3754 | 0.9885 | 0.9751 |
| IMDB-F10% | 0.0000 | 0.2650 | 0.1544 | 0.2628 | 0.0951 | 0.2629 | 0.5915 | 12.6819 | 0.7184 | 0.3855 | 0.9861 | 0.9746 |
| LLOG-F | 0.0984 | 0.0198 | 0.1546 | 0.1934 | 0.0568 | 0.2427 | 0.7623 | 29.1230 | 0.7539 | 0.2650 | 0.5936 | 0.9936 |
| mediamill10% | 0.6983 | 0.0048 | 0.9065 | 0.9483 | 0.4537 | 0.9423 | 0.0190 | 19.6912 | 0.0829 | 0.9151 | 0.8204 | 0.9989 |
| medical | 0.6429 | 0.0107 | 0.7687 | 0.8285 | 0.3098 | 0.8171 | 0.1735 | 4.2347 | 0.1183 | 0.8504 | 0.5535 | 0.9978 |
| Music | 0.2500 | 0.2083 | 0.5542 | 0.6889 | 0.6713 | 0.6835 | 0.2000 | 2.0500 | 0.2217 | 0.8172 | 0.8614 | 0.8682 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.0730 | 0.1620 | 0.2818 | 0.0244 | 0.2737 | 0.9734 | 47.6009 | 0.9992 | 0.1075 | 0.8888 | 0.9999 |
| OHSUMED-F | 0.2283 | 0.0584 | 0.4432 | 0.5542 | 0.4509 | 0.5682 | 0.3553 | 7.6892 | 0.4133 | 0.6154 | 0.9768 | 0.9798 |
| PlantGO | 0.6146 | 0.0460 | 0.7309 | 0.7836 | 0.6733 | 0.7665 | 0.2292 | 1.0000 | 0.1326 | 0.8423 | 0.9833 | 0.9832 |
| PlantPseAAC | 0.0000 | 0.3707 | 0.1660 | 0.2723 | 0.1163 | 0.2733 | 0.7245 | 4.1735 | 0.7161 | 0.4323 | 0.9832 | 0.9425 |
| rcv1subset1 | 0.1017 | 0.0315 | 0.3605 | 0.4876 | 0.2623 | 0.4817 | 0.4417 | 37.7800 | 0.4218 | 0.5022 | 0.9263 | 0.9868 |
| REUTERS-K500-EX2 | 0.1804 | 0.0127 | 0.2012 | 0.2135 | 0.1261 | 0.2690 | 0.7715 | 48.6701 | 0.7918 | 0.2569 | 0.7856 | 0.9991 |
| scene | 0.6432 | 0.0892 | 0.7365 | 0.7836 | 0.7720 | 0.7607 | 0.2241 | 0.7054 | 0.1330 | 0.8511 | 0.9541 | 0.9644 |
| sider_CDK_ECFP4 | 0.0141 | 0.2929 | 0.6234 | 0.7755 | 0.6079 | 0.7718 | 0.3380 | 20.2535 | 0.2516 | 0.6901 | 0.6658 | 0.7120 |
| sider_MordredDesc | 0.0141 | 0.2640 | 0.6275 | 0.7821 | 0.6158 | 0.7825 | 0.3169 | 19.7042 | 0.2028 | 0.7524 | 0.5873 | 0.7476 |
| sider_RDKit_desc | 0.0141 | 0.2859 | 0.6254 | 0.7794 | 0.5901 | 0.7735 | 0.2183 | 20.4577 | 0.2390 | 0.7346 | 0.9016 | 0.7615 |
| SLASHDOT-F | 0.4101 | 0.0417 | 0.5202 | 0.5802 | 0.3992 | 0.5988 | 0.3968 | 5.3624 | 0.3521 | 0.6489 | 0.7560 | 0.9830 |
| solar_flare-L3 | 0.2000 | 0.4000 | 0.4000 | 0.4800 | 0.3238 | 0.5000 | 0.4000 | 0.4000 | 0.4000 | 0.8000 | 0.3333 | 0.7600 |
| Stackex_chemistry | 0.0115 | 0.0200 | 0.1366 | 0.2100 | 0.0677 | 0.2109 | 0.7896 | 105.6110 | 0.8749 | 0.1556 | 0.9188 | 0.9988 |
| Stackex_chess | 0.0298 | 0.0109 | 0.1831 | 0.2740 | 0.0585 | 0.3095 | 0.6429 | 132.4881 | 0.7594 | 0.2332 | 0.5484 | 0.9975 |
| Stackex_coffee | 0.0000 | 0.0194 | 0.0145 | 0.0217 | 0.0081 | 0.0351 | 0.8696 | 78.6957 | 0.9275 | 0.1040 | 0.2579 | 0.9952 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2029 | 0.2744 | 0.1115 | 0.3209 | 0.6357 | 222.6213 | 0.7694 | 0.2353 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0123 | 0.1935 | 0.2790 | 0.0607 | 0.2690 | 0.6809 | 134.8744 | 0.7895 | 0.2165 | 0.7497 | 0.9986 |
| tmc2007-500 | 0.2469 | 0.0692 | 0.5718 | 0.7214 | 0.6052 | 0.6811 | 0.2339 | 4.0486 | 0.1445 | 0.7875 | 0.9592 | 0.9703 |
| tox21_CDK_ECFP4 | 0.1233 | 0.1889 | 0.3505 | 0.4726 | 0.3904 | 0.4635 | 0.4658 | 5.3493 | 0.4885 | 0.5701 | 0.8999 | 0.9008 |
| tox21_RDKit_desc | 0.0000 | 0.5160 | 0.1955 | 0.3304 | 0.2303 | 0.3259 | 0.6370 | 6.4110 | 0.6447 | 0.4526 | 0.9663 | 0.8830 |
| VirusGO | 0.8571 | 0.0317 | 0.9127 | 0.9321 | 0.7433 | 0.9231 | 0.0476 | 0.3810 | 0.0536 | 0.9563 | 0.8256 | 0.9917 |
| VirusPseAAC | 0.2857 | 0.1508 | 0.3810 | 0.4272 | 0.3146 | 0.5128 | 0.4286 | 0.8571 | 0.1810 | 0.7437 | 0.6939 | 0.9008 |
| Water-quality | 0.0189 | 0.2817 | 0.4279 | 0.6056 | 0.5314 | 0.5950 | 0.2547 | 8.7830 | 0.2543 | 0.7297 | 0.7284 | 0.7622 |
| Yahoo_Arts | 0.1909 | 0.0682 | 0.2891 | 0.3548 | 0.2100 | 0.3668 | 0.4993 | 10.0895 | 0.5572 | 0.5099 | 0.9341 | 0.9702 |
| Yahoo_Business | 0.5695 | 0.0271 | 0.7277 | 0.8179 | 0.3221 | 0.7253 | 0.0918 | 3.1720 | 0.2226 | 0.8869 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.4017 | 0.0416 | 0.5562 | 0.6456 | 0.2427 | 0.5888 | 0.3138 | 6.4365 | 0.3454 | 0.6951 | 0.8285 | 0.9848 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.0248 | 0.2952 | 0.4442 | 0.6047 | 0.2820 | 0.5961 | 0.2686 | 6.8595 | 0.2807 | 0.6954 | 0.8625 | 0.8307 |
| Yelp | 0.5563 | 0.1364 | 0.7550 | 0.8413 | 0.7617 | 0.8022 | 0.0768 | 1.1336 | 0.1049 | 0.9333 | 0.9169 | 0.9348 |

Table 25: Detailed results for LR for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0000 | 0.9392 | 0.0513 | 0.0976 | 0.0977 | 0.0976 | 0.9834 | 10.0342 | 0.5320 | 0.1482 | 0.2889 | 0.4440 |
| 3s-bbc1000 | 0.0000 | 0.7917 | 0.2046 | 0.3381 | 0.3371 | 0.3398 | 0.8056 | 2.7500 | 0.5130 | 0.4352 | 0.4927 | 0.5166 |
| 3s-guardian1000 | 0.0000 | 0.6344 | 0.2274 | 0.3634 | 0.3067 | 0.3587 | 0.8387 | 2.9677 | 0.5532 | 0.3914 | 0.4788 | 0.4598 |
| 3s-inter3000 | 0.0000 | 0.5392 | 0.2294 | 0.3703 | 0.2478 | 0.3678 | 0.8824 | 2.2941 | 0.4735 | 0.4147 | 0.3124 | 0.5470 |
| 3s-reuters1000 | 0.0000 | 0.6000 | 0.1833 | 0.2906 | 0.2042 | 0.2895 | 0.8667 | 3.3667 | 0.6550 | 0.3342 | 0.2707 | 0.3281 |
| amphibians | 0.0556 | 0.3175 | 0.5060 | 0.7270 | 0.4111 | 0.6610 | 0.3889 | 3.5556 | 0.2870 | 0.7091 | 0.3794 | 0.6067 |
| bibtex | 0.0000 | 0.2416 | 0.0282 | 0.0551 | 0.0138 | 0.0550 | 0.9932 | 117.6892 | 0.6567 | 0.0275 | 0.2921 | 0.4017 |
| birds | 0.0000 | 0.3482 | 0.1473 | 0.2483 | 0.0984 | 0.2500 | 0.9487 | 11.9744 | 0.5441 | 0.2032 | 0.3351 | 0.4982 |
| bookmarks10% | 0.0000 | 0.2056 | 0.0222 | 0.0438 | 0.0102 | 0.0435 | 0.9749 | 123.7175 | 0.5217 | 0.0395 | 0.3324 | 0.5065 |
| CAL500 | 0.0000 | 0.3238 | 0.2689 | 0.4236 | 0.1812 | 0.4230 | 0.8627 | 153.6471 | 0.5755 | 0.2269 | 0.5692 | 0.7053 |
| corel16k001 | 0.0000 | 0.3254 | 0.0390 | 0.0747 | 0.0275 | 0.0745 | 0.9898 | 105.1881 | 0.5536 | 0.0544 | 0.5946 | 0.6057 |
| Corel5k | 0.0000 | 0.2628 | 0.0268 | 0.0520 | 0.0138 | 0.0520 | 1.0000 | 277.3500 | 0.6080 | 0.0174 | 0.3138 | 0.5081 |
| delicious | 0.0000 | 0.2690 | 0.0489 | 0.0930 | 0.0276 | 0.0931 | 0.9901 | 925.7502 | 0.6170 | 0.0254 | 0.5322 | 0.5621 |
| emotions | 0.0000 | 0.6944 | 0.3044 | 0.4675 | 0.4608 | 0.4658 | 0.9833 | 4.2167 | 0.8573 | 0.3250 | 0.2160 | 0.2196 |
| enron | 0.0000 | 0.1941 | 0.1962 | 0.3314 | 0.0696 | 0.3248 | 0.9825 | 39.7135 | 0.5415 | 0.1103 | 0.3074 | 0.4659 |
| EukaryoteGO | 0.0000 | 0.2873 | 0.1393 | 0.2415 | 0.0762 | 0.2404 | 1.0000 | 15.0039 | 0.6985 | 0.0820 | 0.0755 | 0.3152 |
| EukaryotePseAAC | 0.0000 | 0.1608 | 0.2003 | 0.3133 | 0.0597 | 0.3140 | 0.8507 | 5.8327 | 0.2583 | 0.3495 | 0.3478 | 0.7439 |
| flags | 0.0000 | 0.4857 | 0.4631 | 0.6346 | 0.5677 | 0.6304 | 0.8500 | 5.4000 | 0.6933 | 0.4627 | 0.4227 | 0.3051 |
| foodtruck | 0.0000 | 0.3598 | 0.2542 | 0.4289 | 0.1881 | 0.4197 | 0.9512 | 8.0244 | 0.6359 | 0.2537 | 0.3355 | 0.3792 |
| genbase | 0.0000 | 0.3952 | 0.0891 | 0.1648 | 0.1030 | 0.1637 | 1.0000 | 20.5224 | 0.7815 | 0.0586 | 0.1356 | 0.2181 |
| GnegativeGO | 0.0000 | 0.4982 | 0.1864 | 0.3063 | 0.1703 | 0.3042 | 1.0000 | 6.7071 | 0.9588 | 0.1360 | 0.0696 | 0.0509 |
| GnegativePseAAC | 0.0000 | 0.4455 | 0.2057 | 0.3316 | 0.1802 | 0.3302 | 0.9429 | 4.2000 | 0.5999 | 0.2491 | 0.2575 | 0.3913 |
| GpositiveGO | 0.0000 | 0.4519 | 0.3622 | 0.5281 | 0.4165 | 0.5155 | 0.9231 | 2.4423 | 0.8526 | 0.3446 | 0.2380 | 0.1881 |
| GpositivePseAAC | 0.4038 | 0.2308 | 0.5385 | 0.5983 | 0.4549 | 0.5932 | 0.5769 | 1.3269 | 0.4615 | 0.6154 | 0.7574 | 0.6472 |
| HumanGO | 0.0000 | 0.3254 | 0.1745 | 0.2875 | 0.1059 | 0.2847 | 0.9904 | 9.4502 | 0.7045 | 0.1261 | 0.0877 | 0.2915 |
| HumanPseAAC | 0.0000 | 0.2242 | 0.2068 | 0.3128 | 0.0863 | 0.3107 | 0.9068 | 5.2797 | 0.3788 | 0.2790 | 0.4215 | 0.6297 |
| Image | 0.0000 | 0.7510 | 0.2405 | 0.3884 | 0.3865 | 0.3869 | 0.9700 | 3.2550 | 0.8550 | 0.2921 | 0.2455 | 0.2532 |
| IMDB-ECC-F10% | 0.0000 | 0.2815 | 0.1502 | 0.2602 | 0.0824 | 0.2582 | 0.9140 | 12.1132 | 0.3407 | 0.2212 | 0.4815 | 0.6602 |
| IMDB-F10% | 0.0000 | 0.2543 | 0.1706 | 0.2899 | 0.0837 | 0.2874 | 0.8550 | 15.0994 | 0.4280 | 0.2317 | 0.4364 | 0.5937 |
| LLOG-F | 0.1639 | 0.0168 | 0.1960 | 0.2166 | 0.0521 | 0.2870 | 0.7459 | 28.7131 | 0.7876 | 0.2742 | 0.5981 | 0.9978 |
| mediamill10% | 0.0736 | 0.0303 | 0.4723 | 0.6362 | 0.0895 | 0.5932 | 0.2518 | 58.7981 | 0.4434 | 0.5418 | 0.8127 | 0.9937 |
| medical | 0.0000 | 0.2331 | 0.0836 | 0.1520 | 0.0353 | 0.1504 | 1.0000 | 34.1122 | 0.7669 | 0.0350 | 0.0728 | 0.2468 |
| Music | 0.0000 | 0.6722 | 0.3256 | 0.4908 | 0.4881 | 0.4916 | 0.9000 | 4.2167 | 0.8036 | 0.3665 | 0.2535 | 0.2700 |
| NUS-WIDE-bow10% | 0.0000 | 0.1144 | 0.1338 | 0.2390 | 0.0293 | 0.2360 | 0.9724 | 35.0000 | 0.3132 | 0.1365 | 0.3356 | 0.6632 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.1719 | 0.0985 | 0.1804 | 0.0318 | 0.1781 | 0.9553 | 45.2169 | 0.6014 | 0.0863 | 0.5653 | 0.6834 |
| OHSUMED-F | 0.0000 | 0.2145 | 0.1591 | 0.2619 | 0.0632 | 0.2609 | 0.9792 | 14.4286 | 0.5783 | 0.1318 | 0.3723 | 0.4285 |
| PlantGO | 0.0000 | 0.4158 | 0.1496 | 0.2499 | 0.1206 | 0.2457 | 0.9896 | 8.6875 | 0.7768 | 0.1297 | 0.1030 | 0.2207 |
| PlantPseAAC | 0.0000 | 0.3367 | 0.1787 | 0.2855 | 0.1121 | 0.2800 | 0.9592 | 6.3571 | 0.5521 | 0.2134 | 0.3210 | 0.4534 |
| rcv1subset1 | 0.0000 | 0.1957 | 0.0877 | 0.1595 | 0.0331 | 0.1604 | 0.9750 | 75.9483 | 0.5559 | 0.0662 | 0.2312 | 0.4874 |
| REUTERS-K500-EX2 | 0.3299 | 0.0119 | 0.4133 | 0.4631 | 0.2446 | 0.5007 | 0.5069 | 32.3299 | 0.5319 | 0.4912 | 0.7839 | 0.9972 |
| scene | 0.0000 | 0.7925 | 0.1844 | 0.3108 | 0.3090 | 0.3105 | 0.9917 | 3.8589 | 0.8943 | 0.2287 | 0.2538 | 0.2524 |
| sider_CDK_ECFP4 | 0.0070 | 0.3010 | 0.6224 | 0.7720 | 0.6032 | 0.7698 | 0.9014 | 25.4225 | 0.7766 | 0.4387 | 0.4720 | 0.2741 |
| sider_MordredDesc | 0.0141 | 0.3015 | 0.6227 | 0.7724 | 0.6084 | 0.7697 | 0.6831 | 25.4789 | 0.8119 | 0.4293 | 0.4613 | 0.2449 |
| sider_RDKit_desc | 0.0141 | 0.3088 | 0.6175 | 0.7685 | 0.6013 | 0.7654 | 0.8521 | 25.6761 | 0.8274 | 0.4199 | 0.4655 | 0.2372 |
| SLASHDOT-F | 0.4101 | 0.0417 | 0.5202 | 0.5802 | 0.3992 | 0.5988 | 0.3968 | 5.3624 | 0.3521 | 0.6489 | 0.7560 | 0.9830 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.6000 | 1.2000 | 0.7000 | 0.6000 | 0.6111 | 0.4800 |
| Stackex_chemistry | 0.0000 | 0.1740 | 0.0393 | 0.0752 | 0.0130 | 0.0745 | 0.9597 | 105.2522 | 0.4695 | 0.0694 | 0.2397 | 0.5508 |
| Stackex_chess | 0.0000 | 0.3486 | 0.0213 | 0.0417 | 0.0151 | 0.0415 | 0.9821 | 172.5833 | 0.8134 | 0.0257 | 0.3423 | 0.5853 |
| Stackex_coffee | 0.0000 | 0.0212 | 0.0543 | 0.0915 | 0.0159 | 0.1176 | 0.7826 | 73.7826 | 0.8377 | 0.1619 | 0.2559 | 0.9893 |
| Stackex_cooking | 0.0000 | 0.1993 | 0.0166 | 0.0326 | 0.0067 | 0.0325 | 0.9729 | 270.9961 | 0.5630 | 0.0331 | 0.3078 | 0.5066 |
| Stackex_philosophy | 0.0000 | 0.1643 | 0.0373 | 0.0718 | 0.0116 | 0.0712 | 0.9975 | 139.7412 | 0.4525 | 0.0376 | 0.2298 | 0.5580 |
| tmc2007-500 | 0.0000 | 0.1971 | 0.2506 | 0.3961 | 0.0949 | 0.3921 | 0.9804 | 15.4063 | 0.6124 | 0.1386 | 0.3005 | 0.4008 |
| tox21_CDK_ECFP4 | 0.0000 | 0.5163 | 0.1979 | 0.3370 | 0.2433 | 0.3273 | 0.9178 | 8.1781 | 0.6339 | 0.2532 | 0.4420 | 0.3626 |
| tox21_RDKit_desc | 0.0000 | 0.4966 | 0.2011 | 0.3432 | 0.2369 | 0.3308 | 0.9212 | 8.1678 | 0.6405 | 0.2576 | 0.4392 | 0.3626 |
| VirusGO | 0.0000 | 0.7063 | 0.2000 | 0.3345 | 0.2560 | 0.3308 | 1.0000 | 4.0000 | 0.7800 | 0.2546 | 0.1946 | 0.2428 |
| VirusPseAAC | 0.0476 | 0.3175 | 0.3690 | 0.4991 | 0.1909 | 0.4595 | 1.0000 | 3.2381 | 0.6726 | 0.2806 | 0.3110 | 0.3512 |
| Water-quality | 0.0000 | 0.6220 | 0.3776 | 0.5484 | 0.5371 | 0.5482 | 0.6415 | 11.9434 | 0.6058 | 0.4411 | 0.3622 | 0.3944 |
| Yahoo_Arts | 0.1909 | 0.0682 | 0.2891 | 0.3548 | 0.2100 | 0.3668 | 0.4993 | 10.0895 | 0.5572 | 0.5099 | 0.9341 | 0.9702 |
| Yahoo_Business | 0.0544 | 0.0704 | 0.4012 | 0.5575 | 0.0517 | 0.5439 | 0.7683 | 8.1738 | 0.1915 | 0.4356 | 0.3834 | 0.7575 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.4017 | 0.0416 | 0.5562 | 0.6456 | 0.2427 | 0.5888 | 0.3138 | 6.4365 | 0.3454 | 0.6951 | 0.8285 | 0.9848 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.0000 | 0.2764 | 0.1015 | 0.1838 | 0.0500 | 0.1833 | 0.9826 | 11.6812 | 0.3492 | 0.1578 | 0.2974 | 0.6528 |
| Yahoo_Science | 0.0000 | 0.2580 | 0.0949 | 0.1723 | 0.0474 | 0.1713 | 0.9518 | 15.1275 | 0.3395 | 0.1755 | 0.3312 | 0.6573 |
| Yahoo_Social | 0.0000 | 0.1143 | 0.1845 | 0.3072 | 0.0397 | 0.3016 | 0.9736 | 8.0536 | 0.1794 | 0.2770 | 0.3647 | 0.7993 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.0000 | 0.3616 | 0.4222 | 0.5922 | 0.3532 | 0.5877 | 0.5620 | 10.6240 | 0.4401 | 0.4993 | 0.4123 | 0.5717 |
| Yelp | 0.0030 | 0.6407 | 0.3593 | 0.5287 | 0.4990 | 0.5287 | 0.9163 | 3.4397 | 0.7936 | 0.3968 | 0.3710 | 0.2430 |

Table 26: Detailed results for Random for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.2879 | 0.0573 | 0.4750 | 0.5723 | 0.6051 | 0.5618 | 0.3418 | 2.5814 | 0.1412 | 0.7329 | 0.9293 | 0.8991 |
| 3s-bbc1000 | 0.2222 | 0.1991 | 0.2546 | 0.2745 | 0.3261 | 0.3385 | 0.5556 | 1.8056 | 0.3329 | 0.6231 | 0.7913 | 0.7585 |
| 3s-guardian1000 | 0.2258 | 0.2634 | 0.3629 | 0.4273 | 0.3676 | 0.4096 | 0.4194 | 1.5484 | 0.2790 | 0.6833 | 0.6899 | 0.7624 |
| 3s-inter3000 | 0.0000 | 0.2059 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.4706 | 0.5206 | 0.3667 | 0.3341 | 0.5833 |
| 3s-reuters1000 | 0.1000 | 0.2556 | 0.1000 | 0.1000 | 0.0779 | 0.1154 | 0.7667 | 2.3667 | 0.4900 | 0.4639 | 0.5875 | 0.5217 |
| amphibians | 0.0556 | 0.3175 | 0.4626 | 0.6887 | 0.5005 | 0.6226 | 0.2222 | 2.7222 | 0.1185 | 0.8413 | 0.6453 | 0.7912 |
| bibtex | 0.0284 | 0.0237 | 0.2630 | 0.4096 | 0.3287 | 0.3814 | 0.4932 | 65.1703 | 0.3147 | 0.3816 | 0.7693 | 0.7555 |
| birds | 0.1538 | 0.1026 | 0.3695 | 0.4758 | 0.3497 | 0.4648 | 0.3333 | 6.2051 | 0.2359 | 0.6355 | 0.6187 | 0.7547 |
| bookmarks10% | 0.0000 | 0.0361 | 0.1007 | 0.1706 | 0.1114 | 0.1301 | 0.7882 | 92.3326 | 0.4427 | 0.2438 | 0.7079 | 0.6957 |
| CAL500 | 0.0000 | 0.2035 | 0.2089 | 0.3638 | 0.1407 | 0.3331 | 0.1569 | 150.6471 | 0.3441 | 0.4146 | 0.5486 | 0.7753 |
| corel16k001 | 0.0073 | 0.0286 | 0.0986 | 0.1610 | 0.0781 | 0.1682 | 0.7313 | 72.9797 | 0.4343 | 0.2683 | 0.9089 | 0.9250 |
| Corel5k | 0.0040 | 0.0160 | 0.0839 | 0.1392 | 0.0346 | 0.1439 | 0.7480 | 160.6820 | 0.7330 | 0.1992 | 0.6644 | 0.9854 |
| delicious | 0.0000 | 0.0672 | 0.1001 | 0.1816 | 0.1268 | 0.1840 | 0.5289 | 879.1914 | 0.6410 | 0.2163 | 0.9765 | 0.9832 |
| emotions | 0.3167 | 0.2000 | 0.5528 | 0.6555 | 0.6528 | 0.6667 | 0.2833 | 2.0000 | 0.2086 | 0.7952 | 0.8218 | 0.8255 |
| enron | 0.1170 | 0.0559 | 0.4659 | 0.6199 | 0.2036 | 0.5915 | 0.2924 | 21.8246 | 0.1767 | 0.6361 | 0.4788 | 0.8281 |
| EukaryotеGO | 0.6482 | 0.0214 | 0.7977 | 0.8703 | 0.7717 | 0.8220 | 0.1778 | 0.5902 | 0.0195 | 0.8960 | 0.9781 | 0.9868 |
| EukaryotePseAAC | 0.1532 | 0.0735 | 0.3160 | 0.3946 | 0.1413 | 0.3977 | 0.5689 | 3.7362 | 0.1683 | 0.5731 | 0.5728 | 0.8536 |
| flags | 0.3500 | 0.2500 | 0.6486 | 0.7433 | 0.6405 | 0.7407 | 0.1500 | 3.6500 | 0.2283 | 0.8267 | 0.6379 | 0.8018 |
| foodtruck | 0.1707 | 0.1545 | 0.4456 | 0.6041 | 0.2820 | 0.5581 | 0.2439 | 3.3415 | 0.1546 | 0.7715 | 0.5636 | 0.7820 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 1.0000 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9571 | 0.9714 | 0.8361 | 0.9595 | 0.0214 | 0.1000 | 0.0060 | 0.9860 | 0.8720 | 0.9954 |
| GnegativePseAAC | 0.6357 | 0.0795 | 0.6929 | 0.7241 | 0.3975 | 0.7063 | 0.2643 | 0.7357 | 0.1014 | 0.8263 | 0.6866 | 0.9226 |
| GpositiveGO | 0.8846 | 0.0529 | 0.8942 | 0.8990 | 0.8311 | 0.8952 | 0.0962 | 0.2500 | 0.0801 | 0.9327 | 0.9654 | 0.9620 |
| GpositivePseAAC | 0.4808 | 0.2308 | 0.5673 | 0.6075 | 0.4555 | 0.5862 | 0.4038 | 0.6923 | 0.2756 | 0.7580 | 0.7872 | 0.8780 |
| HumanGO | 0.6013 | 0.0425 | 0.7525 | 0.8260 | 0.7272 | 0.7741 | 0.1736 | 0.9068 | 0.0468 | 0.8839 | 0.9014 | 0.9567 |
| HumanPseAAC | 0.2476 | 0.0838 | 0.2819 | 0.2999 | 0.1474 | 0.3540 | 0.5723 | 2.7524 | 0.1880 | 0.5898 | 0.6325 | 0.8249 |
| Image | 0.5050 | 0.1680 | 0.6025 | 0.6529 | 0.6360 | 0.6316 | 0.2950 | 0.9700 | 0.2108 | 0.8032 | 0.8397 | 0.8402 |
| IMDB-ECC-F10% | 0.0000 | 0.3557 | 0.1337 | 0.2363 | 0.1008 | 0.2337 | 0.8648 | 11.5723 | 0.3222 | 0.2900 | 0.5274 | 0.6731 |
| IMDB-F10% | 0.0000 | 0.3231 | 0.1465 | 0.2550 | 0.1063 | 0.2524 | 0.6620 | 12.8119 | 0.3452 | 0.3665 | 0.4852 | 0.6621 |
| LLOG-F | 0.1475 | 0.0211 | 0.2254 | 0.2725 | 0.0627 | 0.2982 | 0.7049 | 29.1311 | 0.4041 | 0.3207 | 0.4235 | 0.6715 |
| mediamill10% | 0.9644 | 0.0004 | 0.9928 | 0.9964 | 0.8139 | 0.9960 | 0.0024 | 3.4964 | 0.0001 | 0.9976 | 0.8214 | 0.9996 |
| medical | 0.6837 | 0.0086 | 0.8044 | 0.8592 | 0.3307 | 0.8527 | 0.1327 | 3.9694 | 0.0775 | 0.8753 | 0.4691 | 0.9394 |
| Music | 0.2333 | 0.2333 | 0.5111 | 0.6360 | 0.6312 | 0.6471 | 0.2333 | 2.3500 | 0.2266 | 0.7778 | 0.7944 | 0.8010 |
| NUS-WIDE-bow10% | 0.0466 | 0.0375 | 0.2406 | 0.3554 | 0.0556 | 0.3470 | 0.5514 | 18.7046 | 0.1793 | 0.4762 | 0.7050 | 0.8941 |
| NUS-WIDE-cVLADplus10% | 0.0771 | 0.0363 | 0.2852 | 0.4010 | 0.0911 | 0.3927 | 0.5400 | 16.9229 | 0.1560 | 0.5101 | 0.7218 | 0.9041 |
| OHSUMED-F | 0.1651 | 0.0706 | 0.4168 | 0.5501 | 0.4242 | 0.5487 | 0.3719 | 7.0273 | 0.2287 | 0.6162 | 0.7760 | 0.8066 |
| PlantGO | 0.6562 | 0.0425 | 0.7361 | 0.7717 | 0.6453 | 0.7742 | 0.2292 | 1.2500 | 0.0942 | 0.8338 | 0.8543 | 0.9172 |
| PlantPseAAC | 0.0816 | 0.1310 | 0.1551 | 0.1974 | 0.1578 | 0.2451 | 0.6939 | 3.4694 | 0.2983 | 0.4733 | 0.5877 | 0.7252 |
| rcv1subset1 | 0.1117 | 0.0286 | 0.3322 | 0.4466 | 0.2437 | 0.4443 | 0.4033 | 16.2067 | 0.1025 | 0.6143 | 0.8974 | 0.9659 |
| REUTERS-K500-EX2 | 0.1873 | 0.0196 | 0.3629 | 0.4645 | 0.2524 | 0.4247 | 0.6014 | 30.0017 | 0.3350 | 0.4319 | 0.6302 | 0.8163 |
| scene | 0.6515 | 0.0871 | 0.7255 | 0.7624 | 0.7677 | 0.7568 | 0.2199 | 0.7178 | 0.1225 | 0.8451 | 0.9078 | 0.9081 |
| sider_CDK_ECFP4 | 0.0000 | 0.2788 | 0.5862 | 0.7593 | 0.6382 | 0.7550 | 0.1197 | 18.7887 | 0.1389 | 0.8289 | 0.5551 | 0.7859 |
| sider_MordredDesc | 0.0141 | 0.2507 | 0.5938 | 0.7585 | 0.6260 | 0.7741 | 0.2113 | 19.4085 | 0.1536 | 0.7933 | 0.5513 | 0.7812 |
| sider_RDKit_desc | 0.0070 | 0.2840 | 0.5644 | 0.7428 | 0.6107 | 0.7409 | 0.1549 | 19.2394 | 0.1605 | 0.7996 | 0.5574 | 0.7765 |
| SLASHDOT-F | 0.3677 | 0.0462 | 0.4799 | 0.5395 | 0.3983 | 0.5556 | 0.3968 | 3.3466 | 0.1839 | 0.6870 | 0.7078 | 0.9440 |
| solar_flare-L3 | 0.2000 | 0.4000 | 0.4000 | 0.4800 | 0.3238 | 0.5000 | 0.8000 | 0.8000 | 0.4000 | 0.6000 | 0.2222 | 0.6800 |
| Stackex_chemistry | 0.0000 | 0.0594 | 0.0883 | 0.1602 | 0.0904 | 0.1584 | 0.8040 | 98.0072 | 0.5195 | 0.1568 | 0.6020 | 0.6716 |
| Stackex_chess | 0.0119 | 0.0134 | 0.1614 | 0.2594 | 0.0636 | 0.2789 | 0.7381 | 140.2917 | 0.6674 | 0.1715 | 0.4507 | 0.7928 |
| Stackex_coffee | 0.0870 | 0.0212 | 0.1913 | 0.2657 | 0.0581 | 0.2857 | 0.6087 | 55.7826 | 0.4136 | 0.4227 | 0.2514 | 0.9782 |
| Stackex_cooking | 0.0551 | 0.0084 | 0.2443 | 0.3693 | 0.1560 | 0.3358 | 0.5198 | 162.3507 | 0.4659 | 0.3982 | 0.9145 | 0.9909 |
| Stackex_philosophy | 0.0000 | 0.0297 | 0.1356 | 0.2347 | 0.0901 | 0.2288 | 0.7111 | 109.7010 | 0.4090 | 0.2164 | 0.5549 | 0.7795 |
| tmc2007-500 | 0.1143 | 0.1021 | 0.4896 | 0.6542 | 0.5549 | 0.6162 | 0.3311 | 4.0923 | 0.0890 | 0.7470 | 0.8912 | 0.9094 |
| tox21_CDK_ECFP4 | 0.0925 | 0.2026 | 0.3247 | 0.4538 | 0.4012 | 0.4629 | 0.4623 | 4.9144 | 0.2760 | 0.6019 | 0.6582 | 0.7107 |
| tox21_RDKit_desc | 0.1541 | 0.1652 | 0.3790 | 0.4898 | 0.4339 | 0.5139 | 0.4247 | 4.2500 | 0.2215 | 0.6455 | 0.7049 | 0.7558 |
| VirusGO | 0.7619 | 0.0476 | 0.8730 | 0.9121 | 0.7123 | 0.8846 | 0.0476 | 0.3810 | 0.0303 | 0.9563 | 0.7890 | 0.9608 |
| VirusPseAAC | 0.2381 | 0.1429 | 0.3571 | 0.4163 | 0.4722 | 0.5263 | 0.3810 | 0.8571 | 0.1714 | 0.7778 | 0.6295 | 0.8594 |
| Water-quality | 0.0094 | 0.3026 | 0.3906 | 0.5659 | 0.4994 | 0.5645 | 0.2925 | 9.4717 | 0.2800 | 0.6935 | 0.6535 | 0.7050 |
| Yahoo_Arts | 0.3204 | 0.0500 | 0.4285 | 0.4900 | 0.4245 | 0.5152 | 0.3632 | 4.0681 | 0.1071 | 0.7030 | 0.8295 | 0.9013 |
| Yahoo_Business | 0.5820 | 0.0242 | 0.7491 | 0.8389 | 0.4336 | 0.7652 | 0.0856 | 1.6774 | 0.0329 | 0.9199 | 0.7957 | 0.9773 |
| Yahoo_Computers | 0.3960 | 0.0377 | 0.5376 | 0.6218 | 0.3733 | 0.5872 | 0.3052 | 3.1936 | 0.0921 | 0.7549 | 0.8149 | 0.9438 |
| Yahoo_Education | 0.2984 | 0.0370 | 0.4318 | 0.5048 | 0.3232 | 0.5338 | 0.3932 | 2.8969 | 0.0716 | 0.7022 | 0.8238 | 0.9437 |
| Yahoo_Entertainment | 0.4171 | 0.0485 | 0.5577 | 0.6316 | 0.4747 | 0.6272 | 0.2742 | 1.9560 | 0.0666 | 0.7875 | 0.9075 | 0.9388 |
| Yahoo_Health | 0.4788 | 0.0294 | 0.6447 | 0.7306 | 0.3419 | 0.6997 | 0.2020 | 2.5820 | 0.0534 | 0.8342 | 0.7812 | 0.9651 |
| Yahoo_Recreation | 0.4334 | 0.0442 | 0.5549 | 0.6192 | 0.5661 | 0.6234 | 0.2822 | 2.4996 | 0.0832 | 0.7731 | 0.9028 | 0.9223 |
| Yahoo_Reference | 0.4907 | 0.0231 | 0.5618 | 0.6002 | 0.3071 | 0.6326 | 0.2727 | 2.0112 | 0.0778 | 0.7955 | 0.7514 | 0.9623 |
| Yahoo_Science | 0.3250 | 0.0287 | 0.4374 | 0.5013 | 0.4087 | 0.5220 | 0.3624 | 5.6781 | 0.1463 | 0.6905 | 0.8835 | 0.9275 |
| Yahoo_Social | 0.5503 | 0.0199 | 0.6698 | 0.7341 | 0.4257 | 0.6920 | 0.2211 | 2.5000 | 0.0653 | 0.8283 | 0.8628 | 0.9699 |
| Yahoo_Society | 0.3416 | 0.0483 | 0.5130 | 0.6132 | 0.3804 | 0.5621 | 0.2886 | 3.9539 | 0.0965 | 0.7384 | 0.7833 | 0.8987 |
| yeast | 0.2397 | 0.1845 | 0.5700 | 0.6926 | 0.4208 | 0.6813 | 0.2603 | 6.1777 | 0.1701 | 0.7522 | 0.7077 | 0.8329 |
| Yelp | 0.5105 | 0.1436 | 0.7418 | 0.8339 | 0.7730 | 0.8052 | 0.1117 | 1.1655 | 0.1081 | 0.9175 | 0.8686 | 0.9043 |

Table 27: Detailed results for AdaBoost for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5073 | 0.0343 | 0.6156 | 0.6735 | 0.6889 | 0.6882 | 0.3013 | 2.4969 | 0.2422 | 0.7602 | 0.9904 | 0.9906 |
| 3s-bbc1000 | 0.2778 | 0.1667 | 0.2917 | 0.2984 | 0.3826 | 0.3793 | 0.4167 | 1.2500 | 0.2417 | 0.7356 | 0.8836 | 0.8669 |
| 3s-guardian1000 | 0.3226 | 0.1882 | 0.3710 | 0.3937 | 0.2856 | 0.4262 | 0.4516 | 1.6129 | 0.2935 | 0.6769 | 0.7949 | 0.8206 |
| 3s-inter3000 | 0.0000 | 0.1961 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.5882 | 0.4956 | 0.4088 | 0.4435 | 0.6151 |
| 3s-reuters1000 | 0.2333 | 0.1778 | 0.2333 | 0.2333 | 0.2385 | 0.3043 | 0.6333 | 1.9000 | 0.4358 | 0.5528 | 0.7704 | 0.7435 |
| amphibians | 0.0000 | 0.3492 | 0.2815 | 0.4342 | 0.4149 | 0.5217 | 0.3889 | 3.0556 | 0.1926 | 0.7392 | 0.5807 | 0.7248 |
| bibtex | 0.1878 | 0.0120 | 0.3724 | 0.4665 | 0.3332 | 0.4902 | 0.4392 | 72.0892 | 0.5734 | 0.4287 | 0.9977 | 0.9977 |
| birds | 0.1026 | 0.0864 | 0.1880 | 0.2269 | 0.1665 | 0.2889 | 0.4103 | 4.5897 | 0.2215 | 0.6890 | 0.8306 | 0.9212 |
| bookmarks10% | 0.1891 | 0.0088 | 0.2195 | 0.2428 | 0.1118 | 0.2655 | 0.7369 | 105.1412 | 0.7645 | 0.2550 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.1473 | 0.1274 | 0.2344 | 0.0497 | 0.2206 | 0.4314 | 149.4902 | 0.4115 | 0.4205 | 0.7030 | 0.8581 |
| corel16k001 | 0.0000 | 0.0457 | 0.1311 | 0.2193 | 0.0336 | 0.2188 | 0.9477 | 117.8010 | 0.9764 | 0.0577 | 0.9996 | 0.9996 |
| Corel5k | 0.0000 | 0.0180 | 0.1384 | 0.2248 | 0.0274 | 0.2291 | 0.8480 | 163.0860 | 0.9351 | 0.1636 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0454 | 0.1387 | 0.2427 | 0.0890 | 0.2440 | 0.5482 | 906.3238 | 0.8450 | 0.1516 | 0.9927 | 0.9977 |
| emotions | 0.1667 | 0.2028 | 0.4111 | 0.5079 | 0.5492 | 0.5922 | 0.3000 | 1.7000 | 0.1866 | 0.7897 | 0.8594 | 0.8724 |
| enron | 0.1462 | 0.0521 | 0.4796 | 0.6192 | 0.1782 | 0.5931 | 0.3216 | 24.1345 | 0.3680 | 0.6036 | 0.8249 | 0.9804 |
| EukaryotеGO | 0.6611 | 0.0203 | 0.7960 | 0.8596 | 0.7575 | 0.8256 | 0.1688 | 0.8789 | 0.0524 | 0.8922 | 0.9933 | 0.9950 |
| EukaryotePseAAC | 0.1197 | 0.0737 | 0.3373 | 0.4379 | 0.1469 | 0.4392 | 0.5393 | 6.2780 | 0.5101 | 0.5224 | 0.9749 | 0.9775 |
| flags | 0.3000 | 0.2500 | 0.5475 | 0.6709 | 0.5627 | 0.6847 | 0.1000 | 3.5000 | 0.1817 | 0.8580 | 0.7467 | 0.8429 |
| foodtruck | 0.2439 | 0.1443 | 0.3649 | 0.4787 | 0.1232 | 0.4580 | 0.3415 | 3.1707 | 0.1639 | 0.7290 | 0.7104 | 0.8431 |
| genbase | 0.9552 | 0.0017 | 0.9826 | 0.9913 | 0.6222 | 0.9814 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9357 | 0.0098 | 0.9607 | 0.9732 | 0.8373 | 0.9625 | 0.0286 | 0.1643 | 0.0209 | 0.9779 | 0.8744 | 0.9993 |
| GnegativePseAAC | 0.5357 | 0.0679 | 0.5429 | 0.5464 | 0.2219 | 0.6696 | 0.2714 | 0.8643 | 0.1447 | 0.8161 | 0.8249 | 0.9570 |
| GpositiveGO | 0.8846 | 0.0529 | 0.8942 | 0.8990 | 0.9095 | 0.8952 | 0.0962 | 0.2308 | 0.0865 | 0.9375 | 0.9935 | 0.9940 |
| GpositivePseAAC | 0.5385 | 0.1587 | 0.5385 | 0.5385 | 0.4808 | 0.6292 | 0.3462 | 0.6538 | 0.2436 | 0.7869 | 0.9287 | 0.9268 |
| HumanGO | 0.6431 | 0.0395 | 0.7618 | 0.8213 | 0.6965 | 0.7795 | 0.1576 | 1.0772 | 0.1016 | 0.8830 | 0.9848 | 0.9884 |
| HumanPseAAC | 0.2990 | 0.0994 | 0.4113 | 0.4678 | 0.1923 | 0.4470 | 0.5338 | 3.3859 | 0.4777 | 0.5839 | 0.9532 | 0.9541 |
| Image | 0.4150 | 0.1570 | 0.4542 | 0.4739 | 0.5542 | 0.5602 | 0.2750 | 0.8100 | 0.1767 | 0.8267 | 0.9017 | 0.9025 |
| IMDB-ECC-F10% | 0.0000 | 0.2672 | 0.1409 | 0.2428 | 0.0922 | 0.2429 | 0.6331 | 12.3302 | 0.7315 | 0.3754 | 0.9885 | 0.9751 |
| IMDB-F10% | 0.0000 | 0.2650 | 0.1544 | 0.2628 | 0.0951 | 0.2629 | 0.5915 | 12.6819 | 0.7184 | 0.3855 | 0.9861 | 0.9746 |
| LLOG-F | 0.0410 | 0.0173 | 0.0635 | 0.0745 | 0.0318 | 0.1222 | 0.7131 | 27.9426 | 0.7390 | 0.3064 | 0.5908 | 0.9907 |
| mediamill10% | 1.0000 | 0.0000 | 1.0000 | 1.0000 | 0.8218 | 1.0000 | 0.0000 | 3.4537 | 0.0000 | 1.0000 | 0.8218 | 1.0000 |
| medical | 0.6531 | 0.0102 | 0.7449 | 0.7900 | 0.3214 | 0.8069 | 0.1020 | 3.1224 | 0.0886 | 0.8954 | 0.5535 | 0.9979 |
| Music | 0.1333 | 0.1972 | 0.4361 | 0.5632 | 0.6135 | 0.6283 | 0.2500 | 2.0667 | 0.2006 | 0.7919 | 0.8579 | 0.8580 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0379 | 0.2690 | 0.4005 | 0.0571 | 0.3850 | 0.5595 | 35.5385 | 0.6571 | 0.4051 | 0.8836 | 0.9950 |
| OHSUMED-F | 0.2283 | 0.0584 | 0.4432 | 0.5542 | 0.4509 | 0.5682 | 0.3553 | 7.6892 | 0.4133 | 0.6154 | 0.9768 | 0.9798 |
| PlantGO | 0.6979 | 0.0399 | 0.7708 | 0.8051 | 0.6695 | 0.7909 | 0.2188 | 1.0833 | 0.1077 | 0.8501 | 0.9884 | 0.9843 |
| PlantPseAAC | 0.0918 | 0.0893 | 0.0969 | 0.0994 | 0.0662 | 0.1600 | 0.6735 | 2.4490 | 0.2762 | 0.5320 | 0.8078 | 0.8306 |
| rcv1subset1 | 0.1017 | 0.0315 | 0.3605 | 0.4876 | 0.2623 | 0.4817 | 0.4417 | 37.7800 | 0.4218 | 0.5022 | 0.9263 | 0.9868 |
| REUTERS-K500-EX2 | 0.3299 | 0.0119 | 0.4133 | 0.4631 | 0.2446 | 0.5007 | 0.5069 | 32.3299 | 0.5319 | 0.4912 | 0.7839 | 0.9972 |
| scene | 0.4855 | 0.1017 | 0.5104 | 0.5225 | 0.6460 | 0.6370 | 0.2448 | 0.6349 | 0.1194 | 0.8472 | 0.9437 | 0.9545 |
| sider_CDK_ECFP4 | 0.0070 | 0.2483 | 0.6479 | 0.7960 | 0.6241 | 0.7941 | 0.2746 | 19.3592 | 0.1585 | 0.7977 | 0.5827 | 0.7843 |
| sider_MordredDesc | 0.0141 | 0.2640 | 0.6275 | 0.7821 | 0.6158 | 0.7825 | 0.3169 | 19.7042 | 0.2028 | 0.7524 | 0.5873 | 0.7476 |
| sider_RDKit_desc | 0.0070 | 0.2697 | 0.5498 | 0.7354 | 0.5676 | 0.7288 | 0.1549 | 19.4437 | 0.1585 | 0.8267 | 0.5982 | 0.7854 |
| SLASHDOT-F | 0.4101 | 0.0417 | 0.5202 | 0.5802 | 0.3992 | 0.5988 | 0.3968 | 5.3624 | 0.3521 | 0.6489 | 0.7560 | 0.9830 |
| solar_flare-L3 | 0.2000 | 0.4667 | 0.3667 | 0.4552 | 0.2500 | 0.4615 | 0.8000 | 0.8000 | 0.6000 | 0.6000 | 0.2222 | 0.6800 |
| Stackex_chemistry | 0.0115 | 0.0200 | 0.1366 | 0.2100 | 0.0677 | 0.2109 | 0.7896 | 105.6110 | 0.8749 | 0.1556 | 0.9188 | 0.9988 |
| Stackex_chess | 0.0179 | 0.0107 | 0.1165 | 0.1779 | 0.0550 | 0.2243 | 0.6429 | 128.3869 | 0.7120 | 0.2523 | 0.5464 | 0.9950 |
| Stackex_coffee | 0.0000 | 0.0219 | 0.0362 | 0.0512 | 0.0163 | 0.0606 | 0.9130 | 72.4783 | 0.8068 | 0.1388 | 0.2557 | 0.9869 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2029 | 0.2744 | 0.1115 | 0.3209 | 0.6357 | 222.6213 | 0.7694 | 0.2353 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0123 | 0.1935 | 0.2790 | 0.0607 | 0.2690 | 0.6809 | 134.8744 | 0.7895 | 0.2165 | 0.7497 | 0.9986 |
| tmc2007-500 | 0.2469 | 0.0692 | 0.5718 | 0.7214 | 0.6052 | 0.6811 | 0.2339 | 4.0486 | 0.1445 | 0.7875 | 0.9592 | 0.9703 |
| tox21_CDK_ECFP4 | 0.1233 | 0.1889 | 0.3505 | 0.4726 | 0.3904 | 0.4635 | 0.4658 | 5.3493 | 0.4885 | 0.5701 | 0.8999 | 0.9008 |
| tox21_RDKit_desc | 0.1164 | 0.1924 | 0.3413 | 0.4716 | 0.3280 | 0.4484 | 0.5000 | 5.5137 | 0.5053 | 0.5543 | 0.9018 | 0.9030 |
| VirusGO | 0.8095 | 0.0397 | 0.8889 | 0.9206 | 0.7154 | 0.8980 | 0.0476 | 0.3810 | 0.0536 | 0.9563 | 0.8117 | 0.9885 |
| VirusPseAAC | 0.3333 | 0.1349 | 0.3571 | 0.3687 | 0.2708 | 0.4848 | 0.2857 | 0.6190 | 0.1238 | 0.8310 | 0.7102 | 0.9143 |
| Water-quality | 0.0000 | 0.3201 | 0.2311 | 0.3700 | 0.2696 | 0.3641 | 0.2170 | 8.7830 | 0.2452 | 0.7308 | 0.7175 | 0.7536 |
| Yahoo_Arts | 0.1909 | 0.0682 | 0.2891 | 0.3548 | 0.2100 | 0.3668 | 0.4993 | 10.0895 | 0.5572 | 0.5099 | 0.9341 | 0.9702 |
| Yahoo_Business | 0.5695 | 0.0271 | 0.7277 | 0.8179 | 0.3221 | 0.7253 | 0.0918 | 3.1720 | 0.2226 | 0.8869 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.4017 | 0.0416 | 0.5562 | 0.6456 | 0.2427 | 0.5888 | 0.3138 | 6.4365 | 0.3454 | 0.6951 | 0.8285 | 0.9848 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1570 | 0.2196 | 0.5548 | 0.7002 | 0.4597 | 0.6776 | 0.2521 | 6.1818 | 0.2340 | 0.7549 | 0.8234 | 0.8832 |
| Yelp | 0.5633 | 0.1324 | 0.7624 | 0.8487 | 0.7620 | 0.8086 | 0.0658 | 1.1296 | 0.0901 | 0.9365 | 0.9151 | 0.9354 |

Table 28: Detailed results for k-NN for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3683 | 0.0455 | 0.3747 | 0.3779 | 0.4557 | 0.4598 | 0.5705 | 5.8849 | 0.5865 | 0.5029 | 0.9906 | 0.9889 |
| 3s-bbc1000 | 0.0278 | 0.2963 | 0.1898 | 0.2754 | 0.1667 | 0.2889 | 0.6944 | 2.5833 | 0.7407 | 0.5042 | 0.9393 | 0.8851 |
| 3s-guardian1000 | 0.2258 | 0.2581 | 0.3226 | 0.3703 | 0.2984 | 0.3684 | 0.6452 | 2.0645 | 0.6129 | 0.5745 | 0.8708 | 0.8446 |
| 3s-inter3000 | 0.0000 | 0.4804 | 0.2127 | 0.3271 | 0.2091 | 0.3288 | 0.6471 | 2.0588 | 0.4838 | 0.5549 | 0.7111 | 0.8611 |
| 3s-reuters1000 | 0.0000 | 0.3833 | 0.1889 | 0.2566 | 0.1362 | 0.2581 | 0.8333 | 2.6333 | 0.8067 | 0.4050 | 0.8894 | 0.8085 |
| amphibians | 0.0556 | 0.3333 | 0.5101 | 0.7275 | 0.5244 | 0.6719 | 0.2778 | 2.8333 | 0.1667 | 0.8120 | 0.6804 | 0.7600 |
| bibtex | 0.0662 | 0.0197 | 0.1316 | 0.1716 | 0.0416 | 0.1613 | 0.7743 | 91.2324 | 0.8964 | 0.1447 | 0.9993 | 0.9993 |
| birds | 0.1795 | 0.1134 | 0.3096 | 0.3796 | 0.2009 | 0.3636 | 0.5897 | 7.7692 | 0.5733 | 0.4732 | 0.8355 | 0.9404 |
| bookmarks10% | 0.1743 | 0.0089 | 0.1823 | 0.1864 | 0.0499 | 0.1970 | 0.8087 | 110.0387 | 0.8149 | 0.2097 | 0.9854 | 0.9998 |
| CAL500 | 0.0000 | 0.1841 | 0.2806 | 0.4374 | 0.1490 | 0.4389 | 0.5294 | 151.1765 | 0.5346 | 0.4075 | 0.7609 | 0.9033 |
| corel16k001 | 0.0000 | 0.0637 | 0.1109 | 0.1922 | 0.0299 | 0.1914 | 0.9194 | 117.8322 | 0.9644 | 0.0676 | 0.9977 | 0.9977 |
| Corel5k | 0.0000 | 0.0251 | 0.1107 | 0.1873 | 0.0096 | 0.1883 | 0.9560 | 168.9060 | 0.9868 | 0.1209 | 0.6791 | 0.9999 |
| delicious | 0.0000 | 0.0917 | 0.0931 | 0.1691 | 0.0672 | 0.1700 | 0.5152 | 912.7334 | 0.8599 | 0.1404 | 0.9929 | 0.9982 |
| emotions | 0.3833 | 0.2083 | 0.6069 | 0.7099 | 0.6734 | 0.6914 | 0.2833 | 1.7500 | 0.2640 | 0.8027 | 0.8893 | 0.8928 |
| enron | 0.0000 | 0.0653 | 0.3470 | 0.5176 | 0.1078 | 0.5034 | 0.3450 | 28.2982 | 0.5601 | 0.4780 | 0.8300 | 0.9816 |
| EukaryoteGO | 0.6688 | 0.0246 | 0.7457 | 0.7836 | 0.3704 | 0.7692 | 0.2191 | 2.8015 | 0.2074 | 0.7992 | 0.9950 | 0.9947 |
| EukaryotePseAAC | 0.0952 | 0.0834 | 0.2932 | 0.3776 | 0.0865 | 0.3844 | 0.6512 | 7.1351 | 0.6555 | 0.4133 | 0.9727 | 0.9706 |
| flags | 0.1500 | 0.2857 | 0.5836 | 0.7169 | 0.5660 | 0.7059 | 0.3000 | 3.8000 | 0.3233 | 0.7719 | 0.7458 | 0.8277 |
| foodtruck | 0.2927 | 0.1585 | 0.4820 | 0.6182 | 0.2266 | 0.5465 | 0.2683 | 3.7317 | 0.3851 | 0.7383 | 0.8146 | 0.9263 |
| genbase | 0.9254 | 0.0033 | 0.9552 | 0.9699 | 0.4802 | 0.9620 | 0.0149 | 1.4478 | 0.0448 | 0.9603 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0134 | 0.9464 | 0.9553 | 0.7770 | 0.9481 | 0.0357 | 0.2286 | 0.0536 | 0.9654 | 0.8747 | 0.9995 |
| GnegativePseAAC | 0.5857 | 0.0973 | 0.6345 | 0.6598 | 0.2724 | 0.6379 | 0.3714 | 1.4714 | 0.3332 | 0.7304 | 0.8520 | 0.9717 |
| GpositiveGO | 0.9231 | 0.0288 | 0.9327 | 0.9375 | 0.9572 | 0.9423 | 0.0385 | 0.1731 | 0.0481 | 0.9663 | 0.9996 | 0.9993 |
| GpositivePseAAC | 0.7308 | 0.1298 | 0.7308 | 0.7308 | 0.5660 | 0.7379 | 0.2500 | 0.5192 | 0.2500 | 0.8381 | 0.9860 | 0.9792 |
| HumanGO | 0.6077 | 0.0485 | 0.7031 | 0.7526 | 0.4678 | 0.7175 | 0.2412 | 2.0418 | 0.2429 | 0.7883 | 0.9881 | 0.9883 |
| HumanPseAAC | 0.1961 | 0.1270 | 0.2891 | 0.3413 | 0.1129 | 0.3231 | 0.6752 | 4.9325 | 0.6413 | 0.4417 | 0.9407 | 0.9368 |
| Image | 0.5050 | 0.1930 | 0.5958 | 0.6412 | 0.5926 | 0.5954 | 0.3350 | 1.1450 | 0.3638 | 0.7644 | 0.9457 | 0.9388 |
| IMDB-ECC-F10% | 0.0346 | 0.0941 | 0.1965 | 0.2893 | 0.0375 | 0.2742 | 0.6488 | 12.3187 | 0.6892 | 0.3804 | 0.9680 | 0.9644 |
| IMDB-F10% | 0.0025 | 0.1344 | 0.1854 | 0.2878 | 0.0582 | 0.2896 | 0.6810 | 12.8807 | 0.6683 | 0.3661 | 0.9519 | 0.9546 |
| LLOG-F | 0.0000 | 0.0869 | 0.0781 | 0.1371 | 0.0204 | 0.1368 | 0.9180 | 36.7787 | 0.9440 | 0.1260 | 0.5985 | 0.9975 |
| mediamill10% | 0.0926 | 0.0315 | 0.4662 | 0.6316 | 0.0607 | 0.5829 | 0.2732 | 57.8219 | 0.4205 | 0.5490 | 0.8079 | 0.9912 |
| medical | 0.4796 | 0.0177 | 0.5850 | 0.6393 | 0.1647 | 0.6579 | 0.3163 | 12.1633 | 0.3697 | 0.6617 | 0.5530 | 0.9965 |
| Music | 0.2500 | 0.1861 | 0.6083 | 0.7551 | 0.7349 | 0.7352 | 0.2833 | 1.9833 | 0.2718 | 0.8009 | 0.9180 | 0.9182 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0281 | 0.0337 | 0.2594 | 0.3810 | 0.0650 | 0.3811 | 0.5866 | 35.9106 | 0.6574 | 0.3893 | 0.8811 | 0.9928 |
| OHSUMED-F | 0.0000 | 0.1909 | 0.1710 | 0.2766 | 0.0929 | 0.2743 | 0.7337 | 11.7057 | 0.7945 | 0.3266 | 0.9638 | 0.9646 |
| PlantGO | 0.5833 | 0.0556 | 0.6319 | 0.6594 | 0.5037 | 0.6735 | 0.3125 | 2.3750 | 0.3464 | 0.7159 | 0.9952 | 0.9876 |
| PlantPseAAC | 0.1327 | 0.1582 | 0.2696 | 0.3291 | 0.1111 | 0.3111 | 0.7143 | 4.0204 | 0.7290 | 0.4237 | 0.9576 | 0.9355 |
| rcv1subset1 | 0.0000 | 0.0531 | 0.1726 | 0.2828 | 0.0693 | 0.2821 | 0.7650 | 57.5683 | 0.8072 | 0.2311 | 0.9305 | 0.9892 |
| REUTERS-K500-EX2 | 0.3265 | 0.0120 | 0.3738 | 0.4010 | 0.1534 | 0.4242 | 0.5739 | 36.9536 | 0.6141 | 0.4251 | 0.7849 | 0.9982 |
| scene | 0.6763 | 0.0954 | 0.7192 | 0.7405 | 0.7453 | 0.7315 | 0.2531 | 1.0539 | 0.2698 | 0.8044 | 0.9820 | 0.9796 |
| sider_CDK_ECFP4 | 0.0070 | 0.2692 | 0.5973 | 0.7632 | 0.6194 | 0.7662 | 0.0563 | 20.3310 | 0.1976 | 0.8189 | 0.6503 | 0.7927 |
| sider_MordredDesc | 0.0070 | 0.2613 | 0.6034 | 0.7671 | 0.6012 | 0.7704 | 0.1690 | 19.6127 | 0.1622 | 0.7980 | 0.6011 | 0.7909 |
| sider_RDKit_desc | 0.0070 | 0.2564 | 0.6227 | 0.7799 | 0.6092 | 0.7794 | 0.2042 | 19.7324 | 0.1723 | 0.7911 | 0.5943 | 0.7821 |
| SLASHDOT-F | 0.0608 | 0.0948 | 0.1704 | 0.2183 | 0.0676 | 0.2167 | 0.7593 | 11.0847 | 0.7798 | 0.3027 | 0.7649 | 0.9753 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.8000 | 0.8000 | 0.6000 | 0.6000 | 0.2222 | 0.6000 |
| Stackex_chemistry | 0.0000 | 0.0391 | 0.0919 | 0.1615 | 0.0098 | 0.1589 | 0.9107 | 111.7305 | 0.9712 | 0.0774 | 0.9193 | 0.9993 |
| Stackex_chess | 0.0000 | 0.0234 | 0.1038 | 0.1756 | 0.0070 | 0.1739 | 0.8393 | 149.0833 | 0.9262 | 0.0977 | 0.5502 | 0.9993 |
| Stackex_coffee | 0.0000 | 0.0951 | 0.0664 | 0.1189 | 0.0105 | 0.1180 | 1.0000 | 81.6957 | 1.0000 | 0.0364 | 0.2602 | 1.0000 |
| Stackex_cooking | 0.0000 | 0.0262 | 0.0395 | 0.0729 | 0.0030 | 0.0727 | 0.9729 | 256.8357 | 0.9922 | 0.0286 | 0.9250 | 1.0000 |
| Stackex_philosophy | 0.0000 | 0.0492 | 0.0752 | 0.1373 | 0.0069 | 0.1352 | 0.9472 | 152.9196 | 0.9791 | 0.0430 | 0.7509 | 0.9998 |
| tmc2007-500 | 0.2469 | 0.0692 | 0.5718 | 0.7214 | 0.6052 | 0.6811 | 0.2339 | 4.0486 | 0.1445 | 0.7875 | 0.9592 | 0.9703 |
| tox21_CDK_ECFP4 | 0.1096 | 0.1995 | 0.3280 | 0.4503 | 0.3706 | 0.4500 | 0.5034 | 5.7192 | 0.5386 | 0.5411 | 0.8993 | 0.9010 |
| tox21_RDKit_desc | 0.1370 | 0.1929 | 0.3686 | 0.4915 | 0.4286 | 0.4970 | 0.4760 | 5.4384 | 0.4900 | 0.5682 | 0.8957 | 0.9014 |
| VirusGO | 0.7143 | 0.0873 | 0.7698 | 0.8055 | 0.6126 | 0.7755 | 0.1429 | 0.9524 | 0.2139 | 0.8611 | 0.8241 | 0.9834 |
| VirusPseAAC | 0.2857 | 0.1825 | 0.5238 | 0.6208 | 0.3524 | 0.5965 | 0.4762 | 1.2381 | 0.2857 | 0.6984 | 0.6701 | 0.8983 |
| Water-quality | 0.0283 | 0.3208 | 0.4550 | 0.6301 | 0.5819 | 0.6240 | 0.2736 | 8.7547 | 0.2904 | 0.7017 | 0.7228 | 0.7541 |
| Yahoo_Arts | 0.0895 | 0.0919 | 0.2211 | 0.2992 | 0.0875 | 0.2700 | 0.6742 | 12.7049 | 0.7226 | 0.3652 | 0.9356 | 0.9697 |
| Yahoo_Business | 0.5695 | 0.0271 | 0.7277 | 0.8179 | 0.3221 | 0.7253 | 0.0918 | 3.1720 | 0.2226 | 0.8869 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.0888 | 0.1010 | 0.2955 | 0.3938 | 0.1784 | 0.3659 | 0.6237 | 5.2145 | 0.6347 | 0.4820 | 0.9638 | 0.9657 |
| Yahoo_Health | 0.2953 | 0.0514 | 0.4169 | 0.4853 | 0.1496 | 0.4479 | 0.4799 | 8.6623 | 0.5221 | 0.5611 | 0.8288 | 0.9830 |
| Yahoo_Recreation | 0.0522 | 0.1097 | 0.2095 | 0.2799 | 0.1971 | 0.2718 | 0.7124 | 8.1263 | 0.7163 | 0.4126 | 0.9616 | 0.9620 |
| Yahoo_Reference | 0.4035 | 0.0352 | 0.4653 | 0.4973 | 0.0509 | 0.4793 | 0.4695 | 6.8929 | 0.5211 | 0.5718 | 0.8168 | 0.9917 |
| Yahoo_Science | 0.0078 | 0.0688 | 0.1861 | 0.2737 | 0.0502 | 0.2595 | 0.7900 | 16.2239 | 0.8252 | 0.2878 | 0.9638 | 0.9867 |
| Yahoo_Social | 0.2937 | 0.0367 | 0.4291 | 0.4977 | 0.0835 | 0.4599 | 0.4975 | 9.6757 | 0.5265 | 0.5282 | 0.9146 | 0.9910 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.2107 | 0.2217 | 0.5637 | 0.6957 | 0.5072 | 0.6731 | 0.2479 | 5.9545 | 0.2417 | 0.7741 | 0.8298 | 0.8840 |
| Yelp | 0.2832 | 0.2459 | 0.5249 | 0.6533 | 0.4754 | 0.5977 | 0.2502 | 1.6510 | 0.4401 | 0.8151 | 0.9249 | 0.9186 |

Table 29: Detailed results for SVM for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3549 | 0.0370 | 0.3711 | 0.3800 | 0.4846 | 0.5126 | 0.3119 | 1.3870 | 0.0707 | 0.7853 | 0.9111 | 0.9085 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4444 | 1.4722 | 0.2389 | 0.7030 | 0.7974 | 0.7834 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4516 | 1.7742 | 0.2968 | 0.6645 | 0.6684 | 0.7038 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6471 | 1.5294 | 0.2882 | 0.5941 | 0.3783 | 0.6726 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 2.0333 | 0.3950 | 0.4656 | 0.6991 | 0.5957 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1667 | 2.3889 | 0.0648 | 0.9006 | 0.6850 | 0.7904 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4615 | 4.2821 | 0.1405 | 0.6434 | 0.7556 | 0.8634 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1765 | 135.0392 | 0.1908 | 0.4868 | 0.5077 | 0.8104 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0148 | 0.1580 | 0.2500 | 0.0368 | 0.2580 | 0.8340 | 125.8460 | 0.1468 | 0.1771 | 0.4739 | 0.8551 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 1.7333 | 0.1541 | 0.7781 | 0.8428 | 0.8647 |
| enron | 0.0877 | 0.0578 | 0.2133 | 0.3012 | 0.0440 | 0.2722 | 0.2924 | 11.8889 | 0.0762 | 0.6865 | 0.6403 | 0.9120 |
| EukaryoteGO | 0.6585 | 0.0215 | 0.7601 | 0.8104 | 0.5303 | 0.7993 | 0.2281 | 0.8131 | 0.0280 | 0.8638 | 0.9516 | 0.9542 |
| EukaryotePseAAC | 0.1004 | 0.0956 | 0.1849 | 0.2384 | 0.0877 | 0.2427 | 0.7503 | 3.8842 | 0.1689 | 0.4556 | 0.6009 | 0.7559 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.7000 | 0.1958 | 0.8125 | 0.5832 | 0.7736 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.1220 | 0.1340 | 0.7721 | 0.5276 | 0.7835 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3116 | 0.8592 | 0.0000 | 0.4776 | 0.0054 | 0.9933 | 0.6291 | 0.9905 |
| GnegativeGO | 0.7857 | 0.0366 | 0.8000 | 0.8071 | 0.6161 | 0.8476 | 0.1000 | 0.1643 | 0.0163 | 0.9476 | 0.8642 | 0.9910 |
| GnegativePseAAC | 0.5571 | 0.0625 | 0.5643 | 0.5678 | 0.2284 | 0.6957 | 0.1714 | 0.5071 | 0.0638 | 0.8854 | 0.7350 | 0.9443 |
| GpositiveGO | 0.7308 | 0.1154 | 0.7404 | 0.7452 | 0.7098 | 0.7647 | 0.2308 | 0.2885 | 0.0897 | 0.8782 | 0.9439 | 0.9447 |
| GpositivePseAAC | 0.6538 | 0.1250 | 0.6538 | 0.6538 | 0.5411 | 0.7234 | 0.2692 | 0.4231 | 0.1410 | 0.8413 | 0.8838 | 0.8771 |
| HumanGO | 0.6174 | 0.0404 | 0.6688 | 0.6956 | 0.4147 | 0.7309 | 0.1704 | 0.5145 | 0.0227 | 0.9000 | 0.9750 | 0.9812 |
| HumanPseAAC | 0.0225 | 0.0850 | 0.0225 | 0.0225 | 0.0153 | 0.0365 | 0.5627 | 2.2283 | 0.1451 | 0.6152 | 0.7032 | 0.8517 |
| Image | 0.1450 | 0.2080 | 0.1525 | 0.1562 | 0.2133 | 0.2353 | 0.3300 | 0.9050 | 0.1725 | 0.7905 | 0.8343 | 0.8274 |
| IMDB-ECC-F10% | 0.0052 | 0.1173 | 0.2233 | 0.3437 | 0.0568 | 0.3305 | 0.6583 | 11.0168 | 0.2537 | 0.4412 | 0.5208 | 0.7106 |
| IMDB-F10% | 0.0149 | 0.1065 | 0.0225 | 0.0283 | 0.0040 | 0.0249 | 0.9652 | 18.6860 | 0.5753 | 0.1344 | 0.5657 | 0.4179 |
| LLOG-F | 0.1393 | 0.0162 | 0.1776 | 0.1979 | 0.0398 | 0.2673 | 0.5984 | 11.1721 | 0.1142 | 0.4659 | 0.4682 | 0.8827 |
| mediamill10% | 0.0618 | 0.0326 | 0.4003 | 0.5651 | 0.0268 | 0.5053 | 0.2090 | 17.2043 | 0.0505 | 0.6667 | 0.7214 | 0.9409 |
| medical | 0.4796 | 0.0152 | 0.6361 | 0.7096 | 0.1997 | 0.7287 | 0.2857 | 1.7143 | 0.0219 | 0.8134 | 0.5384 | 0.9736 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.9667 | 0.1631 | 0.7970 | 0.8516 | 0.8597 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0262 | 0.0374 | 0.1383 | 0.2213 | 0.0388 | 0.2217 | 0.8121 | 28.7507 | 0.2199 | 0.2794 | 0.5848 | 0.7504 |
| OHSUMED-F | 0.1278 | 0.0672 | 0.1975 | 0.2374 | 0.1400 | 0.2830 | 0.4681 | 6.6949 | 0.2024 | 0.5770 | 0.7858 | 0.7894 |
| PlantGO | 0.2449 | 0.0774 | 0.2602 | 0.2676 | 0.1444 | 0.3724 | 0.3571 | 0.8061 | 0.0579 | 0.7833 | 0.9465 | 0.9407 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.5408 | 2.1735 | 0.1792 | 0.6119 | 0.7811 | 0.8405 |
| rcv1subset1 | 0.0400 | 0.0318 | 0.3120 | 0.4591 | 0.1757 | 0.4384 | 0.6050 | 14.5567 | 0.0599 | 0.4933 | 0.8481 | 0.9304 |
| REUTERS-K500-EX2 | 0.2285 | 0.0156 | 0.4019 | 0.4996 | 0.2199 | 0.4777 | 0.5859 | 7.2818 | 0.0498 | 0.5414 | 0.7082 | 0.9418 |
| scene | 0.4523 | 0.1086 | 0.4751 | 0.4862 | 0.6068 | 0.6045 | 0.2241 | 0.4398 | 0.0668 | 0.8687 | 0.9356 | 0.9457 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1197 | 19.2394 | 0.1339 | 0.8305 | 0.5614 | 0.7910 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 19.6268 | 0.1540 | 0.7929 | 0.5225 | 0.7796 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.2817 | 0.1247 | 0.8320 | 0.5546 | 0.8027 |
| SLASHDOT-F | 0.3694 | 0.0383 | 0.4081 | 0.4275 | 0.2863 | 0.5174 | 0.3430 | 1.9393 | 0.0696 | 0.7455 | 0.6810 | 0.9325 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0179 | 0.0124 | 0.1938 | 0.3006 | 0.0385 | 0.3034 | 0.6726 | 58.6071 | 0.1355 | 0.3112 | 0.4478 | 0.8626 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7391 | 63.2609 | 0.2931 | 0.2740 | 0.1692 | 0.6545 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0402 | 0.0133 | 0.2236 | 0.3308 | 0.0461 | 0.3065 | 0.7965 | 48.7412 | 0.1147 | 0.2894 | 0.5919 | 0.8771 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.0959 | 0.2183 | 0.6120 | 0.6843 | 0.7590 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4966 | 4.1438 | 0.2239 | 0.6027 | 0.6758 | 0.7487 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.9048 | 0.1414 | 0.8233 | 0.7489 | 0.8859 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.6667 | 0.1107 | 0.8230 | 0.6286 | 0.8915 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2642 | 8.9340 | 0.2661 | 0.6925 | 0.6660 | 0.7122 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1983 | 6.1694 | 0.1573 | 0.7724 | 0.7015 | 0.8398 |
| Yelp | 0.0050 | 0.3585 | 0.0050 | 0.0050 | 0.0047 | 0.0055 | 0.2024 | 1.3200 | 0.1238 | 0.8651 | 0.8153 | 0.8612 |

Table 30: Detailed results for DT for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3454 | 0.0347 | 0.3491 | 0.3509 | 0.4715 | 0.5041 | 0.2718 | 0.9004 | 0.0475 | 0.8232 | 0.9650 | 0.9657 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7222 | 2.2500 | 0.4054 | 0.5046 | 0.6260 | 0.6173 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7742 | 2.7097 | 0.4919 | 0.4473 | 0.5056 | 0.5821 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.2353 | 0.4309 | 0.3725 | 0.4545 | 0.5847 |
| 3s-reuters1000 | 0.0000 | 0.1889 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.7000 | 0.5233 | 0.3831 | 0.5422 | 0.5025 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 3.3889 | 0.1944 | 0.7719 | 0.6673 | 0.7433 |
| bibtex | 0.1473 | 0.0123 | 0.2624 | 0.3342 | 0.1856 | 0.3522 | 0.3743 | 28.0000 | 0.1550 | 0.5929 | 0.9478 | 0.9610 |
| birds | 0.1026 | 0.0891 | 0.1154 | 0.1215 | 0.0979 | 0.1316 | 0.3077 | 3.3333 | 0.1015 | 0.7267 | 0.7849 | 0.8993 |
| bookmarks10% | 0.1754 | 0.0092 | 0.1975 | 0.2101 | 0.0466 | 0.2033 | 0.6424 | 59.3793 | 0.3024 | 0.3836 | 0.8730 | 0.9078 |
| CAL500 | 0.0000 | 0.1494 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1373 | 138.8824 | 0.2075 | 0.4427 | 0.5244 | 0.7965 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0148 | 0.1580 | 0.2500 | 0.0368 | 0.2580 | 0.8340 | 125.8460 | 0.1468 | 0.1771 | 0.4739 | 0.8551 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 1.5000 | 0.1205 | 0.8434 | 0.8665 | 0.8877 |
| enron | 0.1228 | 0.0548 | 0.2865 | 0.3814 | 0.1001 | 0.3653 | 0.1988 | 13.2105 | 0.0946 | 0.6951 | 0.6794 | 0.9151 |
| EukaryoteGO | 0.6701 | 0.0206 | 0.7152 | 0.7383 | 0.6446 | 0.7832 | 0.1740 | 0.4227 | 0.0140 | 0.9023 | 0.9930 | 0.9951 |
| EukaryotePseAAC | 0.0167 | 0.0521 | 0.0167 | 0.0167 | 0.0081 | 0.0284 | 0.5302 | 2.2780 | 0.0936 | 0.6330 | 0.7819 | 0.9141 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.4000 | 0.1858 | 0.8444 | 0.7352 | 0.8285 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2195 | 2.7317 | 0.1082 | 0.7970 | 0.6658 | 0.8269 |
| genbase | 0.9254 | 0.0028 | 0.9652 | 0.9825 | 0.6173 | 0.9697 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9996 |
| GnegativeGO | 0.8929 | 0.0179 | 0.9036 | 0.9089 | 0.6713 | 0.9275 | 0.0214 | 0.0929 | 0.0102 | 0.9863 | 0.8738 | 0.9991 |
| GnegativePseAAC | 0.3643 | 0.0866 | 0.3643 | 0.3643 | 0.1419 | 0.5126 | 0.2786 | 0.7357 | 0.0972 | 0.8198 | 0.7772 | 0.9457 |
| GpositiveGO | 0.8654 | 0.0529 | 0.8654 | 0.8654 | 0.9120 | 0.8911 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9962 | 0.9961 |
| GpositivePseAAC | 0.4038 | 0.1587 | 0.4038 | 0.4038 | 0.3621 | 0.5600 | 0.4423 | 0.8077 | 0.2885 | 0.7244 | 0.8093 | 0.8358 |
| HumanGO | 0.5916 | 0.0427 | 0.6356 | 0.6583 | 0.5397 | 0.7019 | 0.2315 | 0.6399 | 0.0378 | 0.8665 | 0.9758 | 0.9844 |
| HumanPseAAC | 0.0161 | 0.0834 | 0.0161 | 0.0161 | 0.0091 | 0.0268 | 0.5627 | 2.1994 | 0.1430 | 0.6105 | 0.7550 | 0.8661 |
| Image | 0.2350 | 0.1850 | 0.2550 | 0.2646 | 0.3468 | 0.3729 | 0.2950 | 0.8650 | 0.1567 | 0.8079 | 0.8603 | 0.8712 |
| IMDB-ECC-F10% | 0.0010 | 0.0673 | 0.0014 | 0.0017 | 0.0010 | 0.0022 | 0.6111 | 7.4015 | 0.1749 | 0.4865 | 0.6157 | 0.8084 |
| IMDB-F10% | 0.0000 | 0.0722 | 0.0004 | 0.0006 | 0.0006 | 0.0008 | 0.5949 | 7.6512 | 0.1736 | 0.4937 | 0.6165 | 0.8148 |
| LLOG-F | 0.0410 | 0.0175 | 0.0574 | 0.0645 | 0.0153 | 0.1011 | 0.5984 | 12.0082 | 0.1607 | 0.4877 | 0.4930 | 0.8957 |
| mediamill10% | 0.5606 | 0.0094 | 0.8430 | 0.9128 | 0.2899 | 0.8803 | 0.0000 | 3.4869 | 0.0001 | 0.9972 | 0.8208 | 0.9991 |
| medical | 0.6633 | 0.0102 | 0.7602 | 0.8052 | 0.3576 | 0.8148 | 0.1429 | 1.8163 | 0.0558 | 0.8869 | 0.5491 | 0.9943 |
| Music | 0.0000 | 0.3167 | 0.0333 | 0.0444 | 0.0533 | 0.0656 | 0.2167 | 1.8833 | 0.1525 | 0.8195 | 0.8546 | 0.8599 |
| NUS-WIDE-bow10% | 0.0010 | 0.0262 | 0.0042 | 0.0064 | 0.0011 | 0.0120 | 0.5666 | 17.2231 | 0.1361 | 0.4932 | 0.6566 | 0.8806 |
| NUS-WIDE-cVLADplus10% | 0.0076 | 0.0258 | 0.0171 | 0.0228 | 0.0037 | 0.0414 | 0.5186 | 15.9743 | 0.1204 | 0.5220 | 0.6660 | 0.8899 |
| OHSUMED-F | 0.1386 | 0.0625 | 0.1942 | 0.2231 | 0.1510 | 0.2677 | 0.3252 | 3.1184 | 0.0774 | 0.7334 | 0.8788 | 0.9187 |
| PlantGO | 0.6146 | 0.0469 | 0.6458 | 0.6611 | 0.6032 | 0.7097 | 0.1979 | 0.5104 | 0.0394 | 0.8838 | 0.9766 | 0.9809 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5918 | 1.9898 | 0.1666 | 0.6011 | 0.7823 | 0.8465 |
| rcv1subset1 | 0.0200 | 0.0288 | 0.0977 | 0.1345 | 0.0548 | 0.1564 | 0.4083 | 11.7150 | 0.0557 | 0.6218 | 0.8846 | 0.9614 |
| REUTERS-K500-EX2 | 0.3127 | 0.0107 | 0.3619 | 0.3883 | 0.1887 | 0.4535 | 0.4502 | 11.1460 | 0.1430 | 0.6392 | 0.7510 | 0.9728 |
| scene | 0.2863 | 0.1335 | 0.2988 | 0.3049 | 0.4429 | 0.4373 | 0.2324 | 0.4896 | 0.0763 | 0.8613 | 0.9445 | 0.9464 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0915 | 18.5915 | 0.1218 | 0.8477 | 0.5859 | 0.8020 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 18.8944 | 0.1296 | 0.8386 | 0.5641 | 0.7966 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1127 | 18.7817 | 0.1204 | 0.8437 | 0.5736 | 0.8046 |
| SLASHDOT-F | 0.3333 | 0.0424 | 0.3708 | 0.3897 | 0.2606 | 0.4692 | 0.4074 | 2.7937 | 0.1252 | 0.6852 | 0.6667 | 0.9185 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.2000 | 0.2000 | 0.1333 | 0.2857 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.2222 | 0.7400 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0238 | 0.0110 | 0.1415 | 0.2122 | 0.0677 | 0.2575 | 0.6310 | 76.3274 | 0.3492 | 0.3659 | 0.5213 | 0.9670 |
| Stackex_coffee | 0.0435 | 0.0205 | 0.1232 | 0.1909 | 0.0488 | 0.1944 | 0.7391 | 58.1739 | 0.3818 | 0.3350 | 0.2450 | 0.9272 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0477 | 0.0096 | 0.1589 | 0.2208 | 0.0637 | 0.2529 | 0.6281 | 79.6784 | 0.3479 | 0.3644 | 0.7061 | 0.9603 |
| tmc2007-500 | 0.0689 | 0.0899 | 0.1102 | 0.1314 | 0.0945 | 0.1456 | 0.2577 | 2.5692 | 0.0466 | 0.7970 | 0.9289 | 0.9528 |
| tox21_CDK_ECFP4 | 0.0205 | 0.1767 | 0.0245 | 0.0273 | 0.0356 | 0.0283 | 0.4726 | 3.9795 | 0.2042 | 0.6384 | 0.7155 | 0.7827 |
| tox21_RDKit_desc | 0.0205 | 0.1769 | 0.0212 | 0.0225 | 0.0182 | 0.0221 | 0.4418 | 3.7055 | 0.1830 | 0.6513 | 0.7375 | 0.7962 |
| VirusGO | 0.7619 | 0.0794 | 0.7619 | 0.7619 | 0.6029 | 0.7619 | 0.0476 | 0.3333 | 0.0476 | 0.9643 | 0.8037 | 0.9865 |
| VirusPseAAC | 0.0476 | 0.1746 | 0.0476 | 0.0476 | 0.0303 | 0.0833 | 0.3810 | 0.9048 | 0.1512 | 0.7571 | 0.6267 | 0.8856 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2075 | 8.5660 | 0.2261 | 0.7406 | 0.7210 | 0.7558 |
| Yahoo_Arts | 0.1362 | 0.0561 | 0.1752 | 0.1957 | 0.1494 | 0.2488 | 0.3525 | 3.7276 | 0.0827 | 0.7115 | 0.7968 | 0.8973 |
| Yahoo_Business | 0.4973 | 0.0277 | 0.6333 | 0.7081 | 0.1369 | 0.6688 | 0.0900 | 1.6533 | 0.0265 | 0.9174 | 0.7659 | 0.9702 |
| Yahoo_Computers | 0.2225 | 0.0388 | 0.2465 | 0.2606 | 0.1062 | 0.3165 | 0.3116 | 2.7839 | 0.0575 | 0.7556 | 0.7661 | 0.9314 |
| Yahoo_Education | 0.1372 | 0.0374 | 0.1579 | 0.1690 | 0.1223 | 0.2602 | 0.4073 | 2.6949 | 0.0612 | 0.6971 | 0.7919 | 0.9401 |
| Yahoo_Entertainment | 0.2687 | 0.0540 | 0.2888 | 0.3003 | 0.1700 | 0.3584 | 0.2797 | 1.9411 | 0.0593 | 0.7871 | 0.8641 | 0.9346 |
| Yahoo_Health | 0.3398 | 0.0338 | 0.4146 | 0.4554 | 0.2174 | 0.5289 | 0.2009 | 2.2780 | 0.0387 | 0.8329 | 0.7570 | 0.9613 |
| Yahoo_Recreation | 0.2627 | 0.0496 | 0.2849 | 0.2974 | 0.2373 | 0.3739 | 0.2829 | 2.4474 | 0.0738 | 0.7705 | 0.8654 | 0.9159 |
| Yahoo_Reference | 0.3101 | 0.0254 | 0.3331 | 0.3448 | 0.1182 | 0.4599 | 0.2889 | 1.9290 | 0.0581 | 0.7884 | 0.7238 | 0.9532 |
| Yahoo_Science | 0.2224 | 0.0295 | 0.2523 | 0.2682 | 0.2006 | 0.3345 | 0.3717 | 4.5070 | 0.0875 | 0.6938 | 0.8594 | 0.9187 |
| Yahoo_Social | 0.4356 | 0.0205 | 0.4673 | 0.4847 | 0.1690 | 0.5646 | 0.2211 | 2.1667 | 0.0449 | 0.8328 | 0.8362 | 0.9639 |
| Yahoo_Society | 0.1880 | 0.0520 | 0.2256 | 0.2478 | 0.1347 | 0.2882 | 0.2837 | 3.8106 | 0.0810 | 0.7414 | 0.7497 | 0.8921 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2107 | 6.0702 | 0.1522 | 0.7739 | 0.7534 | 0.8574 |
| Yelp | 0.2273 | 0.3063 | 0.2474 | 0.2588 | 0.2236 | 0.2615 | 0.0887 | 1.1027 | 0.0682 | 0.9300 | 0.8911 | 0.9216 |

Table 31: Detailed results for ExtraTrees for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3833 | 0.0356 | 0.3947 | 0.4004 | 0.4856 | 0.5328 | 0.3584 | 1.7075 | 0.1424 | 0.7547 | 0.9385 | 0.9399 |
| 3s-bbc1000 | 0.0000 | 0.2130 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5833 | 1.5278 | 0.2510 | 0.6315 | 0.7946 | 0.7641 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4194 | 1.6452 | 0.2702 | 0.6876 | 0.6982 | 0.7502 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6471 | 2.0000 | 0.3794 | 0.5275 | 0.4224 | 0.6085 |
| 3s-reuters1000 | 0.0000 | 0.1833 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.0667 | 0.4058 | 0.4408 | 0.6425 | 0.6007 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5556 | 0.0889 | 0.8543 | 0.7056 | 0.7919 |
| bibtex | 0.1392 | 0.0135 | 0.3148 | 0.4242 | 0.2642 | 0.4378 | 0.4284 | 27.6365 | 0.1428 | 0.5309 | 0.9174 | 0.9371 |
| birds | 0.1538 | 0.0864 | 0.1538 | 0.1538 | 0.0877 | 0.1795 | 0.3333 | 4.7436 | 0.1559 | 0.6859 | 0.7207 | 0.8309 |
| bookmarks10% | 0.1925 | 0.0093 | 0.2193 | 0.2367 | 0.0787 | 0.2438 | 0.6936 | 60.5888 | 0.3286 | 0.3549 | 0.8345 | 0.8734 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4118 | 134.5294 | 0.2266 | 0.3870 | 0.4918 | 0.7755 |
| corel16k001 | 0.0080 | 0.0189 | 0.0381 | 0.0544 | 0.0236 | 0.0692 | 0.7233 | 75.7190 | 0.4390 | 0.2484 | 0.8714 | 0.8860 |
| Corel5k | 0.0120 | 0.0122 | 0.1039 | 0.1664 | 0.0489 | 0.1955 | 0.8120 | 125.4500 | 0.4706 | 0.1974 | 0.6241 | 0.9451 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2833 | 1.5167 | 0.1228 | 0.8169 | 0.8583 | 0.8803 |
| enron | 0.0117 | 0.0587 | 0.1703 | 0.2646 | 0.0451 | 0.2963 | 0.4211 | 14.4152 | 0.1201 | 0.5594 | 0.6526 | 0.8987 |
| EukaryoteGO | 0.2616 | 0.0420 | 0.2762 | 0.2837 | 0.3328 | 0.3867 | 0.2165 | 0.6276 | 0.0278 | 0.8714 | 0.9820 | 0.9906 |
| EukaryotePseAAC | 0.0090 | 0.0526 | 0.0103 | 0.0109 | 0.0100 | 0.0196 | 0.8867 | 8.4607 | 0.5925 | 0.2558 | 0.7623 | 0.7381 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1000 | 3.6000 | 0.1892 | 0.8422 | 0.6431 | 0.8090 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2195 | 2.8537 | 0.1208 | 0.7985 | 0.6439 | 0.8112 |
| genbase | 0.9552 | 0.0017 | 0.9776 | 0.9887 | 0.6451 | 0.9818 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9994 |
| GnegativeGO | 0.9000 | 0.0152 | 0.9179 | 0.9267 | 0.6831 | 0.9391 | 0.0214 | 0.1000 | 0.0072 | 0.9860 | 0.8723 | 0.9978 |
| GnegativePseAAC | 0.3643 | 0.0893 | 0.3643 | 0.3643 | 0.1473 | 0.5050 | 0.3500 | 0.9429 | 0.1264 | 0.7713 | 0.7237 | 0.8962 |
| GpositiveGO | 0.8846 | 0.0433 | 0.8942 | 0.8990 | 0.9224 | 0.9126 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9946 | 0.9938 |
| GpositivePseAAC | 0.3846 | 0.1827 | 0.3846 | 0.3846 | 0.3563 | 0.5128 | 0.3654 | 0.6154 | 0.2051 | 0.7804 | 0.8005 | 0.8291 |
| HumanGO | 0.0354 | 0.0820 | 0.0402 | 0.0425 | 0.1501 | 0.0727 | 0.2990 | 0.9196 | 0.0585 | 0.8107 | 0.9563 | 0.9640 |
| HumanPseAAC | 0.0000 | 0.0848 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7010 | 5.2926 | 0.4998 | 0.4124 | 0.6693 | 0.6851 |
| Image | 0.0900 | 0.2200 | 0.0925 | 0.0937 | 0.1390 | 0.1473 | 0.3250 | 0.8500 | 0.1583 | 0.7993 | 0.8444 | 0.8425 |
| IMDB-ECC-F10% | 0.0010 | 0.0673 | 0.0030 | 0.0043 | 0.0044 | 0.0066 | 0.6457 | 8.9790 | 0.2605 | 0.4358 | 0.6281 | 0.7653 |
| IMDB-F10% | 0.0008 | 0.0721 | 0.0039 | 0.0055 | 0.0065 | 0.0089 | 0.6305 | 9.5824 | 0.2714 | 0.4344 | 0.6408 | 0.7646 |
| LLOG-F | 0.0902 | 0.0255 | 0.1949 | 0.2586 | 0.1156 | 0.2786 | 0.8443 | 12.2951 | 0.1371 | 0.3018 | 0.4616 | 0.8664 |
| mediamill10% | 0.1306 | 0.0217 | 0.6262 | 0.7909 | 0.3328 | 0.7522 | 0.2162 | 7.0356 | 0.0142 | 0.7782 | 0.8067 | 0.9792 |
| medical | 0.4490 | 0.0179 | 0.6786 | 0.7890 | 0.3140 | 0.7427 | 0.1837 | 1.1735 | 0.0141 | 0.8777 | 0.5452 | 0.9881 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 2.0500 | 0.1722 | 0.7972 | 0.8360 | 0.8554 |
| NUS-WIDE-bow10% | 0.0000 | 0.0263 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9115 | 40.8592 | 0.6813 | 0.1375 | 0.7380 | 0.8461 |
| NUS-WIDE-cVLADplus10% | 0.0033 | 0.0263 | 0.0050 | 0.0063 | 0.0039 | 0.0084 | 0.8226 | 33.9377 | 0.4444 | 0.2207 | 0.6360 | 0.7715 |
| OHSUMED-F | 0.2032 | 0.0570 | 0.3167 | 0.3761 | 0.2657 | 0.4191 | 0.3525 | 4.6798 | 0.1699 | 0.6767 | 0.8374 | 0.8587 |
| PlantGO | 0.6458 | 0.0451 | 0.6910 | 0.7152 | 0.6311 | 0.7320 | 0.2083 | 0.4375 | 0.0296 | 0.8811 | 0.9680 | 0.9735 |
| PlantPseAAC | 0.0102 | 0.0927 | 0.0102 | 0.0102 | 0.0278 | 0.0180 | 0.8061 | 3.9898 | 0.4090 | 0.3855 | 0.6339 | 0.6185 |
| rcv1subset1 | 0.0200 | 0.0288 | 0.0977 | 0.1345 | 0.0548 | 0.1564 | 0.4083 | 11.7150 | 0.0557 | 0.6218 | 0.8846 | 0.9614 |
| REUTERS-K500-EX2 | 0.1942 | 0.0134 | 0.2327 | 0.2551 | 0.1621 | 0.3050 | 0.6065 | 23.9622 | 0.3788 | 0.4719 | 0.7602 | 0.9714 |
| scene | 0.2739 | 0.1362 | 0.2822 | 0.2862 | 0.4238 | 0.4154 | 0.2448 | 0.4813 | 0.0756 | 0.8580 | 0.9296 | 0.9336 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3803 | 19.7958 | 0.2050 | 0.7222 | 0.4899 | 0.7277 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2676 | 19.8169 | 0.1544 | 0.7830 | 0.5465 | 0.7767 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3169 | 19.6831 | 0.1598 | 0.7906 | 0.5571 | 0.7700 |
| SLASHDOT-F | 0.2116 | 0.0455 | 0.2487 | 0.2675 | 0.2417 | 0.3700 | 0.4101 | 3.0847 | 0.1532 | 0.6821 | 0.6790 | 0.9197 |
| solar_flare-L3 | 0.4000 | 0.3333 | 0.5000 | 0.5455 | 0.3556 | 0.5455 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.2778 | 0.6800 |
| Stackex_chemistry | 0.0158 | 0.0128 | 0.0486 | 0.0692 | 0.0523 | 0.0910 | 0.7781 | 91.8703 | 0.6790 | 0.1943 | 0.8772 | 0.9535 |
| Stackex_chess | 0.0417 | 0.0153 | 0.1542 | 0.2440 | 0.0819 | 0.2558 | 0.6369 | 95.1786 | 0.4566 | 0.3101 | 0.5111 | 0.9459 |
| Stackex_coffee | 0.0000 | 0.0406 | 0.1522 | 0.2842 | 0.0624 | 0.2177 | 0.8696 | 46.3478 | 0.2359 | 0.2312 | 0.2274 | 0.8776 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0151 | 0.0129 | 0.0871 | 0.1447 | 0.0754 | 0.1678 | 0.7538 | 110.1432 | 0.5553 | 0.2372 | 0.7092 | 0.9508 |
| tmc2007-500 | 0.1084 | 0.0876 | 0.3026 | 0.4096 | 0.1816 | 0.3981 | 0.4266 | 3.8794 | 0.1216 | 0.6850 | 0.8912 | 0.9232 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6199 | 4.7500 | 0.2832 | 0.5167 | 0.6548 | 0.7088 |
| tox21_RDKit_desc | 0.0000 | 0.1787 | 0.0007 | 0.0011 | 0.0048 | 0.0032 | 0.6438 | 5.1678 | 0.3517 | 0.5050 | 0.7087 | 0.7240 |
| VirusGO | 0.7143 | 0.0873 | 0.7143 | 0.7143 | 0.5926 | 0.7317 | 0.0476 | 0.4286 | 0.0440 | 0.9540 | 0.7947 | 0.9640 |
| VirusPseAAC | 0.1429 | 0.1746 | 0.1429 | 0.1429 | 0.1667 | 0.2143 | 0.7143 | 1.1905 | 0.2214 | 0.6024 | 0.5863 | 0.8088 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3302 | 9.3396 | 0.3024 | 0.6544 | 0.6268 | 0.6726 |
| Yahoo_Arts | 0.1362 | 0.0561 | 0.1752 | 0.1957 | 0.1494 | 0.2488 | 0.3525 | 3.7276 | 0.0827 | 0.7115 | 0.7968 | 0.8973 |
| Yahoo_Business | 0.4973 | 0.0277 | 0.6333 | 0.7081 | 0.1369 | 0.6688 | 0.0900 | 1.6533 | 0.0265 | 0.9174 | 0.7659 | 0.9702 |
| Yahoo_Computers | 0.2225 | 0.0388 | 0.2465 | 0.2606 | 0.1062 | 0.3165 | 0.3116 | 2.7839 | 0.0575 | 0.7556 | 0.7661 | 0.9314 |
| Yahoo_Education | 0.1372 | 0.0374 | 0.1579 | 0.1690 | 0.1223 | 0.2602 | 0.4073 | 2.6949 | 0.0612 | 0.6971 | 0.7919 | 0.9401 |
| Yahoo_Entertainment | 0.2687 | 0.0540 | 0.2888 | 0.3003 | 0.1700 | 0.3584 | 0.2797 | 1.9411 | 0.0593 | 0.7871 | 0.8641 | 0.9346 |
| Yahoo_Health | 0.3398 | 0.0338 | 0.4146 | 0.4554 | 0.2174 | 0.5289 | 0.2009 | 2.2780 | 0.0387 | 0.8329 | 0.7570 | 0.9613 |
| Yahoo_Recreation | 0.2627 | 0.0496 | 0.2849 | 0.2974 | 0.2373 | 0.3739 | 0.2829 | 2.4474 | 0.0738 | 0.7705 | 0.8654 | 0.9159 |
| Yahoo_Reference | 0.3101 | 0.0254 | 0.3331 | 0.3448 | 0.1182 | 0.4599 | 0.2889 | 1.9290 | 0.0581 | 0.7884 | 0.7238 | 0.9532 |
| Yahoo_Science | 0.2224 | 0.0295 | 0.2523 | 0.2682 | 0.2006 | 0.3345 | 0.3717 | 4.5070 | 0.0875 | 0.6938 | 0.8594 | 0.9187 |
| Yahoo_Social | 0.4356 | 0.0205 | 0.4673 | 0.4847 | 0.1690 | 0.5646 | 0.2211 | 2.1667 | 0.0449 | 0.8328 | 0.8362 | 0.9639 |
| Yahoo_Society | 0.1880 | 0.0520 | 0.2256 | 0.2478 | 0.1347 | 0.2882 | 0.2837 | 3.8106 | 0.0810 | 0.7414 | 0.7497 | 0.8921 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2686 | 6.9050 | 0.2160 | 0.7051 | 0.6223 | 0.7835 |
| Yelp | 0.2393 | 0.3083 | 0.2479 | 0.2530 | 0.2596 | 0.2510 | 0.0907 | 1.1007 | 0.0700 | 0.9314 | 0.8699 | 0.9061 |

Table 32: Detailed results for LR for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3549 | 0.0370 | 0.3711 | 0.3800 | 0.4846 | 0.5126 | 0.3119 | 1.3870 | 0.0707 | 0.7853 | 0.9111 | 0.9085 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6389 | 1.8611 | 0.3041 | 0.5824 | 0.6937 | 0.7067 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6452 | 2.0968 | 0.3597 | 0.5591 | 0.6177 | 0.6389 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5882 | 1.5294 | 0.2897 | 0.5971 | 0.5179 | 0.6951 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6667 | 1.9000 | 0.3650 | 0.5311 | 0.6928 | 0.6480 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 3.2778 | 0.1852 | 0.7594 | 0.5866 | 0.6821 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5385 | 5.9487 | 0.2156 | 0.5154 | 0.7212 | 0.7886 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6078 | 154.7647 | 0.3132 | 0.3140 | 0.5388 | 0.6876 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0148 | 0.1580 | 0.2500 | 0.0368 | 0.2580 | 0.8340 | 125.8460 | 0.1468 | 0.1771 | 0.4739 | 0.8551 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 1.6500 | 0.1432 | 0.8006 | 0.8633 | 0.8778 |
| enron | 0.0000 | 0.0659 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3392 | 17.0585 | 0.1390 | 0.4858 | 0.6280 | 0.8696 |
| EukaryoteGO | 0.6585 | 0.0215 | 0.7601 | 0.8104 | 0.5303 | 0.7993 | 0.2281 | 0.8131 | 0.0280 | 0.8638 | 0.9516 | 0.9542 |
| EukaryotePseAAC | 0.1004 | 0.0956 | 0.1849 | 0.2384 | 0.0877 | 0.2427 | 0.7503 | 3.8842 | 0.1689 | 0.4556 | 0.6009 | 0.7559 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 3.8000 | 0.2142 | 0.7935 | 0.5286 | 0.7605 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2683 | 3.0000 | 0.1232 | 0.7684 | 0.6554 | 0.8062 |
| genbase | 0.0000 | 0.0448 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2537 | 0.7015 | 0.0179 | 0.8413 | 0.6667 | 0.9809 |
| GnegativeGO | 0.0000 | 0.1313 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0786 | 0.3786 | 0.0414 | 0.9377 | 0.8516 | 0.9568 |
| GnegativePseAAC | 0.0000 | 0.1304 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6429 | 1.4143 | 0.1908 | 0.5874 | 0.7625 | 0.8374 |
| GpositiveGO | 0.0000 | 0.2548 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9936 | 0.9900 |
| GpositivePseAAC | 0.0000 | 0.2500 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2308 | 0.3846 | 0.1282 | 0.8622 | 0.9026 | 0.8872 |
| HumanGO | 0.6174 | 0.0404 | 0.6688 | 0.6956 | 0.4147 | 0.7309 | 0.1704 | 0.5145 | 0.0227 | 0.9000 | 0.9750 | 0.9812 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6688 | 2.6302 | 0.1760 | 0.5258 | 0.7002 | 0.8253 |
| Image | 0.0000 | 0.2390 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5550 | 1.5650 | 0.3433 | 0.6437 | 0.8417 | 0.6992 |
| IMDB-ECC-F10% | 0.0052 | 0.1173 | 0.2233 | 0.3437 | 0.0568 | 0.3305 | 0.6583 | 11.0168 | 0.2537 | 0.4412 | 0.5208 | 0.7106 |
| IMDB-F10% | 0.0149 | 0.1065 | 0.0225 | 0.0283 | 0.0040 | 0.0249 | 0.9652 | 18.6860 | 0.5753 | 0.1344 | 0.5657 | 0.4179 |
| LLOG-F | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9016 | 18.4918 | 0.2081 | 0.2061 | 0.4567 | 0.7917 |
| mediamill10% | 0.0618 | 0.0326 | 0.4003 | 0.5651 | 0.0268 | 0.5053 | 0.2090 | 17.2043 | 0.0505 | 0.6667 | 0.7214 | 0.9409 |
| medical | 0.4796 | 0.0152 | 0.6361 | 0.7096 | 0.1997 | 0.7287 | 0.2857 | 1.7143 | 0.0219 | 0.8134 | 0.5384 | 0.9736 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.9667 | 0.1667 | 0.7887 | 0.8289 | 0.8410 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0262 | 0.0374 | 0.1383 | 0.2213 | 0.0388 | 0.2217 | 0.8121 | 28.7507 | 0.2199 | 0.2794 | 0.5848 | 0.7504 |
| OHSUMED-F | 0.1278 | 0.0672 | 0.1975 | 0.2374 | 0.1400 | 0.2830 | 0.4681 | 6.6949 | 0.2024 | 0.5770 | 0.7858 | 0.7894 |
| PlantGO | 0.0000 | 0.0920 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3646 | 0.7604 | 0.0588 | 0.7864 | 0.9640 | 0.9475 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6837 | 2.5408 | 0.2139 | 0.5204 | 0.7723 | 0.8132 |
| rcv1subset1 | 0.0400 | 0.0318 | 0.3120 | 0.4591 | 0.1757 | 0.4384 | 0.6050 | 14.5567 | 0.0599 | 0.4933 | 0.8481 | 0.9304 |
| REUTERS-K500-EX2 | 0.2285 | 0.0156 | 0.4019 | 0.4996 | 0.2199 | 0.4777 | 0.5859 | 7.2818 | 0.0498 | 0.5414 | 0.7082 | 0.9418 |
| scene | 0.0000 | 0.1812 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3527 | 0.6307 | 0.1074 | 0.7956 | 0.9246 | 0.8878 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 20.1831 | 0.1652 | 0.8077 | 0.5950 | 0.7740 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 19.6268 | 0.1540 | 0.7929 | 0.5225 | 0.7796 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1408 | 19.5282 | 0.1359 | 0.8158 | 0.5710 | 0.7958 |
| SLASHDOT-F | 0.3694 | 0.0383 | 0.4081 | 0.4275 | 0.2863 | 0.5174 | 0.3430 | 1.9393 | 0.0696 | 0.7455 | 0.6810 | 0.9325 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 0.8000 | 0.4000 | 0.6000 | 0.1111 | 0.6000 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0000 | 0.0106 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9345 | 79.1429 | 0.2174 | 0.1079 | 0.4353 | 0.7879 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7391 | 63.2609 | 0.2931 | 0.2740 | 0.1692 | 0.6545 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0000 | 0.0097 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9296 | 87.0176 | 0.2495 | 0.1029 | 0.5709 | 0.7460 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.0959 | 0.2183 | 0.6120 | 0.6843 | 0.7590 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6644 | 4.8253 | 0.2817 | 0.5057 | 0.6744 | 0.7147 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5238 | 1.1429 | 0.1861 | 0.6987 | 0.7341 | 0.8511 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5714 | 1.0000 | 0.1774 | 0.6722 | 0.6581 | 0.8468 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5000 | 9.3868 | 0.3321 | 0.6041 | 0.6638 | 0.6567 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3223 | 7.4050 | 0.2277 | 0.6880 | 0.6608 | 0.7711 |
| Yelp | 0.0000 | 0.3593 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3659 | 1.6590 | 0.2095 | 0.7654 | 0.7079 | 0.7829 |

Table 33: Detailed results for Random for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3549 | 0.0370 | 0.3711 | 0.3800 | 0.4846 | 0.5126 | 0.3119 | 1.3870 | 0.0707 | 0.7853 | 0.9111 | 0.9085 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4444 | 1.4167 | 0.2306 | 0.6975 | 0.8045 | 0.7936 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5161 | 1.7419 | 0.2919 | 0.6392 | 0.6702 | 0.7287 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7647 | 1.8824 | 0.3559 | 0.4853 | 0.4513 | 0.6693 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7333 | 1.9333 | 0.3717 | 0.5083 | 0.7197 | 0.6201 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.5000 | 0.0824 | 0.8426 | 0.6111 | 0.7827 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3846 | 5.0513 | 0.1704 | 0.6453 | 0.7307 | 0.8321 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5882 | 139.5686 | 0.2439 | 0.3628 | 0.4745 | 0.7589 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0148 | 0.1580 | 0.2500 | 0.0368 | 0.2580 | 0.8340 | 125.8460 | 0.1468 | 0.1771 | 0.4739 | 0.8551 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.5333 | 0.1197 | 0.8297 | 0.8559 | 0.8787 |
| enron | 0.0409 | 0.0649 | 0.0448 | 0.0473 | 0.0066 | 0.0329 | 0.3041 | 12.6199 | 0.0829 | 0.6340 | 0.6443 | 0.9080 |
| EukaryoteGO | 0.6585 | 0.0215 | 0.7601 | 0.8104 | 0.5303 | 0.7993 | 0.2281 | 0.8131 | 0.0280 | 0.8638 | 0.9516 | 0.9542 |
| EukaryotePseAAC | 0.1004 | 0.0956 | 0.1849 | 0.2384 | 0.0877 | 0.2427 | 0.7503 | 3.8842 | 0.1689 | 0.4556 | 0.6009 | 0.7559 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1000 | 3.6000 | 0.1850 | 0.8488 | 0.6434 | 0.8076 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2927 | 3.0244 | 0.1379 | 0.7568 | 0.6494 | 0.8071 |
| genbase | 0.4925 | 0.0260 | 0.5000 | 0.5037 | 0.1580 | 0.5913 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9999 |
| GnegativeGO | 0.4929 | 0.0696 | 0.4929 | 0.4929 | 0.2132 | 0.6389 | 0.0429 | 0.1000 | 0.0067 | 0.9774 | 0.8674 | 0.9973 |
| GnegativePseAAC | 0.2143 | 0.1036 | 0.2143 | 0.2143 | 0.0872 | 0.3409 | 0.2571 | 0.7000 | 0.0902 | 0.8303 | 0.7792 | 0.9303 |
| GpositiveGO | 0.8654 | 0.0337 | 0.8750 | 0.8798 | 0.9372 | 0.9293 | 0.0577 | 0.0769 | 0.0192 | 0.9712 | 0.9964 | 0.9963 |
| GpositivePseAAC | 0.1731 | 0.2212 | 0.1731 | 0.1731 | 0.1815 | 0.2812 | 0.4038 | 0.6923 | 0.2308 | 0.7564 | 0.7996 | 0.8166 |
| HumanGO | 0.0000 | 0.0850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1833 | 0.5338 | 0.0245 | 0.8936 | 0.9768 | 0.9791 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5884 | 2.3955 | 0.1591 | 0.5845 | 0.7087 | 0.8451 |
| Image | 0.0200 | 0.2340 | 0.0225 | 0.0237 | 0.0377 | 0.0410 | 0.3450 | 0.9250 | 0.1771 | 0.7823 | 0.8478 | 0.8362 |
| IMDB-ECC-F10% | 0.0052 | 0.1173 | 0.2233 | 0.3437 | 0.0568 | 0.3305 | 0.6583 | 11.0168 | 0.2537 | 0.4412 | 0.5208 | 0.7106 |
| IMDB-F10% | 0.0149 | 0.1065 | 0.0225 | 0.0283 | 0.0040 | 0.0249 | 0.9652 | 18.6860 | 0.5753 | 0.1344 | 0.5657 | 0.4179 |
| LLOG-F | 0.0082 | 0.0177 | 0.0164 | 0.0197 | 0.0035 | 0.0357 | 0.7049 | 12.6475 | 0.1331 | 0.3922 | 0.4576 | 0.8598 |
| mediamill10% | 0.0618 | 0.0326 | 0.4003 | 0.5651 | 0.0268 | 0.5053 | 0.2090 | 17.2043 | 0.0505 | 0.6667 | 0.7214 | 0.9409 |
| medical | 0.2551 | 0.0213 | 0.2942 | 0.3151 | 0.0502 | 0.4405 | 0.1224 | 1.1429 | 0.0129 | 0.9108 | 0.5493 | 0.9856 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.9500 | 0.1649 | 0.7929 | 0.8301 | 0.8503 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0262 | 0.0374 | 0.1383 | 0.2213 | 0.0388 | 0.2217 | 0.8121 | 28.7507 | 0.2199 | 0.2794 | 0.5848 | 0.7504 |
| OHSUMED-F | 0.1278 | 0.0672 | 0.1975 | 0.2374 | 0.1400 | 0.2830 | 0.4681 | 6.6949 | 0.2024 | 0.5770 | 0.7858 | 0.7894 |
| PlantGO | 0.0000 | 0.0920 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2083 | 0.3958 | 0.0249 | 0.8863 | 0.9700 | 0.9768 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6837 | 2.5816 | 0.2181 | 0.5316 | 0.6880 | 0.8024 |
| rcv1subset1 | 0.0400 | 0.0318 | 0.3120 | 0.4591 | 0.1757 | 0.4384 | 0.6050 | 14.5567 | 0.0599 | 0.4933 | 0.8481 | 0.9304 |
| REUTERS-K500-EX2 | 0.1787 | 0.0130 | 0.2044 | 0.2209 | 0.0799 | 0.2650 | 0.7010 | 8.4914 | 0.0571 | 0.4655 | 0.6476 | 0.8943 |
| scene | 0.1328 | 0.1591 | 0.1328 | 0.1328 | 0.2146 | 0.2177 | 0.2075 | 0.4108 | 0.0613 | 0.8788 | 0.9404 | 0.9533 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1479 | 18.9577 | 0.1374 | 0.8154 | 0.5678 | 0.7840 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0915 | 19.3944 | 0.1445 | 0.8225 | 0.5537 | 0.7834 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0915 | 19.6268 | 0.1341 | 0.8404 | 0.5857 | 0.7959 |
| SLASHDOT-F | 0.3694 | 0.0383 | 0.4081 | 0.4275 | 0.2863 | 0.5174 | 0.3430 | 1.9393 | 0.0696 | 0.7455 | 0.6810 | 0.9325 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4000 | 0.8000 | 0.4000 | 0.7333 | 0.5556 | 0.7000 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0119 | 0.0108 | 0.0958 | 0.1394 | 0.0176 | 0.1800 | 0.6607 | 59.1369 | 0.1316 | 0.3293 | 0.4347 | 0.8640 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6957 | 47.4783 | 0.2078 | 0.3249 | 0.2367 | 0.7416 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0402 | 0.0133 | 0.2236 | 0.3308 | 0.0461 | 0.3065 | 0.7965 | 48.7412 | 0.1147 | 0.2894 | 0.5919 | 0.8771 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5240 | 3.9966 | 0.2141 | 0.6010 | 0.7118 | 0.7693 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 3.9384 | 0.2085 | 0.6178 | 0.7237 | 0.7791 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0952 | 0.5238 | 0.0631 | 0.9286 | 0.7697 | 0.9537 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4762 | 0.9048 | 0.1619 | 0.7198 | 0.6340 | 0.8835 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2453 | 9.0094 | 0.2599 | 0.7047 | 0.6770 | 0.7213 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2686 | 6.0661 | 0.1637 | 0.7520 | 0.7287 | 0.8410 |
| Yelp | 0.0000 | 0.3593 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0897 | 1.1396 | 0.0769 | 0.9251 | 0.8732 | 0.8970 |

Table 34: Detailed results for AdaBoost for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0000 | 0.0512 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2770 | 1.1815 | 0.0602 | 0.8106 | 0.9647 | 0.9459 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5000 | 1.2778 | 0.1917 | 0.7009 | 0.8452 | 0.8143 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5161 | 1.7097 | 0.2847 | 0.6527 | 0.6826 | 0.7358 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 1.9412 | 0.3794 | 0.4843 | 0.4544 | 0.6138 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 1.8333 | 0.3558 | 0.5011 | 0.7396 | 0.6729 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 2.8333 | 0.1306 | 0.7737 | 0.5446 | 0.7407 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5128 | 5.0256 | 0.1825 | 0.5975 | 0.7347 | 0.8300 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5098 | 143.7451 | 0.2497 | 0.3721 | 0.5077 | 0.7522 |
| corel16k001 | 0.0000 | 0.0188 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8540 | 66.5113 | 0.2562 | 0.1484 | 0.7017 | 0.7393 |
| Corel5k | 0.0000 | 0.0095 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9760 | 135.8960 | 0.1915 | 0.0767 | 0.4699 | 0.8142 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 1.6000 | 0.1293 | 0.8329 | 0.8545 | 0.8729 |
| enron | 0.0000 | 0.0659 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2398 | 12.3743 | 0.0821 | 0.6772 | 0.6049 | 0.9026 |
| EukaryoteGO | 0.6585 | 0.0215 | 0.7601 | 0.8104 | 0.5303 | 0.7993 | 0.2281 | 0.8131 | 0.0280 | 0.8638 | 0.9516 | 0.9542 |
| EukaryotePseAAC | 0.0000 | 0.0528 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5856 | 2.4929 | 0.1039 | 0.5963 | 0.7858 | 0.9042 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1000 | 3.6000 | 0.1708 | 0.8545 | 0.6154 | 0.8123 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3902 | 2.9268 | 0.1308 | 0.7033 | 0.6848 | 0.8147 |
| genbase | 0.9254 | 0.0028 | 0.9677 | 0.9837 | 0.6416 | 0.9697 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6657 | 0.9994 |
| GnegativeGO | 0.7786 | 0.0321 | 0.7893 | 0.7946 | 0.6233 | 0.8615 | 0.0214 | 0.0786 | 0.0037 | 0.9881 | 0.8730 | 0.9975 |
| GnegativePseAAC | 0.0357 | 0.1259 | 0.0357 | 0.0357 | 0.0205 | 0.0662 | 0.3214 | 0.8500 | 0.1122 | 0.7917 | 0.7675 | 0.9141 |
| GpositiveGO | 0.8269 | 0.0529 | 0.8365 | 0.8413 | 0.9058 | 0.8889 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9901 | 0.9803 |
| GpositivePseAAC | 0.0962 | 0.2260 | 0.0962 | 0.0962 | 0.1087 | 0.1754 | 0.3269 | 0.5769 | 0.1923 | 0.7997 | 0.8354 | 0.8554 |
| HumanGO | 0.6174 | 0.0404 | 0.6688 | 0.6956 | 0.4147 | 0.7309 | 0.1704 | 0.5145 | 0.0227 | 0.9000 | 0.9750 | 0.9812 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6270 | 2.3312 | 0.1541 | 0.5687 | 0.7213 | 0.8538 |
| Image | 0.0000 | 0.2390 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2700 | 0.7550 | 0.1317 | 0.8303 | 0.8737 | 0.8713 |
| IMDB-ECC-F10% | 0.0052 | 0.1173 | 0.2233 | 0.3437 | 0.0568 | 0.3305 | 0.6583 | 11.0168 | 0.2537 | 0.4412 | 0.5208 | 0.7106 |
| IMDB-F10% | 0.0149 | 0.1065 | 0.0225 | 0.0283 | 0.0040 | 0.0249 | 0.9652 | 18.6860 | 0.5753 | 0.1344 | 0.5657 | 0.4179 |
| LLOG-F | 0.0164 | 0.0178 | 0.0164 | 0.0164 | 0.0059 | 0.0240 | 0.9016 | 13.7131 | 0.1507 | 0.2644 | 0.4640 | 0.8457 |
| mediamill10% | 0.0404 | 0.0407 | 0.1114 | 0.1507 | 0.0734 | 0.1417 | 0.1140 | 7.3872 | 0.0148 | 0.7920 | 0.8215 | 0.9819 |
| medical | 0.5714 | 0.0116 | 0.7347 | 0.8116 | 0.3554 | 0.8075 | 0.2857 | 2.1633 | 0.0330 | 0.7671 | 0.5338 | 0.9649 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2167 | 2.0000 | 0.1680 | 0.7989 | 0.8500 | 0.8575 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.0263 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6518 | 16.8968 | 0.1184 | 0.4679 | 0.6624 | 0.8661 |
| OHSUMED-F | 0.0000 | 0.0728 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6123 | 4.4838 | 0.1280 | 0.5573 | 0.8748 | 0.8720 |
| PlantGO | 0.3125 | 0.0686 | 0.3125 | 0.3125 | 0.3628 | 0.4317 | 0.1979 | 0.4792 | 0.0311 | 0.8831 | 0.9700 | 0.9734 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6429 | 2.6224 | 0.2200 | 0.5351 | 0.6921 | 0.8042 |
| rcv1subset1 | 0.0400 | 0.0318 | 0.3120 | 0.4591 | 0.1757 | 0.4384 | 0.6050 | 14.5567 | 0.0599 | 0.4933 | 0.8481 | 0.9304 |
| REUTERS-K500-EX2 | 0.0464 | 0.0136 | 0.0473 | 0.0477 | 0.0205 | 0.0642 | 0.6168 | 9.9570 | 0.0746 | 0.4877 | 0.7130 | 0.9229 |
| scene | 0.0083 | 0.1798 | 0.0083 | 0.0083 | 0.0183 | 0.0152 | 0.1660 | 0.3361 | 0.0476 | 0.9046 | 0.9541 | 0.9608 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1197 | 19.2394 | 0.1339 | 0.8305 | 0.5614 | 0.7910 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 19.6268 | 0.1540 | 0.7929 | 0.5225 | 0.7796 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1761 | 19.1901 | 0.1475 | 0.7966 | 0.5861 | 0.7829 |
| SLASHDOT-F | 0.3694 | 0.0383 | 0.4081 | 0.4275 | 0.2863 | 0.5174 | 0.3430 | 1.9393 | 0.0696 | 0.7455 | 0.6810 | 0.9325 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 0.8000 | 0.4000 | 0.6000 | 0.2222 | 0.7000 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0536 | 0.0111 | 0.1909 | 0.2735 | 0.0746 | 0.3105 | 0.7024 | 49.5595 | 0.1196 | 0.2838 | 0.4621 | 0.8786 |
| Stackex_coffee | 0.0000 | 0.0375 | 0.2118 | 0.3373 | 0.0836 | 0.3205 | 0.7826 | 45.0870 | 0.2404 | 0.2909 | 0.2275 | 0.8767 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0402 | 0.0133 | 0.2236 | 0.3308 | 0.0461 | 0.3065 | 0.7965 | 48.7412 | 0.1147 | 0.2894 | 0.5919 | 0.8771 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.0959 | 0.2183 | 0.6120 | 0.6843 | 0.7590 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4555 | 3.9178 | 0.2027 | 0.6335 | 0.7380 | 0.7788 |
| VirusGO | 0.6667 | 0.0952 | 0.6667 | 0.6667 | 0.4815 | 0.7000 | 0.0476 | 0.3810 | 0.0381 | 0.9619 | 0.7874 | 0.9699 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3810 | 0.7143 | 0.1190 | 0.7929 | 0.5840 | 0.8962 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2075 | 8.7075 | 0.2393 | 0.7326 | 0.7274 | 0.7388 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2562 | 6.7603 | 0.1761 | 0.7346 | 0.7595 | 0.8260 |
| Yelp | 0.0000 | 0.3593 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0947 | 1.1515 | 0.0756 | 0.9206 | 0.8834 | 0.8891 |

Table 35: Detailed results for k-NN for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3549 | 0.0370 | 0.3711 | 0.3800 | 0.4846 | 0.5126 | 0.3119 | 1.3870 | 0.0707 | 0.7853 | 0.9111 | 0.9085 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7500 | 2.3333 | 0.4201 | 0.4938 | 0.6122 | 0.6209 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5484 | 1.9355 | 0.3879 | 0.6132 | 0.6043 | 0.6773 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6471 | 1.6471 | 0.3706 | 0.5814 | 0.4496 | 0.7183 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 2.3667 | 0.4692 | 0.4428 | 0.6465 | 0.5625 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1667 | 2.6111 | 0.0898 | 0.8793 | 0.5518 | 0.7464 |
| bibtex | 0.0027 | 0.0578 | 0.0897 | 0.1611 | 0.1384 | 0.1561 | 0.7932 | 66.8703 | 0.5058 | 0.1957 | 0.9242 | 0.9216 |
| birds | 0.0513 | 0.0945 | 0.0641 | 0.0699 | 0.0286 | 0.0789 | 0.6154 | 5.2821 | 0.2111 | 0.5053 | 0.7224 | 0.8276 |
| bookmarks10% | 0.1458 | 0.0531 | 0.1943 | 0.2707 | 0.0923 | 0.1129 | 0.8132 | 84.8303 | 0.5377 | 0.2464 | 0.9397 | 0.9549 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5882 | 145.0784 | 0.2718 | 0.3747 | 0.5659 | 0.7795 |
| corel16k001 | 0.0000 | 0.0662 | 0.0722 | 0.1277 | 0.0580 | 0.1291 | 0.9187 | 85.7952 | 0.5482 | 0.1329 | 0.9106 | 0.9072 |
| Corel5k | 0.0000 | 0.0653 | 0.0581 | 0.1067 | 0.0373 | 0.1046 | 0.9640 | 155.6700 | 0.5531 | 0.0896 | 0.6371 | 0.9399 |
| delicious | 0.0000 | 0.0837 | 0.0959 | 0.1728 | 0.1076 | 0.1705 | 0.8745 | 777.8937 | 0.3747 | 0.1289 | 0.9185 | 0.9303 |
| emotions | 0.0167 | 0.3028 | 0.0167 | 0.0167 | 0.0167 | 0.0180 | 0.2167 | 1.5667 | 0.1544 | 0.8369 | 0.8355 | 0.8572 |
| enron | 0.0819 | 0.0628 | 0.2564 | 0.3731 | 0.0775 | 0.3361 | 0.3684 | 19.0175 | 0.2505 | 0.5548 | 0.7351 | 0.9103 |
| EukaryoteGO | 0.4575 | 0.0327 | 0.6666 | 0.7601 | 0.4010 | 0.7311 | 0.2680 | 1.2784 | 0.0693 | 0.8275 | 0.9840 | 0.9863 |
| EukaryotePseAAC | 0.1364 | 0.0645 | 0.2416 | 0.2903 | 0.0858 | 0.3531 | 0.6770 | 4.4234 | 0.2797 | 0.5035 | 0.8743 | 0.9060 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.7500 | 0.2367 | 0.7993 | 0.5392 | 0.7683 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2927 | 3.2439 | 0.1755 | 0.7417 | 0.6087 | 0.7815 |
| genbase | 0.8955 | 0.0044 | 0.9453 | 0.9699 | 0.5685 | 0.9518 | 0.0299 | 0.2388 | 0.0012 | 0.9863 | 0.6665 | 0.9993 |
| GnegativeGO | 0.8571 | 0.0223 | 0.8786 | 0.8892 | 0.6656 | 0.9097 | 0.0500 | 0.1429 | 0.0204 | 0.9696 | 0.8696 | 0.9951 |
| GnegativePseAAC | 0.4500 | 0.0777 | 0.4536 | 0.4553 | 0.1962 | 0.5953 | 0.3286 | 0.8929 | 0.1531 | 0.7863 | 0.8047 | 0.9381 |
| GpositiveGO | 0.8846 | 0.0385 | 0.8942 | 0.8990 | 0.7016 | 0.9216 | 0.0385 | 0.0577 | 0.0192 | 0.9808 | 0.9923 | 0.9910 |
| GpositivePseAAC | 0.3846 | 0.1635 | 0.3846 | 0.3846 | 0.3969 | 0.5405 | 0.2885 | 0.5192 | 0.1859 | 0.8205 | 0.8805 | 0.8953 |
| HumanGO | 0.5563 | 0.0480 | 0.6184 | 0.6505 | 0.3940 | 0.6799 | 0.2733 | 1.0836 | 0.0773 | 0.8246 | 0.9494 | 0.9643 |
| HumanPseAAC | 0.0547 | 0.0841 | 0.0713 | 0.0804 | 0.0302 | 0.1327 | 0.6624 | 3.6431 | 0.3239 | 0.4998 | 0.7880 | 0.8227 |
| Image | 0.2700 | 0.1860 | 0.2867 | 0.2955 | 0.3536 | 0.3961 | 0.3400 | 0.9100 | 0.1958 | 0.7923 | 0.8413 | 0.8353 |
| IMDB-ECC-F10% | 0.0126 | 0.0689 | 0.0195 | 0.0239 | 0.0057 | 0.0305 | 0.6740 | 10.0723 | 0.3471 | 0.4181 | 0.7550 | 0.8096 |
| IMDB-F10% | 0.0033 | 0.0725 | 0.0069 | 0.0093 | 0.0027 | 0.0137 | 0.6935 | 9.6769 | 0.3071 | 0.4174 | 0.7396 | 0.8105 |
| LLOG-F | 0.0082 | 0.0589 | 0.1101 | 0.1769 | 0.0528 | 0.1695 | 0.9016 | 23.1721 | 0.4843 | 0.2007 | 0.5268 | 0.9097 |
| mediamill10% | 0.0380 | 0.0374 | 0.4067 | 0.5856 | 0.0555 | 0.5420 | 0.3397 | 11.6603 | 0.0402 | 0.6002 | 0.7478 | 0.9517 |
| medical | 0.0510 | 0.0442 | 0.3888 | 0.5545 | 0.1922 | 0.5209 | 0.5816 | 4.4694 | 0.0895 | 0.6255 | 0.5324 | 0.9720 |
| Music | 0.0000 | 0.3250 | 0.0083 | 0.0111 | 0.0159 | 0.0168 | 0.1833 | 1.8333 | 0.1423 | 0.8440 | 0.8656 | 0.8793 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0262 | 0.0374 | 0.1383 | 0.2213 | 0.0388 | 0.2217 | 0.8121 | 28.7507 | 0.2199 | 0.2794 | 0.5848 | 0.7504 |
| OHSUMED-F | 0.0072 | 0.0725 | 0.0083 | 0.0088 | 0.0042 | 0.0111 | 0.7193 | 8.7107 | 0.3554 | 0.3880 | 0.7688 | 0.7766 |
| PlantGO | 0.3854 | 0.0668 | 0.4167 | 0.4317 | 0.2435 | 0.5276 | 0.3646 | 1.0729 | 0.1115 | 0.7764 | 0.9540 | 0.9520 |
| PlantPseAAC | 0.0510 | 0.0986 | 0.0561 | 0.0586 | 0.0434 | 0.0938 | 0.7245 | 3.3469 | 0.3581 | 0.4658 | 0.7752 | 0.7890 |
| rcv1subset1 | 0.0017 | 0.0535 | 0.1872 | 0.2975 | 0.0978 | 0.2953 | 0.7600 | 34.7233 | 0.3419 | 0.2922 | 0.8890 | 0.9275 |
| REUTERS-K500-EX2 | 0.0653 | 0.0461 | 0.2508 | 0.3854 | 0.2021 | 0.3009 | 0.7199 | 14.5636 | 0.2060 | 0.4471 | 0.7550 | 0.9711 |
| scene | 0.4398 | 0.1162 | 0.4585 | 0.4677 | 0.5764 | 0.5779 | 0.2531 | 0.5519 | 0.0934 | 0.8479 | 0.9312 | 0.9332 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0845 | 19.3239 | 0.1587 | 0.8112 | 0.5836 | 0.7690 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.7394 | 0.1490 | 0.8207 | 0.5567 | 0.7849 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0775 | 19.5352 | 0.1342 | 0.8432 | 0.5747 | 0.7995 |
| SLASHDOT-F | 0.1587 | 0.0587 | 0.1931 | 0.2101 | 0.0859 | 0.2695 | 0.7566 | 6.7593 | 0.4026 | 0.4028 | 0.6688 | 0.8756 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 | 1.0000 | 0.5000 | 0.5000 | 0.0000 | 0.5000 |
| Stackex_chemistry | 0.0000 | 0.0632 | 0.0649 | 0.1188 | 0.0529 | 0.1151 | 0.8746 | 81.2032 | 0.5432 | 0.1801 | 0.8525 | 0.9365 |
| Stackex_chess | 0.0000 | 0.0647 | 0.0713 | 0.1309 | 0.0550 | 0.1274 | 0.8988 | 108.2083 | 0.5408 | 0.1364 | 0.5087 | 0.9480 |
| Stackex_coffee | 0.0000 | 0.0774 | 0.0738 | 0.1446 | 0.0230 | 0.1275 | 0.9130 | 70.9130 | 0.5751 | 0.1443 | 0.2291 | 0.9020 |
| Stackex_cooking | 0.0000 | 0.0485 | 0.0333 | 0.0630 | 0.0251 | 0.0610 | 0.9845 | 222.1952 | 0.7040 | 0.0641 | 0.8851 | 0.9592 |
| Stackex_philosophy | 0.0000 | 0.0648 | 0.0632 | 0.1169 | 0.0388 | 0.1143 | 0.9045 | 113.0477 | 0.5227 | 0.1299 | 0.7008 | 0.9466 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0034 | 0.1787 | 0.0051 | 0.0059 | 0.0037 | 0.0063 | 0.5274 | 4.1438 | 0.2408 | 0.5965 | 0.7273 | 0.7691 |
| tox21_RDKit_desc | 0.0205 | 0.1775 | 0.0217 | 0.0228 | 0.0143 | 0.0220 | 0.5103 | 4.4452 | 0.2642 | 0.5963 | 0.7271 | 0.7661 |
| VirusGO | 0.5714 | 0.1190 | 0.5714 | 0.5714 | 0.4852 | 0.6154 | 0.1429 | 0.6667 | 0.1022 | 0.8905 | 0.7538 | 0.9097 |
| VirusPseAAC | 0.0476 | 0.1746 | 0.0476 | 0.0476 | 0.0303 | 0.0833 | 0.4762 | 0.8571 | 0.1738 | 0.7373 | 0.7178 | 0.8869 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2453 | 8.8019 | 0.2572 | 0.7089 | 0.6805 | 0.7147 |
| Yahoo_Arts | 0.0668 | 0.0692 | 0.0884 | 0.1030 | 0.0326 | 0.1190 | 0.7143 | 8.4072 | 0.3092 | 0.4272 | 0.7600 | 0.8300 |
| Yahoo_Business | 0.3770 | 0.0363 | 0.6088 | 0.7414 | 0.1168 | 0.6499 | 0.1212 | 3.1586 | 0.1048 | 0.8607 | 0.7715 | 0.9568 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.2519 | 0.0481 | 0.3315 | 0.3787 | 0.1238 | 0.3842 | 0.5147 | 5.8751 | 0.1968 | 0.5860 | 0.7108 | 0.9096 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2149 | 6.0537 | 0.1648 | 0.7763 | 0.7301 | 0.8445 |
| Yelp | 0.0578 | 0.3326 | 0.0932 | 0.1121 | 0.0926 | 0.1446 | 0.2313 | 1.6391 | 0.2365 | 0.8153 | 0.7246 | 0.7694 |

Table 36: Detailed results for SVM for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5833 | 2.0833 | 0.3631 | 0.5849 | 0.6181 | 0.6157 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8065 | 2.8387 | 0.5250 | 0.4258 | 0.5726 | 0.4852 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7059 | 2.0000 | 0.3794 | 0.4961 | 0.2939 | 0.5966 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.9667 | 0.5717 | 0.3706 | 0.6111 | 0.4614 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5556 | 0.0824 | 0.8630 | 0.6766 | 0.7860 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4615 | 5.5385 | 0.1941 | 0.5943 | 0.7172 | 0.8150 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2941 | 133.6275 | 0.2022 | 0.4546 | 0.5194 | 0.7988 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0135 | 0.1639 | 0.2610 | 0.0267 | 0.2655 | 0.7500 | 108.4880 | 0.1265 | 0.2308 | 0.4850 | 0.8744 |
| delicious | 0.0130 | 0.5052 | 0.0148 | 0.0538 | 0.0419 | 0.0533 | 0.8914 | 902.8774 | 0.5175 | 0.0631 | 0.8342 | 0.6862 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.5667 | 0.1316 | 0.8104 | 0.8482 | 0.8714 |
| enron | 0.1170 | 0.0569 | 0.2569 | 0.3468 | 0.0497 | 0.3138 | 0.2573 | 12.5029 | 0.0820 | 0.6800 | 0.6480 | 0.9093 |
| EukaryoteGO | 0.6314 | 0.0233 | 0.6992 | 0.7336 | 0.3826 | 0.7608 | 0.2049 | 0.4897 | 0.0150 | 0.8861 | 0.9857 | 0.9856 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1000 | 3.6000 | 0.1900 | 0.8371 | 0.6227 | 0.7802 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2927 | 3.0000 | 0.1422 | 0.7434 | 0.5521 | 0.7901 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3206 | 0.8592 | 0.0000 | 0.5373 | 0.0066 | 0.9907 | 0.6291 | 0.9896 |
| GnegativeGO | 0.9071 | 0.0179 | 0.9179 | 0.9232 | 0.6779 | 0.9286 | 0.0357 | 0.1214 | 0.0089 | 0.9776 | 0.8521 | 0.9899 |
| GnegativePseAAC | 0.5643 | 0.0625 | 0.5679 | 0.5696 | 0.2276 | 0.6957 | 0.1786 | 0.4786 | 0.0607 | 0.8839 | 0.7386 | 0.9453 |
| GpositiveGO | 0.8654 | 0.0481 | 0.8654 | 0.8654 | 0.8406 | 0.9000 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9968 | 0.9923 |
| GpositivePseAAC | 0.5962 | 0.1154 | 0.5962 | 0.5962 | 0.5437 | 0.7209 | 0.2692 | 0.4231 | 0.1410 | 0.8413 | 0.9060 | 0.9100 |
| HumanGO | 0.5498 | 0.0459 | 0.5718 | 0.5831 | 0.3252 | 0.6491 | 0.1543 | 0.4920 | 0.0220 | 0.9083 | 0.9723 | 0.9792 |
| HumanPseAAC | 0.0096 | 0.0838 | 0.0096 | 0.0096 | 0.0064 | 0.0162 | 0.5498 | 2.1768 | 0.1415 | 0.6213 | 0.7146 | 0.8572 |
| Image | 0.1900 | 0.2020 | 0.2000 | 0.2049 | 0.2683 | 0.2937 | 0.2950 | 0.8550 | 0.1592 | 0.8105 | 0.8487 | 0.8405 |
| IMDB-ECC-F10% | 0.0168 | 0.1174 | 0.1287 | 0.1953 | 0.0338 | 0.1967 | 0.7358 | 9.1866 | 0.2391 | 0.3592 | 0.5525 | 0.7518 |
| IMDB-F10% | 0.0066 | 0.0792 | 0.0223 | 0.0320 | 0.0149 | 0.0470 | 0.7523 | 9.2568 | 0.2185 | 0.4176 | 0.5699 | 0.7623 |
| LLOG-F | 0.0492 | 0.0174 | 0.0574 | 0.0612 | 0.0126 | 0.0914 | 0.6803 | 13.2213 | 0.1425 | 0.4156 | 0.4463 | 0.8565 |
| mediamill10% | 0.0689 | 0.0326 | 0.3942 | 0.5429 | 0.0273 | 0.4921 | 0.2090 | 19.9691 | 0.0628 | 0.5811 | 0.7289 | 0.9277 |
| medical | 0.6122 | 0.0116 | 0.7160 | 0.7668 | 0.2361 | 0.7901 | 0.1429 | 1.4592 | 0.0176 | 0.8921 | 0.5447 | 0.9777 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2167 | 1.9167 | 0.1543 | 0.8142 | 0.8613 | 0.8666 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0363 | 0.1928 | 0.2935 | 0.0394 | 0.2841 | 0.7041 | 27.6889 | 0.2006 | 0.3803 | 0.5622 | 0.7702 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.3542 | 0.0668 | 0.3594 | 0.3620 | 0.1958 | 0.4762 | 0.2083 | 0.4062 | 0.0254 | 0.8860 | 0.9736 | 0.9762 |
| PlantPseAAC | 0.0306 | 0.0910 | 0.0357 | 0.0381 | 0.0354 | 0.0696 | 0.5714 | 2.1837 | 0.1808 | 0.6000 | 0.7766 | 0.8330 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.3144 | 0.0121 | 0.4145 | 0.4733 | 0.1777 | 0.4941 | 0.4725 | 6.2302 | 0.0417 | 0.6266 | 0.7165 | 0.9519 |
| scene | 0.5187 | 0.0968 | 0.5394 | 0.5496 | 0.6641 | 0.6585 | 0.2116 | 0.3900 | 0.0581 | 0.8800 | 0.9445 | 0.9526 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0845 | 19.1127 | 0.1195 | 0.8555 | 0.5679 | 0.8049 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.2606 | 0.1237 | 0.8378 | 0.5363 | 0.8029 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.2746 | 0.1226 | 0.8318 | 0.5642 | 0.8038 |
| SLASHDOT-F | 0.2937 | 0.0437 | 0.3223 | 0.3365 | 0.2095 | 0.4229 | 0.3624 | 2.0688 | 0.0765 | 0.7297 | 0.6794 | 0.9209 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0115 | 0.0214 | 0.0720 | 0.1145 | 0.0185 | 0.1102 | 0.9107 | 45.0043 | 0.1577 | 0.2125 | 0.5317 | 0.6461 |
| Stackex_chess | 0.0298 | 0.0110 | 0.1645 | 0.2424 | 0.0176 | 0.2584 | 0.6012 | 57.5060 | 0.1360 | 0.3392 | 0.4258 | 0.8628 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7391 | 48.9565 | 0.2154 | 0.3043 | 0.1987 | 0.7405 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0804 | 0.0103 | 0.2140 | 0.2941 | 0.0253 | 0.2840 | 0.6181 | 49.5050 | 0.1158 | 0.3587 | 0.5784 | 0.8732 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4726 | 4.0719 | 0.2180 | 0.6174 | 0.6850 | 0.7560 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5068 | 4.0993 | 0.2235 | 0.6028 | 0.6777 | 0.7491 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1429 | 0.6190 | 0.0815 | 0.9008 | 0.7227 | 0.9117 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3810 | 0.8571 | 0.1548 | 0.7675 | 0.6263 | 0.8898 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2358 | 9.3208 | 0.2901 | 0.6818 | 0.6625 | 0.6834 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2190 | 6.2149 | 0.1590 | 0.7689 | 0.7163 | 0.8440 |
| Yelp | 0.0080 | 0.3583 | 0.0080 | 0.0080 | 0.0074 | 0.0088 | 0.2104 | 1.3539 | 0.1303 | 0.8566 | 0.8012 | 0.8537 |

Table 37: Detailed results for DT for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3439 | 0.0347 | 0.3473 | 0.3489 | 0.4702 | 0.5024 | 0.2682 | 0.8594 | 0.0449 | 0.8272 | 0.9668 | 0.9671 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6667 | 2.0833 | 0.3900 | 0.5516 | 0.6241 | 0.6168 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7419 | 2.4839 | 0.4387 | 0.4849 | 0.5055 | 0.6222 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.2941 | 0.4426 | 0.4167 | 0.4471 | 0.5893 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.5333 | 0.4992 | 0.3978 | 0.5396 | 0.5046 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.6667 | 0.1093 | 0.8334 | 0.6661 | 0.7899 |
| bibtex | 0.1514 | 0.0122 | 0.2652 | 0.3362 | 0.1665 | 0.3509 | 0.3932 | 28.3568 | 0.1518 | 0.5801 | 0.9455 | 0.9595 |
| birds | 0.0769 | 0.0904 | 0.0897 | 0.0957 | 0.0768 | 0.1067 | 0.2821 | 3.3590 | 0.1064 | 0.7183 | 0.7889 | 0.9000 |
| bookmarks10% | 0.1800 | 0.0091 | 0.1946 | 0.2034 | 0.0475 | 0.1974 | 0.6378 | 59.6196 | 0.3003 | 0.3851 | 0.8730 | 0.9078 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2745 | 135.4118 | 0.2059 | 0.4605 | 0.5217 | 0.7974 |
| corel16k001 | 0.0080 | 0.0221 | 0.0932 | 0.1429 | 0.0137 | 0.1448 | 0.9085 | 56.1358 | 0.1950 | 0.2044 | 0.6424 | 0.8028 |
| Corel5k | 0.0000 | 0.0181 | 0.1392 | 0.2297 | 0.0302 | 0.2305 | 0.8820 | 137.2300 | 0.1702 | 0.1415 | 0.3770 | 0.8310 |
| delicious | 0.0130 | 0.5052 | 0.0148 | 0.0538 | 0.0419 | 0.0533 | 0.8914 | 902.8774 | 0.5175 | 0.0631 | 0.8342 | 0.6862 |
| emotions | 0.0167 | 0.3056 | 0.0167 | 0.0167 | 0.0159 | 0.0179 | 0.2333 | 1.5000 | 0.1193 | 0.8420 | 0.8732 | 0.8912 |
| enron | 0.1287 | 0.0562 | 0.2671 | 0.3469 | 0.0934 | 0.3294 | 0.2164 | 13.1754 | 0.0922 | 0.7007 | 0.6756 | 0.9163 |
| EukaryoteGO | 0.6778 | 0.0200 | 0.7229 | 0.7461 | 0.6554 | 0.7891 | 0.1778 | 0.4291 | 0.0144 | 0.9006 | 0.9930 | 0.9950 |
| EukaryotePseAAC | 0.0180 | 0.0521 | 0.0180 | 0.0180 | 0.0088 | 0.0305 | 0.5495 | 2.2973 | 0.0947 | 0.6248 | 0.7864 | 0.9134 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 3.5000 | 0.2033 | 0.8178 | 0.7317 | 0.8224 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2195 | 2.7805 | 0.1083 | 0.8047 | 0.6722 | 0.8285 |
| genbase | 0.9403 | 0.0022 | 0.9701 | 0.9850 | 0.6173 | 0.9756 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9996 |
| GnegativeGO | 0.8929 | 0.0170 | 0.9071 | 0.9142 | 0.6730 | 0.9314 | 0.0214 | 0.0929 | 0.0102 | 0.9863 | 0.8737 | 0.9990 |
| GnegativePseAAC | 0.3643 | 0.0866 | 0.3643 | 0.3643 | 0.1445 | 0.5126 | 0.2643 | 0.6714 | 0.0889 | 0.8320 | 0.7764 | 0.9462 |
| GpositiveGO | 0.8654 | 0.0529 | 0.8654 | 0.8654 | 0.9120 | 0.8911 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9962 | 0.9961 |
| GpositivePseAAC | 0.4615 | 0.1490 | 0.4615 | 0.4615 | 0.4126 | 0.6076 | 0.4423 | 0.8654 | 0.3205 | 0.7212 | 0.8333 | 0.8391 |
| HumanGO | 0.5981 | 0.0429 | 0.6372 | 0.6574 | 0.5375 | 0.6998 | 0.2154 | 0.6206 | 0.0360 | 0.8741 | 0.9769 | 0.9848 |
| HumanPseAAC | 0.0064 | 0.0841 | 0.0064 | 0.0064 | 0.0029 | 0.0108 | 0.5595 | 2.1447 | 0.1395 | 0.6108 | 0.7532 | 0.8699 |
| Image | 0.2200 | 0.1900 | 0.2375 | 0.2459 | 0.3262 | 0.3493 | 0.2950 | 0.8250 | 0.1496 | 0.8132 | 0.8743 | 0.8830 |
| IMDB-ECC-F10% | 0.0010 | 0.0673 | 0.0014 | 0.0017 | 0.0010 | 0.0022 | 0.6226 | 7.3071 | 0.1726 | 0.4832 | 0.6197 | 0.8093 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6089 | 7.5559 | 0.1709 | 0.4911 | 0.6314 | 0.8165 |
| LLOG-F | 0.0574 | 0.0173 | 0.0738 | 0.0811 | 0.0177 | 0.1222 | 0.6148 | 13.0656 | 0.1798 | 0.4581 | 0.4855 | 0.8859 |
| mediamill10% | 0.6223 | 0.0080 | 0.8688 | 0.9278 | 0.3521 | 0.9004 | 0.0000 | 3.4846 | 0.0001 | 0.9993 | 0.8207 | 0.9992 |
| medical | 0.6327 | 0.0107 | 0.7449 | 0.7976 | 0.3760 | 0.8082 | 0.1633 | 1.8776 | 0.0469 | 0.8818 | 0.5503 | 0.9949 |
| Music | 0.0000 | 0.3194 | 0.0250 | 0.0333 | 0.0389 | 0.0496 | 0.2167 | 1.8333 | 0.1437 | 0.8231 | 0.8647 | 0.8712 |
| NUS-WIDE-bow10% | 0.0124 | 0.0254 | 0.0426 | 0.0586 | 0.0092 | 0.1086 | 0.5571 | 16.3216 | 0.1108 | 0.4822 | 0.6369 | 0.8742 |
| NUS-WIDE-cVLADplus10% | 0.0071 | 0.0260 | 0.0137 | 0.0182 | 0.0028 | 0.0307 | 0.4976 | 15.8592 | 0.1177 | 0.5271 | 0.6727 | 0.8909 |
| OHSUMED-F | 0.1378 | 0.0621 | 0.1956 | 0.2255 | 0.1519 | 0.2726 | 0.3295 | 3.1170 | 0.0774 | 0.7309 | 0.8827 | 0.9193 |
| PlantGO | 0.6250 | 0.0469 | 0.6615 | 0.6797 | 0.6207 | 0.7216 | 0.1979 | 0.5208 | 0.0489 | 0.8820 | 0.9764 | 0.9810 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6122 | 1.9694 | 0.1634 | 0.5933 | 0.7999 | 0.8519 |
| rcv1subset1 | 0.0283 | 0.0285 | 0.1081 | 0.1462 | 0.0629 | 0.1660 | 0.4517 | 13.2667 | 0.0640 | 0.6082 | 0.8793 | 0.9595 |
| REUTERS-K500-EX2 | 0.3093 | 0.0108 | 0.3555 | 0.3814 | 0.1835 | 0.4458 | 0.4399 | 11.5137 | 0.1469 | 0.6401 | 0.7488 | 0.9715 |
| scene | 0.2863 | 0.1335 | 0.2988 | 0.3049 | 0.4426 | 0.4373 | 0.2075 | 0.4440 | 0.0678 | 0.8763 | 0.9492 | 0.9505 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 18.8944 | 0.1286 | 0.8256 | 0.5857 | 0.7974 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0915 | 18.8239 | 0.1184 | 0.8495 | 0.5796 | 0.8068 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1127 | 18.8944 | 0.1274 | 0.8347 | 0.5744 | 0.7971 |
| SLASHDOT-F | 0.3333 | 0.0418 | 0.3748 | 0.3957 | 0.2818 | 0.4775 | 0.3995 | 2.7143 | 0.1203 | 0.6902 | 0.6681 | 0.9185 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.2000 | 0.2000 | 0.1333 | 0.2857 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0173 | 0.0121 | 0.0531 | 0.0722 | 0.0355 | 0.0949 | 0.6744 | 51.9481 | 0.2955 | 0.3492 | 0.8545 | 0.9455 |
| Stackex_chess | 0.0357 | 0.0109 | 0.1644 | 0.2434 | 0.0695 | 0.2783 | 0.6667 | 87.3750 | 0.3972 | 0.3281 | 0.5208 | 0.9665 |
| Stackex_coffee | 0.0435 | 0.0216 | 0.1232 | 0.1865 | 0.0420 | 0.1867 | 0.8261 | 45.6087 | 0.2702 | 0.3124 | 0.2464 | 0.9374 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0553 | 0.0097 | 0.1648 | 0.2280 | 0.0702 | 0.2566 | 0.6080 | 84.5754 | 0.3682 | 0.3774 | 0.7086 | 0.9611 |
| tmc2007-500 | 0.0703 | 0.0892 | 0.1187 | 0.1428 | 0.1011 | 0.1602 | 0.2577 | 2.5962 | 0.0472 | 0.7942 | 0.9266 | 0.9520 |
| tox21_CDK_ECFP4 | 0.0274 | 0.1761 | 0.0331 | 0.0367 | 0.0406 | 0.0374 | 0.4760 | 3.9212 | 0.2026 | 0.6336 | 0.7137 | 0.7827 |
| tox21_RDKit_desc | 0.0137 | 0.1775 | 0.0144 | 0.0156 | 0.0135 | 0.0158 | 0.4178 | 3.6952 | 0.1801 | 0.6599 | 0.7364 | 0.7958 |
| VirusGO | 0.7619 | 0.0794 | 0.7619 | 0.7619 | 0.6029 | 0.7619 | 0.0476 | 0.3333 | 0.0476 | 0.9643 | 0.8037 | 0.9873 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 0.7619 | 0.1226 | 0.7968 | 0.6044 | 0.8915 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1887 | 8.5660 | 0.2270 | 0.7393 | 0.7210 | 0.7546 |
| Yahoo_Arts | 0.1482 | 0.0560 | 0.1836 | 0.2023 | 0.1533 | 0.2575 | 0.3578 | 3.8812 | 0.0895 | 0.7007 | 0.7914 | 0.8949 |
| Yahoo_Business | 0.4955 | 0.0278 | 0.6319 | 0.7065 | 0.1288 | 0.6652 | 0.0856 | 1.6480 | 0.0256 | 0.9191 | 0.7623 | 0.9699 |
| Yahoo_Computers | 0.2273 | 0.0387 | 0.2508 | 0.2651 | 0.0768 | 0.3175 | 0.3092 | 2.7285 | 0.0551 | 0.7592 | 0.7721 | 0.9331 |
| Yahoo_Education | 0.1264 | 0.0381 | 0.1456 | 0.1563 | 0.1106 | 0.2403 | 0.3849 | 2.6933 | 0.0595 | 0.7083 | 0.7821 | 0.9408 |
| Yahoo_Entertainment | 0.2757 | 0.0537 | 0.2952 | 0.3066 | 0.1782 | 0.3642 | 0.2804 | 1.9482 | 0.0587 | 0.7827 | 0.8679 | 0.9337 |
| Yahoo_Health | 0.3485 | 0.0337 | 0.4198 | 0.4592 | 0.2288 | 0.5330 | 0.1998 | 2.2389 | 0.0362 | 0.8382 | 0.7614 | 0.9618 |
| Yahoo_Recreation | 0.2595 | 0.0498 | 0.2816 | 0.2934 | 0.2352 | 0.3697 | 0.2884 | 2.3437 | 0.0706 | 0.7724 | 0.8815 | 0.9180 |
| Yahoo_Reference | 0.3014 | 0.0257 | 0.3232 | 0.3343 | 0.1081 | 0.4495 | 0.2715 | 1.9128 | 0.0518 | 0.7969 | 0.7186 | 0.9540 |
| Yahoo_Science | 0.2146 | 0.0298 | 0.2447 | 0.2611 | 0.1895 | 0.3269 | 0.3561 | 4.6827 | 0.0978 | 0.6996 | 0.8558 | 0.9168 |
| Yahoo_Social | 0.4282 | 0.0208 | 0.4598 | 0.4769 | 0.1582 | 0.5568 | 0.2285 | 2.1312 | 0.0429 | 0.8290 | 0.8320 | 0.9629 |
| Yahoo_Society | 0.1832 | 0.0523 | 0.2199 | 0.2415 | 0.1324 | 0.2820 | 0.2920 | 3.8271 | 0.0834 | 0.7379 | 0.7531 | 0.8908 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1612 | 6.0372 | 0.1465 | 0.7930 | 0.7469 | 0.8589 |
| Yelp | 0.2273 | 0.3069 | 0.2459 | 0.2570 | 0.2457 | 0.2597 | 0.1426 | 1.1735 | 0.0891 | 0.9044 | 0.8820 | 0.9106 |

Table 38: Detailed results for ExtraTrees for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2130 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5278 | 1.3333 | 0.2104 | 0.6824 | 0.7937 | 0.7901 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4194 | 1.5806 | 0.2573 | 0.6968 | 0.7036 | 0.7537 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7059 | 2.0588 | 0.3912 | 0.4961 | 0.4262 | 0.6111 |
| 3s-reuters1000 | 0.0000 | 0.1833 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 1.9667 | 0.3900 | 0.4744 | 0.6708 | 0.6003 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.6667 | 0.1046 | 0.8445 | 0.7078 | 0.7924 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.1026 | 0.0891 | 0.1154 | 0.1215 | 0.0658 | 0.1538 | 0.4103 | 4.9231 | 0.1657 | 0.6472 | 0.7161 | 0.8305 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4706 | 136.6471 | 0.2162 | 0.4105 | 0.4915 | 0.7842 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0223 | 0.1151 | 0.1952 | 0.0635 | 0.1933 | 0.8200 | 116.3640 | 0.3200 | 0.1899 | 0.6006 | 0.9274 |
| delicious | 0.0130 | 0.5052 | 0.0148 | 0.0538 | 0.0419 | 0.0533 | 0.8914 | 902.8774 | 0.5175 | 0.0631 | 0.8342 | 0.6862 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2167 | 1.6333 | 0.1287 | 0.8301 | 0.8614 | 0.8773 |
| enron | 0.0117 | 0.0578 | 0.2023 | 0.3152 | 0.0595 | 0.3434 | 0.4035 | 13.8246 | 0.1138 | 0.5839 | 0.6556 | 0.9042 |
| EukaryoteGO | 0.6314 | 0.0233 | 0.6992 | 0.7336 | 0.3826 | 0.7608 | 0.2049 | 0.4897 | 0.0150 | 0.8861 | 0.9857 | 0.9856 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1500 | 3.7000 | 0.2017 | 0.8302 | 0.6491 | 0.8102 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1951 | 2.8049 | 0.1153 | 0.8135 | 0.6483 | 0.8133 |
| genbase | 0.9254 | 0.0033 | 0.9627 | 0.9810 | 0.6391 | 0.9643 | 0.0299 | 0.2388 | 0.0012 | 0.9863 | 0.6667 | 0.9994 |
| GnegativeGO | 0.9000 | 0.0152 | 0.9179 | 0.9267 | 0.6831 | 0.9391 | 0.0214 | 0.1000 | 0.0072 | 0.9860 | 0.8726 | 0.9980 |
| GnegativePseAAC | 0.3571 | 0.0893 | 0.3571 | 0.3571 | 0.1445 | 0.5000 | 0.3429 | 0.9500 | 0.1266 | 0.7704 | 0.7297 | 0.8997 |
| GpositiveGO | 0.8846 | 0.0433 | 0.8942 | 0.8990 | 0.9224 | 0.9126 | 0.0769 | 0.1346 | 0.0385 | 0.9551 | 0.9961 | 0.9927 |
| GpositivePseAAC | 0.4423 | 0.1827 | 0.4615 | 0.4710 | 0.4321 | 0.5682 | 0.6154 | 0.8462 | 0.2821 | 0.6554 | 0.7670 | 0.7564 |
| HumanGO | 0.5498 | 0.0459 | 0.5718 | 0.5831 | 0.3252 | 0.6491 | 0.1543 | 0.4920 | 0.0220 | 0.9083 | 0.9723 | 0.9792 |
| HumanPseAAC | 0.0000 | 0.0848 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7106 | 5.2508 | 0.5069 | 0.4080 | 0.6684 | 0.6952 |
| Image | 0.1150 | 0.2150 | 0.1175 | 0.1187 | 0.1717 | 0.1825 | 0.3200 | 0.8650 | 0.1633 | 0.8000 | 0.8426 | 0.8433 |
| IMDB-ECC-F10% | 0.0168 | 0.1174 | 0.1287 | 0.1953 | 0.0338 | 0.1967 | 0.7358 | 9.1866 | 0.2391 | 0.3592 | 0.5525 | 0.7518 |
| IMDB-F10% | 0.0066 | 0.0792 | 0.0223 | 0.0320 | 0.0149 | 0.0470 | 0.7523 | 9.2568 | 0.2185 | 0.4176 | 0.5699 | 0.7623 |
| LLOG-F | 0.0984 | 0.0268 | 0.2235 | 0.2918 | 0.1300 | 0.2899 | 0.6639 | 11.1230 | 0.1243 | 0.4293 | 0.4614 | 0.8758 |
| mediamill10% | 0.1568 | 0.0190 | 0.6759 | 0.8139 | 0.3855 | 0.7974 | 0.1758 | 6.0071 | 0.0113 | 0.8141 | 0.8053 | 0.9827 |
| medical | 0.4286 | 0.0186 | 0.6692 | 0.7812 | 0.3164 | 0.7355 | 0.2755 | 1.3571 | 0.0182 | 0.8293 | 0.5446 | 0.9870 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2167 | 2.0000 | 0.1620 | 0.8050 | 0.8401 | 0.8573 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0029 | 0.0263 | 0.0046 | 0.0058 | 0.0038 | 0.0080 | 0.8444 | 34.7255 | 0.4500 | 0.2039 | 0.6365 | 0.7589 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.6458 | 0.0477 | 0.6858 | 0.7073 | 0.6200 | 0.7179 | 0.2708 | 0.4688 | 0.0329 | 0.8533 | 0.9678 | 0.9733 |
| PlantPseAAC | 0.0204 | 0.0918 | 0.0204 | 0.0204 | 0.0238 | 0.0357 | 0.7653 | 2.9694 | 0.2563 | 0.4596 | 0.6317 | 0.7604 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.2010 | 0.0151 | 0.2826 | 0.3296 | 0.1980 | 0.3688 | 0.5722 | 17.2010 | 0.2703 | 0.5123 | 0.7447 | 0.9553 |
| scene | 0.3071 | 0.1307 | 0.3154 | 0.3194 | 0.4631 | 0.4522 | 0.2324 | 0.4274 | 0.0651 | 0.8697 | 0.9331 | 0.9399 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2958 | 20.0141 | 0.1967 | 0.7421 | 0.4794 | 0.7326 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1620 | 20.0141 | 0.1875 | 0.7695 | 0.5610 | 0.7528 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1761 | 20.1690 | 0.1954 | 0.7562 | 0.5757 | 0.7515 |
| SLASHDOT-F | 0.2143 | 0.0451 | 0.2504 | 0.2687 | 0.2525 | 0.3719 | 0.4153 | 2.9497 | 0.1463 | 0.6773 | 0.6774 | 0.9214 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.2000 | 0.2000 | 0.1667 | 0.2857 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.2778 | 0.7400 |
| Stackex_chemistry | 0.0231 | 0.0140 | 0.0760 | 0.1123 | 0.0775 | 0.1412 | 0.7493 | 76.2522 | 0.5195 | 0.2379 | 0.8467 | 0.9173 |
| Stackex_chess | 0.0119 | 0.0150 | 0.1057 | 0.1765 | 0.0905 | 0.2228 | 0.7262 | 97.1012 | 0.4685 | 0.2543 | 0.5109 | 0.9420 |
| Stackex_coffee | 0.0000 | 0.0382 | 0.1458 | 0.2535 | 0.0657 | 0.2059 | 0.9130 | 43.7391 | 0.2092 | 0.2316 | 0.2299 | 0.8884 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0276 | 0.0163 | 0.1342 | 0.2243 | 0.0985 | 0.2147 | 0.7085 | 93.3543 | 0.4324 | 0.2787 | 0.6844 | 0.9219 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5890 | 4.6199 | 0.2723 | 0.5374 | 0.6546 | 0.7131 |
| tox21_RDKit_desc | 0.0000 | 0.1787 | 0.0007 | 0.0011 | 0.0048 | 0.0032 | 0.6575 | 5.2500 | 0.3784 | 0.4950 | 0.7031 | 0.7196 |
| VirusGO | 0.7143 | 0.0873 | 0.7143 | 0.7143 | 0.5926 | 0.7317 | 0.0476 | 0.3810 | 0.0345 | 0.9563 | 0.7962 | 0.9699 |
| VirusPseAAC | 0.1429 | 0.1587 | 0.1429 | 0.1429 | 0.1667 | 0.2308 | 0.4286 | 0.8095 | 0.1429 | 0.7571 | 0.5899 | 0.8670 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2642 | 8.7830 | 0.2381 | 0.7239 | 0.6971 | 0.7329 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2686 | 6.9876 | 0.2210 | 0.7030 | 0.6061 | 0.7789 |
| Yelp | 0.2413 | 0.3081 | 0.2499 | 0.2550 | 0.2620 | 0.2525 | 0.1206 | 1.1246 | 0.0773 | 0.9187 | 0.8730 | 0.9056 |

Table 39: Detailed results for LR for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5556 | 1.8333 | 0.2927 | 0.6104 | 0.6950 | 0.7155 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5806 | 1.8710 | 0.3218 | 0.5968 | 0.6155 | 0.6602 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 1.9412 | 0.3794 | 0.4353 | 0.5198 | 0.6111 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7667 | 1.9333 | 0.3758 | 0.4922 | 0.6945 | 0.6400 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 3.2778 | 0.1852 | 0.7594 | 0.5866 | 0.6821 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5897 | 6.0000 | 0.2396 | 0.4698 | 0.7188 | 0.7878 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3922 | 152.5098 | 0.3111 | 0.3061 | 0.5379 | 0.6923 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0135 | 0.1639 | 0.2610 | 0.0267 | 0.2655 | 0.7500 | 108.4880 | 0.1265 | 0.2308 | 0.4850 | 0.8744 |
| delicious | 0.0130 | 0.5052 | 0.0148 | 0.0538 | 0.0419 | 0.0533 | 0.8914 | 902.8774 | 0.5175 | 0.0631 | 0.8342 | 0.6862 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2833 | 1.6333 | 0.1391 | 0.8076 | 0.8635 | 0.8780 |
| enron | 0.0000 | 0.0659 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4561 | 16.0175 | 0.1307 | 0.4565 | 0.6250 | 0.8639 |
| EukaryoteGO | 0.6314 | 0.0233 | 0.6992 | 0.7336 | 0.3826 | 0.7608 | 0.2049 | 0.4897 | 0.0150 | 0.8861 | 0.9857 | 0.9856 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 3.9500 | 0.2283 | 0.7830 | 0.5365 | 0.7590 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.0732 | 0.1317 | 0.7692 | 0.6534 | 0.8051 |
| genbase | 0.0000 | 0.0448 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1642 | 0.5970 | 0.0135 | 0.8831 | 0.6667 | 0.9889 |
| GnegativeGO | 0.0000 | 0.1313 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1214 | 0.4357 | 0.0487 | 0.9157 | 0.8517 | 0.9560 |
| GnegativePseAAC | 0.0000 | 0.1304 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4571 | 0.9500 | 0.1266 | 0.7219 | 0.7639 | 0.8932 |
| GpositiveGO | 0.0000 | 0.2548 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1538 | 0.2692 | 0.0833 | 0.9071 | 0.9936 | 0.9414 |
| GpositivePseAAC | 0.0000 | 0.2500 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5385 | 0.7308 | 0.2436 | 0.7019 | 0.8961 | 0.8035 |
| HumanGO | 0.5498 | 0.0459 | 0.5718 | 0.5831 | 0.3252 | 0.6491 | 0.1543 | 0.4920 | 0.0220 | 0.9083 | 0.9723 | 0.9792 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6913 | 2.7524 | 0.1881 | 0.5037 | 0.6977 | 0.8181 |
| Image | 0.0000 | 0.2390 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3650 | 0.9000 | 0.1646 | 0.7768 | 0.8418 | 0.8345 |
| IMDB-ECC-F10% | 0.0168 | 0.1174 | 0.1287 | 0.1953 | 0.0338 | 0.1967 | 0.7358 | 9.1866 | 0.2391 | 0.3592 | 0.5525 | 0.7518 |
| IMDB-F10% | 0.0066 | 0.0792 | 0.0223 | 0.0320 | 0.0149 | 0.0470 | 0.7523 | 9.2568 | 0.2185 | 0.4176 | 0.5699 | 0.7623 |
| LLOG-F | 0.0000 | 0.0180 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9426 | 16.7787 | 0.1925 | 0.1765 | 0.4593 | 0.7996 |
| mediamill10% | 0.0689 | 0.0326 | 0.3942 | 0.5429 | 0.0273 | 0.4921 | 0.2090 | 19.9691 | 0.0628 | 0.5811 | 0.7289 | 0.9277 |
| medical | 0.6122 | 0.0116 | 0.7160 | 0.7668 | 0.2361 | 0.7901 | 0.1429 | 1.4592 | 0.0176 | 0.8921 | 0.5447 | 0.9777 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3167 | 2.1833 | 0.2041 | 0.7539 | 0.8276 | 0.8016 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0363 | 0.1928 | 0.2935 | 0.0394 | 0.2841 | 0.7041 | 27.6889 | 0.2006 | 0.3803 | 0.5622 | 0.7702 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.0000 | 0.0920 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4896 | 1.0521 | 0.0850 | 0.7078 | 0.9635 | 0.9276 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6327 | 2.2755 | 0.1909 | 0.5577 | 0.7727 | 0.8237 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.3144 | 0.0121 | 0.4145 | 0.4733 | 0.1777 | 0.4941 | 0.4725 | 6.2302 | 0.0417 | 0.6266 | 0.7165 | 0.9519 |
| scene | 0.0000 | 0.1812 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3568 | 0.6722 | 0.1157 | 0.7893 | 0.9258 | 0.8855 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0845 | 19.1127 | 0.1195 | 0.8555 | 0.5679 | 0.8049 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.2606 | 0.1237 | 0.8378 | 0.5363 | 0.8029 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.7606 | 0.1441 | 0.8172 | 0.5699 | 0.7866 |
| SLASHDOT-F | 0.2937 | 0.0437 | 0.3223 | 0.3365 | 0.2095 | 0.4229 | 0.3624 | 2.0688 | 0.0765 | 0.7297 | 0.6794 | 0.9209 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 0.8000 | 0.4000 | 0.6000 | 0.1111 | 0.6000 |
| Stackex_chemistry | 0.0115 | 0.0214 | 0.0720 | 0.1145 | 0.0185 | 0.1102 | 0.9107 | 45.0043 | 0.1577 | 0.2125 | 0.5317 | 0.6461 |
| Stackex_chess | 0.0000 | 0.0106 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7976 | 86.5595 | 0.2419 | 0.1776 | 0.4363 | 0.7754 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7391 | 48.9565 | 0.2154 | 0.3043 | 0.1987 | 0.7405 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0000 | 0.0097 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8492 | 70.1080 | 0.1836 | 0.1528 | 0.5684 | 0.8121 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4726 | 4.0719 | 0.2180 | 0.6174 | 0.6850 | 0.7560 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5959 | 4.9932 | 0.2898 | 0.5076 | 0.6774 | 0.7115 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0952 | 0.5714 | 0.0642 | 0.9238 | 0.7510 | 0.9200 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 0.7619 | 0.1333 | 0.7913 | 0.6329 | 0.8767 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3208 | 9.2736 | 0.3063 | 0.6484 | 0.6601 | 0.6781 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4050 | 8.0537 | 0.2628 | 0.6277 | 0.6566 | 0.7369 |
| Yelp | 0.0000 | 0.3593 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3051 | 1.6092 | 0.1940 | 0.7937 | 0.7155 | 0.7960 |

Table 40: Detailed results for Random for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4722 | 1.4722 | 0.2292 | 0.6787 | 0.8186 | 0.7917 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5161 | 1.8387 | 0.3081 | 0.6253 | 0.6457 | 0.7111 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.1765 | 0.4147 | 0.4373 | 0.3299 | 0.5648 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 1.8333 | 0.3550 | 0.4975 | 0.7479 | 0.6670 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5000 | 0.0778 | 0.8583 | 0.6424 | 0.7816 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3846 | 5.2051 | 0.1796 | 0.6342 | 0.7287 | 0.8244 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5098 | 141.9020 | 0.2267 | 0.3849 | 0.4855 | 0.7740 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0135 | 0.1639 | 0.2610 | 0.0267 | 0.2655 | 0.7500 | 108.4880 | 0.1265 | 0.2308 | 0.4850 | 0.8744 |
| delicious | 0.0130 | 0.5052 | 0.0148 | 0.0538 | 0.0419 | 0.0533 | 0.8914 | 902.8774 | 0.5175 | 0.0631 | 0.8342 | 0.6862 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 1.6000 | 0.1376 | 0.8131 | 0.8361 | 0.8643 |
| enron | 0.0000 | 0.0661 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2515 | 12.5673 | 0.0805 | 0.6853 | 0.6347 | 0.9105 |
| EukaryoteGO | 0.6314 | 0.0233 | 0.6992 | 0.7336 | 0.3826 | 0.7608 | 0.2049 | 0.4897 | 0.0150 | 0.8861 | 0.9857 | 0.9856 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1500 | 3.5000 | 0.1800 | 0.8417 | 0.6709 | 0.8156 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.0000 | 0.1298 | 0.7807 | 0.6557 | 0.8124 |
| genbase | 0.7463 | 0.0160 | 0.7612 | 0.7686 | 0.2743 | 0.7820 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9998 |
| GnegativeGO | 0.8000 | 0.0304 | 0.8036 | 0.8054 | 0.5390 | 0.8692 | 0.0357 | 0.0929 | 0.0057 | 0.9810 | 0.8681 | 0.9980 |
| GnegativePseAAC | 0.0000 | 0.1304 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.7143 | 0.0940 | 0.8197 | 0.7398 | 0.9243 |
| GpositiveGO | 0.6538 | 0.0913 | 0.6635 | 0.6682 | 0.7173 | 0.7865 | 0.0962 | 0.1154 | 0.0321 | 0.9519 | 0.9958 | 0.9696 |
| GpositivePseAAC | 0.4038 | 0.2404 | 0.5096 | 0.5575 | 0.4376 | 0.5614 | 0.5385 | 1.0769 | 0.3654 | 0.6538 | 0.7967 | 0.7362 |
| HumanGO | 0.0000 | 0.0850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1897 | 0.5884 | 0.0282 | 0.8850 | 0.9750 | 0.9782 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6013 | 2.3601 | 0.1574 | 0.5786 | 0.7129 | 0.8484 |
| Image | 0.0100 | 0.2370 | 0.0100 | 0.0100 | 0.0167 | 0.0166 | 0.5150 | 1.1000 | 0.2258 | 0.7017 | 0.8357 | 0.7701 |
| IMDB-ECC-F10% | 0.0168 | 0.1174 | 0.1287 | 0.1953 | 0.0338 | 0.1967 | 0.7358 | 9.1866 | 0.2391 | 0.3592 | 0.5525 | 0.7518 |
| IMDB-F10% | 0.0066 | 0.0792 | 0.0223 | 0.0320 | 0.0149 | 0.0470 | 0.7523 | 9.2568 | 0.2185 | 0.4176 | 0.5699 | 0.7623 |
| LLOG-F | 0.0328 | 0.0173 | 0.0430 | 0.0492 | 0.0130 | 0.0814 | 0.6803 | 11.2295 | 0.1224 | 0.4112 | 0.4726 | 0.8759 |
| mediamill10% | 0.0689 | 0.0326 | 0.3942 | 0.5429 | 0.0273 | 0.4921 | 0.2090 | 19.9691 | 0.0628 | 0.5811 | 0.7289 | 0.9277 |
| medical | 0.2857 | 0.0218 | 0.3163 | 0.3309 | 0.0464 | 0.4146 | 0.1735 | 1.1633 | 0.0144 | 0.8958 | 0.5481 | 0.9859 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2167 | 1.9000 | 0.1510 | 0.8139 | 0.8434 | 0.8583 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0363 | 0.1928 | 0.2935 | 0.0394 | 0.2841 | 0.7041 | 27.6889 | 0.2006 | 0.3803 | 0.5622 | 0.7702 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.0000 | 0.0920 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2292 | 0.4062 | 0.0264 | 0.8785 | 0.9698 | 0.9768 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6531 | 2.6020 | 0.2215 | 0.5368 | 0.7043 | 0.8032 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.3144 | 0.0121 | 0.4145 | 0.4733 | 0.1777 | 0.4941 | 0.4725 | 6.2302 | 0.0417 | 0.6266 | 0.7165 | 0.9519 |
| scene | 0.0373 | 0.1743 | 0.0394 | 0.0404 | 0.0712 | 0.0735 | 0.2033 | 0.3942 | 0.0580 | 0.8837 | 0.9401 | 0.9504 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.0070 | 0.1281 | 0.8395 | 0.5732 | 0.7960 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2113 | 19.5845 | 0.1658 | 0.7738 | 0.5612 | 0.7653 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 19.1549 | 0.1446 | 0.8168 | 0.5749 | 0.7843 |
| SLASHDOT-F | 0.2937 | 0.0437 | 0.3223 | 0.3365 | 0.2095 | 0.4229 | 0.3624 | 2.0688 | 0.0765 | 0.7297 | 0.6794 | 0.9209 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.2222 | 0.7400 |
| Stackex_chemistry | 0.0115 | 0.0214 | 0.0720 | 0.1145 | 0.0185 | 0.1102 | 0.9107 | 45.0043 | 0.1577 | 0.2125 | 0.5317 | 0.6461 |
| Stackex_chess | 0.0179 | 0.0107 | 0.0519 | 0.0734 | 0.0108 | 0.0850 | 0.6012 | 58.6845 | 0.1298 | 0.3473 | 0.4394 | 0.8657 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7826 | 55.1304 | 0.2344 | 0.2895 | 0.2218 | 0.7422 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0804 | 0.0103 | 0.2140 | 0.2941 | 0.0253 | 0.2840 | 0.6181 | 49.5050 | 0.1158 | 0.3587 | 0.5784 | 0.8732 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5445 | 4.0890 | 0.2220 | 0.5952 | 0.7120 | 0.7690 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4486 | 3.9349 | 0.2032 | 0.6382 | 0.7213 | 0.7761 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0476 | 0.3810 | 0.0345 | 0.9563 | 0.7874 | 0.9754 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.8571 | 0.1488 | 0.8008 | 0.6197 | 0.8772 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3113 | 8.9057 | 0.2624 | 0.6939 | 0.6839 | 0.7219 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2603 | 6.0248 | 0.1601 | 0.7545 | 0.7286 | 0.8425 |
| Yelp | 0.0000 | 0.3593 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1276 | 1.1505 | 0.0833 | 0.9118 | 0.8743 | 0.9040 |

Table 41: Detailed results for AdaBoost for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4167 | 1.2222 | 0.1840 | 0.7356 | 0.8504 | 0.8175 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4516 | 1.7097 | 0.2863 | 0.6570 | 0.6708 | 0.7507 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.0588 | 0.4029 | 0.4294 | 0.4722 | 0.6329 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6667 | 1.8333 | 0.3517 | 0.5589 | 0.7450 | 0.6702 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.8333 | 0.1176 | 0.8015 | 0.5494 | 0.7335 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3846 | 4.7179 | 0.1614 | 0.6582 | 0.7460 | 0.8416 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1373 | 142.4314 | 0.2407 | 0.3918 | 0.4910 | 0.7601 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0135 | 0.1639 | 0.2610 | 0.0267 | 0.2655 | 0.7500 | 108.4880 | 0.1265 | 0.2308 | 0.4850 | 0.8744 |
| delicious | 0.0130 | 0.5052 | 0.0148 | 0.0538 | 0.0419 | 0.0533 | 0.8914 | 902.8774 | 0.5175 | 0.0631 | 0.8342 | 0.6862 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.5500 | 0.1269 | 0.8313 | 0.8580 | 0.8747 |
| enron | 0.1170 | 0.0569 | 0.2569 | 0.3468 | 0.0497 | 0.3138 | 0.2573 | 12.5029 | 0.0820 | 0.6800 | 0.6480 | 0.9093 |
| EukaryoteGO | 0.6314 | 0.0233 | 0.6992 | 0.7336 | 0.3826 | 0.7608 | 0.2049 | 0.4897 | 0.0150 | 0.8861 | 0.9857 | 0.9856 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1000 | 3.5000 | 0.1633 | 0.8597 | 0.6178 | 0.8109 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2683 | 2.8293 | 0.1156 | 0.7716 | 0.6847 | 0.8251 |
| genbase | 0.9403 | 0.0022 | 0.9726 | 0.9861 | 0.6451 | 0.9759 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6645 | 0.9993 |
| GnegativeGO | 0.7643 | 0.0348 | 0.7714 | 0.7750 | 0.6097 | 0.8482 | 0.0214 | 0.0714 | 0.0031 | 0.9893 | 0.8730 | 0.9972 |
| GnegativePseAAC | 0.0357 | 0.1259 | 0.0357 | 0.0357 | 0.0205 | 0.0662 | 0.3214 | 0.8357 | 0.1102 | 0.7933 | 0.7674 | 0.9143 |
| GpositiveGO | 0.8269 | 0.0529 | 0.8365 | 0.8413 | 0.9058 | 0.8889 | 0.1346 | 0.1923 | 0.0561 | 0.9263 | 0.9875 | 0.9210 |
| GpositivePseAAC | 0.0000 | 0.2500 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7115 | 1.4423 | 0.4808 | 0.5513 | 0.7729 | 0.5753 |
| HumanGO | 0.5498 | 0.0459 | 0.5718 | 0.5831 | 0.3252 | 0.6491 | 0.1543 | 0.4920 | 0.0220 | 0.9083 | 0.9723 | 0.9792 |
| HumanPseAAC | 0.0096 | 0.0838 | 0.0096 | 0.0096 | 0.0064 | 0.0162 | 0.5498 | 2.1768 | 0.1415 | 0.6213 | 0.7146 | 0.8572 |
| Image | 0.0000 | 0.2390 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3750 | 0.8450 | 0.1613 | 0.7824 | 0.8702 | 0.8415 |
| IMDB-ECC-F10% | 0.0168 | 0.1174 | 0.1287 | 0.1953 | 0.0338 | 0.1967 | 0.7358 | 9.1866 | 0.2391 | 0.3592 | 0.5525 | 0.7518 |
| IMDB-F10% | 0.0066 | 0.0792 | 0.0223 | 0.0320 | 0.0149 | 0.0470 | 0.7523 | 9.2568 | 0.2185 | 0.4176 | 0.5699 | 0.7623 |
| LLOG-F | 0.0082 | 0.0179 | 0.0082 | 0.0082 | 0.0033 | 0.0120 | 0.7459 | 12.5246 | 0.1343 | 0.3656 | 0.4775 | 0.8591 |
| mediamill10% | 0.0143 | 0.0419 | 0.0635 | 0.0908 | 0.0432 | 0.0935 | 0.1710 | 9.0926 | 0.0285 | 0.6715 | 0.8214 | 0.9711 |
| medical | 0.5510 | 0.0138 | 0.6956 | 0.7692 | 0.2936 | 0.7663 | 0.2857 | 1.7449 | 0.0267 | 0.8200 | 0.5340 | 0.9675 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 2.0000 | 0.1656 | 0.7935 | 0.8475 | 0.8560 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0363 | 0.1928 | 0.2935 | 0.0394 | 0.2841 | 0.7041 | 27.6889 | 0.2006 | 0.3803 | 0.5622 | 0.7702 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.4271 | 0.0599 | 0.4323 | 0.4349 | 0.3900 | 0.5490 | 0.1979 | 0.5000 | 0.0344 | 0.8806 | 0.9575 | 0.9685 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6837 | 2.7143 | 0.2322 | 0.5202 | 0.6854 | 0.7981 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.3144 | 0.0121 | 0.4145 | 0.4733 | 0.1777 | 0.4941 | 0.4725 | 6.2302 | 0.0417 | 0.6266 | 0.7165 | 0.9519 |
| scene | 0.0000 | 0.1812 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2407 | 0.4772 | 0.0761 | 0.8593 | 0.9265 | 0.9351 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0845 | 19.1127 | 0.1195 | 0.8555 | 0.5679 | 0.8049 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.2606 | 0.1237 | 0.8378 | 0.5363 | 0.8029 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0915 | 19.3099 | 0.1370 | 0.8281 | 0.5852 | 0.7956 |
| SLASHDOT-F | 0.2937 | 0.0437 | 0.3223 | 0.3365 | 0.2095 | 0.4229 | 0.3624 | 2.0688 | 0.0765 | 0.7297 | 0.6794 | 0.9209 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 0.8000 | 0.4000 | 0.6000 | 0.2222 | 0.6600 |
| Stackex_chemistry | 0.0115 | 0.0214 | 0.0720 | 0.1145 | 0.0185 | 0.1102 | 0.9107 | 45.0043 | 0.1577 | 0.2125 | 0.5317 | 0.6461 |
| Stackex_chess | 0.0179 | 0.0107 | 0.1123 | 0.1688 | 0.0490 | 0.2128 | 0.7440 | 60.2202 | 0.1495 | 0.2361 | 0.4507 | 0.8490 |
| Stackex_coffee | 0.0000 | 0.0410 | 0.1534 | 0.2448 | 0.0658 | 0.2368 | 0.9130 | 46.0435 | 0.2553 | 0.2188 | 0.2229 | 0.8567 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0804 | 0.0103 | 0.2140 | 0.2941 | 0.0253 | 0.2840 | 0.6181 | 49.5050 | 0.1158 | 0.3587 | 0.5784 | 0.8732 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4726 | 4.0719 | 0.2180 | 0.6174 | 0.6850 | 0.7560 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.1336 | 0.2226 | 0.5927 | 0.7185 | 0.7692 |
| VirusGO | 0.6190 | 0.0952 | 0.6190 | 0.6190 | 0.4759 | 0.6842 | 0.0952 | 0.4762 | 0.0536 | 0.9302 | 0.7710 | 0.9584 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4286 | 0.8571 | 0.1548 | 0.7532 | 0.5590 | 0.8620 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2264 | 9.0283 | 0.2564 | 0.7130 | 0.7013 | 0.7215 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2438 | 6.8058 | 0.1816 | 0.7356 | 0.6849 | 0.8183 |
| Yelp | 0.0000 | 0.3593 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0628 | 1.0907 | 0.0631 | 0.9411 | 0.8795 | 0.9062 |

### 3.0.2 Initialization of the individuals

Table 42: Detailed results for k-NN for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7222 | 2.1944 | 0.3903 | 0.5215 | 0.6061 | 0.6131 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6452 | 2.0645 | 0.4008 | 0.5621 | 0.6053 | 0.6604 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6471 | 1.5294 | 0.3000 | 0.5843 | 0.4543 | 0.6997 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.5000 | 0.4983 | 0.4011 | 0.6296 | 0.5359 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.8889 | 0.1620 | 0.8311 | 0.5519 | 0.7248 |
| bibtex | 0.0027 | 0.0560 | 0.0848 | 0.1535 | 0.1334 | 0.1481 | 0.9108 | 66.6419 | 0.5075 | 0.1597 | 0.9229 | 0.9184 |
| birds | 0.0769 | 0.0918 | 0.0897 | 0.0957 | 0.0496 | 0.1053 | 0.5897 | 5.2821 | 0.2119 | 0.5158 | 0.7262 | 0.8251 |
| bookmarks10% | 0.1469 | 0.0550 | 0.1947 | 0.2721 | 0.0928 | 0.1117 | 0.8052 | 84.9920 | 0.5385 | 0.2471 | 0.9360 | 0.9527 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2549 | 144.7255 | 0.2635 | 0.4049 | 0.5700 | 0.7895 |
| corel16k001 | 0.0000 | 0.0637 | 0.0723 | 0.1285 | 0.0570 | 0.1289 | 0.8577 | 84.9717 | 0.5410 | 0.1580 | 0.9110 | 0.9085 |
| Corel5k | 0.0000 | 0.0619 | 0.0602 | 0.1104 | 0.0397 | 0.1089 | 0.9100 | 154.2360 | 0.5566 | 0.1146 | 0.6349 | 0.9414 |
| delicious | 0.0000 | 0.0888 | 0.0937 | 0.1693 | 0.1051 | 0.1673 | 0.8776 | 788.5811 | 0.3773 | 0.1279 | 0.9183 | 0.9300 |
| emotions | 0.0167 | 0.3028 | 0.0167 | 0.0167 | 0.0167 | 0.0180 | 0.2667 | 1.6167 | 0.1675 | 0.8196 | 0.8349 | 0.8601 |
| enron | 0.0526 | 0.0670 | 0.2305 | 0.3676 | 0.0902 | 0.3337 | 0.6491 | 19.6608 | 0.2636 | 0.4355 | 0.7343 | 0.9041 |
| EukaryoteGO | 0.4755 | 0.0319 | 0.6728 | 0.7615 | 0.3896 | 0.7352 | 0.2616 | 1.3067 | 0.0744 | 0.8302 | 0.9836 | 0.9864 |
| EukaryotePseAAC | 0.1403 | 0.0620 | 0.2173 | 0.2544 | 0.0806 | 0.3225 | 0.6654 | 4.5148 | 0.2838 | 0.4999 | 0.8731 | 0.9013 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.8000 | 0.2450 | 0.7909 | 0.5325 | 0.7675 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2683 | 3.2195 | 0.1731 | 0.7489 | 0.6110 | 0.7868 |
| genbase | 0.8806 | 0.0061 | 0.9378 | 0.9679 | 0.6209 | 0.9364 | 0.0149 | 0.2388 | 0.0009 | 0.9900 | 0.6665 | 0.9993 |
| GnegativeGO | 0.8643 | 0.0223 | 0.8857 | 0.8963 | 0.6653 | 0.9104 | 0.0357 | 0.1286 | 0.0184 | 0.9768 | 0.8684 | 0.9943 |
| GnegativePseAAC | 0.4357 | 0.0795 | 0.4393 | 0.4411 | 0.1900 | 0.5822 | 0.3571 | 0.9071 | 0.1577 | 0.7758 | 0.8034 | 0.9337 |
| GpositiveGO | 0.8269 | 0.0529 | 0.8365 | 0.8413 | 0.6748 | 0.8889 | 0.0385 | 0.0577 | 0.0192 | 0.9808 | 0.9893 | 0.9898 |
| GpositivePseAAC | 0.3846 | 0.1635 | 0.3846 | 0.3846 | 0.3969 | 0.5405 | 0.2885 | 0.5192 | 0.1859 | 0.8205 | 0.8805 | 0.8953 |
| HumanGO | 0.5498 | 0.0473 | 0.6179 | 0.6529 | 0.4052 | 0.6860 | 0.2765 | 1.1254 | 0.0832 | 0.8207 | 0.9530 | 0.9649 |
| HumanPseAAC | 0.0547 | 0.0848 | 0.0665 | 0.0730 | 0.0277 | 0.1193 | 0.6688 | 3.5981 | 0.3201 | 0.5032 | 0.7883 | 0.8267 |
| Image | 0.2850 | 0.1820 | 0.3042 | 0.3142 | 0.3809 | 0.4167 | 0.3250 | 0.8950 | 0.1800 | 0.7993 | 0.8392 | 0.8416 |
| IMDB-ECC-F10% | 0.0010 | 0.0676 | 0.0028 | 0.0034 | 0.0014 | 0.0055 | 0.7170 | 9.5335 | 0.3163 | 0.3961 | 0.7639 | 0.8000 |
| IMDB-F10% | 0.0033 | 0.0725 | 0.0061 | 0.0075 | 0.0022 | 0.0097 | 0.6893 | 9.8940 | 0.3320 | 0.4153 | 0.7537 | 0.8133 |
| LLOG-F | 0.0246 | 0.0534 | 0.1051 | 0.1693 | 0.0487 | 0.1525 | 0.9508 | 22.5492 | 0.4758 | 0.2081 | 0.5265 | 0.9108 |
| mediamill10% | 0.0451 | 0.0355 | 0.4145 | 0.6012 | 0.0716 | 0.5449 | 0.2898 | 11.8504 | 0.0444 | 0.5504 | 0.7490 | 0.9518 |
| medical | 0.0612 | 0.0488 | 0.3624 | 0.5157 | 0.1857 | 0.4893 | 0.4694 | 4.6633 | 0.0910 | 0.6677 | 0.5330 | 0.9731 |
| Music | 0.0000 | 0.3250 | 0.0083 | 0.0111 | 0.0159 | 0.0168 | 0.1667 | 1.8833 | 0.1527 | 0.8451 | 0.8688 | 0.8823 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0167 | 0.0476 | 0.2200 | 0.3618 | 0.0823 | 0.3410 | 0.6817 | 21.0871 | 0.2479 | 0.4289 | 0.7874 | 0.9250 |
| OHSUMED-F | 0.0072 | 0.0726 | 0.0096 | 0.0109 | 0.0060 | 0.0144 | 0.7523 | 8.9462 | 0.3702 | 0.3635 | 0.7699 | 0.7701 |
| PlantGO | 0.3958 | 0.0668 | 0.4271 | 0.4422 | 0.2616 | 0.5333 | 0.3333 | 1.0417 | 0.1147 | 0.7860 | 0.9554 | 0.9525 |
| PlantPseAAC | 0.0510 | 0.0986 | 0.0561 | 0.0586 | 0.0458 | 0.0938 | 0.7449 | 3.2959 | 0.3549 | 0.4567 | 0.7740 | 0.7862 |
| rcv1subset1 | 0.0017 | 0.0487 | 0.2020 | 0.3051 | 0.1176 | 0.3112 | 0.8050 | 34.8783 | 0.3455 | 0.2829 | 0.8891 | 0.9233 |
| REUTERS-K500-EX2 | 0.0653 | 0.0436 | 0.2554 | 0.3925 | 0.2145 | 0.3075 | 0.6443 | 14.6048 | 0.2059 | 0.4794 | 0.7547 | 0.9709 |
| scene | 0.4274 | 0.1176 | 0.4440 | 0.4521 | 0.5673 | 0.5663 | 0.2614 | 0.5685 | 0.0967 | 0.8422 | 0.9315 | 0.9282 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2254 | 19.5704 | 0.1483 | 0.8030 | 0.5745 | 0.7825 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.5986 | 0.1481 | 0.8186 | 0.5589 | 0.7835 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1761 | 19.4014 | 0.1383 | 0.8225 | 0.5712 | 0.7907 |
| SLASHDOT-F | 0.1508 | 0.0581 | 0.1772 | 0.1904 | 0.0746 | 0.2441 | 0.7857 | 6.9021 | 0.4066 | 0.3811 | 0.6665 | 0.8692 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.8000 | 0.8000 | 0.5000 | 0.6000 | 0.3333 | 0.7400 |
| Stackex_chemistry | 0.0000 | 0.0700 | 0.0635 | 0.1170 | 0.0546 | 0.1151 | 0.9294 | 81.2493 | 0.5441 | 0.1470 | 0.8527 | 0.9359 |
| Stackex_chess | 0.0000 | 0.0645 | 0.0709 | 0.1298 | 0.0541 | 0.1271 | 0.8988 | 108.1548 | 0.5406 | 0.1364 | 0.5080 | 0.9485 |
| Stackex_coffee | 0.0000 | 0.0484 | 0.1199 | 0.2117 | 0.0337 | 0.1893 | 0.6957 | 70.1304 | 0.5662 | 0.2556 | 0.2308 | 0.9080 |
| Stackex_cooking | 0.0000 | 0.0497 | 0.0328 | 0.0621 | 0.0243 | 0.0603 | 0.9816 | 222.2657 | 0.7040 | 0.0627 | 0.8850 | 0.9586 |
| Stackex_philosophy | 0.0000 | 0.0623 | 0.0617 | 0.1136 | 0.0395 | 0.1111 | 0.9673 | 113.1633 | 0.5246 | 0.1028 | 0.7010 | 0.9451 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1792 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5068 | 4.3116 | 0.2482 | 0.6015 | 0.7256 | 0.7663 |
| tox21_RDKit_desc | 0.0205 | 0.1775 | 0.0234 | 0.0252 | 0.0160 | 0.0251 | 0.4658 | 4.3699 | 0.2525 | 0.6132 | 0.7274 | 0.7714 |
| VirusGO | 0.5714 | 0.1190 | 0.5714 | 0.5714 | 0.3867 | 0.6154 | 0.1905 | 0.8095 | 0.1319 | 0.8540 | 0.7631 | 0.9125 |
| VirusPseAAC | 0.0952 | 0.1667 | 0.0952 | 0.0952 | 0.0556 | 0.1600 | 0.3810 | 0.9048 | 0.1833 | 0.7611 | 0.7193 | 0.8890 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2830 | 8.7642 | 0.2506 | 0.7123 | 0.6831 | 0.7208 |
| Yahoo_Arts | 0.0614 | 0.0682 | 0.0800 | 0.0920 | 0.0316 | 0.1075 | 0.6836 | 8.3458 | 0.3059 | 0.4397 | 0.7606 | 0.8331 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.2291 | 0.0488 | 0.3027 | 0.3459 | 0.1044 | 0.3530 | 0.4929 | 5.9837 | 0.2002 | 0.5825 | 0.7111 | 0.9113 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2066 | 6.0826 | 0.1629 | 0.7797 | 0.7298 | 0.8455 |
| Yelp | 0.0508 | 0.3362 | 0.0831 | 0.1004 | 0.0839 | 0.1309 | 0.2522 | 1.6650 | 0.2162 | 0.8040 | 0.7305 | 0.7704 |

Table 43: Detailed results for Massive (1%) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5088 | 0.0279 | 0.5636 | 0.5910 | 0.6895 | 0.6938 | 0.3034 | 2.3859 | 0.2312 | 0.7628 | 0.9821 | 0.9824 |
| 3s-bbc1000 | 0.1389 | 0.2500 | 0.2245 | 0.2788 | 0.2537 | 0.3077 | 0.7222 | 2.7222 | 0.6428 | 0.4713 | 0.8371 | 0.7776 |
| 3s-guardian1000 | 0.2581 | 0.2581 | 0.3387 | 0.3775 | 0.1692 | 0.3514 | 0.5484 | 2.3548 | 0.5516 | 0.5726 | 0.8160 | 0.8211 |
| 3s-inter3000 | 0.1765 | 0.2549 | 0.2647 | 0.3081 | 0.0870 | 0.3158 | 0.8824 | 2.7059 | 0.7647 | 0.3853 | 0.4926 | 0.6660 |
| 3s-reuters1000 | 0.1000 | 0.3000 | 0.1500 | 0.1714 | 0.1672 | 0.1818 | 0.9000 | 2.5333 | 0.7933 | 0.3844 | 0.8545 | 0.7777 |
| amphibians | 0.0000 | 0.3095 | 0.4840 | 0.7107 | 0.5309 | 0.6667 | 0.3333 | 2.5000 | 0.1407 | 0.8293 | 0.7612 | 0.8040 |
| bibtex | 0.1689 | 0.0119 | 0.3411 | 0.4308 | 0.2916 | 0.4620 | 0.4068 | 68.9095 | 0.5449 | 0.4535 | 0.9968 | 0.9969 |
| birds | 0.1795 | 0.0931 | 0.3444 | 0.4307 | 0.3052 | 0.4390 | 0.4872 | 8.0000 | 0.5470 | 0.5120 | 0.8537 | 0.9523 |
| bookmarks10% | 0.1868 | 0.0089 | 0.2151 | 0.2352 | 0.1081 | 0.2533 | 0.7118 | 104.0091 | 0.7432 | 0.2714 | 0.9844 | 0.9988 |
| CAL500 | 0.0000 | 0.7353 | 0.1553 | 0.2688 | 0.2065 | 0.2687 | 0.3725 | 151.5686 | 0.9417 | 0.3043 | 0.8907 | 0.9965 |
| corel16k001 | 0.0138 | 0.0233 | 0.1008 | 0.1518 | 0.0210 | 0.1453 | 0.8620 | 114.2012 | 0.9333 | 0.0960 | 0.9985 | 0.9986 |
| Corel5k | 0.0100 | 0.0092 | 0.0379 | 0.0538 | 0.0166 | 0.0774 | 0.8640 | 165.4960 | 0.9482 | 0.1537 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0481 | 0.0419 | 0.0792 | 0.0422 | 0.0810 | 0.5134 | 912.1790 | 0.8519 | 0.1464 | 0.9928 | 0.9978 |
| emotions | 0.3000 | 0.2083 | 0.5583 | 0.6759 | 0.6612 | 0.6753 | 0.2667 | 1.7833 | 0.2346 | 0.8078 | 0.8781 | 0.8893 |
| enron | 0.1754 | 0.0503 | 0.4511 | 0.5790 | 0.1515 | 0.5590 | 0.2749 | 24.9415 | 0.3653 | 0.6098 | 0.8258 | 0.9798 |
| EukaryoteGO | 0.6933 | 0.0190 | 0.7826 | 0.8267 | 0.6505 | 0.8216 | 0.1740 | 0.8415 | 0.0469 | 0.8907 | 0.9928 | 0.9946 |
| EukaryotePseAAC | 0.2394 | 0.0572 | 0.3229 | 0.3673 | 0.1195 | 0.4024 | 0.5753 | 6.6512 | 0.5241 | 0.4996 | 0.9723 | 0.9750 |
| flags | 0.2000 | 0.2643 | 0.5619 | 0.6911 | 0.5528 | 0.7087 | 0.2500 | 3.6500 | 0.2458 | 0.7894 | 0.6876 | 0.7954 |
| foodtruck | 0.3659 | 0.1443 | 0.4877 | 0.5968 | 0.1014 | 0.4818 | 0.2439 | 4.6098 | 0.4399 | 0.7172 | 0.8550 | 0.9586 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0149 | 0.2388 | 0.0009 | 0.9900 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0134 | 0.9464 | 0.9589 | 0.8184 | 0.9485 | 0.0357 | 0.1143 | 0.0209 | 0.9780 | 0.8745 | 0.9980 |
| GnegativePseAAC | 0.7429 | 0.0536 | 0.7643 | 0.7749 | 0.4371 | 0.7857 | 0.2000 | 0.6143 | 0.1454 | 0.8667 | 0.8574 | 0.9858 |
| GpositiveGO | 0.9231 | 0.0385 | 0.9231 | 0.9231 | 0.8601 | 0.9231 | 0.0577 | 0.1538 | 0.0449 | 0.9615 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5662 | 0.7308 | 0.2692 | 0.5769 | 0.2692 | 0.8237 | 0.9707 | 0.9689 |
| HumanGO | 0.6945 | 0.0356 | 0.7647 | 0.8026 | 0.6796 | 0.7757 | 0.1511 | 0.9035 | 0.0903 | 0.8903 | 0.9844 | 0.9880 |
| HumanPseAAC | 0.3087 | 0.0939 | 0.3751 | 0.4105 | 0.1758 | 0.4081 | 0.5466 | 3.5884 | 0.4957 | 0.5692 | 0.9534 | 0.9551 |
| Image | 0.5450 | 0.1680 | 0.6133 | 0.6476 | 0.6257 | 0.6216 | 0.3100 | 1.1350 | 0.3642 | 0.7764 | 0.9463 | 0.9461 |
| IMDB-ECC-F10% | 0.1405 | 0.0776 | 0.2299 | 0.2812 | 0.0238 | 0.2487 | 0.9497 | 15.8721 | 0.9969 | 0.1564 | 1.0000 | 1.0000 |
| IMDB-F10% | 0.0489 | 0.0902 | 0.1364 | 0.1861 | 0.0229 | 0.1862 | 0.6015 | 12.7738 | 0.7269 | 0.3791 | 0.9865 | 0.9751 |
| LLOG-F | 0.1639 | 0.0161 | 0.1974 | 0.2169 | 0.0520 | 0.2899 | 0.7459 | 28.5246 | 0.7822 | 0.2773 | 0.5982 | 0.9979 |
| mediamill10% | 0.0974 | 0.0318 | 0.4130 | 0.5653 | 0.0439 | 0.5110 | 0.1758 | 59.5202 | 0.4537 | 0.5433 | 0.8131 | 0.9938 |
| medical | 0.6531 | 0.0104 | 0.7611 | 0.8136 | 0.2979 | 0.8175 | 0.1531 | 4.9286 | 0.1227 | 0.8528 | 0.5531 | 0.9978 |
| Music | 0.2167 | 0.1944 | 0.5389 | 0.6802 | 0.6705 | 0.6930 | 0.3500 | 1.9833 | 0.2718 | 0.7768 | 0.9059 | 0.8968 |
| NUS-WIDE-bow10% | 0.1618 | 0.0254 | 0.2889 | 0.3567 | 0.0365 | 0.3646 | 0.5775 | 35.5856 | 0.6257 | 0.4065 | 0.8814 | 0.9924 |
| NUS-WIDE-cVLADplus10% | 0.1903 | 0.0246 | 0.3214 | 0.3901 | 0.0497 | 0.4022 | 0.5376 | 33.8625 | 0.5941 | 0.4388 | 0.8816 | 0.9924 |
| OHSUMED-F | 0.2276 | 0.0581 | 0.4199 | 0.5214 | 0.4110 | 0.5450 | 0.3503 | 6.8090 | 0.3532 | 0.6397 | 0.9658 | 0.9699 |
| PlantGO | 0.6771 | 0.0425 | 0.7014 | 0.7153 | 0.6022 | 0.7487 | 0.2396 | 1.1667 | 0.1200 | 0.8358 | 0.9888 | 0.9850 |
| PlantPseAAC | 0.2857 | 0.1080 | 0.3410 | 0.3742 | 0.1995 | 0.3865 | 0.6327 | 3.1122 | 0.4962 | 0.5314 | 0.9361 | 0.9283 |
| rcv1subset1 | 0.0600 | 0.0300 | 0.2396 | 0.3362 | 0.1660 | 0.3636 | 0.4250 | 47.4600 | 0.5321 | 0.4437 | 0.9286 | 0.9885 |
| REUTERS-K500-EX2 | 0.3179 | 0.0115 | 0.3819 | 0.4183 | 0.2219 | 0.4737 | 0.5223 | 33.4296 | 0.5388 | 0.4808 | 0.7838 | 0.9971 |
| scene | 0.6805 | 0.0885 | 0.7324 | 0.7579 | 0.7603 | 0.7470 | 0.2199 | 0.9834 | 0.2220 | 0.8253 | 0.9697 | 0.9759 |
| sider_CDK_ECFP4 | 0.0141 | 0.2746 | 0.6343 | 0.7831 | 0.6401 | 0.7827 | 0.1831 | 19.0915 | 0.1758 | 0.7857 | 0.5913 | 0.7645 |
| sider_MordredDesc | 0.0282 | 0.2744 | 0.6184 | 0.7724 | 0.6158 | 0.7770 | 0.2676 | 19.6690 | 0.1858 | 0.7556 | 0.5751 | 0.7666 |
| sider_RDKit_desc | 0.0141 | 0.2856 | 0.6278 | 0.7800 | 0.5971 | 0.7746 | 0.3169 | 19.6549 | 0.1967 | 0.7412 | 0.5866 | 0.7524 |
| SLASHDOT-F | 0.3889 | 0.0423 | 0.5043 | 0.5659 | 0.3726 | 0.5859 | 0.4153 | 6.0926 | 0.3959 | 0.6214 | 0.7597 | 0.9865 |
| solar_flare-L3 | 0.4000 | 0.4000 | 0.4000 | 0.4000 | 0.1905 | 0.4000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.6667 | 0.8200 |
| Stackex_chemistry | 0.0432 | 0.0121 | 0.0983 | 0.1322 | 0.0501 | 0.1694 | 0.7752 | 104.6196 | 0.8641 | 0.1665 | 0.9182 | 0.9982 |
| Stackex_chess | 0.0417 | 0.0099 | 0.1502 | 0.2087 | 0.0567 | 0.2731 | 0.6607 | 137.4048 | 0.7980 | 0.2109 | 0.5492 | 0.9984 |
| Stackex_coffee | 0.0435 | 0.0187 | 0.0739 | 0.0990 | 0.0172 | 0.1311 | 0.7826 | 78.3043 | 0.8634 | 0.1491 | 0.2567 | 0.9907 |
| Stackex_cooking | 0.0560 | 0.0053 | 0.1945 | 0.2708 | 0.1056 | 0.3174 | 0.6135 | 218.8580 | 0.7440 | 0.2539 | 0.9240 | 0.9989 |
| Stackex_philosophy | 0.0704 | 0.0092 | 0.1715 | 0.2298 | 0.0560 | 0.2671 | 0.6960 | 135.1784 | 0.7907 | 0.2090 | 0.7497 | 0.9986 |
| tmc2007-500 | 0.2850 | 0.0623 | 0.5630 | 0.6962 | 0.5826 | 0.6751 | 0.2657 | 4.1979 | 0.1486 | 0.7700 | 0.9590 | 0.9699 |
| tox21_CDK_ECFP4 | 0.1575 | 0.1692 | 0.3424 | 0.4361 | 0.3648 | 0.4432 | 0.4623 | 5.3425 | 0.4891 | 0.5707 | 0.9050 | 0.9050 |
| tox21_RDKit_desc | 0.1575 | 0.1807 | 0.2917 | 0.3794 | 0.2120 | 0.3427 | 0.5137 | 6.0753 | 0.6553 | 0.4974 | 0.9422 | 0.9430 |
| VirusGO | 0.6667 | 0.0714 | 0.7778 | 0.8175 | 0.6782 | 0.8163 | 0.1905 | 0.6190 | 0.1040 | 0.8825 | 0.7885 | 0.9628 |
| VirusPseAAC | 0.4286 | 0.1349 | 0.4524 | 0.4640 | 0.3136 | 0.5405 | 0.6190 | 1.1905 | 0.2714 | 0.6381 | 0.6966 | 0.8877 |
| Water-quality | 0.0094 | 0.3248 | 0.2659 | 0.4025 | 0.2760 | 0.4079 | 0.2830 | 9.3019 | 0.3552 | 0.6897 | 0.7610 | 0.7572 |
| Yahoo_Arts | 0.1629 | 0.0662 | 0.2283 | 0.2738 | 0.1751 | 0.3051 | 0.5434 | 11.0521 | 0.6781 | 0.4689 | 0.9347 | 0.9747 |
| Yahoo_Business | 0.5526 | 0.0277 | 0.7158 | 0.8073 | 0.2846 | 0.7116 | 0.1025 | 3.1711 | 0.2192 | 0.8806 | 0.8533 | 0.9934 |
| Yahoo_Computers | 0.3920 | 0.0410 | 0.4780 | 0.5378 | 0.2522 | 0.5085 | 0.3831 | 6.5799 | 0.4260 | 0.6112 | 0.8897 | 0.9823 |
| Yahoo_Education | 0.1554 | 0.0460 | 0.2022 | 0.2380 | 0.1740 | 0.3005 | 0.5528 | 9.2510 | 0.5759 | 0.5219 | 0.8883 | 0.9767 |
| Yahoo_Entertainment | 0.3566 | 0.0712 | 0.4305 | 0.4779 | 0.2495 | 0.4403 | 0.4650 | 4.4572 | 0.4579 | 0.6067 | 0.9709 | 0.9659 |
| Yahoo_Health | 0.3648 | 0.0425 | 0.4900 | 0.5633 | 0.2083 | 0.5319 | 0.3616 | 6.6851 | 0.3664 | 0.6641 | 0.8245 | 0.9812 |
| Yahoo_Recreation | 0.2089 | 0.0648 | 0.2642 | 0.3022 | 0.2863 | 0.3594 | 0.5456 | 6.8885 | 0.6180 | 0.5363 | 0.9670 | 0.9684 |
| Yahoo_Reference | 0.4222 | 0.0328 | 0.4830 | 0.5215 | 0.1398 | 0.5113 | 0.4172 | 6.0461 | 0.4426 | 0.6209 | 0.8069 | 0.9875 |
| Yahoo_Science | 0.1493 | 0.0411 | 0.1833 | 0.2139 | 0.1284 | 0.2509 | 0.7045 | 14.6967 | 0.7277 | 0.3650 | 0.9557 | 0.9820 |
| Yahoo_Social | 0.4785 | 0.0274 | 0.5385 | 0.5760 | 0.1629 | 0.5440 | 0.3696 | 7.3960 | 0.3816 | 0.6518 | 0.9133 | 0.9898 |
| Yahoo_Society | 0.3238 | 0.0840 | 0.4556 | 0.5531 | 0.2266 | 0.4651 | 0.3610 | 8.3493 | 0.4732 | 0.5868 | 0.9487 | 0.9836 |
| yeast | 0.2066 | 0.1951 | 0.5487 | 0.6762 | 0.3981 | 0.6700 | 0.2686 | 6.1818 | 0.2309 | 0.7529 | 0.8260 | 0.8830 |
| Yelp | 0.4207 | 0.1954 | 0.6304 | 0.7278 | 0.6386 | 0.7102 | 0.2074 | 1.4407 | 0.2693 | 0.8532 | 0.8852 | 0.9052 |

Table 44: Detailed results for Massive (5%) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5628 | 0.0260 | 0.6010 | 0.6199 | 0.7099 | 0.7150 | 0.3268 | 2.8345 | 0.2742 | 0.7373 | 0.9922 | 0.9922 |
| 3s-bbc1000 | 0.1667 | 0.2824 | 0.2454 | 0.2893 | 0.2468 | 0.2989 | 0.7500 | 3.0000 | 0.6998 | 0.4370 | 0.8159 | 0.7580 |
| 3s-guardian1000 | 0.1613 | 0.2419 | 0.2554 | 0.3143 | 0.2619 | 0.3478 | 0.4516 | 2.0323 | 0.4903 | 0.6414 | 0.8384 | 0.8482 |
| 3s-inter3000 | 0.2353 | 0.2353 | 0.3235 | 0.3671 | 0.1425 | 0.3684 | 1.0000 | 2.5294 | 0.7426 | 0.3510 | 0.5511 | 0.7355 |
| 3s-reuters1000 | 0.1333 | 0.2944 | 0.1500 | 0.1579 | 0.1160 | 0.1587 | 0.9000 | 2.5667 | 0.7933 | 0.3839 | 0.8325 | 0.7667 |
| amphibians | 0.1111 | 0.3254 | 0.4955 | 0.7236 | 0.4558 | 0.6168 | 0.3333 | 2.6111 | 0.1111 | 0.8200 | 0.7673 | 0.8040 |
| bibtex | 0.1743 | 0.0120 | 0.3433 | 0.4326 | 0.2910 | 0.4580 | 0.3959 | 68.8405 | 0.5402 | 0.4587 | 0.9969 | 0.9970 |
| birds | 0.1795 | 0.0931 | 0.3387 | 0.4195 | 0.3194 | 0.4390 | 0.4615 | 7.4872 | 0.4709 | 0.5408 | 0.8418 | 0.9377 |
| bookmarks10% | 0.1868 | 0.0089 | 0.2162 | 0.2376 | 0.1096 | 0.2574 | 0.7096 | 103.9009 | 0.7464 | 0.2717 | 0.9845 | 0.9988 |
| CAL500 | 0.0000 | 0.4181 | 0.1421 | 0.2490 | 0.1056 | 0.2490 | 0.1373 | 151.0588 | 0.7970 | 0.3889 | 0.8689 | 0.9779 |
| corel16k001 | 0.0196 | 0.0364 | 0.0483 | 0.0641 | 0.0062 | 0.0622 | 0.9441 | 117.9194 | 0.9785 | 0.0558 | 0.9995 | 0.9996 |
| Corel5k | 0.0100 | 0.0091 | 0.0421 | 0.0598 | 0.0169 | 0.0837 | 0.8640 | 164.0940 | 0.9435 | 0.1577 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.6084 | 0.0213 | 0.0418 | 0.0488 | 0.0418 | 0.6967 | 920.1815 | 0.9614 | 0.0574 | 0.9945 | 0.9996 |
| emotions | 0.3167 | 0.2056 | 0.5625 | 0.6698 | 0.6588 | 0.6754 | 0.3000 | 1.7667 | 0.2304 | 0.7944 | 0.8722 | 0.8823 |
| enron | 0.1696 | 0.0511 | 0.4447 | 0.5696 | 0.1451 | 0.5518 | 0.3216 | 24.0702 | 0.3393 | 0.6077 | 0.8260 | 0.9801 |
| EukaryoteGO | 0.6972 | 0.0183 | 0.7910 | 0.8370 | 0.6635 | 0.8298 | 0.1662 | 0.8531 | 0.0495 | 0.8941 | 0.9929 | 0.9948 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.2500 | 0.2429 | 0.6067 | 0.7231 | 0.5696 | 0.7344 | 0.1000 | 3.5500 | 0.2275 | 0.8400 | 0.6986 | 0.7942 |
| foodtruck | 0.3659 | 0.1443 | 0.4877 | 0.5921 | 0.0903 | 0.4741 | 0.2439 | 4.6585 | 0.4507 | 0.7154 | 0.8516 | 0.9545 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0134 | 0.9464 | 0.9589 | 0.8184 | 0.9485 | 0.0357 | 0.1214 | 0.0245 | 0.9768 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7429 | 0.0527 | 0.7667 | 0.7786 | 0.4540 | 0.7900 | 0.1929 | 0.6214 | 0.1505 | 0.8689 | 0.8576 | 0.9857 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8699 | 0.9333 | 0.0577 | 0.1923 | 0.0577 | 0.9567 | 0.9968 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5661 | 0.7308 | 0.2692 | 0.5577 | 0.2436 | 0.8269 | 0.9667 | 0.9617 |
| HumanGO | 0.6817 | 0.0361 | 0.7535 | 0.7918 | 0.6775 | 0.7734 | 0.1704 | 1.0129 | 0.0954 | 0.8775 | 0.9841 | 0.9877 |
| HumanPseAAC | 0.3537 | 0.0914 | 0.4068 | 0.4347 | 0.1844 | 0.4265 | 0.5434 | 3.6109 | 0.5035 | 0.5704 | 0.9581 | 0.9589 |
| Image | 0.5300 | 0.1680 | 0.6125 | 0.6543 | 0.6320 | 0.6283 | 0.3100 | 1.1050 | 0.3000 | 0.7819 | 0.9115 | 0.9088 |
| IMDB-ECC-F10% | 0.1394 | 0.0776 | 0.2313 | 0.2840 | 0.0284 | 0.2513 | 0.7149 | 13.4633 | 0.8279 | 0.3074 | 0.9925 | 0.9859 |
| IMDB-F10% | 0.0497 | 0.0904 | 0.1363 | 0.1855 | 0.0225 | 0.1851 | 0.5965 | 13.0149 | 0.7412 | 0.3736 | 0.9904 | 0.9768 |
| LLOG-F | 0.1639 | 0.0161 | 0.1933 | 0.2109 | 0.0518 | 0.2829 | 0.7377 | 29.1885 | 0.7835 | 0.2768 | 0.5985 | 0.9982 |
| mediamill10% | 0.0974 | 0.0319 | 0.4088 | 0.5579 | 0.0435 | 0.5067 | 0.2589 | 59.8670 | 0.4572 | 0.5282 | 0.8133 | 0.9937 |
| medical | 0.6327 | 0.0107 | 0.7415 | 0.7939 | 0.3022 | 0.8127 | 0.1735 | 5.4388 | 0.1433 | 0.8335 | 0.5522 | 0.9972 |
| Music | 0.3000 | 0.1861 | 0.5708 | 0.6860 | 0.7140 | 0.7173 | 0.2833 | 2.0167 | 0.2385 | 0.7972 | 0.8903 | 0.8833 |
| NUS-WIDE-bow10% | 0.1836 | 0.0250 | 0.3109 | 0.3772 | 0.0418 | 0.3791 | 0.5219 | 34.2350 | 0.5868 | 0.4398 | 0.8803 | 0.9913 |
| NUS-WIDE-cVLADplus10% | 0.1922 | 0.0301 | 0.3154 | 0.3801 | 0.0369 | 0.3478 | 0.5918 | 37.0937 | 0.6943 | 0.3774 | 0.8841 | 0.9950 |
| OHSUMED-F | 0.2340 | 0.0569 | 0.4327 | 0.5372 | 0.4387 | 0.5582 | 0.3575 | 7.6382 | 0.4113 | 0.6145 | 0.9765 | 0.9795 |
| PlantGO | 0.6979 | 0.0399 | 0.7222 | 0.7361 | 0.6268 | 0.7677 | 0.2396 | 0.9688 | 0.0966 | 0.8458 | 0.9892 | 0.9850 |
| PlantPseAAC | 0.2755 | 0.1003 | 0.3282 | 0.3578 | 0.2156 | 0.3918 | 0.6224 | 3.1224 | 0.5097 | 0.5340 | 0.9373 | 0.9292 |
| rcv1subset1 | 0.1150 | 0.0306 | 0.3271 | 0.4323 | 0.2374 | 0.4350 | 0.4100 | 38.4417 | 0.4071 | 0.5133 | 0.9261 | 0.9867 |
| REUTERS-K500-EX2 | 0.3351 | 0.0115 | 0.4108 | 0.4535 | 0.2449 | 0.4985 | 0.5086 | 32.4931 | 0.5272 | 0.4931 | 0.7836 | 0.9970 |
| scene | 0.6681 | 0.0892 | 0.7282 | 0.7581 | 0.7599 | 0.7466 | 0.2158 | 0.8880 | 0.1863 | 0.8359 | 0.9652 | 0.9701 |
| sider_CDK_ECFP4 | 0.0141 | 0.2470 | 0.6478 | 0.7962 | 0.6275 | 0.7947 | 0.1408 | 19.5915 | 0.1747 | 0.8006 | 0.5928 | 0.7697 |
| sider_MordredDesc | 0.0141 | 0.2707 | 0.6202 | 0.7741 | 0.6153 | 0.7788 | 0.2042 | 19.6197 | 0.1804 | 0.7836 | 0.5792 | 0.7673 |
| sider_RDKit_desc | 0.0282 | 0.2926 | 0.6256 | 0.7767 | 0.6098 | 0.7725 | 0.1761 | 20.1408 | 0.2218 | 0.7302 | 0.5668 | 0.7394 |
| SLASHDOT-F | 0.4048 | 0.0410 | 0.4917 | 0.5393 | 0.3479 | 0.5806 | 0.4259 | 6.1667 | 0.4000 | 0.6156 | 0.7591 | 0.9859 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0447 | 0.0121 | 0.1030 | 0.1382 | 0.0529 | 0.1740 | 0.7709 | 104.3184 | 0.8622 | 0.1684 | 0.9182 | 0.9982 |
| Stackex_chess | 0.0417 | 0.0099 | 0.1530 | 0.2120 | 0.0575 | 0.2713 | 0.6548 | 137.1905 | 0.8043 | 0.2122 | 0.5493 | 0.9983 |
| Stackex_coffee | 0.0435 | 0.0201 | 0.0606 | 0.0723 | 0.0159 | 0.0952 | 0.8261 | 76.6957 | 0.8276 | 0.1602 | 0.2562 | 0.9875 |
| Stackex_cooking | 0.0000 | 0.6450 | 0.0066 | 0.0131 | 0.0329 | 0.0131 | 0.8802 | 250.2725 | 0.9452 | 0.0745 | 0.9249 | 0.9998 |
| Stackex_philosophy | 0.0653 | 0.0092 | 0.1751 | 0.2353 | 0.0582 | 0.2774 | 0.6960 | 135.0101 | 0.7878 | 0.2127 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2930 | 0.0620 | 0.5604 | 0.6922 | 0.5671 | 0.6697 | 0.2517 | 4.1269 | 0.1467 | 0.7761 | 0.9583 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1507 | 0.1641 | 0.3274 | 0.4153 | 0.3614 | 0.4368 | 0.4726 | 5.3699 | 0.4915 | 0.5659 | 0.8982 | 0.8993 |
| tox21_RDKit_desc | 0.1473 | 0.1781 | 0.2935 | 0.3903 | 0.2414 | 0.3735 | 0.5068 | 5.5411 | 0.5008 | 0.5532 | 0.8960 | 0.8960 |
| VirusGO | 0.6667 | 0.0714 | 0.7619 | 0.8015 | 0.6687 | 0.8085 | 0.0952 | 0.5238 | 0.0779 | 0.9206 | 0.7972 | 0.9707 |
| VirusPseAAC | 0.4286 | 0.1349 | 0.4762 | 0.5000 | 0.3333 | 0.5641 | 0.4286 | 1.0476 | 0.2333 | 0.7310 | 0.7252 | 0.9181 |
| Water-quality | 0.0094 | 0.3073 | 0.3305 | 0.4891 | 0.3404 | 0.4806 | 0.2925 | 9.4057 | 0.3804 | 0.6855 | 0.7820 | 0.7669 |
| Yahoo_Arts | 0.2003 | 0.0637 | 0.2876 | 0.3439 | 0.2097 | 0.3680 | 0.5180 | 10.4152 | 0.6266 | 0.4939 | 0.9390 | 0.9785 |
| Yahoo_Business | 0.5793 | 0.0256 | 0.7334 | 0.8194 | 0.2952 | 0.7354 | 0.0882 | 3.1907 | 0.2239 | 0.8874 | 0.8569 | 0.9952 |
| Yahoo_Computers | 0.3920 | 0.0410 | 0.4780 | 0.5378 | 0.2522 | 0.5085 | 0.3831 | 6.5799 | 0.4260 | 0.6112 | 0.8897 | 0.9823 |
| Yahoo_Education | 0.1463 | 0.0457 | 0.2027 | 0.2431 | 0.1515 | 0.3118 | 0.6160 | 9.3067 | 0.6590 | 0.4864 | 0.8866 | 0.9795 |
| Yahoo_Entertainment | 0.4184 | 0.0743 | 0.5347 | 0.5793 | 0.3536 | 0.5342 | 0.3891 | 3.9963 | 0.3942 | 0.6735 | 0.9767 | 0.9757 |
| Yahoo_Health | 0.4104 | 0.0392 | 0.5493 | 0.6289 | 0.2476 | 0.5895 | 0.3105 | 6.4235 | 0.3456 | 0.6967 | 0.8294 | 0.9855 |
| Yahoo_Recreation | 0.2377 | 0.0599 | 0.2948 | 0.3333 | 0.3080 | 0.3954 | 0.5152 | 6.4973 | 0.5465 | 0.5640 | 0.9606 | 0.9621 |
| Yahoo_Reference | 0.4508 | 0.0308 | 0.5126 | 0.5513 | 0.1769 | 0.5411 | 0.4035 | 5.4707 | 0.4356 | 0.6373 | 0.8089 | 0.9906 |
| Yahoo_Science | 0.2053 | 0.0383 | 0.2613 | 0.3035 | 0.1578 | 0.3349 | 0.6407 | 13.8989 | 0.6690 | 0.4129 | 0.9578 | 0.9843 |
| Yahoo_Social | 0.4785 | 0.0274 | 0.5385 | 0.5760 | 0.1629 | 0.5440 | 0.3696 | 7.3960 | 0.3816 | 0.6518 | 0.9133 | 0.9898 |
| Yahoo_Society | 0.3238 | 0.0840 | 0.4556 | 0.5531 | 0.2266 | 0.4651 | 0.3610 | 8.3493 | 0.4732 | 0.5868 | 0.9487 | 0.9836 |
| yeast | 0.2190 | 0.1951 | 0.5397 | 0.6667 | 0.3766 | 0.6615 | 0.2355 | 6.2190 | 0.2336 | 0.7575 | 0.8239 | 0.8822 |
| Yelp | 0.4257 | 0.1920 | 0.6369 | 0.7348 | 0.6511 | 0.7155 | 0.2074 | 1.4427 | 0.2599 | 0.8538 | 0.8853 | 0.9040 |

Table 45: Detailed results for Massive (10%) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5628 | 0.0260 | 0.6010 | 0.6199 | 0.7099 | 0.7150 | 0.3268 | 2.8345 | 0.2742 | 0.7373 | 0.9922 | 0.9922 |
| 3s-bbc1000 | 0.1111 | 0.2963 | 0.1667 | 0.2037 | 0.1722 | 0.2195 | 0.7778 | 3.0000 | 0.7019 | 0.4241 | 0.7818 | 0.7305 |
| 3s-guardian1000 | 0.2903 | 0.2204 | 0.3978 | 0.4510 | 0.2865 | 0.4384 | 0.5161 | 2.2258 | 0.5290 | 0.5978 | 0.8749 | 0.8588 |
| 3s-inter3000 | 0.2941 | 0.2353 | 0.3235 | 0.3376 | 0.0870 | 0.3333 | 0.7647 | 2.7059 | 0.9529 | 0.4510 | 0.7734 | 0.9411 |
| 3s-reuters1000 | 0.1333 | 0.3111 | 0.1333 | 0.1333 | 0.0670 | 0.1250 | 0.8667 | 2.6667 | 0.8000 | 0.3833 | 0.8355 | 0.7542 |
| amphibians | 0.0556 | 0.3095 | 0.4452 | 0.6732 | 0.2792 | 0.5714 | 0.2222 | 2.5000 | 0.1167 | 0.8570 | 0.7364 | 0.8030 |
| bibtex | 0.1838 | 0.0120 | 0.3547 | 0.4451 | 0.3074 | 0.4724 | 0.4311 | 72.7608 | 0.5786 | 0.4289 | 0.9977 | 0.9977 |
| birds | 0.1795 | 0.0864 | 0.3226 | 0.3930 | 0.2697 | 0.4182 | 0.5128 | 7.8462 | 0.5060 | 0.5024 | 0.8441 | 0.9359 |
| bookmarks10% | 0.1834 | 0.0088 | 0.2150 | 0.2373 | 0.1118 | 0.2626 | 0.7255 | 105.0171 | 0.7631 | 0.2604 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1601 | 0.1562 | 0.2719 | 0.0430 | 0.2664 | 0.5098 | 151.0588 | 0.7115 | 0.3898 | 0.8475 | 0.9597 |
| corel16k001 | 0.0051 | 0.0189 | 0.0471 | 0.0699 | 0.0305 | 0.0893 | 0.8744 | 114.6253 | 0.9426 | 0.0895 | 0.9989 | 0.9989 |
| Corel5k | 0.0100 | 0.0091 | 0.0500 | 0.0713 | 0.0196 | 0.1003 | 0.8460 | 164.6020 | 0.9346 | 0.1630 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.6084 | 0.0213 | 0.0418 | 0.0488 | 0.0418 | 0.6967 | 920.1815 | 0.9614 | 0.0574 | 0.9945 | 0.9996 |
| emotions | 0.3167 | 0.1944 | 0.5847 | 0.7062 | 0.6785 | 0.6983 | 0.3000 | 1.7833 | 0.2448 | 0.7869 | 0.9006 | 0.8901 |
| enron | 0.1813 | 0.0522 | 0.4449 | 0.5669 | 0.1351 | 0.5439 | 0.2807 | 23.7895 | 0.3654 | 0.6072 | 0.8255 | 0.9809 |
| EukaryoteGO | 0.7101 | 0.0188 | 0.7889 | 0.8283 | 0.7341 | 0.8224 | 0.1701 | 0.8969 | 0.0525 | 0.8918 | 0.9933 | 0.9948 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.1500 | 0.2571 | 0.5750 | 0.7091 | 0.5478 | 0.7143 | 0.4000 | 3.4500 | 0.2817 | 0.7815 | 0.7472 | 0.8164 |
| foodtruck | 0.3659 | 0.1402 | 0.4917 | 0.6008 | 0.1075 | 0.4889 | 0.2439 | 4.6098 | 0.4729 | 0.7172 | 0.8604 | 0.9604 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0149 | 0.2985 | 0.0024 | 0.9885 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9357 | 0.0125 | 0.9500 | 0.9571 | 0.8192 | 0.9517 | 0.0357 | 0.1214 | 0.0245 | 0.9768 | 0.8740 | 0.9981 |
| GnegativePseAAC | 0.7714 | 0.0509 | 0.7952 | 0.8071 | 0.4683 | 0.8014 | 0.1714 | 0.6214 | 0.1515 | 0.8772 | 0.8629 | 0.9903 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8699 | 0.9333 | 0.0577 | 0.1538 | 0.0449 | 0.9615 | 0.9986 | 0.9983 |
| GpositivePseAAC | 0.7500 | 0.1250 | 0.7500 | 0.7500 | 0.5688 | 0.7500 | 0.2500 | 0.5385 | 0.2500 | 0.8365 | 0.9841 | 0.9760 |
| HumanGO | 0.7010 | 0.0358 | 0.7629 | 0.7959 | 0.7029 | 0.7726 | 0.1608 | 1.0643 | 0.0996 | 0.8818 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.3537 | 0.0914 | 0.4068 | 0.4347 | 0.1844 | 0.4265 | 0.5434 | 3.6109 | 0.5035 | 0.5704 | 0.9581 | 0.9589 |
| Image | 0.5450 | 0.1690 | 0.6175 | 0.6545 | 0.6308 | 0.6253 | 0.3050 | 1.0200 | 0.2850 | 0.7959 | 0.9347 | 0.9312 |
| IMDB-ECC-F10% | 0.0597 | 0.0844 | 0.1470 | 0.1947 | 0.0277 | 0.1938 | 0.6321 | 12.3386 | 0.7342 | 0.3751 | 0.9907 | 0.9763 |
| IMDB-F10% | 0.0522 | 0.0904 | 0.1408 | 0.1910 | 0.0279 | 0.1925 | 0.5857 | 12.7755 | 0.7197 | 0.3867 | 0.9855 | 0.9750 |
| LLOG-F | 0.1639 | 0.0158 | 0.1933 | 0.2109 | 0.0521 | 0.2857 | 0.7459 | 28.7049 | 0.7876 | 0.2752 | 0.5982 | 0.9978 |
| mediamill10% | 0.0879 | 0.0317 | 0.4129 | 0.5683 | 0.0370 | 0.5116 | 0.2399 | 57.9976 | 0.4335 | 0.5504 | 0.8123 | 0.9932 |
| medical | 0.6633 | 0.0100 | 0.7662 | 0.8162 | 0.3063 | 0.8240 | 0.1735 | 5.0510 | 0.1336 | 0.8325 | 0.5526 | 0.9975 |
| Music | 0.2833 | 0.1694 | 0.5861 | 0.7192 | 0.7288 | 0.7359 | 0.3167 | 2.0000 | 0.2543 | 0.7904 | 0.9088 | 0.8972 |
| NUS-WIDE-bow10% | 0.1836 | 0.0250 | 0.3109 | 0.3772 | 0.0418 | 0.3791 | 0.5219 | 34.2350 | 0.5868 | 0.4398 | 0.8803 | 0.9913 |
| NUS-WIDE-cVLADplus10% | 0.1970 | 0.0296 | 0.3220 | 0.3867 | 0.0416 | 0.3527 | 0.6327 | 38.3635 | 0.7183 | 0.3576 | 0.8856 | 0.9967 |
| OHSUMED-F | 0.2340 | 0.0569 | 0.4327 | 0.5372 | 0.4387 | 0.5582 | 0.3575 | 7.6382 | 0.4113 | 0.6145 | 0.9765 | 0.9795 |
| PlantGO | 0.6979 | 0.0443 | 0.7240 | 0.7370 | 0.6173 | 0.7463 | 0.2292 | 0.9479 | 0.0957 | 0.8527 | 0.9895 | 0.9843 |
| PlantPseAAC | 0.2653 | 0.1114 | 0.3197 | 0.3485 | 0.1915 | 0.3610 | 0.6020 | 3.2653 | 0.5468 | 0.5340 | 0.9503 | 0.9440 |
| rcv1subset1 | 0.1150 | 0.0306 | 0.3271 | 0.4323 | 0.2374 | 0.4350 | 0.4100 | 38.4417 | 0.4071 | 0.5133 | 0.9261 | 0.9867 |
| REUTERS-K500-EX2 | 0.3333 | 0.0117 | 0.4060 | 0.4497 | 0.2318 | 0.4924 | 0.5258 | 32.0979 | 0.5321 | 0.4838 | 0.7839 | 0.9972 |
| scene | 0.7012 | 0.0809 | 0.7531 | 0.7786 | 0.7795 | 0.7683 | 0.1992 | 0.9544 | 0.2000 | 0.8373 | 0.9774 | 0.9792 |
| sider_CDK_ECFP4 | 0.0141 | 0.2546 | 0.6488 | 0.7955 | 0.6205 | 0.7930 | 0.2324 | 19.0352 | 0.1617 | 0.7985 | 0.5797 | 0.7717 |
| sider_MordredDesc | 0.0141 | 0.2681 | 0.6151 | 0.7774 | 0.6106 | 0.7782 | 0.3169 | 19.4085 | 0.1817 | 0.7627 | 0.5686 | 0.7624 |
| sider_RDKit_desc | 0.0141 | 0.2848 | 0.6273 | 0.7796 | 0.5943 | 0.7745 | 0.2535 | 20.0141 | 0.2104 | 0.7390 | 0.5873 | 0.7505 |
| SLASHDOT-F | 0.3995 | 0.0420 | 0.5064 | 0.5638 | 0.3643 | 0.5880 | 0.4048 | 5.7910 | 0.3764 | 0.6339 | 0.7581 | 0.9849 |
| solar_flare-L3 | 0.8000 | 0.1333 | 0.8000 | 0.8000 | 0.5333 | 0.8000 | 0.2000 | 0.2000 | 0.2000 | 0.9000 | 0.6667 | 0.9800 |
| Stackex_chemistry | 0.0389 | 0.0120 | 0.0991 | 0.1347 | 0.0535 | 0.1684 | 0.7925 | 105.9726 | 0.8776 | 0.1538 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0298 | 0.0100 | 0.1373 | 0.1921 | 0.0497 | 0.2563 | 0.6548 | 137.7798 | 0.8088 | 0.2050 | 0.5490 | 0.9981 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0507 | 0.0732 | 0.0221 | 0.1159 | 0.7391 | 72.3043 | 0.8229 | 0.1898 | 0.2549 | 0.9871 |
| Stackex_cooking | 0.0589 | 0.0052 | 0.1915 | 0.2597 | 0.1002 | 0.3072 | 0.6406 | 223.4725 | 0.7720 | 0.2311 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0678 | 0.0092 | 0.1701 | 0.2285 | 0.0550 | 0.2685 | 0.6834 | 134.9121 | 0.7897 | 0.2140 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2930 | 0.0620 | 0.5604 | 0.6922 | 0.5671 | 0.6697 | 0.2517 | 4.1269 | 0.1467 | 0.7761 | 0.9583 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1575 | 0.1632 | 0.3243 | 0.4099 | 0.3492 | 0.4280 | 0.4726 | 5.4007 | 0.4838 | 0.5688 | 0.8987 | 0.8990 |
| tox21_RDKit_desc | 0.1575 | 0.1732 | 0.2887 | 0.3766 | 0.2566 | 0.3684 | 0.4966 | 5.4521 | 0.4993 | 0.5586 | 0.9004 | 0.9013 |
| VirusGO | 0.7143 | 0.0556 | 0.8175 | 0.8607 | 0.6894 | 0.8511 | 0.2381 | 0.6667 | 0.1135 | 0.8587 | 0.8176 | 0.9790 |
| VirusPseAAC | 0.5714 | 0.1032 | 0.5952 | 0.6069 | 0.3833 | 0.6829 | 0.3333 | 1.0476 | 0.2524 | 0.7667 | 0.7592 | 0.9337 |
| Water-quality | 0.0094 | 0.3255 | 0.2704 | 0.4183 | 0.2612 | 0.4117 | 0.2642 | 9.0377 | 0.3439 | 0.6913 | 0.7708 | 0.7588 |
| Yahoo_Arts | 0.2003 | 0.0637 | 0.2876 | 0.3439 | 0.2097 | 0.3680 | 0.5180 | 10.4152 | 0.6266 | 0.4939 | 0.9390 | 0.9785 |
| Yahoo_Business | 0.5793 | 0.0256 | 0.7334 | 0.8194 | 0.2952 | 0.7354 | 0.0882 | 3.1907 | 0.2239 | 0.8874 | 0.8569 | 0.9952 |
| Yahoo_Computers | 0.3920 | 0.0410 | 0.4780 | 0.5378 | 0.2522 | 0.5085 | 0.3831 | 6.5799 | 0.4260 | 0.6112 | 0.8897 | 0.9823 |
| Yahoo_Education | 0.1463 | 0.0457 | 0.2027 | 0.2431 | 0.1515 | 0.3118 | 0.6160 | 9.3067 | 0.6590 | 0.4864 | 0.8866 | 0.9795 |
| Yahoo_Entertainment | 0.4184 | 0.0743 | 0.5347 | 0.5793 | 0.3536 | 0.5342 | 0.3891 | 3.9963 | 0.3942 | 0.6735 | 0.9767 | 0.9757 |
| Yahoo_Health | 0.4104 | 0.0392 | 0.5493 | 0.6289 | 0.2476 | 0.5895 | 0.3105 | 6.4235 | 0.3456 | 0.6967 | 0.8294 | 0.9855 |
| Yahoo_Recreation | 0.2377 | 0.0599 | 0.2948 | 0.3333 | 0.3080 | 0.3954 | 0.5152 | 6.4973 | 0.5465 | 0.5640 | 0.9606 | 0.9621 |
| Yahoo_Reference | 0.4508 | 0.0308 | 0.5126 | 0.5513 | 0.1769 | 0.5411 | 0.4035 | 5.4707 | 0.4356 | 0.6373 | 0.8089 | 0.9906 |
| Yahoo_Science | 0.2053 | 0.0383 | 0.2613 | 0.3035 | 0.1578 | 0.3349 | 0.6407 | 13.8989 | 0.6690 | 0.4129 | 0.9578 | 0.9843 |
| Yahoo_Social | 0.4785 | 0.0274 | 0.5385 | 0.5760 | 0.1629 | 0.5440 | 0.3696 | 7.3960 | 0.3816 | 0.6518 | 0.9133 | 0.9898 |
| Yahoo_Society | 0.3238 | 0.0840 | 0.4556 | 0.5531 | 0.2266 | 0.4651 | 0.3610 | 8.3493 | 0.4732 | 0.5868 | 0.9487 | 0.9836 |
| yeast | 0.2273 | 0.1942 | 0.5444 | 0.6690 | 0.3953 | 0.6643 | 0.2562 | 6.2025 | 0.2344 | 0.7530 | 0.8266 | 0.8841 |
| Yelp | 0.4187 | 0.1886 | 0.6332 | 0.7290 | 0.6715 | 0.7239 | 0.1974 | 1.3689 | 0.2289 | 0.8636 | 0.8774 | 0.9012 |

Table 46: Detailed results for Massive (25%) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5628 | 0.0260 | 0.6010 | 0.6199 | 0.7099 | 0.7150 | 0.3268 | 2.8345 | 0.2742 | 0.7373 | 0.9922 | 0.9922 |
| 3s-bbc1000 | 0.1111 | 0.2824 | 0.2176 | 0.2754 | 0.2318 | 0.2824 | 0.7222 | 2.8611 | 0.6498 | 0.4548 | 0.8476 | 0.7795 |
| 3s-guardian1000 | 0.2903 | 0.2366 | 0.3737 | 0.4162 | 0.2159 | 0.4054 | 0.5484 | 2.2258 | 0.5113 | 0.5860 | 0.8548 | 0.8547 |
| 3s-inter3000 | 0.1765 | 0.2451 | 0.2941 | 0.3505 | 0.1346 | 0.3590 | 0.9412 | 2.3529 | 0.6235 | 0.3882 | 0.5006 | 0.6832 |
| 3s-reuters1000 | 0.1000 | 0.2722 | 0.1333 | 0.1481 | 0.1277 | 0.1695 | 0.8667 | 2.4000 | 0.7267 | 0.4122 | 0.8432 | 0.7601 |
| amphibians | 0.0000 | 0.3413 | 0.4135 | 0.6604 | 0.3873 | 0.5743 | 0.2222 | 2.3889 | 0.0852 | 0.8756 | 0.7442 | 0.8009 |
| bibtex | 0.1838 | 0.0120 | 0.3547 | 0.4451 | 0.3074 | 0.4724 | 0.4311 | 72.7608 | 0.5786 | 0.4289 | 0.9977 | 0.9977 |
| birds | 0.1795 | 0.0972 | 0.3236 | 0.3912 | 0.2691 | 0.3898 | 0.4615 | 7.9231 | 0.4940 | 0.5168 | 0.8465 | 0.9417 |
| bookmarks10% | 0.1834 | 0.0088 | 0.2150 | 0.2373 | 0.1118 | 0.2626 | 0.7255 | 105.0171 | 0.7631 | 0.2604 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1432 | 0.1634 | 0.2798 | 0.0376 | 0.2766 | 0.4118 | 151.0784 | 0.6804 | 0.4148 | 0.8454 | 0.9574 |
| corel16k001 | 0.0138 | 0.0232 | 0.0918 | 0.1346 | 0.0148 | 0.1257 | 0.8889 | 115.0922 | 0.9519 | 0.0809 | 0.9991 | 0.9991 |
| Corel5k | 0.0100 | 0.0092 | 0.0351 | 0.0494 | 0.0151 | 0.0733 | 0.8580 | 163.2580 | 0.9454 | 0.1562 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.6084 | 0.0213 | 0.0418 | 0.0488 | 0.0418 | 0.6967 | 920.1815 | 0.9614 | 0.0574 | 0.9945 | 0.9996 |
| emotions | 0.3167 | 0.1917 | 0.5792 | 0.7002 | 0.6786 | 0.6960 | 0.2667 | 1.7333 | 0.2198 | 0.8045 | 0.8733 | 0.8822 |
| enron | 0.1754 | 0.0503 | 0.4575 | 0.5865 | 0.1575 | 0.5682 | 0.3041 | 23.9357 | 0.3437 | 0.6182 | 0.8254 | 0.9795 |
| EukaryoteGO | 0.6972 | 0.0182 | 0.7902 | 0.8355 | 0.6441 | 0.8307 | 0.1611 | 0.8286 | 0.0456 | 0.8980 | 0.9924 | 0.9945 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.2500 | 0.2571 | 0.5775 | 0.6904 | 0.5426 | 0.7143 | 0.3000 | 3.5000 | 0.2292 | 0.7997 | 0.6985 | 0.7915 |
| foodtruck | 0.3171 | 0.1484 | 0.4633 | 0.5842 | 0.0903 | 0.4672 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8554 | 0.9574 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0134 | 0.9464 | 0.9553 | 0.8175 | 0.9481 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7286 | 0.0563 | 0.7536 | 0.7660 | 0.4211 | 0.7758 | 0.2000 | 0.6214 | 0.1454 | 0.8665 | 0.8571 | 0.9859 |
| GpositiveGO | 0.9423 | 0.0240 | 0.9519 | 0.9567 | 0.9625 | 0.9524 | 0.0192 | 0.0769 | 0.0321 | 0.9856 | 0.9972 | 0.9978 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5662 | 0.7308 | 0.2692 | 0.5385 | 0.2436 | 0.8301 | 0.9697 | 0.9643 |
| HumanGO | 0.6881 | 0.0347 | 0.7540 | 0.7892 | 0.6773 | 0.7776 | 0.1640 | 1.0257 | 0.0995 | 0.8801 | 0.9841 | 0.9879 |
| HumanPseAAC | 0.3537 | 0.0914 | 0.4068 | 0.4347 | 0.1844 | 0.4265 | 0.5434 | 3.6109 | 0.5035 | 0.5704 | 0.9581 | 0.9589 |
| Image | 0.5500 | 0.1650 | 0.6175 | 0.6516 | 0.6313 | 0.6292 | 0.3250 | 1.1100 | 0.3038 | 0.7764 | 0.9195 | 0.9199 |
| IMDB-ECC-F10% | 0.0608 | 0.0846 | 0.1450 | 0.1910 | 0.0255 | 0.1887 | 0.6373 | 12.2883 | 0.7180 | 0.3788 | 0.9861 | 0.9741 |
| IMDB-F10% | 0.0522 | 0.0904 | 0.1408 | 0.1910 | 0.0279 | 0.1925 | 0.5857 | 12.7755 | 0.7197 | 0.3867 | 0.9855 | 0.9750 |
| LLOG-F | 0.1721 | 0.0157 | 0.2015 | 0.2192 | 0.0554 | 0.2941 | 0.7213 | 28.2377 | 0.7591 | 0.2964 | 0.5986 | 0.9983 |
| mediamill10% | 0.0950 | 0.0318 | 0.4164 | 0.5704 | 0.0393 | 0.5112 | 0.1853 | 60.3112 | 0.4665 | 0.5320 | 0.8142 | 0.9942 |
| medical | 0.6429 | 0.0104 | 0.7611 | 0.8186 | 0.2975 | 0.8189 | 0.1735 | 4.9592 | 0.1234 | 0.8383 | 0.5521 | 0.9975 |
| Music | 0.2500 | 0.1750 | 0.5764 | 0.7207 | 0.7058 | 0.7249 | 0.3500 | 2.1333 | 0.2683 | 0.7570 | 0.8938 | 0.8892 |
| NUS-WIDE-bow10% | 0.1836 | 0.0250 | 0.3109 | 0.3772 | 0.0418 | 0.3791 | 0.5219 | 34.2350 | 0.5868 | 0.4398 | 0.8803 | 0.9913 |
| NUS-WIDE-cVLADplus10% | 0.1970 | 0.0296 | 0.3220 | 0.3867 | 0.0416 | 0.3527 | 0.6327 | 38.3635 | 0.7183 | 0.3576 | 0.8856 | 0.9967 |
| OHSUMED-F | 0.2340 | 0.0569 | 0.4327 | 0.5372 | 0.4387 | 0.5582 | 0.3575 | 7.6382 | 0.4113 | 0.6145 | 0.9765 | 0.9795 |
| PlantGO | 0.6771 | 0.0434 | 0.6962 | 0.7074 | 0.6014 | 0.7423 | 0.2396 | 1.1667 | 0.1191 | 0.8374 | 0.9889 | 0.9841 |
| PlantPseAAC | 0.2653 | 0.1105 | 0.3214 | 0.3542 | 0.1777 | 0.3689 | 0.6429 | 3.1327 | 0.5067 | 0.5255 | 0.9433 | 0.9358 |
| rcv1subset1 | 0.1150 | 0.0306 | 0.3271 | 0.4323 | 0.2374 | 0.4350 | 0.4100 | 38.4417 | 0.4071 | 0.5133 | 0.9261 | 0.9867 |
| REUTERS-K500-EX2 | 0.3247 | 0.0113 | 0.3942 | 0.4339 | 0.2469 | 0.4921 | 0.5120 | 31.2646 | 0.5308 | 0.4936 | 0.7839 | 0.9972 |
| scene | 0.6929 | 0.0851 | 0.7386 | 0.7608 | 0.7656 | 0.7545 | 0.2116 | 0.8506 | 0.1813 | 0.8413 | 0.9643 | 0.9697 |
| sider_CDK_ECFP4 | 0.0211 | 0.2647 | 0.6366 | 0.7859 | 0.6371 | 0.7863 | 0.1901 | 19.2887 | 0.1862 | 0.7660 | 0.5949 | 0.7598 |
| sider_MordredDesc | 0.0141 | 0.2681 | 0.6151 | 0.7774 | 0.6106 | 0.7782 | 0.3169 | 19.4085 | 0.1817 | 0.7627 | 0.5686 | 0.7624 |
| sider_RDKit_desc | 0.0141 | 0.2861 | 0.6275 | 0.7795 | 0.5895 | 0.7742 | 0.3662 | 19.8732 | 0.1974 | 0.7394 | 0.5841 | 0.7537 |
| SLASHDOT-F | 0.4021 | 0.0402 | 0.4940 | 0.5424 | 0.3602 | 0.5877 | 0.4206 | 5.9153 | 0.3884 | 0.6245 | 0.7581 | 0.9851 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.5556 | 0.8400 |
| Stackex_chemistry | 0.0432 | 0.0122 | 0.1023 | 0.1387 | 0.0520 | 0.1748 | 0.7695 | 104.0360 | 0.8579 | 0.1703 | 0.9182 | 0.9982 |
| Stackex_chess | 0.0298 | 0.0100 | 0.1351 | 0.1917 | 0.0559 | 0.2568 | 0.6905 | 137.4881 | 0.8096 | 0.2000 | 0.5493 | 0.9984 |
| Stackex_coffee | 0.0435 | 0.0194 | 0.0725 | 0.0851 | 0.0210 | 0.1270 | 0.7391 | 75.4783 | 0.8591 | 0.1580 | 0.2562 | 0.9889 |
| Stackex_cooking | 0.0589 | 0.0052 | 0.1915 | 0.2597 | 0.1002 | 0.3072 | 0.6406 | 223.4725 | 0.7720 | 0.2311 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0628 | 0.0093 | 0.1656 | 0.2263 | 0.0536 | 0.2611 | 0.6834 | 134.5176 | 0.7890 | 0.2147 | 0.7497 | 0.9986 |
| tmc2007-500 | 0.2930 | 0.0620 | 0.5604 | 0.6922 | 0.5671 | 0.6697 | 0.2517 | 4.1269 | 0.1467 | 0.7761 | 0.9583 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1541 | 0.1630 | 0.3331 | 0.4245 | 0.3700 | 0.4429 | 0.4658 | 5.4212 | 0.4975 | 0.5678 | 0.9016 | 0.9023 |
| tox21_RDKit_desc | 0.1473 | 0.1747 | 0.2907 | 0.3861 | 0.2563 | 0.3768 | 0.5034 | 5.5685 | 0.5155 | 0.5494 | 0.9001 | 0.9008 |
| VirusGO | 0.7143 | 0.0714 | 0.8095 | 0.8491 | 0.6495 | 0.8163 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.7926 | 0.9628 |
| VirusPseAAC | 0.2381 | 0.1508 | 0.4048 | 0.4808 | 0.3193 | 0.5581 | 0.4762 | 1.0476 | 0.2333 | 0.7095 | 0.7526 | 0.9147 |
| Water-quality | 0.0189 | 0.3208 | 0.2835 | 0.4348 | 0.3174 | 0.4333 | 0.2736 | 9.1415 | 0.3510 | 0.6956 | 0.7641 | 0.7585 |
| Yahoo_Arts | 0.2003 | 0.0637 | 0.2876 | 0.3439 | 0.2097 | 0.3680 | 0.5180 | 10.4152 | 0.6266 | 0.4939 | 0.9390 | 0.9785 |
| Yahoo_Business | 0.5793 | 0.0256 | 0.7334 | 0.8194 | 0.2952 | 0.7354 | 0.0882 | 3.1907 | 0.2239 | 0.8874 | 0.8569 | 0.9952 |
| Yahoo_Computers | 0.3920 | 0.0410 | 0.4780 | 0.5378 | 0.2522 | 0.5085 | 0.3831 | 6.5799 | 0.4260 | 0.6112 | 0.8897 | 0.9823 |
| Yahoo_Education | 0.1463 | 0.0457 | 0.2027 | 0.2431 | 0.1515 | 0.3118 | 0.6160 | 9.3067 | 0.6590 | 0.4864 | 0.8866 | 0.9795 |
| Yahoo_Entertainment | 0.4184 | 0.0743 | 0.5347 | 0.5793 | 0.3536 | 0.5342 | 0.3891 | 3.9963 | 0.3942 | 0.6735 | 0.9767 | 0.9757 |
| Yahoo_Health | 0.4104 | 0.0392 | 0.5493 | 0.6289 | 0.2476 | 0.5895 | 0.3105 | 6.4235 | 0.3456 | 0.6967 | 0.8294 | 0.9855 |
| Yahoo_Recreation | 0.2377 | 0.0599 | 0.2948 | 0.3333 | 0.3080 | 0.3954 | 0.5152 | 6.4973 | 0.5465 | 0.5640 | 0.9606 | 0.9621 |
| Yahoo_Reference | 0.4508 | 0.0308 | 0.5126 | 0.5513 | 0.1769 | 0.5411 | 0.4035 | 5.4707 | 0.4356 | 0.6373 | 0.8089 | 0.9906 |
| Yahoo_Science | 0.2053 | 0.0383 | 0.2613 | 0.3035 | 0.1578 | 0.3349 | 0.6407 | 13.8989 | 0.6690 | 0.4129 | 0.9578 | 0.9843 |
| Yahoo_Social | 0.4785 | 0.0274 | 0.5385 | 0.5760 | 0.1629 | 0.5440 | 0.3696 | 7.3960 | 0.3816 | 0.6518 | 0.9133 | 0.9898 |
| Yahoo_Society | 0.3238 | 0.0840 | 0.4556 | 0.5531 | 0.2266 | 0.4651 | 0.3610 | 8.3493 | 0.4732 | 0.5868 | 0.9487 | 0.9836 |
| yeast | 0.2107 | 0.1951 | 0.5404 | 0.6680 | 0.3862 | 0.6640 | 0.2686 | 6.1694 | 0.2324 | 0.7501 | 0.8220 | 0.8820 |
| Yelp | 0.4118 | 0.1936 | 0.6274 | 0.7256 | 0.6517 | 0.7118 | 0.2233 | 1.4138 | 0.2442 | 0.8503 | 0.8807 | 0.9015 |

Table 47: Detailed results for Massive (50%) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5083 | 0.0280 | 0.5613 | 0.5880 | 0.6850 | 0.6914 | 0.3050 | 2.3454 | 0.2194 | 0.7647 | 0.9805 | 0.9808 |
| 3s-bbc1000 | 0.1389 | 0.2870 | 0.2616 | 0.3271 | 0.3010 | 0.3404 | 0.7222 | 2.6667 | 0.5971 | 0.4801 | 0.7977 | 0.7444 |
| 3s-guardian1000 | 0.2258 | 0.2419 | 0.3468 | 0.4085 | 0.2468 | 0.4000 | 0.4839 | 2.0323 | 0.5056 | 0.6247 | 0.8265 | 0.8368 |
| 3s-inter3000 | 0.2353 | 0.2353 | 0.2941 | 0.3235 | 0.0870 | 0.3333 | 0.8824 | 2.5294 | 0.6706 | 0.4078 | 0.5101 | 0.7057 |
| 3s-reuters1000 | 0.0667 | 0.2833 | 0.1000 | 0.1143 | 0.1081 | 0.1356 | 0.9000 | 2.5667 | 0.7667 | 0.3839 | 0.8373 | 0.7669 |
| amphibians | 0.0556 | 0.3333 | 0.4357 | 0.6649 | 0.4083 | 0.5800 | 0.2222 | 2.5556 | 0.1000 | 0.8543 | 0.7429 | 0.8120 |
| bibtex | 0.1811 | 0.0120 | 0.3468 | 0.4345 | 0.2896 | 0.4593 | 0.4027 | 69.3446 | 0.5485 | 0.4516 | 0.9967 | 0.9968 |
| birds | 0.1795 | 0.0985 | 0.3286 | 0.4004 | 0.2690 | 0.4065 | 0.5385 | 7.0513 | 0.4863 | 0.5150 | 0.8414 | 0.9361 |
| bookmarks10% | 0.1834 | 0.0088 | 0.2150 | 0.2373 | 0.1118 | 0.2626 | 0.7255 | 105.0171 | 0.7631 | 0.2604 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1388 | 0.1453 | 0.2522 | 0.0299 | 0.2469 | 0.1373 | 151.0392 | 0.6826 | 0.4254 | 0.8427 | 0.9592 |
| corel16k001 | 0.0123 | 0.0234 | 0.0855 | 0.1273 | 0.0152 | 0.1189 | 0.8983 | 115.8170 | 0.9527 | 0.0795 | 0.9989 | 0.9990 |
| Corel5k | 0.0060 | 0.0092 | 0.0358 | 0.0515 | 0.0161 | 0.0745 | 0.8680 | 165.5440 | 0.9497 | 0.1508 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.6084 | 0.0213 | 0.0418 | 0.0488 | 0.0418 | 0.6967 | 920.1815 | 0.9614 | 0.0574 | 0.9945 | 0.9996 |
| emotions | 0.3500 | 0.1944 | 0.5611 | 0.6564 | 0.6554 | 0.6789 | 0.2833 | 1.7667 | 0.2120 | 0.7972 | 0.8631 | 0.8788 |
| enron | 0.1813 | 0.0500 | 0.4557 | 0.5810 | 0.1509 | 0.5615 | 0.2164 | 24.0351 | 0.3444 | 0.6274 | 0.8254 | 0.9799 |
| EukaryoteGO | 0.6946 | 0.0186 | 0.7902 | 0.8364 | 0.6608 | 0.8291 | 0.1649 | 0.8041 | 0.0444 | 0.8965 | 0.9929 | 0.9948 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.2000 | 0.2500 | 0.5869 | 0.7096 | 0.5820 | 0.7287 | 0.2000 | 3.5500 | 0.2283 | 0.8167 | 0.7081 | 0.8164 |
| foodtruck | 0.3659 | 0.1443 | 0.4869 | 0.5974 | 0.0829 | 0.4741 | 0.2439 | 4.6341 | 0.4426 | 0.7166 | 0.8469 | 0.9542 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9143 | 0.0152 | 0.9393 | 0.9518 | 0.8127 | 0.9416 | 0.0357 | 0.1143 | 0.0209 | 0.9780 | 0.8740 | 0.9976 |
| GnegativePseAAC | 0.7286 | 0.0554 | 0.7536 | 0.7660 | 0.4175 | 0.7786 | 0.2000 | 0.6357 | 0.1505 | 0.8656 | 0.8577 | 0.9860 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8699 | 0.9333 | 0.0577 | 0.1538 | 0.0449 | 0.9615 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1394 | 0.7308 | 0.7308 | 0.5611 | 0.7238 | 0.2500 | 0.5385 | 0.2436 | 0.8365 | 0.9677 | 0.9629 |
| HumanGO | 0.6945 | 0.0340 | 0.7610 | 0.7975 | 0.6827 | 0.7843 | 0.1608 | 0.9646 | 0.0965 | 0.8835 | 0.9841 | 0.9878 |
| HumanPseAAC | 0.3537 | 0.0914 | 0.4068 | 0.4347 | 0.1844 | 0.4265 | 0.5434 | 3.6109 | 0.5035 | 0.5704 | 0.9581 | 0.9589 |
| Image | 0.5350 | 0.1670 | 0.6050 | 0.6405 | 0.6273 | 0.6230 | 0.3350 | 1.1250 | 0.3033 | 0.7712 | 0.9142 | 0.9130 |
| IMDB-ECC-F10% | 0.0587 | 0.0846 | 0.1428 | 0.1879 | 0.0219 | 0.1871 | 0.6342 | 12.2872 | 0.7290 | 0.3768 | 0.9905 | 0.9760 |
| IMDB-F10% | 0.0505 | 0.0905 | 0.1361 | 0.1851 | 0.0224 | 0.1845 | 0.5990 | 12.8998 | 0.7331 | 0.3768 | 0.9892 | 0.9762 |
| LLOG-F | 0.1639 | 0.0163 | 0.1974 | 0.2169 | 0.0527 | 0.2871 | 0.7377 | 28.6639 | 0.7794 | 0.2809 | 0.5984 | 0.9983 |
| mediamill10% | 0.0760 | 0.0315 | 0.4317 | 0.5962 | 0.0572 | 0.5403 | 0.2375 | 58.7197 | 0.4471 | 0.5381 | 0.8105 | 0.9926 |
| medical | 0.6531 | 0.0107 | 0.7491 | 0.7976 | 0.2863 | 0.8097 | 0.1633 | 5.0102 | 0.1327 | 0.8436 | 0.5526 | 0.9974 |
| Music | 0.2500 | 0.1806 | 0.5806 | 0.7271 | 0.7052 | 0.7210 | 0.3333 | 2.1000 | 0.2747 | 0.7662 | 0.9036 | 0.8940 |
| NUS-WIDE-bow10% | 0.1836 | 0.0250 | 0.3109 | 0.3772 | 0.0418 | 0.3791 | 0.5219 | 34.2350 | 0.5868 | 0.4398 | 0.8803 | 0.9913 |
| NUS-WIDE-cVLADplus10% | 0.1832 | 0.0248 | 0.3195 | 0.3911 | 0.0466 | 0.3970 | 0.5090 | 33.6889 | 0.5875 | 0.4475 | 0.8813 | 0.9920 |
| OHSUMED-F | 0.2312 | 0.0574 | 0.4187 | 0.5176 | 0.3961 | 0.5435 | 0.3525 | 6.7286 | 0.3538 | 0.6423 | 0.9659 | 0.9700 |
| PlantGO | 0.6771 | 0.0425 | 0.7014 | 0.7153 | 0.6078 | 0.7487 | 0.2188 | 0.9479 | 0.0947 | 0.8562 | 0.9905 | 0.9851 |
| PlantPseAAC | 0.2653 | 0.1097 | 0.3231 | 0.3551 | 0.1959 | 0.3707 | 0.6224 | 2.9898 | 0.4817 | 0.5421 | 0.9374 | 0.9280 |
| rcv1subset1 | 0.1150 | 0.0306 | 0.3271 | 0.4323 | 0.2374 | 0.4350 | 0.4100 | 38.4417 | 0.4071 | 0.5133 | 0.9261 | 0.9867 |
| REUTERS-K500-EX2 | 0.3333 | 0.0114 | 0.3974 | 0.4341 | 0.2386 | 0.4891 | 0.5172 | 32.5034 | 0.5345 | 0.4876 | 0.7838 | 0.9972 |
| scene | 0.6722 | 0.0906 | 0.7241 | 0.7496 | 0.7547 | 0.7406 | 0.2241 | 0.8506 | 0.1755 | 0.8366 | 0.9630 | 0.9673 |
| sider_CDK_ECFP4 | 0.0282 | 0.2520 | 0.6499 | 0.7977 | 0.6236 | 0.7937 | 0.1972 | 19.1831 | 0.1646 | 0.7897 | 0.5896 | 0.7723 |
| sider_MordredDesc | 0.0141 | 0.2741 | 0.6189 | 0.7798 | 0.6021 | 0.7762 | 0.1338 | 19.6831 | 0.1806 | 0.7873 | 0.5920 | 0.7729 |
| sider_RDKit_desc | 0.0141 | 0.2851 | 0.6285 | 0.7801 | 0.5985 | 0.7751 | 0.1761 | 20.0704 | 0.2046 | 0.7607 | 0.5872 | 0.7571 |
| SLASHDOT-F | 0.4153 | 0.0412 | 0.5078 | 0.5589 | 0.3569 | 0.5892 | 0.3968 | 5.5741 | 0.3697 | 0.6418 | 0.7570 | 0.9834 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.8400 |
| Stackex_chemistry | 0.0403 | 0.0122 | 0.1020 | 0.1392 | 0.0536 | 0.1758 | 0.7781 | 104.5922 | 0.8621 | 0.1644 | 0.9181 | 0.9981 |
| Stackex_chess | 0.0417 | 0.0099 | 0.1497 | 0.2082 | 0.0538 | 0.2680 | 0.6488 | 135.8452 | 0.8023 | 0.2106 | 0.5493 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0209 | 0.0497 | 0.0708 | 0.0210 | 0.1194 | 0.8696 | 74.0000 | 0.8270 | 0.1533 | 0.2571 | 0.9889 |
| Stackex_cooking | 0.0618 | 0.0054 | 0.1959 | 0.2675 | 0.1017 | 0.3099 | 0.6145 | 220.3227 | 0.7457 | 0.2520 | 0.9240 | 0.9989 |
| Stackex_philosophy | 0.0653 | 0.0093 | 0.1679 | 0.2248 | 0.0590 | 0.2654 | 0.7035 | 135.0251 | 0.7963 | 0.2096 | 0.7498 | 0.9987 |
| tmc2007-500 | 0.2930 | 0.0620 | 0.5604 | 0.6922 | 0.5671 | 0.6697 | 0.2517 | 4.1269 | 0.1467 | 0.7761 | 0.9583 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1541 | 0.1604 | 0.3346 | 0.4253 | 0.3726 | 0.4479 | 0.4692 | 5.3425 | 0.4836 | 0.5731 | 0.9037 | 0.9042 |
| tox21_RDKit_desc | 0.1404 | 0.1709 | 0.2735 | 0.3625 | 0.2303 | 0.3634 | 0.5068 | 5.4966 | 0.4958 | 0.5541 | 0.8954 | 0.8956 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.1905 | 0.5714 | 0.0934 | 0.8849 | 0.7972 | 0.9687 |
| VirusPseAAC | 0.2381 | 0.1429 | 0.4762 | 0.5867 | 0.3772 | 0.6250 | 0.3333 | 0.8095 | 0.1762 | 0.7873 | 0.7321 | 0.9152 |
| Water-quality | 0.0000 | 0.3194 | 0.3023 | 0.4472 | 0.3496 | 0.4650 | 0.2830 | 9.0755 | 0.3555 | 0.6930 | 0.7793 | 0.7706 |
| Yahoo_Arts | 0.2003 | 0.0637 | 0.2876 | 0.3439 | 0.2097 | 0.3680 | 0.5180 | 10.4152 | 0.6266 | 0.4939 | 0.9390 | 0.9785 |
| Yahoo_Business | 0.5793 | 0.0256 | 0.7334 | 0.8194 | 0.2952 | 0.7354 | 0.0882 | 3.1907 | 0.2239 | 0.8874 | 0.8569 | 0.9952 |
| Yahoo_Computers | 0.3920 | 0.0410 | 0.4780 | 0.5378 | 0.2522 | 0.5085 | 0.3831 | 6.5799 | 0.4260 | 0.6112 | 0.8897 | 0.9823 |
| Yahoo_Education | 0.1463 | 0.0457 | 0.2027 | 0.2431 | 0.1515 | 0.3118 | 0.6160 | 9.3067 | 0.6590 | 0.4864 | 0.8866 | 0.9795 |
| Yahoo_Entertainment | 0.4184 | 0.0743 | 0.5347 | 0.5793 | 0.3536 | 0.5342 | 0.3891 | 3.9963 | 0.3942 | 0.6735 | 0.9767 | 0.9757 |
| Yahoo_Health | 0.4104 | 0.0392 | 0.5493 | 0.6289 | 0.2476 | 0.5895 | 0.3105 | 6.4235 | 0.3456 | 0.6967 | 0.8294 | 0.9855 |
| Yahoo_Recreation | 0.2377 | 0.0599 | 0.2948 | 0.3333 | 0.3080 | 0.3954 | 0.5152 | 6.4973 | 0.5465 | 0.5640 | 0.9606 | 0.9621 |
| Yahoo_Reference | 0.4508 | 0.0308 | 0.5126 | 0.5513 | 0.1769 | 0.5411 | 0.4035 | 5.4707 | 0.4356 | 0.6373 | 0.8089 | 0.9906 |
| Yahoo_Science | 0.2053 | 0.0383 | 0.2613 | 0.3035 | 0.1578 | 0.3349 | 0.6407 | 13.8989 | 0.6690 | 0.4129 | 0.9578 | 0.9843 |
| Yahoo_Social | 0.4785 | 0.0274 | 0.5385 | 0.5760 | 0.1629 | 0.5440 | 0.3696 | 7.3960 | 0.3816 | 0.6518 | 0.9133 | 0.9898 |
| Yahoo_Society | 0.3238 | 0.0840 | 0.4556 | 0.5531 | 0.2266 | 0.4651 | 0.3610 | 8.3493 | 0.4732 | 0.5868 | 0.9487 | 0.9836 |
| yeast | 0.2066 | 0.1986 | 0.5402 | 0.6675 | 0.3865 | 0.6606 | 0.2521 | 6.2149 | 0.2331 | 0.7570 | 0.8221 | 0.8810 |
| Yelp | 0.4068 | 0.1928 | 0.6218 | 0.7195 | 0.6556 | 0.7118 | 0.2004 | 1.3848 | 0.2248 | 0.8617 | 0.8718 | 0.8961 |

Table 48: Detailed results for Massive (1%) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5005 | 0.0277 | 0.5427 | 0.5640 | 0.6773 | 0.6835 | 0.3034 | 2.3117 | 0.2221 | 0.7663 | 0.9799 | 0.9804 |
| 3s-bbc1000 | 0.1389 | 0.2500 | 0.2060 | 0.2492 | 0.2796 | 0.2895 | 0.6944 | 2.6944 | 0.6567 | 0.4858 | 0.8222 | 0.7797 |
| 3s-guardian1000 | 0.0968 | 0.2581 | 0.1344 | 0.1586 | 0.1696 | 0.2000 | 0.6129 | 2.1613 | 0.5113 | 0.5720 | 0.8517 | 0.8464 |
| 3s-inter3000 | 0.0588 | 0.2059 | 0.0588 | 0.0588 | 0.0556 | 0.0870 | 0.6471 | 2.2353 | 0.8824 | 0.5373 | 0.7427 | 0.9153 |
| 3s-reuters1000 | 0.0333 | 0.2333 | 0.0778 | 0.0982 | 0.1819 | 0.1600 | 0.9333 | 2.4667 | 0.7467 | 0.3761 | 0.8289 | 0.7652 |
| amphibians | 0.1111 | 0.2698 | 0.5492 | 0.7531 | 0.5876 | 0.7167 | 0.2222 | 2.6111 | 0.1167 | 0.8524 | 0.7858 | 0.8274 |
| bibtex | 0.1784 | 0.0120 | 0.3442 | 0.4357 | 0.2974 | 0.4589 | 0.4068 | 69.4176 | 0.5501 | 0.4512 | 0.9966 | 0.9968 |
| birds | 0.1795 | 0.0999 | 0.3296 | 0.4048 | 0.3164 | 0.4127 | 0.5128 | 7.9487 | 0.5494 | 0.5014 | 0.8469 | 0.9457 |
| bookmarks10% | 0.1811 | 0.0090 | 0.2103 | 0.2316 | 0.1074 | 0.2521 | 0.7084 | 103.2984 | 0.7416 | 0.2741 | 0.9844 | 0.9988 |
| CAL500 | 0.0000 | 0.1394 | 0.2125 | 0.3547 | 0.0691 | 0.3452 | 0.4510 | 150.9020 | 0.6245 | 0.4324 | 0.8369 | 0.9485 |
| corel16k001 | 0.0051 | 0.0189 | 0.0405 | 0.0588 | 0.0260 | 0.0753 | 0.8678 | 114.5265 | 0.9410 | 0.0914 | 0.9989 | 0.9989 |
| Corel5k | 0.0100 | 0.0092 | 0.0496 | 0.0713 | 0.0190 | 0.0977 | 0.8560 | 163.8440 | 0.9432 | 0.1567 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0252 | 0.0929 | 0.1613 | 0.0835 | 0.1716 | 0.5357 | 906.4891 | 0.8490 | 0.1489 | 0.9934 | 0.9986 |
| emotions | 0.2500 | 0.1972 | 0.5236 | 0.6548 | 0.6249 | 0.6635 | 0.2833 | 1.7500 | 0.2109 | 0.8014 | 0.8589 | 0.8754 |
| enron | 0.1520 | 0.0495 | 0.4537 | 0.5970 | 0.1676 | 0.5776 | 0.3041 | 24.4854 | 0.3547 | 0.6080 | 0.8266 | 0.9799 |
| EukaryoteGO | 0.7062 | 0.0189 | 0.7835 | 0.8216 | 0.6795 | 0.8201 | 0.1637 | 0.8634 | 0.0487 | 0.8949 | 0.9925 | 0.9946 |
| EukaryotePseAAC | 0.1313 | 0.0510 | 0.1583 | 0.1717 | 0.0813 | 0.2496 | 0.5573 | 6.6628 | 0.5180 | 0.5090 | 0.9732 | 0.9755 |
| flags | 0.2500 | 0.2357 | 0.6292 | 0.7431 | 0.6025 | 0.7519 | 0.2000 | 3.7000 | 0.2717 | 0.8004 | 0.7235 | 0.8236 |
| foodtruck | 0.2927 | 0.1524 | 0.4722 | 0.6126 | 0.1521 | 0.5098 | 0.2439 | 4.4390 | 0.4327 | 0.7210 | 0.8459 | 0.9542 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0000 | 0.2388 | 0.0006 | 0.9950 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0125 | 0.9500 | 0.9643 | 0.8247 | 0.9524 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8737 | 0.9979 |
| GnegativePseAAC | 0.7071 | 0.0527 | 0.7357 | 0.7500 | 0.4592 | 0.7839 | 0.1786 | 0.6286 | 0.1709 | 0.8727 | 0.8583 | 0.9870 |
| GpositiveGO | 0.9231 | 0.0288 | 0.9327 | 0.9375 | 0.9566 | 0.9423 | 0.0385 | 0.0962 | 0.0256 | 0.9760 | 0.9956 | 0.9970 |
| GpositivePseAAC | 0.6731 | 0.1298 | 0.6731 | 0.6731 | 0.5474 | 0.7216 | 0.2692 | 0.5769 | 0.2692 | 0.8237 | 0.9707 | 0.9689 |
| HumanGO | 0.6881 | 0.0358 | 0.7588 | 0.7968 | 0.6884 | 0.7765 | 0.1640 | 0.9132 | 0.0846 | 0.8853 | 0.9840 | 0.9876 |
| HumanPseAAC | 0.2187 | 0.0843 | 0.2390 | 0.2496 | 0.1505 | 0.3089 | 0.5531 | 3.4180 | 0.4757 | 0.5754 | 0.9518 | 0.9536 |
| Image | 0.5000 | 0.1680 | 0.5592 | 0.5887 | 0.5948 | 0.5962 | 0.3250 | 1.1050 | 0.3142 | 0.7771 | 0.9160 | 0.9137 |
| IMDB-ECC-F10% | 0.0398 | 0.0688 | 0.0617 | 0.0746 | 0.0293 | 0.0910 | 0.6331 | 12.3417 | 0.7290 | 0.3762 | 0.9895 | 0.9760 |
| IMDB-F10% | 0.0124 | 0.0725 | 0.0334 | 0.0437 | 0.0530 | 0.0577 | 0.6023 | 13.0017 | 0.7398 | 0.3706 | 0.9901 | 0.9768 |
| LLOG-F | 0.1721 | 0.0160 | 0.2015 | 0.2187 | 0.0533 | 0.2913 | 0.7459 | 29.2295 | 0.7944 | 0.2687 | 0.5981 | 0.9978 |
| mediamill10% | 0.0808 | 0.0296 | 0.4583 | 0.6212 | 0.0746 | 0.5767 | 0.2589 | 59.5748 | 0.4503 | 0.5359 | 0.8138 | 0.9938 |
| medical | 0.6224 | 0.0113 | 0.7415 | 0.7979 | 0.3090 | 0.8047 | 0.1531 | 5.0102 | 0.1324 | 0.8487 | 0.5523 | 0.9974 |
| Music | 0.2833 | 0.1806 | 0.5611 | 0.6809 | 0.7014 | 0.7111 | 0.3333 | 2.0667 | 0.2379 | 0.7735 | 0.8888 | 0.8802 |
| NUS-WIDE-bow10% | 0.1180 | 0.0248 | 0.2243 | 0.2782 | 0.0452 | 0.3345 | 0.5442 | 35.1289 | 0.6004 | 0.4253 | 0.8806 | 0.9914 |
| NUS-WIDE-cVLADplus10% | 0.1361 | 0.0235 | 0.2445 | 0.2990 | 0.0602 | 0.3640 | 0.5328 | 34.0409 | 0.5943 | 0.4398 | 0.8815 | 0.9923 |
| OHSUMED-F | 0.2283 | 0.0566 | 0.4156 | 0.5151 | 0.4066 | 0.5411 | 0.3489 | 6.7251 | 0.3504 | 0.6447 | 0.9657 | 0.9699 |
| PlantGO | 0.6875 | 0.0391 | 0.7292 | 0.7482 | 0.6195 | 0.7783 | 0.2500 | 1.1562 | 0.1219 | 0.8325 | 0.9904 | 0.9864 |
| PlantPseAAC | 0.1939 | 0.0944 | 0.2194 | 0.2321 | 0.1737 | 0.3019 | 0.6224 | 2.9898 | 0.4791 | 0.5461 | 0.9339 | 0.9259 |
| rcv1subset1 | 0.0683 | 0.0306 | 0.2808 | 0.3971 | 0.2148 | 0.3990 | 0.4250 | 44.5800 | 0.4991 | 0.4642 | 0.9285 | 0.9884 |
| REUTERS-K500-EX2 | 0.3024 | 0.0112 | 0.3705 | 0.4061 | 0.2310 | 0.4734 | 0.5034 | 31.5069 | 0.5256 | 0.4983 | 0.7837 | 0.9971 |
| scene | 0.6432 | 0.0844 | 0.7116 | 0.7457 | 0.7674 | 0.7550 | 0.2033 | 0.8714 | 0.1838 | 0.8432 | 0.9664 | 0.9711 |
| sider_CDK_ECFP4 | 0.0141 | 0.2426 | 0.6500 | 0.7976 | 0.6344 | 0.7959 | 0.0986 | 18.9366 | 0.1407 | 0.8236 | 0.5868 | 0.7889 |
| sider_MordredDesc | 0.0141 | 0.2668 | 0.6227 | 0.7763 | 0.6094 | 0.7794 | 0.3099 | 19.7324 | 0.1890 | 0.7553 | 0.5671 | 0.7598 |
| sider_RDKit_desc | 0.0141 | 0.2770 | 0.6328 | 0.7838 | 0.6021 | 0.7793 | 0.3380 | 20.2817 | 0.2465 | 0.7008 | 0.5804 | 0.7258 |
| SLASHDOT-F | 0.3968 | 0.0404 | 0.4828 | 0.5298 | 0.3829 | 0.5768 | 0.4153 | 5.6958 | 0.3789 | 0.6311 | 0.7574 | 0.9841 |
| solar_flare-L3 | 0.4000 | 0.2667 | 0.6000 | 0.6857 | 0.4571 | 0.6667 | 0.2000 | 0.2000 | 0.2000 | 0.9000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0360 | 0.0121 | 0.0981 | 0.1361 | 0.0650 | 0.1751 | 0.7810 | 104.4784 | 0.8667 | 0.1629 | 0.9182 | 0.9981 |
| Stackex_chess | 0.0417 | 0.0102 | 0.1512 | 0.2124 | 0.0619 | 0.2702 | 0.6488 | 137.1131 | 0.8026 | 0.2115 | 0.5491 | 0.9982 |
| Stackex_coffee | 0.0000 | 0.0212 | 0.0688 | 0.1192 | 0.0150 | 0.1429 | 0.7826 | 76.6957 | 0.8302 | 0.1675 | 0.2554 | 0.9877 |
| Stackex_cooking | 0.0560 | 0.0054 | 0.1868 | 0.2562 | 0.1008 | 0.3013 | 0.6164 | 221.3411 | 0.7478 | 0.2509 | 0.9240 | 0.9989 |
| Stackex_philosophy | 0.0653 | 0.0093 | 0.1734 | 0.2366 | 0.0595 | 0.2714 | 0.6884 | 134.2387 | 0.7855 | 0.2172 | 0.7499 | 0.9987 |
| tmc2007-500 | 0.2867 | 0.0616 | 0.5563 | 0.6882 | 0.5665 | 0.6672 | 0.2434 | 4.1657 | 0.1474 | 0.7788 | 0.9587 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1601 | 0.2976 | 0.3776 | 0.3794 | 0.4305 | 0.4863 | 5.4795 | 0.5282 | 0.5512 | 0.9060 | 0.9093 |
| tox21_RDKit_desc | 0.0856 | 0.1638 | 0.1889 | 0.2524 | 0.2151 | 0.3000 | 0.5068 | 5.4829 | 0.5021 | 0.5513 | 0.8973 | 0.8984 |
| VirusGO | 0.7619 | 0.0556 | 0.8333 | 0.8611 | 0.6949 | 0.8571 | 0.1905 | 0.6667 | 0.1040 | 0.8802 | 0.8019 | 0.9552 |
| VirusPseAAC | 0.4762 | 0.1270 | 0.5000 | 0.5116 | 0.2879 | 0.5789 | 0.3810 | 1.0000 | 0.2298 | 0.7492 | 0.7495 | 0.9219 |
| Water-quality | 0.0000 | 0.3106 | 0.3694 | 0.5390 | 0.4375 | 0.5422 | 0.2642 | 9.3585 | 0.3648 | 0.6918 | 0.7738 | 0.7649 |
| Yahoo_Arts | 0.1242 | 0.0632 | 0.1797 | 0.2159 | 0.1746 | 0.2696 | 0.5207 | 10.5007 | 0.5788 | 0.4931 | 0.9294 | 0.9655 |
| Yahoo_Business | 0.5526 | 0.0271 | 0.7134 | 0.8022 | 0.2724 | 0.7141 | 0.1025 | 3.1827 | 0.2154 | 0.8822 | 0.8531 | 0.9935 |
| Yahoo_Computers | 0.3743 | 0.0384 | 0.4524 | 0.5047 | 0.2464 | 0.5044 | 0.3880 | 6.6104 | 0.4292 | 0.6073 | 0.8894 | 0.9815 |
| Yahoo_Education | 0.1147 | 0.0425 | 0.1515 | 0.1783 | 0.1592 | 0.2589 | 0.6326 | 9.6276 | 0.6962 | 0.4676 | 0.8889 | 0.9815 |
| Yahoo_Entertainment | 0.2239 | 0.0577 | 0.2678 | 0.2966 | 0.2211 | 0.3802 | 0.4847 | 4.5216 | 0.4752 | 0.5928 | 0.9708 | 0.9651 |
| Yahoo_Health | 0.3583 | 0.0420 | 0.4729 | 0.5404 | 0.2170 | 0.5222 | 0.3692 | 6.7644 | 0.3688 | 0.6604 | 0.8245 | 0.9809 |
| Yahoo_Recreation | 0.2011 | 0.0574 | 0.2420 | 0.2673 | 0.2791 | 0.3480 | 0.5339 | 6.8769 | 0.5984 | 0.5423 | 0.9662 | 0.9677 |
| Yahoo_Reference | 0.3811 | 0.0308 | 0.4201 | 0.4451 | 0.1459 | 0.4826 | 0.4197 | 5.9714 | 0.4405 | 0.6226 | 0.8072 | 0.9875 |
| Yahoo_Science | 0.1353 | 0.0394 | 0.1702 | 0.1987 | 0.1422 | 0.2457 | 0.7107 | 14.6656 | 0.7263 | 0.3654 | 0.9567 | 0.9824 |
| Yahoo_Social | 0.4398 | 0.0236 | 0.4848 | 0.5118 | 0.1596 | 0.5489 | 0.3721 | 7.5792 | 0.3928 | 0.6463 | 0.9132 | 0.9896 |
| Yahoo_Society | 0.3153 | 0.0802 | 0.4385 | 0.5541 | 0.2054 | 0.4627 | 0.3731 | 8.3514 | 0.4842 | 0.5898 | 0.9421 | 0.9714 |
| yeast | 0.2025 | 0.1916 | 0.5217 | 0.6559 | 0.3834 | 0.6516 | 0.2603 | 6.0744 | 0.2472 | 0.7691 | 0.8422 | 0.8897 |
| Yelp | 0.4207 | 0.1884 | 0.6392 | 0.7391 | 0.6679 | 0.7241 | 0.1954 | 1.3829 | 0.2254 | 0.8627 | 0.8785 | 0.9003 |

Table 49: Detailed results for Massive (5%) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5633 | 0.0254 | 0.5957 | 0.6118 | 0.7121 | 0.7161 | 0.2930 | 2.4015 | 0.2273 | 0.7693 | 0.9900 | 0.9904 |
| 3s-bbc1000 | 0.1389 | 0.2361 | 0.2130 | 0.2543 | 0.2566 | 0.3014 | 0.7222 | 2.6389 | 0.6061 | 0.4824 | 0.8187 | 0.7853 |
| 3s-guardian1000 | 0.1290 | 0.2312 | 0.1989 | 0.2468 | 0.2168 | 0.3175 | 0.5806 | 2.3548 | 0.5774 | 0.5667 | 0.8823 | 0.8709 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.8235 | 0.8235 | 0.3490 | 0.5069 | 0.6984 |
| 3s-reuters1000 | 0.0667 | 0.2722 | 0.1000 | 0.1143 | 0.1122 | 0.1404 | 0.9000 | 2.0667 | 0.6400 | 0.4328 | 0.8290 | 0.7492 |
| amphibians | 0.0000 | 0.3095 | 0.4709 | 0.7092 | 0.4548 | 0.6422 | 0.3889 | 2.6667 | 0.1556 | 0.7870 | 0.7624 | 0.8102 |
| bibtex | 0.1851 | 0.0120 | 0.3562 | 0.4465 | 0.3072 | 0.4744 | 0.4405 | 72.2851 | 0.5818 | 0.4259 | 0.9977 | 0.9978 |
| birds | 0.1795 | 0.0931 | 0.3489 | 0.4369 | 0.3295 | 0.4567 | 0.4615 | 7.7949 | 0.5270 | 0.5277 | 0.8566 | 0.9546 |
| bookmarks10% | 0.1879 | 0.0088 | 0.2175 | 0.2392 | 0.1100 | 0.2617 | 0.7244 | 105.2403 | 0.7626 | 0.2589 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1393 | 0.2232 | 0.3676 | 0.0710 | 0.3583 | 0.2941 | 151.0784 | 0.6363 | 0.4288 | 0.8366 | 0.9483 |
| corel16k001 | 0.0058 | 0.0189 | 0.0381 | 0.0554 | 0.0241 | 0.0704 | 0.8606 | 114.4503 | 0.9378 | 0.0941 | 0.9988 | 0.9988 |
| Corel5k | 0.0100 | 0.0092 | 0.0503 | 0.0718 | 0.0196 | 0.1006 | 0.8700 | 164.2280 | 0.9472 | 0.1538 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0252 | 0.0929 | 0.1613 | 0.0835 | 0.1716 | 0.5357 | 906.4891 | 0.8490 | 0.1489 | 0.9934 | 0.9986 |
| emotions | 0.3167 | 0.1917 | 0.5597 | 0.6728 | 0.6380 | 0.6730 | 0.2667 | 1.7500 | 0.2182 | 0.8133 | 0.8774 | 0.8886 |
| enron | 0.1579 | 0.0492 | 0.4616 | 0.5987 | 0.1615 | 0.5832 | 0.2339 | 23.7427 | 0.3465 | 0.6255 | 0.8255 | 0.9797 |
| EukaryoteGO | 0.6997 | 0.0185 | 0.7884 | 0.8318 | 0.7017 | 0.8269 | 0.1765 | 0.8905 | 0.0519 | 0.8884 | 0.9929 | 0.9947 |
| EukaryotePseAAC | 0.1892 | 0.0510 | 0.2192 | 0.2341 | 0.1125 | 0.3090 | 0.5380 | 6.2021 | 0.4996 | 0.5262 | 0.9741 | 0.9765 |
| flags | 0.2500 | 0.2357 | 0.6242 | 0.7392 | 0.6053 | 0.7481 | 0.2500 | 3.7000 | 0.2592 | 0.7813 | 0.7027 | 0.7913 |
| foodtruck | 0.2683 | 0.1585 | 0.4526 | 0.5974 | 0.1469 | 0.5000 | 0.2439 | 4.5610 | 0.4480 | 0.7173 | 0.8512 | 0.9558 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8262 | 0.9556 | 0.0357 | 0.1214 | 0.0245 | 0.9768 | 0.8740 | 0.9982 |
| GnegativePseAAC | 0.7143 | 0.0527 | 0.7345 | 0.7446 | 0.4409 | 0.7823 | 0.2071 | 0.6429 | 0.1699 | 0.8602 | 0.8594 | 0.9878 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9135 | 0.9279 | 0.8639 | 0.9245 | 0.0385 | 0.0962 | 0.0256 | 0.9760 | 0.9963 | 0.9966 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5662 | 0.7308 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9692 | 0.9650 |
| HumanGO | 0.6945 | 0.0354 | 0.7647 | 0.8012 | 0.6889 | 0.7800 | 0.1704 | 0.9582 | 0.0970 | 0.8799 | 0.9841 | 0.9877 |
| HumanPseAAC | 0.2733 | 0.0852 | 0.3012 | 0.3160 | 0.1618 | 0.3592 | 0.5273 | 3.3794 | 0.4662 | 0.5885 | 0.9534 | 0.9539 |
| Image | 0.5100 | 0.1680 | 0.5592 | 0.5839 | 0.5884 | 0.5942 | 0.3200 | 1.0800 | 0.2929 | 0.7835 | 0.9156 | 0.9140 |
| IMDB-ECC-F10% | 0.0294 | 0.0690 | 0.0492 | 0.0616 | 0.0292 | 0.0799 | 0.6394 | 12.4203 | 0.7358 | 0.3720 | 0.9900 | 0.9758 |
| IMDB-F10% | 0.0199 | 0.0727 | 0.0499 | 0.0659 | 0.0315 | 0.0890 | 0.5899 | 12.7531 | 0.7194 | 0.3837 | 0.9868 | 0.9750 |
| LLOG-F | 0.1639 | 0.0163 | 0.1933 | 0.2109 | 0.0520 | 0.2802 | 0.7295 | 28.5246 | 0.7780 | 0.2833 | 0.5987 | 0.9984 |
| mediamill10% | 0.0879 | 0.0295 | 0.4659 | 0.6278 | 0.0756 | 0.5807 | 0.2684 | 60.0736 | 0.4616 | 0.5258 | 0.8139 | 0.9943 |
| medical | 0.6224 | 0.0113 | 0.7355 | 0.7923 | 0.3113 | 0.8000 | 0.1531 | 5.3878 | 0.1426 | 0.8421 | 0.5526 | 0.9974 |
| Music | 0.2833 | 0.1806 | 0.5639 | 0.6864 | 0.6956 | 0.7085 | 0.3500 | 2.1833 | 0.2826 | 0.7541 | 0.8957 | 0.8889 |
| NUS-WIDE-bow10% | 0.1180 | 0.0248 | 0.2243 | 0.2782 | 0.0452 | 0.3345 | 0.5442 | 35.1289 | 0.6004 | 0.4253 | 0.8806 | 0.9914 |
| NUS-WIDE-cVLADplus10% | 0.1370 | 0.0236 | 0.2447 | 0.2978 | 0.0603 | 0.3627 | 0.5243 | 33.6047 | 0.5735 | 0.4501 | 0.8809 | 0.9915 |
| OHSUMED-F | 0.2319 | 0.0567 | 0.4292 | 0.5327 | 0.4335 | 0.5556 | 0.3561 | 7.6698 | 0.4119 | 0.6159 | 0.9768 | 0.9797 |
| PlantGO | 0.6875 | 0.0399 | 0.7240 | 0.7404 | 0.6186 | 0.7723 | 0.2292 | 1.0000 | 0.1061 | 0.8475 | 0.9904 | 0.9863 |
| PlantPseAAC | 0.1837 | 0.0978 | 0.2177 | 0.2364 | 0.1709 | 0.3030 | 0.6224 | 3.0000 | 0.4887 | 0.5430 | 0.9368 | 0.9278 |
| rcv1subset1 | 0.1217 | 0.0307 | 0.3238 | 0.4299 | 0.2556 | 0.4323 | 0.4317 | 38.0800 | 0.4266 | 0.4998 | 0.9262 | 0.9869 |
| REUTERS-K500-EX2 | 0.3127 | 0.0111 | 0.3812 | 0.4181 | 0.2390 | 0.4877 | 0.5086 | 31.7113 | 0.5207 | 0.4968 | 0.7837 | 0.9972 |
| scene | 0.6390 | 0.0851 | 0.6992 | 0.7290 | 0.7601 | 0.7485 | 0.2158 | 0.8672 | 0.1880 | 0.8385 | 0.9664 | 0.9713 |
| sider_CDK_ECFP4 | 0.0141 | 0.2371 | 0.6531 | 0.7994 | 0.6339 | 0.7997 | 0.1549 | 19.0704 | 0.1613 | 0.7993 | 0.5841 | 0.7742 |
| sider_MordredDesc | 0.0141 | 0.2564 | 0.6260 | 0.7841 | 0.6114 | 0.7842 | 0.1408 | 19.9085 | 0.1811 | 0.7867 | 0.5776 | 0.7692 |
| sider_RDKit_desc | 0.0141 | 0.2796 | 0.6314 | 0.7827 | 0.6003 | 0.7779 | 0.3521 | 19.7465 | 0.1936 | 0.7476 | 0.6087 | 0.7641 |
| SLASHDOT-F | 0.3889 | 0.0400 | 0.4753 | 0.5225 | 0.3655 | 0.5758 | 0.4048 | 5.7460 | 0.3813 | 0.6331 | 0.7576 | 0.9830 |
| solar_flare-L3 | 0.4000 | 0.2667 | 0.6000 | 0.6857 | 0.4571 | 0.6667 | 0.2000 | 0.2000 | 0.3000 | 0.9000 | 0.4444 | 0.9000 |
| Stackex_chemistry | 0.0375 | 0.0121 | 0.0923 | 0.1254 | 0.0581 | 0.1635 | 0.7767 | 104.7435 | 0.8632 | 0.1634 | 0.9182 | 0.9981 |
| Stackex_chess | 0.0357 | 0.0101 | 0.1498 | 0.2107 | 0.0558 | 0.2684 | 0.6607 | 138.7083 | 0.8103 | 0.2032 | 0.5492 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0209 | 0.0598 | 0.0978 | 0.0251 | 0.1449 | 0.8261 | 75.5652 | 0.8918 | 0.1266 | 0.2566 | 0.9872 |
| Stackex_cooking | 0.0667 | 0.0052 | 0.2018 | 0.2710 | 0.1090 | 0.3157 | 0.6367 | 224.2184 | 0.7726 | 0.2322 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0628 | 0.0092 | 0.1749 | 0.2397 | 0.0627 | 0.2782 | 0.6784 | 135.1231 | 0.7898 | 0.2160 | 0.7499 | 0.9987 |
| tmc2007-500 | 0.2850 | 0.0614 | 0.5578 | 0.6908 | 0.5705 | 0.6695 | 0.2538 | 4.0867 | 0.1450 | 0.7759 | 0.9586 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1301 | 0.1561 | 0.2833 | 0.3614 | 0.3743 | 0.4224 | 0.4726 | 5.3733 | 0.4883 | 0.5692 | 0.9035 | 0.9043 |
| tox21_RDKit_desc | 0.0959 | 0.1621 | 0.1916 | 0.2526 | 0.2172 | 0.2918 | 0.5000 | 5.4932 | 0.4999 | 0.5574 | 0.8995 | 0.9004 |
| VirusGO | 0.7143 | 0.0635 | 0.8095 | 0.8491 | 0.6773 | 0.8333 | 0.1905 | 0.7143 | 0.1325 | 0.8762 | 0.7911 | 0.9612 |
| VirusPseAAC | 0.3333 | 0.1190 | 0.5238 | 0.6108 | 0.3947 | 0.6809 | 0.4762 | 1.0476 | 0.2429 | 0.7095 | 0.7501 | 0.9122 |
| Water-quality | 0.0094 | 0.3080 | 0.3618 | 0.5269 | 0.4368 | 0.5370 | 0.2830 | 9.2547 | 0.3632 | 0.6884 | 0.7726 | 0.7635 |
| Yahoo_Arts | 0.1802 | 0.0631 | 0.2615 | 0.3156 | 0.2136 | 0.3555 | 0.5020 | 10.3792 | 0.6090 | 0.5016 | 0.9374 | 0.9770 |
| Yahoo_Business | 0.5731 | 0.0265 | 0.7307 | 0.8194 | 0.3200 | 0.7298 | 0.0891 | 3.1604 | 0.2225 | 0.8873 | 0.8566 | 0.9951 |
| Yahoo_Computers | 0.3847 | 0.0371 | 0.4604 | 0.5108 | 0.2407 | 0.5137 | 0.3831 | 6.5839 | 0.4216 | 0.6125 | 0.8889 | 0.9817 |
| Yahoo_Education | 0.1397 | 0.0417 | 0.1825 | 0.2117 | 0.1536 | 0.2942 | 0.5495 | 9.1579 | 0.5635 | 0.5264 | 0.8887 | 0.9768 |
| Yahoo_Entertainment | 0.2765 | 0.0559 | 0.3293 | 0.3620 | 0.2424 | 0.4309 | 0.4368 | 4.1815 | 0.3822 | 0.6370 | 0.9667 | 0.9637 |
| Yahoo_Health | 0.4202 | 0.0382 | 0.5384 | 0.6098 | 0.2428 | 0.5848 | 0.3105 | 6.5190 | 0.3491 | 0.6932 | 0.8292 | 0.9853 |
| Yahoo_Recreation | 0.2778 | 0.0210 | 0.4000 | 0.4295 | 0.4058 | 0.5034 | 0.4776 | 6.1482 | 0.4855 | 0.6065 | 0.9655 | 0.9705 |
| Yahoo_Reference | 0.4134 | 0.0294 | 0.4590 | 0.4870 | 0.1711 | 0.5180 | 0.3923 | 5.4296 | 0.4257 | 0.6441 | 0.8090 | 0.9903 |
| Yahoo_Science | 0.2271 | 0.0394 | 0.2830 | 0.3277 | 0.1742 | 0.3433 | 0.6190 | 13.6796 | 0.6455 | 0.4273 | 0.9575 | 0.9840 |
| Yahoo_Social | 0.4398 | 0.0236 | 0.4848 | 0.5118 | 0.1596 | 0.5489 | 0.3721 | 7.5792 | 0.3928 | 0.6463 | 0.9132 | 0.9896 |
| Yahoo_Society | 0.3153 | 0.0802 | 0.4385 | 0.5541 | 0.2054 | 0.4627 | 0.3731 | 8.3514 | 0.4842 | 0.5898 | 0.9421 | 0.9714 |
| yeast | 0.1942 | 0.1942 | 0.5213 | 0.6548 | 0.3735 | 0.6493 | 0.2603 | 6.1818 | 0.2292 | 0.7574 | 0.8273 | 0.8827 |
| Yelp | 0.4078 | 0.1932 | 0.6326 | 0.7315 | 0.6611 | 0.7220 | 0.2203 | 1.3898 | 0.2185 | 0.8530 | 0.8673 | 0.8923 |

Table 50: Detailed results for Massive (10%) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5633 | 0.0254 | 0.5957 | 0.6118 | 0.7121 | 0.7161 | 0.2930 | 2.4015 | 0.2273 | 0.7693 | 0.9900 | 0.9904 |
| 3s-bbc1000 | 0.1667 | 0.2176 | 0.2315 | 0.2684 | 0.2801 | 0.3188 | 0.7222 | 2.6944 | 0.6935 | 0.4699 | 0.8773 | 0.8295 |
| 3s-guardian1000 | 0.1290 | 0.2527 | 0.2376 | 0.2980 | 0.2609 | 0.3380 | 0.5161 | 2.0323 | 0.4976 | 0.6183 | 0.8442 | 0.8419 |
| 3s-inter3000 | 0.0000 | 0.1961 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.5882 | 0.8118 | 0.3755 | 0.6110 | 0.7817 |
| 3s-reuters1000 | 0.0000 | 0.2389 | 0.0167 | 0.0222 | 0.0556 | 0.0444 | 0.9000 | 2.3667 | 0.7200 | 0.4083 | 0.8353 | 0.7627 |
| amphibians | 0.1111 | 0.2619 | 0.5757 | 0.7796 | 0.5485 | 0.7179 | 0.3333 | 2.6111 | 0.1148 | 0.8126 | 0.7674 | 0.8061 |
| bibtex | 0.1851 | 0.0120 | 0.3562 | 0.4465 | 0.3072 | 0.4744 | 0.4405 | 72.2851 | 0.5818 | 0.4259 | 0.9977 | 0.9978 |
| birds | 0.1795 | 0.0931 | 0.3391 | 0.4115 | 0.2703 | 0.4103 | 0.4872 | 7.7436 | 0.5208 | 0.5088 | 0.8404 | 0.9349 |
| bookmarks10% | 0.1879 | 0.0088 | 0.2175 | 0.2392 | 0.1100 | 0.2617 | 0.7244 | 105.2403 | 0.7626 | 0.2589 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1398 | 0.2214 | 0.3660 | 0.0725 | 0.3573 | 0.3725 | 151.1176 | 0.5721 | 0.4383 | 0.8215 | 0.9334 |
| corel16k001 | 0.0087 | 0.0188 | 0.0439 | 0.0631 | 0.0327 | 0.0824 | 0.8824 | 115.2622 | 0.9461 | 0.0863 | 0.9990 | 0.9991 |
| Corel5k | 0.0060 | 0.0091 | 0.0567 | 0.0834 | 0.0235 | 0.1145 | 0.8460 | 163.4020 | 0.9382 | 0.1610 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0252 | 0.0929 | 0.1613 | 0.0835 | 0.1716 | 0.5357 | 906.4891 | 0.8490 | 0.1489 | 0.9934 | 0.9986 |
| emotions | 0.2833 | 0.1889 | 0.5667 | 0.6956 | 0.6557 | 0.6881 | 0.2833 | 1.7500 | 0.2454 | 0.8004 | 0.8866 | 0.8932 |
| enron | 0.1871 | 0.0487 | 0.4713 | 0.6055 | 0.1688 | 0.5859 | 0.3041 | 23.9825 | 0.3603 | 0.6047 | 0.8246 | 0.9802 |
| EukaryoteGO | 0.7242 | 0.0190 | 0.7848 | 0.8155 | 0.6970 | 0.8157 | 0.1701 | 0.8570 | 0.0500 | 0.8930 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.1892 | 0.0510 | 0.2192 | 0.2341 | 0.1125 | 0.3090 | 0.5380 | 6.2021 | 0.4996 | 0.5262 | 0.9741 | 0.9765 |
| flags | 0.2000 | 0.2357 | 0.6002 | 0.7259 | 0.5930 | 0.7402 | 0.2000 | 3.7000 | 0.2958 | 0.7894 | 0.6871 | 0.8111 |
| foodtruck | 0.2927 | 0.1545 | 0.4612 | 0.6031 | 0.1245 | 0.4933 | 0.2439 | 4.4390 | 0.4354 | 0.7207 | 0.8544 | 0.9573 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2985 | 0.0018 | 0.9922 | 0.6667 | 0.9994 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8741 | 0.9981 |
| GnegativePseAAC | 0.7429 | 0.0482 | 0.7607 | 0.7695 | 0.4536 | 0.8015 | 0.1786 | 0.6214 | 0.1526 | 0.8742 | 0.8632 | 0.9902 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.6923 | 0.1154 | 0.6923 | 0.6923 | 0.5556 | 0.7500 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6881 | 0.0358 | 0.7663 | 0.8059 | 0.6960 | 0.7790 | 0.1576 | 1.0740 | 0.1010 | 0.8831 | 0.9846 | 0.9883 |
| HumanPseAAC | 0.2733 | 0.0852 | 0.3012 | 0.3160 | 0.1618 | 0.3592 | 0.5273 | 3.3794 | 0.4662 | 0.5885 | 0.9534 | 0.9539 |
| Image | 0.5500 | 0.1580 | 0.6083 | 0.6379 | 0.6349 | 0.6326 | 0.3000 | 1.0500 | 0.2917 | 0.7935 | 0.9339 | 0.9298 |
| IMDB-ECC-F10% | 0.0304 | 0.0690 | 0.0575 | 0.0730 | 0.0326 | 0.0962 | 0.6342 | 12.3197 | 0.7278 | 0.3762 | 0.9876 | 0.9750 |
| IMDB-F10% | 0.0199 | 0.0727 | 0.0499 | 0.0659 | 0.0315 | 0.0890 | 0.5899 | 12.7531 | 0.7194 | 0.3837 | 0.9868 | 0.9750 |
| LLOG-F | 0.1721 | 0.0161 | 0.2015 | 0.2187 | 0.0533 | 0.2899 | 0.7295 | 28.5984 | 0.7781 | 0.2847 | 0.5982 | 0.9978 |
| mediamill10% | 0.0879 | 0.0295 | 0.4653 | 0.6266 | 0.0881 | 0.5814 | 0.1615 | 59.6366 | 0.4481 | 0.5501 | 0.8131 | 0.9938 |
| medical | 0.6633 | 0.0104 | 0.7526 | 0.7993 | 0.2863 | 0.8130 | 0.1735 | 5.0306 | 0.1329 | 0.8368 | 0.5527 | 0.9974 |
| Music | 0.2500 | 0.1806 | 0.5583 | 0.6878 | 0.7045 | 0.7137 | 0.3000 | 1.9833 | 0.2712 | 0.7884 | 0.9207 | 0.9109 |
| NUS-WIDE-bow10% | 0.1180 | 0.0248 | 0.2243 | 0.2782 | 0.0452 | 0.3345 | 0.5442 | 35.1289 | 0.6004 | 0.4253 | 0.8806 | 0.9914 |
| NUS-WIDE-cVLADplus10% | 0.1418 | 0.0235 | 0.2496 | 0.3053 | 0.0536 | 0.3673 | 0.5485 | 35.4358 | 0.6363 | 0.4177 | 0.8835 | 0.9946 |
| OHSUMED-F | 0.2319 | 0.0567 | 0.4292 | 0.5327 | 0.4335 | 0.5556 | 0.3561 | 7.6698 | 0.4119 | 0.6159 | 0.9768 | 0.9797 |
| PlantGO | 0.7083 | 0.0408 | 0.7396 | 0.7535 | 0.6399 | 0.7707 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9884 | 0.9843 |
| PlantPseAAC | 0.2449 | 0.0901 | 0.2738 | 0.2898 | 0.2090 | 0.3614 | 0.6020 | 3.3469 | 0.5649 | 0.5273 | 0.9524 | 0.9445 |
| rcv1subset1 | 0.1217 | 0.0307 | 0.3238 | 0.4299 | 0.2556 | 0.4323 | 0.4317 | 38.0800 | 0.4266 | 0.4998 | 0.9262 | 0.9869 |
| REUTERS-K500-EX2 | 0.3076 | 0.0112 | 0.3766 | 0.4134 | 0.2349 | 0.4839 | 0.5069 | 32.3900 | 0.5342 | 0.4910 | 0.7839 | 0.9972 |
| scene | 0.6888 | 0.0809 | 0.7407 | 0.7662 | 0.7750 | 0.7655 | 0.2033 | 0.9046 | 0.1838 | 0.8403 | 0.9754 | 0.9780 |
| sider_CDK_ECFP4 | 0.0141 | 0.2431 | 0.6522 | 0.7977 | 0.6281 | 0.7978 | 0.0986 | 19.1056 | 0.1362 | 0.8306 | 0.5956 | 0.7950 |
| sider_MordredDesc | 0.0141 | 0.2564 | 0.6260 | 0.7841 | 0.6114 | 0.7842 | 0.1408 | 19.9085 | 0.1811 | 0.7867 | 0.5776 | 0.7692 |
| sider_RDKit_desc | 0.0141 | 0.2801 | 0.6300 | 0.7821 | 0.5951 | 0.7770 | 0.3239 | 20.2746 | 0.2339 | 0.7148 | 0.5848 | 0.7335 |
| SLASHDOT-F | 0.4021 | 0.0397 | 0.4852 | 0.5305 | 0.3868 | 0.5823 | 0.4021 | 5.5556 | 0.3668 | 0.6405 | 0.7571 | 0.9841 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0461 | 0.0120 | 0.1055 | 0.1416 | 0.0659 | 0.1787 | 0.7867 | 105.2104 | 0.8745 | 0.1573 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0298 | 0.0100 | 0.1309 | 0.1844 | 0.0554 | 0.2539 | 0.6726 | 137.4881 | 0.8052 | 0.2032 | 0.5493 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0533 | 0.0900 | 0.0172 | 0.1159 | 0.8261 | 73.8696 | 0.8247 | 0.1573 | 0.2564 | 0.9874 |
| Stackex_cooking | 0.0667 | 0.0052 | 0.2018 | 0.2710 | 0.1090 | 0.3157 | 0.6367 | 224.2184 | 0.7726 | 0.2322 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0553 | 0.0093 | 0.1705 | 0.2386 | 0.0650 | 0.2775 | 0.6809 | 134.6357 | 0.7823 | 0.2203 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2850 | 0.0614 | 0.5578 | 0.6908 | 0.5705 | 0.6695 | 0.2538 | 4.0867 | 0.1450 | 0.7759 | 0.9586 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1572 | 0.2846 | 0.3570 | 0.3706 | 0.4132 | 0.4726 | 5.3527 | 0.4770 | 0.5724 | 0.8971 | 0.8969 |
| tox21_RDKit_desc | 0.0959 | 0.1621 | 0.1916 | 0.2526 | 0.2172 | 0.2918 | 0.5000 | 5.4932 | 0.4999 | 0.5574 | 0.8995 | 0.9004 |
| VirusGO | 0.7619 | 0.0476 | 0.8492 | 0.8768 | 0.7283 | 0.8800 | 0.0952 | 0.6190 | 0.1171 | 0.9143 | 0.8080 | 0.9814 |
| VirusPseAAC | 0.4762 | 0.1190 | 0.5238 | 0.5476 | 0.3295 | 0.6154 | 0.3333 | 0.9048 | 0.1952 | 0.7754 | 0.7121 | 0.9139 |
| Water-quality | 0.0094 | 0.3160 | 0.3636 | 0.5254 | 0.4177 | 0.5333 | 0.2925 | 9.1509 | 0.3542 | 0.6877 | 0.7696 | 0.7563 |
| Yahoo_Arts | 0.1802 | 0.0631 | 0.2615 | 0.3156 | 0.2136 | 0.3555 | 0.5020 | 10.3792 | 0.6090 | 0.5016 | 0.9374 | 0.9770 |
| Yahoo_Business | 0.5731 | 0.0265 | 0.7307 | 0.8194 | 0.3200 | 0.7298 | 0.0891 | 3.1604 | 0.2225 | 0.8873 | 0.8566 | 0.9951 |
| Yahoo_Computers | 0.3847 | 0.0371 | 0.4604 | 0.5108 | 0.2407 | 0.5137 | 0.3831 | 6.5839 | 0.4216 | 0.6125 | 0.8889 | 0.9817 |
| Yahoo_Education | 0.1397 | 0.0417 | 0.1825 | 0.2117 | 0.1536 | 0.2942 | 0.5495 | 9.1579 | 0.5635 | 0.5264 | 0.8887 | 0.9768 |
| Yahoo_Entertainment | 0.2765 | 0.0559 | 0.3293 | 0.3620 | 0.2424 | 0.4309 | 0.4368 | 4.1815 | 0.3822 | 0.6370 | 0.9667 | 0.9637 |
| Yahoo_Health | 0.4202 | 0.0382 | 0.5384 | 0.6098 | 0.2428 | 0.5848 | 0.3105 | 6.5190 | 0.3491 | 0.6932 | 0.8292 | 0.9853 |
| Yahoo_Recreation | 0.2778 | 0.0210 | 0.4000 | 0.4295 | 0.4058 | 0.5034 | 0.4776 | 6.1482 | 0.4855 | 0.6065 | 0.9655 | 0.9705 |
| Yahoo_Reference | 0.4134 | 0.0294 | 0.4590 | 0.4870 | 0.1711 | 0.5180 | 0.3923 | 5.4296 | 0.4257 | 0.6441 | 0.8090 | 0.9903 |
| Yahoo_Science | 0.2271 | 0.0394 | 0.2830 | 0.3277 | 0.1742 | 0.3433 | 0.6190 | 13.6796 | 0.6455 | 0.4273 | 0.9575 | 0.9840 |
| Yahoo_Social | 0.4398 | 0.0236 | 0.4848 | 0.5118 | 0.1596 | 0.5489 | 0.3721 | 7.5792 | 0.3928 | 0.6463 | 0.9132 | 0.9896 |
| Yahoo_Society | 0.3153 | 0.0802 | 0.4385 | 0.5541 | 0.2054 | 0.4627 | 0.3731 | 8.3514 | 0.4842 | 0.5898 | 0.9421 | 0.9714 |
| yeast | 0.2025 | 0.1898 | 0.5290 | 0.6629 | 0.3834 | 0.6571 | 0.2603 | 6.1901 | 0.2385 | 0.7566 | 0.8287 | 0.8854 |
| Yelp | 0.4317 | 0.1862 | 0.6527 | 0.7506 | 0.6708 | 0.7321 | 0.2014 | 1.3819 | 0.2495 | 0.8619 | 0.8926 | 0.9130 |

Table 51: Detailed results for Massive (25%) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5633 | 0.0254 | 0.5957 | 0.6118 | 0.7121 | 0.7161 | 0.2930 | 2.4015 | 0.2273 | 0.7693 | 0.9900 | 0.9904 |
| 3s-bbc1000 | 0.1111 | 0.2731 | 0.1713 | 0.1992 | 0.2147 | 0.2338 | 0.7778 | 2.8056 | 0.6873 | 0.4338 | 0.8122 | 0.7750 |
| 3s-guardian1000 | 0.0968 | 0.2419 | 0.1866 | 0.2359 | 0.2395 | 0.3077 | 0.4839 | 2.2903 | 0.4750 | 0.6056 | 0.7560 | 0.7914 |
| 3s-inter3000 | 0.0000 | 0.2255 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 | 2.5882 | 0.8353 | 0.3637 | 0.5597 | 0.7487 |
| 3s-reuters1000 | 0.0667 | 0.2556 | 0.1167 | 0.1412 | 0.1646 | 0.1786 | 0.8667 | 2.5000 | 0.7608 | 0.4050 | 0.9001 | 0.7908 |
| amphibians | 0.0000 | 0.2937 | 0.5183 | 0.7408 | 0.5204 | 0.6891 | 0.3333 | 2.5556 | 0.1056 | 0.8219 | 0.7509 | 0.8045 |
| bibtex | 0.1851 | 0.0120 | 0.3562 | 0.4465 | 0.3072 | 0.4744 | 0.4405 | 72.2851 | 0.5818 | 0.4259 | 0.9977 | 0.9978 |
| birds | 0.2051 | 0.0850 | 0.3568 | 0.4304 | 0.3609 | 0.4706 | 0.4615 | 7.6410 | 0.4885 | 0.5314 | 0.8503 | 0.9433 |
| bookmarks10% | 0.1879 | 0.0088 | 0.2175 | 0.2392 | 0.1100 | 0.2617 | 0.7244 | 105.2403 | 0.7626 | 0.2589 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1375 | 0.2116 | 0.3528 | 0.0635 | 0.3420 | 0.3922 | 151.0392 | 0.6257 | 0.4244 | 0.8346 | 0.9462 |
| corel16k001 | 0.0065 | 0.0188 | 0.0385 | 0.0553 | 0.0308 | 0.0713 | 0.8649 | 114.5229 | 0.9371 | 0.0933 | 0.9987 | 0.9988 |
| Corel5k | 0.0140 | 0.0091 | 0.0568 | 0.0824 | 0.0228 | 0.1123 | 0.8560 | 163.2520 | 0.9399 | 0.1599 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0252 | 0.0929 | 0.1613 | 0.0835 | 0.1716 | 0.5357 | 906.4891 | 0.8490 | 0.1489 | 0.9934 | 0.9986 |
| emotions | 0.3500 | 0.1750 | 0.6042 | 0.7208 | 0.6671 | 0.7123 | 0.2667 | 1.7500 | 0.2369 | 0.8036 | 0.8636 | 0.8733 |
| enron | 0.1579 | 0.0495 | 0.4506 | 0.5817 | 0.1667 | 0.5768 | 0.2690 | 23.8304 | 0.3422 | 0.6255 | 0.8258 | 0.9795 |
| EukaryoteGO | 0.6907 | 0.0191 | 0.7816 | 0.8257 | 0.6706 | 0.8217 | 0.1753 | 0.8673 | 0.0507 | 0.8893 | 0.9926 | 0.9946 |
| EukaryotePseAAC | 0.1892 | 0.0510 | 0.2192 | 0.2341 | 0.1125 | 0.3090 | 0.5380 | 6.2021 | 0.4996 | 0.5262 | 0.9741 | 0.9765 |
| flags | 0.2500 | 0.2286 | 0.6419 | 0.7557 | 0.6210 | 0.7612 | 0.2000 | 3.7000 | 0.2417 | 0.7938 | 0.7171 | 0.8026 |
| foodtruck | 0.2927 | 0.1524 | 0.4702 | 0.6077 | 0.1470 | 0.5033 | 0.2439 | 4.6585 | 0.4480 | 0.7154 | 0.8503 | 0.9544 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2985 | 0.0018 | 0.9922 | 0.6667 | 0.9994 |
| GnegativeGO | 0.9286 | 0.0125 | 0.9500 | 0.9607 | 0.8243 | 0.9521 | 0.0357 | 0.1143 | 0.0209 | 0.9780 | 0.8739 | 0.9975 |
| GnegativePseAAC | 0.7071 | 0.0536 | 0.7274 | 0.7375 | 0.4149 | 0.7778 | 0.1929 | 0.6143 | 0.1495 | 0.8697 | 0.8586 | 0.9867 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9231 | 0.9422 | 0.8658 | 0.9259 | 0.0385 | 0.0962 | 0.0256 | 0.9760 | 0.9963 | 0.9968 |
| GpositivePseAAC | 0.6538 | 0.1298 | 0.6538 | 0.6538 | 0.5361 | 0.7158 | 0.2692 | 0.5385 | 0.2436 | 0.8301 | 0.9697 | 0.9643 |
| HumanGO | 0.6881 | 0.0363 | 0.7621 | 0.8015 | 0.6847 | 0.7743 | 0.1543 | 0.9325 | 0.0952 | 0.8865 | 0.9837 | 0.9878 |
| HumanPseAAC | 0.2733 | 0.0852 | 0.3012 | 0.3160 | 0.1618 | 0.3592 | 0.5273 | 3.3794 | 0.4662 | 0.5885 | 0.9534 | 0.9539 |
| Image | 0.4900 | 0.1700 | 0.5417 | 0.5675 | 0.5807 | 0.5833 | 0.3100 | 1.0800 | 0.3079 | 0.7865 | 0.9224 | 0.9204 |
| IMDB-ECC-F10% | 0.0252 | 0.0688 | 0.0420 | 0.0517 | 0.0265 | 0.0670 | 0.6384 | 12.4696 | 0.7440 | 0.3678 | 0.9919 | 0.9775 |
| IMDB-F10% | 0.0199 | 0.0727 | 0.0499 | 0.0659 | 0.0315 | 0.0890 | 0.5899 | 12.7531 | 0.7194 | 0.3837 | 0.9868 | 0.9750 |
| LLOG-F | 0.1557 | 0.0163 | 0.1892 | 0.2087 | 0.0519 | 0.2802 | 0.7377 | 29.2213 | 0.7862 | 0.2749 | 0.5982 | 0.9979 |
| mediamill10% | 0.0831 | 0.0300 | 0.4539 | 0.6146 | 0.0716 | 0.5656 | 0.2565 | 61.2542 | 0.4725 | 0.5220 | 0.8141 | 0.9944 |
| medical | 0.6531 | 0.0104 | 0.7594 | 0.8128 | 0.3070 | 0.8175 | 0.1939 | 4.6735 | 0.1288 | 0.8280 | 0.5519 | 0.9971 |
| Music | 0.2667 | 0.1833 | 0.5472 | 0.6711 | 0.6897 | 0.7027 | 0.2667 | 2.1167 | 0.2624 | 0.7856 | 0.9054 | 0.8970 |
| NUS-WIDE-bow10% | 0.1180 | 0.0248 | 0.2243 | 0.2782 | 0.0452 | 0.3345 | 0.5442 | 35.1289 | 0.6004 | 0.4253 | 0.8806 | 0.9914 |
| NUS-WIDE-cVLADplus10% | 0.1418 | 0.0235 | 0.2496 | 0.3053 | 0.0536 | 0.3673 | 0.5485 | 35.4358 | 0.6363 | 0.4177 | 0.8835 | 0.9946 |
| OHSUMED-F | 0.2319 | 0.0567 | 0.4292 | 0.5327 | 0.4335 | 0.5556 | 0.3561 | 7.6698 | 0.4119 | 0.6159 | 0.9768 | 0.9797 |
| PlantGO | 0.6771 | 0.0408 | 0.7118 | 0.7309 | 0.6156 | 0.7638 | 0.2396 | 1.0625 | 0.1001 | 0.8432 | 0.9888 | 0.9842 |
| PlantPseAAC | 0.1939 | 0.0927 | 0.2143 | 0.2245 | 0.1822 | 0.2968 | 0.6122 | 2.9184 | 0.4609 | 0.5552 | 0.9374 | 0.9290 |
| rcv1subset1 | 0.1217 | 0.0307 | 0.3238 | 0.4299 | 0.2556 | 0.4323 | 0.4317 | 38.0800 | 0.4266 | 0.4998 | 0.9262 | 0.9869 |
| REUTERS-K500-EX2 | 0.3076 | 0.0112 | 0.3724 | 0.4074 | 0.2338 | 0.4790 | 0.5223 | 32.6323 | 0.5372 | 0.4851 | 0.7839 | 0.9973 |
| scene | 0.6515 | 0.0858 | 0.7054 | 0.7320 | 0.7592 | 0.7469 | 0.2199 | 0.8548 | 0.1772 | 0.8378 | 0.9640 | 0.9692 |
| sider_CDK_ECFP4 | 0.0070 | 0.2394 | 0.6507 | 0.7984 | 0.6286 | 0.7978 | 0.1338 | 19.2394 | 0.1449 | 0.8116 | 0.5902 | 0.7936 |
| sider_MordredDesc | 0.0141 | 0.2564 | 0.6260 | 0.7841 | 0.6114 | 0.7842 | 0.1408 | 19.9085 | 0.1811 | 0.7867 | 0.5776 | 0.7692 |
| sider_RDKit_desc | 0.0070 | 0.2773 | 0.6260 | 0.7810 | 0.5835 | 0.7754 | 0.1479 | 20.0704 | 0.1898 | 0.7607 | 0.6094 | 0.7691 |
| SLASHDOT-F | 0.4074 | 0.0399 | 0.4830 | 0.5241 | 0.3746 | 0.5776 | 0.4286 | 6.0529 | 0.4038 | 0.6134 | 0.7585 | 0.9853 |
| solar_flare-L3 | 0.4000 | 0.2667 | 0.6000 | 0.6857 | 0.4571 | 0.6667 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0447 | 0.0120 | 0.1031 | 0.1392 | 0.0645 | 0.1777 | 0.7723 | 104.6427 | 0.8595 | 0.1683 | 0.9183 | 0.9983 |
| Stackex_chess | 0.0357 | 0.0102 | 0.1433 | 0.2023 | 0.0623 | 0.2624 | 0.6607 | 135.0119 | 0.7908 | 0.2178 | 0.5492 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0201 | 0.0609 | 0.0996 | 0.0264 | 0.1493 | 0.8261 | 75.4783 | 0.8915 | 0.1316 | 0.2547 | 0.9878 |
| Stackex_cooking | 0.0667 | 0.0052 | 0.2018 | 0.2710 | 0.1090 | 0.3157 | 0.6367 | 224.2184 | 0.7726 | 0.2322 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0603 | 0.0093 | 0.1727 | 0.2383 | 0.0646 | 0.2766 | 0.6884 | 134.9221 | 0.7861 | 0.2160 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2850 | 0.0614 | 0.5578 | 0.6908 | 0.5705 | 0.6695 | 0.2538 | 4.0867 | 0.1450 | 0.7759 | 0.9586 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1507 | 0.1570 | 0.2986 | 0.3722 | 0.3781 | 0.4235 | 0.4658 | 5.2808 | 0.4787 | 0.5752 | 0.9006 | 0.9010 |
| tox21_RDKit_desc | 0.0959 | 0.1621 | 0.1955 | 0.2594 | 0.2190 | 0.3073 | 0.5137 | 5.5616 | 0.5126 | 0.5454 | 0.8965 | 0.8961 |
| VirusGO | 0.7619 | 0.0635 | 0.8333 | 0.8611 | 0.6711 | 0.8400 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.7972 | 0.9636 |
| VirusPseAAC | 0.5238 | 0.1190 | 0.5476 | 0.5593 | 0.3500 | 0.6154 | 0.3333 | 0.9524 | 0.2143 | 0.7730 | 0.7365 | 0.9223 |
| Water-quality | 0.0094 | 0.3086 | 0.3573 | 0.5205 | 0.4224 | 0.5278 | 0.2736 | 9.1226 | 0.3517 | 0.6959 | 0.7653 | 0.7630 |
| Yahoo_Arts | 0.1802 | 0.0631 | 0.2615 | 0.3156 | 0.2136 | 0.3555 | 0.5020 | 10.3792 | 0.6090 | 0.5016 | 0.9374 | 0.9770 |
| Yahoo_Business | 0.5731 | 0.0265 | 0.7307 | 0.8194 | 0.3200 | 0.7298 | 0.0891 | 3.1604 | 0.2225 | 0.8873 | 0.8566 | 0.9951 |
| Yahoo_Computers | 0.3847 | 0.0371 | 0.4604 | 0.5108 | 0.2407 | 0.5137 | 0.3831 | 6.5839 | 0.4216 | 0.6125 | 0.8889 | 0.9817 |
| Yahoo_Education | 0.1397 | 0.0417 | 0.1825 | 0.2117 | 0.1536 | 0.2942 | 0.5495 | 9.1579 | 0.5635 | 0.5264 | 0.8887 | 0.9768 |
| Yahoo_Entertainment | 0.2765 | 0.0559 | 0.3293 | 0.3620 | 0.2424 | 0.4309 | 0.4368 | 4.1815 | 0.3822 | 0.6370 | 0.9667 | 0.9637 |
| Yahoo_Health | 0.4202 | 0.0382 | 0.5384 | 0.6098 | 0.2428 | 0.5848 | 0.3105 | 6.5190 | 0.3491 | 0.6932 | 0.8292 | 0.9853 |
| Yahoo_Recreation | 0.2778 | 0.0210 | 0.4000 | 0.4295 | 0.4058 | 0.5034 | 0.4776 | 6.1482 | 0.4855 | 0.6065 | 0.9655 | 0.9705 |
| Yahoo_Reference | 0.4134 | 0.0294 | 0.4590 | 0.4870 | 0.1711 | 0.5180 | 0.3923 | 5.4296 | 0.4257 | 0.6441 | 0.8090 | 0.9903 |
| Yahoo_Science | 0.2271 | 0.0394 | 0.2830 | 0.3277 | 0.1742 | 0.3433 | 0.6190 | 13.6796 | 0.6455 | 0.4273 | 0.9575 | 0.9840 |
| Yahoo_Social | 0.4398 | 0.0236 | 0.4848 | 0.5118 | 0.1596 | 0.5489 | 0.3721 | 7.5792 | 0.3928 | 0.6463 | 0.9132 | 0.9896 |
| Yahoo_Society | 0.3153 | 0.0802 | 0.4385 | 0.5541 | 0.2054 | 0.4627 | 0.3731 | 8.3514 | 0.4842 | 0.5898 | 0.9421 | 0.9714 |
| yeast | 0.1942 | 0.1921 | 0.5203 | 0.6556 | 0.3693 | 0.6498 | 0.2273 | 6.0909 | 0.2291 | 0.7700 | 0.8249 | 0.8826 |
| Yelp | 0.3928 | 0.1920 | 0.6189 | 0.7183 | 0.6561 | 0.7155 | 0.2054 | 1.3679 | 0.2084 | 0.8598 | 0.8637 | 0.8897 |

Table 52: Detailed results for Massive (50%) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5062 | 0.0276 | 0.5505 | 0.5727 | 0.6816 | 0.6876 | 0.3024 | 2.2624 | 0.2171 | 0.7689 | 0.9811 | 0.9812 |
| 3s-bbc1000 | 0.0833 | 0.2778 | 0.1690 | 0.2151 | 0.2323 | 0.2683 | 0.7222 | 2.7778 | 0.6235 | 0.4620 | 0.7915 | 0.7323 |
| 3s-guardian1000 | 0.0645 | 0.2473 | 0.1425 | 0.1880 | 0.2066 | 0.2581 | 0.5806 | 2.2903 | 0.4790 | 0.5659 | 0.7590 | 0.7788 |
| 3s-inter3000 | 0.0588 | 0.2157 | 0.0588 | 0.0588 | 0.0476 | 0.0833 | 0.8235 | 2.5294 | 0.7529 | 0.4294 | 0.6102 | 0.7626 |
| 3s-reuters1000 | 0.0667 | 0.2556 | 0.1000 | 0.1143 | 0.1157 | 0.1481 | 0.9000 | 2.7667 | 0.8333 | 0.3617 | 0.8094 | 0.7371 |
| amphibians | 0.0556 | 0.2698 | 0.5427 | 0.7637 | 0.5406 | 0.7018 | 0.2222 | 2.5000 | 0.0935 | 0.8593 | 0.7329 | 0.8032 |
| bibtex | 0.1770 | 0.0118 | 0.3472 | 0.4377 | 0.2981 | 0.4666 | 0.3973 | 70.2405 | 0.5501 | 0.4506 | 0.9969 | 0.9969 |
| birds | 0.2051 | 0.0877 | 0.3558 | 0.4308 | 0.3383 | 0.4538 | 0.4872 | 7.9231 | 0.5159 | 0.5180 | 0.8442 | 0.9390 |
| bookmarks10% | 0.1879 | 0.0088 | 0.2175 | 0.2392 | 0.1100 | 0.2617 | 0.7244 | 105.2403 | 0.7626 | 0.2589 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1396 | 0.2142 | 0.3557 | 0.0661 | 0.3441 | 0.4510 | 151.0784 | 0.6116 | 0.4316 | 0.8306 | 0.9435 |
| corel16k001 | 0.0044 | 0.0189 | 0.0314 | 0.0456 | 0.0249 | 0.0595 | 0.8765 | 115.2273 | 0.9432 | 0.0875 | 0.9988 | 0.9988 |
| Corel5k | 0.0080 | 0.0092 | 0.0522 | 0.0774 | 0.0188 | 0.1036 | 0.8460 | 164.4420 | 0.9419 | 0.1582 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0252 | 0.0929 | 0.1613 | 0.0835 | 0.1716 | 0.5357 | 906.4891 | 0.8490 | 0.1489 | 0.9934 | 0.9986 |
| emotions | 0.3000 | 0.1972 | 0.5417 | 0.6525 | 0.6603 | 0.6758 | 0.2833 | 1.7333 | 0.2147 | 0.7965 | 0.8789 | 0.8858 |
| enron | 0.1579 | 0.0490 | 0.4695 | 0.6118 | 0.1554 | 0.5858 | 0.2398 | 24.3743 | 0.3499 | 0.6199 | 0.8264 | 0.9807 |
| EukaryoteGO | 0.6933 | 0.0189 | 0.7865 | 0.8322 | 0.7208 | 0.8246 | 0.1740 | 0.8557 | 0.0496 | 0.8904 | 0.9926 | 0.9946 |
| EukaryotePseAAC | 0.1892 | 0.0510 | 0.2192 | 0.2341 | 0.1125 | 0.3090 | 0.5380 | 6.2021 | 0.4996 | 0.5262 | 0.9741 | 0.9765 |
| flags | 0.2000 | 0.1929 | 0.6808 | 0.7999 | 0.6547 | 0.8000 | 0.4000 | 3.5500 | 0.2325 | 0.7781 | 0.7215 | 0.8135 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1447 | 0.5000 | 0.2439 | 4.4878 | 0.4354 | 0.7193 | 0.8475 | 0.9530 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0429 | 0.1214 | 0.0219 | 0.9744 | 0.8738 | 0.9975 |
| GnegativePseAAC | 0.7214 | 0.0518 | 0.7429 | 0.7535 | 0.4568 | 0.7868 | 0.1929 | 0.6143 | 0.1495 | 0.8697 | 0.8584 | 0.9864 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9135 | 0.9279 | 0.8639 | 0.9245 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9962 |
| GpositivePseAAC | 0.7308 | 0.1298 | 0.7308 | 0.7308 | 0.5713 | 0.7379 | 0.2692 | 0.5577 | 0.2436 | 0.8269 | 0.9662 | 0.9615 |
| HumanGO | 0.6849 | 0.0361 | 0.7604 | 0.8007 | 0.6930 | 0.7760 | 0.1704 | 1.0000 | 0.0922 | 0.8789 | 0.9844 | 0.9879 |
| HumanPseAAC | 0.2733 | 0.0852 | 0.3012 | 0.3160 | 0.1618 | 0.3592 | 0.5273 | 3.3794 | 0.4662 | 0.5885 | 0.9534 | 0.9539 |
| Image | 0.5250 | 0.1660 | 0.5742 | 0.5989 | 0.6008 | 0.6029 | 0.3050 | 1.0800 | 0.2867 | 0.7883 | 0.9092 | 0.9046 |
| IMDB-ECC-F10% | 0.0262 | 0.0687 | 0.0489 | 0.0619 | 0.0277 | 0.0830 | 0.6363 | 12.1090 | 0.6982 | 0.3869 | 0.9832 | 0.9730 |
| IMDB-F10% | 0.0149 | 0.0725 | 0.0326 | 0.0421 | 0.0182 | 0.0548 | 0.6156 | 13.1872 | 0.7558 | 0.3618 | 0.9906 | 0.9796 |
| LLOG-F | 0.1721 | 0.0160 | 0.2015 | 0.2192 | 0.0538 | 0.2981 | 0.7377 | 28.6803 | 0.7794 | 0.2799 | 0.5985 | 0.9982 |
| mediamill10% | 0.0713 | 0.0321 | 0.4306 | 0.5973 | 0.0650 | 0.5472 | 0.1663 | 58.3658 | 0.4387 | 0.5494 | 0.8086 | 0.9920 |
| medical | 0.6429 | 0.0111 | 0.7526 | 0.8092 | 0.2844 | 0.8078 | 0.1837 | 4.2653 | 0.1181 | 0.8422 | 0.5503 | 0.9954 |
| Music | 0.2333 | 0.1889 | 0.5389 | 0.6749 | 0.6861 | 0.6937 | 0.2167 | 2.0500 | 0.2111 | 0.8153 | 0.8772 | 0.8779 |
| NUS-WIDE-bow10% | 0.1180 | 0.0248 | 0.2243 | 0.2782 | 0.0452 | 0.3345 | 0.5442 | 35.1289 | 0.6004 | 0.4253 | 0.8806 | 0.9914 |
| NUS-WIDE-cVLADplus10% | 0.1361 | 0.0236 | 0.2443 | 0.2984 | 0.0514 | 0.3619 | 0.4948 | 33.4439 | 0.5640 | 0.4573 | 0.8807 | 0.9915 |
| OHSUMED-F | 0.2204 | 0.0576 | 0.4109 | 0.5108 | 0.4051 | 0.5397 | 0.3460 | 6.8428 | 0.3600 | 0.6421 | 0.9662 | 0.9701 |
| PlantGO | 0.7083 | 0.0382 | 0.7465 | 0.7673 | 0.6557 | 0.7843 | 0.2396 | 0.9688 | 0.0966 | 0.8458 | 0.9900 | 0.9845 |
| PlantPseAAC | 0.1939 | 0.0918 | 0.2177 | 0.2312 | 0.1861 | 0.3077 | 0.6224 | 3.0918 | 0.4989 | 0.5378 | 0.9369 | 0.9294 |
| rcv1subset1 | 0.1217 | 0.0307 | 0.3238 | 0.4299 | 0.2556 | 0.4323 | 0.4317 | 38.0800 | 0.4266 | 0.4998 | 0.9262 | 0.9869 |
| REUTERS-K500-EX2 | 0.3110 | 0.0111 | 0.3744 | 0.4085 | 0.2320 | 0.4816 | 0.5069 | 32.2698 | 0.5334 | 0.4931 | 0.7839 | 0.9973 |
| scene | 0.6349 | 0.0864 | 0.6888 | 0.7154 | 0.7497 | 0.7412 | 0.2241 | 0.8299 | 0.1681 | 0.8376 | 0.9573 | 0.9642 |
| sider_CDK_ECFP4 | 0.0141 | 0.2436 | 0.6496 | 0.7970 | 0.6302 | 0.7963 | 0.1761 | 19.4718 | 0.1771 | 0.7772 | 0.5881 | 0.7661 |
| sider_MordredDesc | 0.0141 | 0.2593 | 0.6269 | 0.7860 | 0.6085 | 0.7834 | 0.1338 | 19.6127 | 0.1884 | 0.7757 | 0.5879 | 0.7602 |
| sider_RDKit_desc | 0.0141 | 0.2694 | 0.6364 | 0.7868 | 0.6024 | 0.7832 | 0.1479 | 19.8944 | 0.2001 | 0.7531 | 0.6079 | 0.7656 |
| SLASHDOT-F | 0.3889 | 0.0405 | 0.4654 | 0.5061 | 0.3656 | 0.5652 | 0.4206 | 5.9577 | 0.3880 | 0.6243 | 0.7574 | 0.9841 |
| solar_flare-L3 | 0.6000 | 0.2000 | 0.7000 | 0.7467 | 0.4889 | 0.7273 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.5556 | 0.9000 |
| Stackex_chemistry | 0.0418 | 0.0122 | 0.0993 | 0.1350 | 0.0562 | 0.1705 | 0.7810 | 104.5634 | 0.8629 | 0.1664 | 0.9182 | 0.9982 |
| Stackex_chess | 0.0536 | 0.0102 | 0.1448 | 0.2003 | 0.0579 | 0.2562 | 0.6786 | 135.9286 | 0.8034 | 0.2060 | 0.5493 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0201 | 0.0543 | 0.0915 | 0.0196 | 0.1231 | 0.8696 | 78.2174 | 0.8952 | 0.1192 | 0.2549 | 0.9864 |
| Stackex_cooking | 0.0551 | 0.0054 | 0.1835 | 0.2533 | 0.1004 | 0.2954 | 0.6164 | 220.8048 | 0.7496 | 0.2483 | 0.9240 | 0.9989 |
| Stackex_philosophy | 0.0578 | 0.0093 | 0.1698 | 0.2331 | 0.0637 | 0.2741 | 0.6910 | 135.2588 | 0.7925 | 0.2137 | 0.7498 | 0.9987 |
| tmc2007-500 | 0.2836 | 0.0618 | 0.5517 | 0.6837 | 0.5636 | 0.6644 | 0.2479 | 4.1626 | 0.1489 | 0.7771 | 0.9589 | 0.9697 |
| tox21_CDK_ECFP4 | 0.1473 | 0.1575 | 0.3094 | 0.3891 | 0.3818 | 0.4344 | 0.4658 | 5.4041 | 0.5026 | 0.5646 | 0.9036 | 0.9039 |
| tox21_RDKit_desc | 0.0959 | 0.1607 | 0.1885 | 0.2452 | 0.2160 | 0.2954 | 0.5000 | 5.4726 | 0.5020 | 0.5579 | 0.8961 | 0.8967 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.1905 | 0.6667 | 0.1325 | 0.8786 | 0.7926 | 0.9715 |
| VirusPseAAC | 0.3333 | 0.1429 | 0.5000 | 0.5811 | 0.3545 | 0.6087 | 0.5238 | 1.0476 | 0.2143 | 0.6897 | 0.7225 | 0.8890 |
| Water-quality | 0.0000 | 0.3133 | 0.3602 | 0.5308 | 0.4204 | 0.5308 | 0.2830 | 9.1509 | 0.3565 | 0.6898 | 0.7716 | 0.7646 |
| Yahoo_Arts | 0.1802 | 0.0631 | 0.2615 | 0.3156 | 0.2136 | 0.3555 | 0.5020 | 10.3792 | 0.6090 | 0.5016 | 0.9374 | 0.9770 |
| Yahoo_Business | 0.5731 | 0.0265 | 0.7307 | 0.8194 | 0.3200 | 0.7298 | 0.0891 | 3.1604 | 0.2225 | 0.8873 | 0.8566 | 0.9951 |
| Yahoo_Computers | 0.3847 | 0.0371 | 0.4604 | 0.5108 | 0.2407 | 0.5137 | 0.3831 | 6.5839 | 0.4216 | 0.6125 | 0.8889 | 0.9817 |
| Yahoo_Education | 0.1397 | 0.0417 | 0.1825 | 0.2117 | 0.1536 | 0.2942 | 0.5495 | 9.1579 | 0.5635 | 0.5264 | 0.8887 | 0.9768 |
| Yahoo_Entertainment | 0.2765 | 0.0559 | 0.3293 | 0.3620 | 0.2424 | 0.4309 | 0.4368 | 4.1815 | 0.3822 | 0.6370 | 0.9667 | 0.9637 |
| Yahoo_Health | 0.4202 | 0.0382 | 0.5384 | 0.6098 | 0.2428 | 0.5848 | 0.3105 | 6.5190 | 0.3491 | 0.6932 | 0.8292 | 0.9853 |
| Yahoo_Recreation | 0.2778 | 0.0210 | 0.4000 | 0.4295 | 0.4058 | 0.5034 | 0.4776 | 6.1482 | 0.4855 | 0.6065 | 0.9655 | 0.9705 |
| Yahoo_Reference | 0.4134 | 0.0294 | 0.4590 | 0.4870 | 0.1711 | 0.5180 | 0.3923 | 5.4296 | 0.4257 | 0.6441 | 0.8090 | 0.9903 |
| Yahoo_Science | 0.2271 | 0.0394 | 0.2830 | 0.3277 | 0.1742 | 0.3433 | 0.6190 | 13.6796 | 0.6455 | 0.4273 | 0.9575 | 0.9840 |
| Yahoo_Social | 0.4398 | 0.0236 | 0.4848 | 0.5118 | 0.1596 | 0.5489 | 0.3721 | 7.5792 | 0.3928 | 0.6463 | 0.9132 | 0.9896 |
| Yahoo_Society | 0.3153 | 0.0802 | 0.4385 | 0.5541 | 0.2054 | 0.4627 | 0.3731 | 8.3514 | 0.4842 | 0.5898 | 0.9421 | 0.9714 |
| yeast | 0.2025 | 0.1895 | 0.5361 | 0.6687 | 0.4036 | 0.6625 | 0.2603 | 6.1570 | 0.2346 | 0.7532 | 0.8252 | 0.8827 |
| Yelp | 0.4038 | 0.1950 | 0.6261 | 0.7268 | 0.6599 | 0.7157 | 0.2124 | 1.4128 | 0.2395 | 0.8539 | 0.8747 | 0.8979 |

Table 53: Detailed results for Massive (1%) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4876 | 0.0310 | 0.5712 | 0.6144 | 0.6828 | 0.6859 | 0.3003 | 2.3646 | 0.2253 | 0.7656 | 0.9812 | 0.9814 |
| 3s-bbc1000 | 0.1667 | 0.2824 | 0.2741 | 0.3362 | 0.3263 | 0.3441 | 0.7500 | 2.7222 | 0.6519 | 0.4505 | 0.8433 | 0.7843 |
| 3s-guardian1000 | 0.1935 | 0.2903 | 0.3586 | 0.4561 | 0.2837 | 0.4130 | 0.4839 | 1.9677 | 0.4387 | 0.6344 | 0.8178 | 0.8281 |
| 3s-inter3000 | 0.2353 | 0.2549 | 0.2843 | 0.3186 | 0.0870 | 0.3158 | 1.0000 | 2.3529 | 0.6838 | 0.3686 | 0.5235 | 0.7229 |
| 3s-reuters1000 | 0.0667 | 0.3111 | 0.0944 | 0.1106 | 0.1041 | 0.1250 | 0.9000 | 2.6000 | 0.8467 | 0.3811 | 0.8457 | 0.7713 |
| amphibians | 0.1111 | 0.3095 | 0.5228 | 0.7558 | 0.5016 | 0.6609 | 0.2778 | 2.5556 | 0.1370 | 0.8472 | 0.7378 | 0.8220 |
| bibtex | 0.1676 | 0.0122 | 0.3521 | 0.4481 | 0.3080 | 0.4716 | 0.4027 | 68.5743 | 0.5461 | 0.4559 | 0.9968 | 0.9968 |
| birds | 0.1795 | 0.0999 | 0.3457 | 0.4362 | 0.3170 | 0.4394 | 0.4872 | 8.0256 | 0.5156 | 0.5093 | 0.8416 | 0.9407 |
| bookmarks10% | 0.1902 | 0.0090 | 0.2216 | 0.2443 | 0.1190 | 0.2682 | 0.7084 | 103.4419 | 0.7417 | 0.2745 | 0.9844 | 0.9988 |
| CAL500 | 0.0000 | 0.2107 | 0.3153 | 0.4775 | 0.1443 | 0.4777 | 0.1373 | 150.9412 | 0.5999 | 0.4477 | 0.8343 | 0.9457 |
| corel16k001 | 0.0000 | 0.0575 | 0.1170 | 0.1999 | 0.0341 | 0.1996 | 0.8649 | 114.5890 | 0.9373 | 0.0934 | 0.9987 | 0.9987 |
| Corel5k | 0.0000 | 0.0181 | 0.1357 | 0.2205 | 0.0235 | 0.2243 | 0.8660 | 164.5940 | 0.9480 | 0.1540 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0858 | 0.0987 | 0.1789 | 0.0805 | 0.1794 | 0.5202 | 907.0907 | 0.8549 | 0.1461 | 0.9933 | 0.9985 |
| emotions | 0.3167 | 0.1889 | 0.5875 | 0.7150 | 0.6726 | 0.6991 | 0.2667 | 1.7500 | 0.2281 | 0.8119 | 0.8741 | 0.8824 |
| enron | 0.1579 | 0.0510 | 0.4887 | 0.6302 | 0.1835 | 0.5962 | 0.2749 | 24.0760 | 0.3493 | 0.6128 | 0.8264 | 0.9803 |
| EukaryoteGO | 0.6894 | 0.0189 | 0.7947 | 0.8452 | 0.7142 | 0.8283 | 0.1649 | 0.8003 | 0.0426 | 0.8967 | 0.9926 | 0.9947 |
| EukaryotePseAAC | 0.2252 | 0.0586 | 0.3235 | 0.3768 | 0.1450 | 0.4120 | 0.5959 | 6.6306 | 0.5347 | 0.4894 | 0.9724 | 0.9757 |
| flags | 0.2500 | 0.2357 | 0.6549 | 0.7663 | 0.7050 | 0.7626 | 0.2000 | 3.5000 | 0.2033 | 0.8208 | 0.7114 | 0.7975 |
| foodtruck | 0.2683 | 0.1585 | 0.4560 | 0.6023 | 0.1470 | 0.5000 | 0.2927 | 4.4878 | 0.4479 | 0.6963 | 0.8529 | 0.9556 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0149 | 0.2537 | 0.0012 | 0.9876 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8262 | 0.9556 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8741 | 0.9982 |
| GnegativePseAAC | 0.7643 | 0.0527 | 0.7917 | 0.8054 | 0.5023 | 0.7986 | 0.2000 | 0.6429 | 0.1679 | 0.8638 | 0.8609 | 0.9890 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1394 | 0.7308 | 0.7308 | 0.5611 | 0.7238 | 0.2692 | 0.5577 | 0.2436 | 0.8269 | 0.9672 | 0.9626 |
| HumanGO | 0.6913 | 0.0349 | 0.7706 | 0.8112 | 0.6973 | 0.7859 | 0.1543 | 1.0225 | 0.0985 | 0.8857 | 0.9839 | 0.9878 |
| HumanPseAAC | 0.2830 | 0.0999 | 0.3885 | 0.4412 | 0.1764 | 0.4284 | 0.5563 | 3.6849 | 0.4901 | 0.5632 | 0.9510 | 0.9542 |
| Image | 0.4850 | 0.1820 | 0.6017 | 0.6616 | 0.6231 | 0.6192 | 0.3250 | 1.1250 | 0.2983 | 0.7743 | 0.9185 | 0.9160 |
| IMDB-ECC-F10% | 0.0010 | 0.1154 | 0.2309 | 0.3537 | 0.0574 | 0.3423 | 0.6992 | 13.2694 | 0.8153 | 0.3192 | 0.9935 | 0.9854 |
| IMDB-F10% | 0.0041 | 0.1148 | 0.2470 | 0.3702 | 0.0504 | 0.3609 | 0.8882 | 15.6984 | 0.9583 | 0.1943 | 0.9947 | 0.9957 |
| LLOG-F | 0.1557 | 0.0168 | 0.1906 | 0.2125 | 0.0500 | 0.2804 | 0.7377 | 28.6885 | 0.7794 | 0.2807 | 0.5980 | 0.9978 |
| mediamill10% | 0.0831 | 0.0298 | 0.4728 | 0.6370 | 0.0735 | 0.5874 | 0.2589 | 59.1211 | 0.4579 | 0.5305 | 0.8143 | 0.9942 |
| medical | 0.6633 | 0.0109 | 0.7696 | 0.8243 | 0.3224 | 0.8140 | 0.1837 | 4.9388 | 0.1282 | 0.8367 | 0.5527 | 0.9961 |
| Music | 0.2667 | 0.1833 | 0.5889 | 0.7345 | 0.7145 | 0.7227 | 0.3333 | 2.2000 | 0.2879 | 0.7565 | 0.8982 | 0.8922 |
| NUS-WIDE-bow10% | 0.1461 | 0.0272 | 0.3092 | 0.4007 | 0.0429 | 0.3909 | 0.5666 | 35.7626 | 0.6203 | 0.4075 | 0.8812 | 0.9922 |
| NUS-WIDE-cVLADplus10% | 0.1589 | 0.0263 | 0.3321 | 0.4254 | 0.0597 | 0.4279 | 0.5095 | 33.8758 | 0.5929 | 0.4435 | 0.8813 | 0.9922 |
| OHSUMED-F | 0.2017 | 0.0614 | 0.4312 | 0.5507 | 0.4401 | 0.5641 | 0.3431 | 6.6518 | 0.3482 | 0.6489 | 0.9666 | 0.9706 |
| PlantGO | 0.6875 | 0.0373 | 0.7500 | 0.7794 | 0.6543 | 0.7943 | 0.2396 | 1.0625 | 0.1001 | 0.8432 | 0.9893 | 0.9852 |
| PlantPseAAC | 0.2653 | 0.1156 | 0.3554 | 0.4064 | 0.2117 | 0.3982 | 0.6429 | 3.1020 | 0.4943 | 0.5270 | 0.9352 | 0.9279 |
| rcv1subset1 | 0.0667 | 0.0313 | 0.3281 | 0.4630 | 0.2304 | 0.4582 | 0.4117 | 46.1150 | 0.5310 | 0.4481 | 0.9287 | 0.9887 |
| REUTERS-K500-EX2 | 0.3299 | 0.0118 | 0.4101 | 0.4564 | 0.2521 | 0.5028 | 0.5189 | 31.6684 | 0.5311 | 0.4902 | 0.7839 | 0.9972 |
| scene | 0.6141 | 0.0941 | 0.7255 | 0.7813 | 0.7676 | 0.7509 | 0.2282 | 0.8008 | 0.1639 | 0.8382 | 0.9584 | 0.9646 |
| sider_CDK_ECFP4 | 0.0211 | 0.2470 | 0.6487 | 0.7952 | 0.6295 | 0.7954 | 0.1549 | 19.7042 | 0.1733 | 0.7839 | 0.5961 | 0.7746 |
| sider_MordredDesc | 0.0141 | 0.2692 | 0.6323 | 0.7843 | 0.6165 | 0.7829 | 0.2606 | 19.6761 | 0.2045 | 0.7530 | 0.5720 | 0.7508 |
| sider_RDKit_desc | 0.0211 | 0.2838 | 0.6290 | 0.7807 | 0.6057 | 0.7761 | 0.3099 | 19.4577 | 0.1748 | 0.7773 | 0.5898 | 0.7682 |
| SLASHDOT-F | 0.3968 | 0.0417 | 0.5115 | 0.5725 | 0.3864 | 0.5979 | 0.4312 | 6.0529 | 0.4011 | 0.6147 | 0.7586 | 0.9855 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.4000 | 0.4000 | 0.4000 | 0.8000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0432 | 0.0161 | 0.1483 | 0.2160 | 0.0732 | 0.2141 | 0.7795 | 104.4784 | 0.8615 | 0.1660 | 0.9182 | 0.9982 |
| Stackex_chess | 0.0357 | 0.0103 | 0.1529 | 0.2176 | 0.0550 | 0.2714 | 0.6667 | 138.5357 | 0.8069 | 0.2035 | 0.5493 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0219 | 0.0522 | 0.0884 | 0.0156 | 0.1143 | 0.7826 | 78.2609 | 0.8705 | 0.1469 | 0.2564 | 0.9902 |
| Stackex_cooking | 0.0657 | 0.0055 | 0.2087 | 0.2893 | 0.1134 | 0.3278 | 0.6087 | 219.5729 | 0.7453 | 0.2543 | 0.9240 | 0.9989 |
| Stackex_philosophy | 0.0578 | 0.0094 | 0.1707 | 0.2356 | 0.0644 | 0.2748 | 0.7035 | 135.1784 | 0.7939 | 0.2088 | 0.7497 | 0.9986 |
| tmc2007-500 | 0.2552 | 0.0676 | 0.5707 | 0.7161 | 0.6054 | 0.6802 | 0.2493 | 4.1248 | 0.1462 | 0.7780 | 0.9587 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1507 | 0.1764 | 0.3553 | 0.4606 | 0.3898 | 0.4607 | 0.4692 | 5.3493 | 0.4887 | 0.5684 | 0.9019 | 0.9026 |
| tox21_RDKit_desc | 0.1233 | 0.1895 | 0.3397 | 0.4654 | 0.3172 | 0.4411 | 0.5103 | 5.5274 | 0.5010 | 0.5498 | 0.8963 | 0.8963 |
| VirusGO | 0.7143 | 0.0635 | 0.8333 | 0.8849 | 0.6613 | 0.8400 | 0.0952 | 0.5714 | 0.0980 | 0.9183 | 0.8001 | 0.9743 |
| VirusPseAAC | 0.2857 | 0.1587 | 0.5238 | 0.6349 | 0.3742 | 0.6154 | 0.4286 | 1.0476 | 0.2429 | 0.7254 | 0.7143 | 0.9109 |
| Water-quality | 0.0094 | 0.3356 | 0.4280 | 0.6066 | 0.4994 | 0.5997 | 0.2736 | 9.2358 | 0.3521 | 0.6937 | 0.7716 | 0.7618 |
| Yahoo_Arts | 0.1202 | 0.0906 | 0.2667 | 0.3599 | 0.1780 | 0.3297 | 0.5487 | 11.1121 | 0.6838 | 0.4632 | 0.9354 | 0.9754 |
| Yahoo_Business | 0.5535 | 0.0295 | 0.7169 | 0.8110 | 0.3036 | 0.7062 | 0.0998 | 3.1560 | 0.2181 | 0.8828 | 0.8533 | 0.9934 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.1887 | 0.0612 | 0.3147 | 0.3939 | 0.1797 | 0.3553 | 0.6334 | 9.5586 | 0.6838 | 0.4700 | 0.8883 | 0.9807 |
| Yahoo_Entertainment | 0.3291 | 0.0775 | 0.4231 | 0.4850 | 0.2647 | 0.4399 | 0.4800 | 4.4910 | 0.4681 | 0.5975 | 0.9703 | 0.9651 |
| Yahoo_Health | 0.3561 | 0.0464 | 0.5024 | 0.5890 | 0.2104 | 0.5326 | 0.3626 | 6.8773 | 0.3715 | 0.6602 | 0.8249 | 0.9814 |
| Yahoo_Recreation | 0.2089 | 0.0726 | 0.2771 | 0.3291 | 0.2777 | 0.3630 | 0.5401 | 6.8200 | 0.5960 | 0.5422 | 0.9656 | 0.9670 |
| Yahoo_Reference | 0.4334 | 0.0340 | 0.4962 | 0.5368 | 0.1411 | 0.5103 | 0.4147 | 5.9601 | 0.4418 | 0.6226 | 0.8080 | 0.9877 |
| Yahoo_Science | 0.1602 | 0.0602 | 0.2549 | 0.3194 | 0.1251 | 0.2684 | 0.7045 | 14.6159 | 0.7223 | 0.3681 | 0.9562 | 0.9821 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.1736 | 0.2078 | 0.5529 | 0.6867 | 0.4453 | 0.6735 | 0.2314 | 6.1570 | 0.2267 | 0.7697 | 0.8224 | 0.8813 |
| Yelp | 0.4018 | 0.1962 | 0.6346 | 0.7377 | 0.6719 | 0.7192 | 0.2144 | 1.4337 | 0.2626 | 0.8501 | 0.8820 | 0.9038 |

Table 54: Detailed results for Massive (5%) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4891 | 0.0306 | 0.5684 | 0.6094 | 0.6819 | 0.6863 | 0.2977 | 2.2941 | 0.2161 | 0.7702 | 0.9797 | 0.9803 |
| 3s-bbc1000 | 0.1944 | 0.2963 | 0.2616 | 0.3055 | 0.2517 | 0.2889 | 0.7500 | 2.8889 | 0.7046 | 0.4454 | 0.8570 | 0.7857 |
| 3s-guardian1000 | 0.2258 | 0.2581 | 0.3306 | 0.3922 | 0.2707 | 0.3846 | 0.5161 | 2.2258 | 0.5339 | 0.5981 | 0.8527 | 0.8517 |
| 3s-inter3000 | 0.2353 | 0.2549 | 0.3235 | 0.3671 | 0.1346 | 0.3500 | 0.8824 | 2.4706 | 0.6588 | 0.4088 | 0.5167 | 0.6772 |
| 3s-reuters1000 | 0.0667 | 0.3056 | 0.1111 | 0.1333 | 0.1190 | 0.1538 | 0.9000 | 2.6000 | 0.8200 | 0.3772 | 0.8493 | 0.7686 |
| amphibians | 0.0556 | 0.2778 | 0.5405 | 0.7502 | 0.5421 | 0.7059 | 0.2222 | 2.5000 | 0.1056 | 0.8570 | 0.7512 | 0.8035 |
| bibtex | 0.1743 | 0.0122 | 0.3538 | 0.4484 | 0.3106 | 0.4703 | 0.4041 | 69.1351 | 0.5396 | 0.4561 | 0.9969 | 0.9970 |
| birds | 0.1282 | 0.1012 | 0.3406 | 0.4558 | 0.3495 | 0.4604 | 0.4872 | 7.9231 | 0.5032 | 0.5152 | 0.8383 | 0.9349 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.2170 | 0.3135 | 0.4753 | 0.1433 | 0.4752 | 0.1373 | 151.0588 | 0.6358 | 0.4367 | 0.8343 | 0.9480 |
| corel16k001 | 0.0000 | 0.0576 | 0.1169 | 0.1998 | 0.0337 | 0.1994 | 0.8722 | 114.7858 | 0.9412 | 0.0890 | 0.9988 | 0.9988 |
| Corel5k | 0.0000 | 0.0181 | 0.1352 | 0.2195 | 0.0212 | 0.2234 | 0.8640 | 165.2300 | 0.9480 | 0.1541 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.2667 | 0.2111 | 0.5528 | 0.6860 | 0.6625 | 0.6752 | 0.2667 | 1.8000 | 0.2354 | 0.8015 | 0.8750 | 0.8824 |
| enron | 0.1754 | 0.0516 | 0.4903 | 0.6240 | 0.1764 | 0.5952 | 0.3216 | 24.7368 | 0.3586 | 0.6035 | 0.8262 | 0.9799 |
| EukaryoteGO | 0.6933 | 0.0186 | 0.7962 | 0.8456 | 0.7053 | 0.8306 | 0.1662 | 0.8144 | 0.0451 | 0.8951 | 0.9929 | 0.9947 |
| EukaryotePseAAC | 0.3063 | 0.0563 | 0.4008 | 0.4503 | 0.1481 | 0.4587 | 0.5380 | 6.1094 | 0.4983 | 0.5282 | 0.9744 | 0.9770 |
| flags | 0.2500 | 0.2500 | 0.6369 | 0.7491 | 0.6113 | 0.7482 | 0.2000 | 3.5500 | 0.2717 | 0.7980 | 0.7324 | 0.8287 |
| foodtruck | 0.2927 | 0.1524 | 0.4749 | 0.6108 | 0.1576 | 0.5161 | 0.2439 | 4.4390 | 0.4408 | 0.7207 | 0.8568 | 0.9588 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0149 | 0.2537 | 0.0012 | 0.9876 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1143 | 0.0209 | 0.9780 | 0.8740 | 0.9980 |
| GnegativePseAAC | 0.7571 | 0.0563 | 0.7845 | 0.7982 | 0.4724 | 0.7850 | 0.2000 | 0.6500 | 0.1750 | 0.8620 | 0.8591 | 0.9881 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9231 | 0.9422 | 0.8658 | 0.9259 | 0.0385 | 0.0962 | 0.0256 | 0.9760 | 0.9963 | 0.9971 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5662 | 0.7308 | 0.2692 | 0.5577 | 0.2436 | 0.8269 | 0.9677 | 0.9628 |
| HumanGO | 0.6849 | 0.0367 | 0.7642 | 0.8064 | 0.6884 | 0.7746 | 0.1608 | 1.0932 | 0.1053 | 0.8803 | 0.9842 | 0.9878 |
| HumanPseAAC | 0.3087 | 0.0978 | 0.4070 | 0.4568 | 0.1915 | 0.4380 | 0.5370 | 3.3505 | 0.4701 | 0.5840 | 0.9527 | 0.9534 |
| Image | 0.4450 | 0.1920 | 0.5900 | 0.6628 | 0.6207 | 0.6129 | 0.3200 | 1.1350 | 0.3187 | 0.7747 | 0.9227 | 0.9218 |
| IMDB-ECC-F10% | 0.0000 | 0.2682 | 0.1417 | 0.2441 | 0.0891 | 0.2440 | 0.6488 | 12.6059 | 0.7581 | 0.3587 | 0.9908 | 0.9792 |
| IMDB-F10% | 0.0000 | 0.2658 | 0.1536 | 0.2613 | 0.1052 | 0.2614 | 0.6239 | 13.1781 | 0.7551 | 0.3608 | 0.9886 | 0.9789 |
| LLOG-F | 0.1721 | 0.0164 | 0.2056 | 0.2255 | 0.0557 | 0.2991 | 0.7377 | 28.3279 | 0.7713 | 0.2848 | 0.5983 | 0.9980 |
| mediamill10% | 0.0808 | 0.0299 | 0.4751 | 0.6367 | 0.0768 | 0.5885 | 0.2162 | 59.5226 | 0.4544 | 0.5399 | 0.8144 | 0.9943 |
| medical | 0.6531 | 0.0107 | 0.7585 | 0.8119 | 0.3057 | 0.8142 | 0.1633 | 5.1531 | 0.1433 | 0.8301 | 0.5523 | 0.9975 |
| Music | 0.2500 | 0.2028 | 0.5611 | 0.6969 | 0.6925 | 0.6996 | 0.2667 | 2.0000 | 0.2710 | 0.8008 | 0.8930 | 0.8932 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1670 | 0.0260 | 0.3346 | 0.4249 | 0.0708 | 0.4309 | 0.5366 | 34.1280 | 0.5959 | 0.4362 | 0.8816 | 0.9924 |
| OHSUMED-F | 0.2261 | 0.0592 | 0.4444 | 0.5574 | 0.4408 | 0.5686 | 0.3546 | 7.6497 | 0.4158 | 0.6150 | 0.9770 | 0.9800 |
| PlantGO | 0.6875 | 0.0373 | 0.7500 | 0.7793 | 0.6588 | 0.7962 | 0.2396 | 1.0104 | 0.1061 | 0.8423 | 0.9901 | 0.9850 |
| PlantPseAAC | 0.2449 | 0.1156 | 0.3359 | 0.3883 | 0.2092 | 0.3929 | 0.6327 | 3.0306 | 0.4669 | 0.5418 | 0.9371 | 0.9285 |
| rcv1subset1 | 0.1000 | 0.0316 | 0.3562 | 0.4783 | 0.2658 | 0.4708 | 0.3933 | 37.5533 | 0.4104 | 0.5188 | 0.9255 | 0.9864 |
| REUTERS-K500-EX2 | 0.3333 | 0.0116 | 0.4159 | 0.4614 | 0.2406 | 0.5060 | 0.5120 | 32.0120 | 0.5304 | 0.4925 | 0.7839 | 0.9973 |
| scene | 0.6556 | 0.0878 | 0.7365 | 0.7770 | 0.7714 | 0.7572 | 0.1992 | 0.8672 | 0.1805 | 0.8444 | 0.9642 | 0.9690 |
| sider_CDK_ECFP4 | 0.0211 | 0.2439 | 0.6497 | 0.7970 | 0.6281 | 0.7962 | 0.2817 | 19.2817 | 0.1804 | 0.7734 | 0.5778 | 0.7604 |
| sider_MordredDesc | 0.0141 | 0.2715 | 0.6311 | 0.7826 | 0.6147 | 0.7814 | 0.2254 | 19.3380 | 0.1750 | 0.7728 | 0.5828 | 0.7668 |
| sider_RDKit_desc | 0.0141 | 0.2827 | 0.6286 | 0.7804 | 0.6016 | 0.7759 | 0.4366 | 19.5634 | 0.1813 | 0.7567 | 0.5899 | 0.7703 |
| SLASHDOT-F | 0.3915 | 0.0412 | 0.5049 | 0.5637 | 0.3811 | 0.5960 | 0.4233 | 5.8730 | 0.3811 | 0.6241 | 0.7567 | 0.9831 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.5556 | 0.7800 |
| Stackex_chemistry | 0.0476 | 0.0161 | 0.1547 | 0.2229 | 0.0791 | 0.2193 | 0.7666 | 104.2738 | 0.8569 | 0.1728 | 0.9182 | 0.9982 |
| Stackex_chess | 0.0357 | 0.0102 | 0.1514 | 0.2143 | 0.0612 | 0.2756 | 0.6964 | 138.4464 | 0.8126 | 0.1948 | 0.5493 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0761 | 0.1192 | 0.0263 | 0.1644 | 0.8696 | 75.1304 | 0.8566 | 0.1345 | 0.2571 | 0.9912 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0553 | 0.0093 | 0.1693 | 0.2361 | 0.0630 | 0.2745 | 0.7035 | 134.6734 | 0.7911 | 0.2093 | 0.7499 | 0.9987 |
| tmc2007-500 | 0.2584 | 0.0671 | 0.5720 | 0.7166 | 0.5985 | 0.6812 | 0.2559 | 4.1045 | 0.1458 | 0.7757 | 0.9585 | 0.9699 |
| tox21_CDK_ECFP4 | 0.1473 | 0.1758 | 0.3584 | 0.4652 | 0.3911 | 0.4606 | 0.4589 | 5.4212 | 0.4973 | 0.5683 | 0.9018 | 0.9027 |
| tox21_RDKit_desc | 0.1062 | 0.1915 | 0.3377 | 0.4665 | 0.3235 | 0.4468 | 0.5103 | 5.5103 | 0.5054 | 0.5515 | 0.9005 | 0.9011 |
| VirusGO | 0.7619 | 0.0556 | 0.8413 | 0.8729 | 0.6989 | 0.8571 | 0.0952 | 0.6190 | 0.1171 | 0.9143 | 0.7988 | 0.9679 |
| VirusPseAAC | 0.2857 | 0.1429 | 0.4921 | 0.5905 | 0.3814 | 0.6400 | 0.2857 | 0.8095 | 0.2143 | 0.8032 | 0.7650 | 0.9477 |
| Water-quality | 0.0000 | 0.3302 | 0.4374 | 0.6166 | 0.5094 | 0.6074 | 0.2925 | 9.0660 | 0.3501 | 0.6922 | 0.7722 | 0.7631 |
| Yahoo_Arts | 0.2043 | 0.0686 | 0.3003 | 0.3653 | 0.2145 | 0.3734 | 0.4993 | 10.2163 | 0.5747 | 0.5043 | 0.9355 | 0.9738 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4554 | 0.0299 | 0.5275 | 0.5741 | 0.1737 | 0.5256 | 0.3985 | 7.9224 | 0.4090 | 0.6257 | 0.9138 | 0.9892 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.1694 | 0.2060 | 0.5528 | 0.6832 | 0.4504 | 0.6738 | 0.2397 | 6.2066 | 0.2285 | 0.7609 | 0.8230 | 0.8804 |
| Yelp | 0.4108 | 0.1936 | 0.6425 | 0.7463 | 0.6704 | 0.7234 | 0.2253 | 1.4616 | 0.2694 | 0.8429 | 0.8906 | 0.9097 |

Table 55: Detailed results for Massive (10%) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5368 | 0.0306 | 0.6222 | 0.6662 | 0.7034 | 0.7049 | 0.3019 | 2.5057 | 0.2421 | 0.7604 | 0.9901 | 0.9904 |
| 3s-bbc1000 | 0.1111 | 0.3519 | 0.2162 | 0.2745 | 0.2328 | 0.2692 | 0.7222 | 2.7500 | 0.6324 | 0.4675 | 0.7753 | 0.7300 |
| 3s-guardian1000 | 0.1290 | 0.2957 | 0.2554 | 0.3254 | 0.2543 | 0.3373 | 0.5161 | 2.1290 | 0.5008 | 0.6118 | 0.8080 | 0.8266 |
| 3s-inter3000 | 0.0000 | 0.3137 | 0.3039 | 0.4287 | 0.2103 | 0.4286 | 0.8824 | 2.5294 | 0.6956 | 0.3951 | 0.4825 | 0.6700 |
| 3s-reuters1000 | 0.1333 | 0.2889 | 0.1833 | 0.2053 | 0.1758 | 0.2121 | 0.9333 | 2.5667 | 0.7733 | 0.3689 | 0.8342 | 0.7614 |
| amphibians | 0.0000 | 0.2619 | 0.5540 | 0.7626 | 0.5638 | 0.7227 | 0.3333 | 2.6111 | 0.1259 | 0.8126 | 0.7689 | 0.8187 |
| bibtex | 0.1919 | 0.0120 | 0.3673 | 0.4610 | 0.3257 | 0.4853 | 0.4324 | 72.3973 | 0.5751 | 0.4301 | 0.9977 | 0.9978 |
| birds | 0.1795 | 0.1012 | 0.3528 | 0.4478 | 0.3480 | 0.4444 | 0.4615 | 6.6410 | 0.3973 | 0.5683 | 0.8327 | 0.9241 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.2121 | 0.3160 | 0.4776 | 0.1442 | 0.4781 | 0.3529 | 151.0588 | 0.6057 | 0.4346 | 0.8233 | 0.9410 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1946 | 0.0408 | 0.1944 | 0.8751 | 115.1089 | 0.9440 | 0.0885 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0138 | 0.1438 | 0.2289 | 0.0265 | 0.2362 | 0.8500 | 163.3540 | 0.9344 | 0.1641 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.3333 | 0.1778 | 0.6097 | 0.7359 | 0.7134 | 0.7265 | 0.2833 | 1.7167 | 0.2209 | 0.8100 | 0.8949 | 0.8973 |
| enron | 0.1871 | 0.0516 | 0.4874 | 0.6162 | 0.1837 | 0.5952 | 0.2924 | 23.5848 | 0.3608 | 0.6091 | 0.8256 | 0.9809 |
| EukaryoteGO | 0.7139 | 0.0190 | 0.7912 | 0.8293 | 0.7279 | 0.8204 | 0.1637 | 0.8673 | 0.0510 | 0.8948 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.3063 | 0.0563 | 0.4008 | 0.4503 | 0.1481 | 0.4587 | 0.5380 | 6.1094 | 0.4983 | 0.5282 | 0.9744 | 0.9770 |
| flags | 0.2500 | 0.2286 | 0.6533 | 0.7664 | 0.6261 | 0.7647 | 0.3000 | 3.5000 | 0.2642 | 0.7969 | 0.7058 | 0.8092 |
| foodtruck | 0.2927 | 0.1565 | 0.4621 | 0.6010 | 0.1431 | 0.4967 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8553 | 0.9573 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6369 | 0.9989 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7643 | 0.0500 | 0.8060 | 0.8268 | 0.4948 | 0.8095 | 0.1857 | 0.6143 | 0.1470 | 0.8736 | 0.8626 | 0.9901 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9231 | 0.9326 | 0.8658 | 0.9259 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9968 |
| GpositivePseAAC | 0.7500 | 0.1202 | 0.7596 | 0.7644 | 0.5833 | 0.7619 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6785 | 0.0388 | 0.7666 | 0.8139 | 0.6950 | 0.7744 | 0.1704 | 1.0900 | 0.1057 | 0.8758 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.3087 | 0.0978 | 0.4070 | 0.4568 | 0.1915 | 0.4380 | 0.5370 | 3.3505 | 0.4701 | 0.5840 | 0.9527 | 0.9534 |
| Image | 0.5250 | 0.1740 | 0.6258 | 0.6779 | 0.6433 | 0.6345 | 0.2900 | 1.0050 | 0.2838 | 0.8026 | 0.9344 | 0.9316 |
| IMDB-ECC-F10% | 0.0000 | 0.2376 | 0.1474 | 0.2504 | 0.0847 | 0.2502 | 0.6331 | 12.3941 | 0.7320 | 0.3750 | 0.9883 | 0.9755 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1549 | 0.2640 | 0.0967 | 0.2638 | 0.5866 | 12.6819 | 0.7149 | 0.3875 | 0.9845 | 0.9741 |
| LLOG-F | 0.1721 | 0.0166 | 0.2001 | 0.2173 | 0.0526 | 0.2897 | 0.7377 | 28.5820 | 0.7822 | 0.2814 | 0.5984 | 0.9981 |
| mediamill10% | 0.0760 | 0.0302 | 0.4709 | 0.6365 | 0.0942 | 0.5882 | 0.1686 | 59.1829 | 0.4511 | 0.5468 | 0.8136 | 0.9940 |
| medical | 0.6735 | 0.0104 | 0.7747 | 0.8288 | 0.3108 | 0.8203 | 0.1735 | 4.9388 | 0.1278 | 0.8427 | 0.5527 | 0.9976 |
| Music | 0.2833 | 0.1889 | 0.5792 | 0.7041 | 0.7057 | 0.7143 | 0.2333 | 2.0667 | 0.2549 | 0.8015 | 0.9072 | 0.8981 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.2261 | 0.0592 | 0.4444 | 0.5574 | 0.4408 | 0.5686 | 0.3546 | 7.6497 | 0.4158 | 0.6150 | 0.9770 | 0.9800 |
| PlantGO | 0.7292 | 0.0365 | 0.7865 | 0.8133 | 0.6773 | 0.8037 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9888 | 0.9836 |
| PlantPseAAC | 0.2551 | 0.1190 | 0.3503 | 0.4049 | 0.2145 | 0.3966 | 0.6224 | 3.1633 | 0.4977 | 0.5348 | 0.9382 | 0.9327 |
| rcv1subset1 | 0.1000 | 0.0316 | 0.3562 | 0.4783 | 0.2658 | 0.4708 | 0.3933 | 37.5533 | 0.4104 | 0.5188 | 0.9255 | 0.9864 |
| REUTERS-K500-EX2 | 0.3402 | 0.0116 | 0.4244 | 0.4731 | 0.2553 | 0.5133 | 0.5052 | 31.1787 | 0.5163 | 0.5018 | 0.7839 | 0.9972 |
| scene | 0.6722 | 0.0858 | 0.7448 | 0.7811 | 0.7711 | 0.7615 | 0.1992 | 0.9004 | 0.1913 | 0.8426 | 0.9784 | 0.9802 |
| sider_CDK_ECFP4 | 0.0141 | 0.2415 | 0.6503 | 0.7981 | 0.6298 | 0.7976 | 0.2676 | 19.1620 | 0.1673 | 0.7814 | 0.5891 | 0.7700 |
| sider_MordredDesc | 0.0141 | 0.2713 | 0.6279 | 0.7815 | 0.6128 | 0.7799 | 0.3099 | 19.8803 | 0.2231 | 0.7418 | 0.5733 | 0.7340 |
| sider_RDKit_desc | 0.0141 | 0.2817 | 0.6302 | 0.7816 | 0.6048 | 0.7770 | 0.4366 | 20.1901 | 0.2124 | 0.7188 | 0.5680 | 0.7430 |
| SLASHDOT-F | 0.4048 | 0.0416 | 0.5226 | 0.5858 | 0.4132 | 0.6023 | 0.3942 | 5.5026 | 0.3613 | 0.6456 | 0.7563 | 0.9834 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.5556 | 0.8000 |
| Stackex_chemistry | 0.0447 | 0.0159 | 0.1454 | 0.2070 | 0.0565 | 0.2017 | 0.7983 | 105.5317 | 0.8778 | 0.1525 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0357 | 0.0102 | 0.1546 | 0.2204 | 0.0545 | 0.2788 | 0.6667 | 137.8571 | 0.8081 | 0.2036 | 0.5493 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0543 | 0.0915 | 0.0156 | 0.1159 | 0.8261 | 75.4348 | 0.8596 | 0.1437 | 0.2562 | 0.9893 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0094 | 0.1649 | 0.2302 | 0.0616 | 0.2718 | 0.6910 | 135.1181 | 0.7947 | 0.2115 | 0.7498 | 0.9987 |
| tmc2007-500 | 0.2584 | 0.0671 | 0.5720 | 0.7166 | 0.5985 | 0.6812 | 0.2559 | 4.1045 | 0.1458 | 0.7757 | 0.9585 | 0.9699 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1744 | 0.3474 | 0.4547 | 0.3847 | 0.4530 | 0.4726 | 5.3014 | 0.4819 | 0.5704 | 0.8999 | 0.8998 |
| tox21_RDKit_desc | 0.1062 | 0.1915 | 0.3377 | 0.4665 | 0.3235 | 0.4468 | 0.5103 | 5.5103 | 0.5054 | 0.5515 | 0.9005 | 0.9011 |
| VirusGO | 0.7619 | 0.0556 | 0.8413 | 0.8686 | 0.7005 | 0.8627 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.8034 | 0.9699 |
| VirusPseAAC | 0.5238 | 0.1190 | 0.6349 | 0.6897 | 0.3892 | 0.6809 | 0.2857 | 0.9048 | 0.2333 | 0.7968 | 0.7556 | 0.9379 |
| Water-quality | 0.0000 | 0.3336 | 0.4263 | 0.6046 | 0.4911 | 0.5953 | 0.2736 | 9.2170 | 0.3555 | 0.6840 | 0.7591 | 0.7537 |
| Yahoo_Arts | 0.2043 | 0.0686 | 0.3003 | 0.3653 | 0.2145 | 0.3734 | 0.4993 | 10.2163 | 0.5747 | 0.5043 | 0.9355 | 0.9738 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.1942 | 0.2081 | 0.5549 | 0.6878 | 0.4481 | 0.6756 | 0.2521 | 6.2025 | 0.2346 | 0.7556 | 0.8250 | 0.8836 |
| Yelp | 0.4566 | 0.1819 | 0.6612 | 0.7560 | 0.6758 | 0.7338 | 0.1795 | 1.4008 | 0.2710 | 0.8672 | 0.9082 | 0.9253 |

Table 56: Detailed results for Massive (25%) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5368 | 0.0306 | 0.6222 | 0.6662 | 0.7034 | 0.7049 | 0.3019 | 2.5057 | 0.2421 | 0.7604 | 0.9901 | 0.9904 |
| 3s-bbc1000 | 0.1111 | 0.3056 | 0.1782 | 0.2218 | 0.1886 | 0.2326 | 0.7222 | 3.0000 | 0.6796 | 0.4463 | 0.7972 | 0.7342 |
| 3s-guardian1000 | 0.2903 | 0.2581 | 0.3952 | 0.4489 | 0.2435 | 0.4146 | 0.5161 | 2.3226 | 0.5121 | 0.5927 | 0.7611 | 0.7836 |
| 3s-inter3000 | 0.0000 | 0.3235 | 0.2843 | 0.3985 | 0.1627 | 0.4000 | 0.8235 | 2.2353 | 0.6250 | 0.4539 | 0.5824 | 0.7308 |
| 3s-reuters1000 | 0.1333 | 0.3000 | 0.1611 | 0.1785 | 0.1620 | 0.1818 | 0.9000 | 2.4333 | 0.7733 | 0.3917 | 0.8460 | 0.7717 |
| amphibians | 0.1667 | 0.2698 | 0.6030 | 0.7954 | 0.5543 | 0.7119 | 0.2222 | 2.5000 | 0.1111 | 0.8635 | 0.7422 | 0.8002 |
| bibtex | 0.1919 | 0.0120 | 0.3673 | 0.4610 | 0.3257 | 0.4853 | 0.4324 | 72.3973 | 0.5751 | 0.4301 | 0.9977 | 0.9978 |
| birds | 0.1795 | 0.1026 | 0.3521 | 0.4500 | 0.3456 | 0.4493 | 0.4872 | 7.5385 | 0.4965 | 0.5141 | 0.8467 | 0.9407 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.2104 | 0.3149 | 0.4763 | 0.1431 | 0.4769 | 0.2745 | 151.0588 | 0.6046 | 0.4390 | 0.8310 | 0.9435 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1946 | 0.0408 | 0.1944 | 0.8751 | 115.1089 | 0.9440 | 0.0885 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0138 | 0.1438 | 0.2289 | 0.0265 | 0.2362 | 0.8500 | 163.3540 | 0.9344 | 0.1641 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.3667 | 0.1889 | 0.6111 | 0.7203 | 0.6969 | 0.7119 | 0.2833 | 1.7833 | 0.2442 | 0.8031 | 0.8815 | 0.8905 |
| enron | 0.1871 | 0.0506 | 0.4940 | 0.6238 | 0.1915 | 0.6026 | 0.2573 | 24.0409 | 0.3686 | 0.6122 | 0.8268 | 0.9814 |
| EukaryoteGO | 0.6933 | 0.0184 | 0.7992 | 0.8504 | 0.7326 | 0.8332 | 0.1624 | 0.8518 | 0.0491 | 0.8956 | 0.9929 | 0.9947 |
| EukaryotePseAAC | 0.3063 | 0.0563 | 0.4008 | 0.4503 | 0.1481 | 0.4587 | 0.5380 | 6.1094 | 0.4983 | 0.5282 | 0.9744 | 0.9770 |
| flags | 0.2000 | 0.2500 | 0.6277 | 0.7475 | 0.6022 | 0.7482 | 0.2000 | 3.6500 | 0.2275 | 0.8017 | 0.7059 | 0.7981 |
| foodtruck | 0.2927 | 0.1524 | 0.4722 | 0.6092 | 0.1514 | 0.5098 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8541 | 0.9560 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6369 | 0.9989 |
| GnegativeGO | 0.9286 | 0.0125 | 0.9500 | 0.9607 | 0.8243 | 0.9521 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8742 | 0.9981 |
| GnegativePseAAC | 0.7500 | 0.0527 | 0.7774 | 0.7911 | 0.4722 | 0.7944 | 0.2000 | 0.6214 | 0.1505 | 0.8661 | 0.8573 | 0.9860 |
| GpositiveGO | 0.8846 | 0.0337 | 0.9231 | 0.9422 | 0.8738 | 0.9346 | 0.0385 | 0.0962 | 0.0256 | 0.9760 | 0.9959 | 0.9966 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5661 | 0.7308 | 0.2692 | 0.5577 | 0.2436 | 0.8269 | 0.9672 | 0.9628 |
| HumanGO | 0.7042 | 0.0347 | 0.7811 | 0.8213 | 0.6997 | 0.7940 | 0.1608 | 0.9968 | 0.0957 | 0.8848 | 0.9844 | 0.9879 |
| HumanPseAAC | 0.3087 | 0.0978 | 0.4070 | 0.4568 | 0.1915 | 0.4380 | 0.5370 | 3.3505 | 0.4701 | 0.5840 | 0.9527 | 0.9534 |
| Image | 0.4950 | 0.1820 | 0.6100 | 0.6691 | 0.6257 | 0.6224 | 0.3300 | 1.1300 | 0.3075 | 0.7712 | 0.9145 | 0.9132 |
| IMDB-ECC-F10% | 0.0000 | 0.2682 | 0.1420 | 0.2446 | 0.0917 | 0.2445 | 0.6363 | 12.4130 | 0.7461 | 0.3682 | 0.9937 | 0.9777 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1549 | 0.2640 | 0.0967 | 0.2638 | 0.5866 | 12.6819 | 0.7149 | 0.3875 | 0.9845 | 0.9741 |
| LLOG-F | 0.1639 | 0.0163 | 0.2001 | 0.2184 | 0.0543 | 0.2938 | 0.7459 | 29.1967 | 0.7917 | 0.2705 | 0.5984 | 0.9982 |
| mediamill10% | 0.0903 | 0.0302 | 0.4711 | 0.6328 | 0.0784 | 0.5854 | 0.2399 | 59.4157 | 0.4538 | 0.5384 | 0.8138 | 0.9940 |
| medical | 0.6224 | 0.0116 | 0.7347 | 0.7930 | 0.2981 | 0.7984 | 0.1633 | 5.0612 | 0.1332 | 0.8368 | 0.5520 | 0.9960 |
| Music | 0.2500 | 0.1861 | 0.5764 | 0.7167 | 0.7161 | 0.7197 | 0.3167 | 2.0833 | 0.2491 | 0.7737 | 0.8946 | 0.8898 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.2261 | 0.0592 | 0.4444 | 0.5574 | 0.4408 | 0.5686 | 0.3546 | 7.6497 | 0.4158 | 0.6150 | 0.9770 | 0.9800 |
| PlantGO | 0.6771 | 0.0408 | 0.7309 | 0.7595 | 0.6428 | 0.7729 | 0.2396 | 0.7812 | 0.0829 | 0.8543 | 0.9831 | 0.9828 |
| PlantPseAAC | 0.2449 | 0.1148 | 0.3529 | 0.4114 | 0.2168 | 0.4156 | 0.6224 | 3.0408 | 0.4808 | 0.5443 | 0.9382 | 0.9295 |
| rcv1subset1 | 0.1000 | 0.0316 | 0.3562 | 0.4783 | 0.2658 | 0.4708 | 0.3933 | 37.5533 | 0.4104 | 0.5188 | 0.9255 | 0.9864 |
| REUTERS-K500-EX2 | 0.3282 | 0.0118 | 0.4133 | 0.4619 | 0.2529 | 0.5011 | 0.5069 | 32.4381 | 0.5276 | 0.4950 | 0.7839 | 0.9972 |
| scene | 0.6556 | 0.0885 | 0.7324 | 0.7707 | 0.7684 | 0.7529 | 0.2158 | 0.8589 | 0.1830 | 0.8389 | 0.9669 | 0.9711 |
| sider_CDK_ECFP4 | 0.0141 | 0.2428 | 0.6540 | 0.8004 | 0.6349 | 0.7983 | 0.2465 | 19.3873 | 0.1728 | 0.7791 | 0.5895 | 0.7668 |
| sider_MordredDesc | 0.0141 | 0.2713 | 0.6279 | 0.7815 | 0.6128 | 0.7799 | 0.3099 | 19.8803 | 0.2231 | 0.7418 | 0.5733 | 0.7340 |
| sider_RDKit_desc | 0.0141 | 0.2812 | 0.6303 | 0.7819 | 0.6051 | 0.7773 | 0.1761 | 19.9718 | 0.2076 | 0.7530 | 0.6013 | 0.7518 |
| SLASHDOT-F | 0.4021 | 0.0405 | 0.5118 | 0.5694 | 0.3962 | 0.6021 | 0.4153 | 5.8016 | 0.3819 | 0.6294 | 0.7588 | 0.9858 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0418 | 0.0160 | 0.1498 | 0.2169 | 0.0790 | 0.2145 | 0.7767 | 104.0072 | 0.8617 | 0.1666 | 0.9183 | 0.9982 |
| Stackex_chess | 0.0417 | 0.0103 | 0.1520 | 0.2128 | 0.0598 | 0.2736 | 0.6726 | 136.4702 | 0.8083 | 0.2010 | 0.5491 | 0.9981 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0543 | 0.0851 | 0.0251 | 0.1408 | 0.7826 | 75.4348 | 0.8702 | 0.1470 | 0.2573 | 0.9902 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0603 | 0.0093 | 0.1699 | 0.2345 | 0.0637 | 0.2749 | 0.6935 | 134.1910 | 0.7876 | 0.2138 | 0.7499 | 0.9987 |
| tmc2007-500 | 0.2584 | 0.0671 | 0.5720 | 0.7166 | 0.5985 | 0.6812 | 0.2559 | 4.1045 | 0.1458 | 0.7757 | 0.9585 | 0.9699 |
| tox21_CDK_ECFP4 | 0.1610 | 0.1727 | 0.3555 | 0.4559 | 0.3837 | 0.4574 | 0.4658 | 5.3562 | 0.4903 | 0.5694 | 0.9008 | 0.9017 |
| tox21_RDKit_desc | 0.1130 | 0.1904 | 0.3397 | 0.4693 | 0.3159 | 0.4409 | 0.5137 | 5.4384 | 0.4945 | 0.5533 | 0.8941 | 0.8939 |
| VirusGO | 0.7619 | 0.0476 | 0.8492 | 0.8768 | 0.7283 | 0.8800 | 0.1429 | 0.5714 | 0.0821 | 0.8984 | 0.7972 | 0.9683 |
| VirusPseAAC | 0.2857 | 0.1349 | 0.4921 | 0.5867 | 0.4756 | 0.6383 | 0.3333 | 0.7619 | 0.1762 | 0.7952 | 0.7560 | 0.9274 |
| Water-quality | 0.0094 | 0.3309 | 0.4358 | 0.6126 | 0.5110 | 0.6056 | 0.2642 | 9.2170 | 0.3577 | 0.6943 | 0.7711 | 0.7654 |
| Yahoo_Arts | 0.2043 | 0.0686 | 0.3003 | 0.3653 | 0.2145 | 0.3734 | 0.4993 | 10.2163 | 0.5747 | 0.5043 | 0.9355 | 0.9738 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.1942 | 0.2081 | 0.5549 | 0.6878 | 0.4481 | 0.6756 | 0.2521 | 6.2025 | 0.2346 | 0.7556 | 0.8250 | 0.8836 |
| Yelp | 0.4207 | 0.1930 | 0.6415 | 0.7417 | 0.6800 | 0.7253 | 0.2034 | 1.4008 | 0.2372 | 0.8577 | 0.8762 | 0.8996 |

Table 57: Detailed results for Massive (50%) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4850 | 0.0310 | 0.5652 | 0.6070 | 0.6789 | 0.6829 | 0.3034 | 2.3122 | 0.2220 | 0.7661 | 0.9809 | 0.9812 |
| 3s-bbc1000 | 0.1389 | 0.3102 | 0.2519 | 0.3307 | 0.3212 | 0.3232 | 0.7222 | 2.7222 | 0.6137 | 0.4676 | 0.7817 | 0.7323 |
| 3s-guardian1000 | 0.1613 | 0.3118 | 0.2753 | 0.3454 | 0.2092 | 0.3256 | 0.5806 | 2.2903 | 0.5153 | 0.5766 | 0.7698 | 0.7962 |
| 3s-inter3000 | 0.1765 | 0.2843 | 0.2843 | 0.3447 | 0.1425 | 0.3256 | 0.9412 | 2.5294 | 0.6941 | 0.3775 | 0.5117 | 0.6905 |
| 3s-reuters1000 | 0.0667 | 0.3111 | 0.1056 | 0.1293 | 0.1433 | 0.1515 | 0.9000 | 2.6000 | 0.7933 | 0.3811 | 0.8049 | 0.7589 |
| amphibians | 0.0000 | 0.2857 | 0.4979 | 0.7347 | 0.5171 | 0.6786 | 0.2222 | 2.4444 | 0.1111 | 0.8663 | 0.7513 | 0.8048 |
| bibtex | 0.1784 | 0.0122 | 0.3546 | 0.4449 | 0.3242 | 0.4770 | 0.4054 | 69.4270 | 0.5454 | 0.4550 | 0.9968 | 0.9969 |
| birds | 0.1538 | 0.0985 | 0.3365 | 0.4358 | 0.3295 | 0.4427 | 0.4872 | 7.4615 | 0.4809 | 0.5233 | 0.8487 | 0.9447 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.2058 | 0.3150 | 0.4767 | 0.1410 | 0.4771 | 0.4118 | 151.0980 | 0.6056 | 0.4335 | 0.8276 | 0.9410 |
| corel16k001 | 0.0000 | 0.0575 | 0.1166 | 0.1990 | 0.0326 | 0.1989 | 0.8758 | 114.8925 | 0.9426 | 0.0885 | 0.9988 | 0.9988 |
| Corel5k | 0.0000 | 0.0158 | 0.1426 | 0.2301 | 0.0241 | 0.2347 | 0.8680 | 163.9480 | 0.9466 | 0.1532 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.3167 | 0.1889 | 0.5931 | 0.7229 | 0.6883 | 0.7069 | 0.2667 | 1.7667 | 0.2211 | 0.7995 | 0.8618 | 0.8776 |
| enron | 0.1696 | 0.0512 | 0.4890 | 0.6258 | 0.2076 | 0.5965 | 0.2924 | 24.4094 | 0.3497 | 0.6118 | 0.8255 | 0.9797 |
| EukaryoteGO | 0.6997 | 0.0192 | 0.7988 | 0.8476 | 0.7193 | 0.8252 | 0.1585 | 0.7835 | 0.0426 | 0.8999 | 0.9926 | 0.9947 |
| EukaryotePseAAC | 0.3063 | 0.0563 | 0.4008 | 0.4503 | 0.1481 | 0.4587 | 0.5380 | 6.1094 | 0.4983 | 0.5282 | 0.9744 | 0.9770 |
| flags | 0.2500 | 0.2429 | 0.6519 | 0.7626 | 0.6283 | 0.7571 | 0.2000 | 3.7000 | 0.2567 | 0.7977 | 0.7238 | 0.8088 |
| foodtruck | 0.2927 | 0.1524 | 0.4661 | 0.6027 | 0.1470 | 0.5033 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8509 | 0.9545 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8262 | 0.9556 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7500 | 0.0536 | 0.7810 | 0.7964 | 0.4781 | 0.7917 | 0.2000 | 0.6214 | 0.1505 | 0.8661 | 0.8574 | 0.9860 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9231 | 0.9326 | 0.8658 | 0.9259 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9956 | 0.9965 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5661 | 0.7308 | 0.2692 | 0.5577 | 0.2436 | 0.8269 | 0.9681 | 0.9630 |
| HumanGO | 0.6977 | 0.0356 | 0.7712 | 0.8103 | 0.6978 | 0.7808 | 0.1576 | 0.9614 | 0.0928 | 0.8865 | 0.9842 | 0.9879 |
| HumanPseAAC | 0.3087 | 0.0978 | 0.4070 | 0.4568 | 0.1915 | 0.4380 | 0.5370 | 3.3505 | 0.4701 | 0.5840 | 0.9527 | 0.9534 |
| Image | 0.4450 | 0.1890 | 0.5908 | 0.6628 | 0.6205 | 0.6182 | 0.3250 | 1.1050 | 0.2879 | 0.7775 | 0.9067 | 0.9038 |
| IMDB-ECC-F10% | 0.0000 | 0.2688 | 0.1413 | 0.2434 | 0.0881 | 0.2434 | 0.6363 | 12.3700 | 0.7401 | 0.3695 | 0.9929 | 0.9770 |
| IMDB-F10% | 0.0000 | 0.2659 | 0.1537 | 0.2617 | 0.1055 | 0.2616 | 0.6015 | 12.8509 | 0.7285 | 0.3788 | 0.9876 | 0.9754 |
| LLOG-F | 0.1557 | 0.0168 | 0.1919 | 0.2134 | 0.0528 | 0.2870 | 0.7295 | 27.8607 | 0.7700 | 0.2865 | 0.5981 | 0.9979 |
| mediamill10% | 0.0689 | 0.0324 | 0.4513 | 0.6194 | 0.0751 | 0.5687 | 0.2755 | 59.0333 | 0.4507 | 0.5301 | 0.8100 | 0.9927 |
| medical | 0.6224 | 0.0113 | 0.7500 | 0.8120 | 0.3215 | 0.8077 | 0.1735 | 5.1122 | 0.1333 | 0.8367 | 0.5520 | 0.9971 |
| Music | 0.3000 | 0.1889 | 0.5931 | 0.7156 | 0.7299 | 0.7258 | 0.2333 | 2.0000 | 0.2448 | 0.8094 | 0.8983 | 0.8980 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.1960 | 0.0622 | 0.4256 | 0.5477 | 0.4290 | 0.5606 | 0.3453 | 6.6425 | 0.3462 | 0.6467 | 0.9662 | 0.9701 |
| PlantGO | 0.6875 | 0.0408 | 0.7326 | 0.7569 | 0.6431 | 0.7707 | 0.2396 | 0.9688 | 0.0966 | 0.8458 | 0.9905 | 0.9850 |
| PlantPseAAC | 0.2551 | 0.1165 | 0.3571 | 0.4121 | 0.2162 | 0.4069 | 0.6327 | 3.1224 | 0.5004 | 0.5330 | 0.9338 | 0.9250 |
| rcv1subset1 | 0.1000 | 0.0316 | 0.3562 | 0.4783 | 0.2658 | 0.4708 | 0.3933 | 37.5533 | 0.4104 | 0.5188 | 0.9255 | 0.9864 |
| REUTERS-K500-EX2 | 0.3213 | 0.0118 | 0.3998 | 0.4456 | 0.2403 | 0.4936 | 0.5137 | 34.0017 | 0.5459 | 0.4810 | 0.7837 | 0.9971 |
| scene | 0.6349 | 0.0913 | 0.7282 | 0.7749 | 0.7671 | 0.7509 | 0.2075 | 0.8050 | 0.1681 | 0.8467 | 0.9618 | 0.9668 |
| sider_CDK_ECFP4 | 0.0070 | 0.2394 | 0.6497 | 0.7983 | 0.6327 | 0.7983 | 0.1338 | 19.1268 | 0.1575 | 0.7898 | 0.5897 | 0.7792 |
| sider_MordredDesc | 0.0141 | 0.2624 | 0.6370 | 0.7877 | 0.6171 | 0.7868 | 0.3169 | 19.9577 | 0.2201 | 0.7387 | 0.5584 | 0.7306 |
| sider_RDKit_desc | 0.0141 | 0.2866 | 0.6281 | 0.7798 | 0.6056 | 0.7749 | 0.3099 | 19.9718 | 0.1992 | 0.7555 | 0.5714 | 0.7541 |
| SLASHDOT-F | 0.4074 | 0.0411 | 0.5118 | 0.5676 | 0.3799 | 0.5976 | 0.4127 | 5.6005 | 0.3703 | 0.6347 | 0.7578 | 0.9850 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0418 | 0.0162 | 0.1500 | 0.2189 | 0.0759 | 0.2146 | 0.7767 | 104.5865 | 0.8617 | 0.1664 | 0.9182 | 0.9982 |
| Stackex_chess | 0.0476 | 0.0102 | 0.1673 | 0.2301 | 0.0602 | 0.2868 | 0.6786 | 136.5774 | 0.8009 | 0.2075 | 0.5492 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0205 | 0.0652 | 0.1030 | 0.0240 | 0.1471 | 0.8261 | 75.4348 | 0.8810 | 0.1330 | 0.2564 | 0.9906 |
| Stackex_cooking | 0.0628 | 0.0055 | 0.2125 | 0.2944 | 0.1115 | 0.3330 | 0.6068 | 218.9101 | 0.7416 | 0.2564 | 0.9240 | 0.9989 |
| Stackex_philosophy | 0.0578 | 0.0094 | 0.1725 | 0.2406 | 0.0646 | 0.2791 | 0.6960 | 134.5905 | 0.7861 | 0.2132 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2587 | 0.0668 | 0.5708 | 0.7153 | 0.5997 | 0.6807 | 0.2713 | 4.1413 | 0.1498 | 0.7676 | 0.9589 | 0.9695 |
| tox21_CDK_ECFP4 | 0.1336 | 0.1858 | 0.3447 | 0.4559 | 0.3913 | 0.4552 | 0.4658 | 5.4007 | 0.4956 | 0.5664 | 0.8994 | 0.9002 |
| tox21_RDKit_desc | 0.1301 | 0.1858 | 0.3355 | 0.4566 | 0.3126 | 0.4364 | 0.5068 | 5.4726 | 0.4954 | 0.5536 | 0.9000 | 0.9004 |
| VirusGO | 0.7143 | 0.0714 | 0.8095 | 0.8491 | 0.6534 | 0.8163 | 0.0952 | 0.4762 | 0.0684 | 0.9286 | 0.7988 | 0.9739 |
| VirusPseAAC | 0.2381 | 0.1429 | 0.4524 | 0.5532 | 0.3618 | 0.6087 | 0.5714 | 1.1429 | 0.2619 | 0.6619 | 0.7291 | 0.8991 |
| Water-quality | 0.0094 | 0.3376 | 0.4249 | 0.6011 | 0.4974 | 0.5956 | 0.3208 | 9.3679 | 0.3570 | 0.6861 | 0.7688 | 0.7603 |
| Yahoo_Arts | 0.2043 | 0.0686 | 0.3003 | 0.3653 | 0.2145 | 0.3734 | 0.4993 | 10.2163 | 0.5747 | 0.5043 | 0.9355 | 0.9738 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.1942 | 0.2075 | 0.5546 | 0.6852 | 0.4434 | 0.6723 | 0.2314 | 6.1736 | 0.2254 | 0.7701 | 0.8215 | 0.8813 |
| Yelp | 0.3998 | 0.1954 | 0.6364 | 0.7442 | 0.6694 | 0.7258 | 0.2104 | 1.4078 | 0.2327 | 0.8534 | 0.8678 | 0.8922 |

Table 58: Detailed results for Massive (1%) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4295 | 0.0361 | 0.5489 | 0.6110 | 0.6610 | 0.6605 | 0.3024 | 2.2993 | 0.2158 | 0.7677 | 0.9805 | 0.9808 |
| 3s-bbc1000 | 0.1111 | 0.3009 | 0.2616 | 0.3489 | 0.3025 | 0.3434 | 0.7500 | 2.7778 | 0.6130 | 0.4469 | 0.7916 | 0.7465 |
| 3s-guardian1000 | 0.1613 | 0.3226 | 0.3253 | 0.4070 | 0.2102 | 0.3617 | 0.5484 | 2.3226 | 0.5218 | 0.5847 | 0.8151 | 0.8208 |
| 3s-inter3000 | 0.0000 | 0.5588 | 0.2176 | 0.3443 | 0.2329 | 0.3448 | 0.9412 | 2.4706 | 0.6824 | 0.3814 | 0.5116 | 0.6713 |
| 3s-reuters1000 | 0.0667 | 0.3167 | 0.1067 | 0.1301 | 0.1706 | 0.1493 | 0.9000 | 2.7000 | 0.8467 | 0.3683 | 0.8405 | 0.7717 |
| amphibians | 0.0000 | 0.3492 | 0.4869 | 0.7045 | 0.5469 | 0.6716 | 0.2222 | 2.7222 | 0.1713 | 0.8478 | 0.6869 | 0.7788 |
| bibtex | 0.1770 | 0.0122 | 0.3606 | 0.4579 | 0.3152 | 0.4811 | 0.4054 | 69.1932 | 0.5442 | 0.4543 | 0.9969 | 0.9969 |
| birds | 0.1282 | 0.1107 | 0.3434 | 0.4582 | 0.3602 | 0.4533 | 0.5128 | 7.3333 | 0.4849 | 0.5099 | 0.8424 | 0.9384 |
| bookmarks10% | 0.1879 | 0.0092 | 0.2288 | 0.2573 | 0.1279 | 0.2735 | 0.7107 | 103.4715 | 0.7434 | 0.2740 | 0.9843 | 0.9987 |
| CAL500 | 0.0000 | 0.2085 | 0.3165 | 0.4785 | 0.1440 | 0.4780 | 0.2941 | 151.0588 | 0.6120 | 0.4401 | 0.8286 | 0.9454 |
| corel16k001 | 0.0000 | 0.0575 | 0.1175 | 0.2007 | 0.0360 | 0.2004 | 0.8533 | 114.3689 | 0.9355 | 0.0964 | 0.9986 | 0.9986 |
| Corel5k | 0.0000 | 0.0180 | 0.1368 | 0.2222 | 0.0232 | 0.2261 | 0.8580 | 164.5280 | 0.9430 | 0.1581 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0820 | 0.1011 | 0.1829 | 0.0770 | 0.1835 | 0.5376 | 906.8260 | 0.8539 | 0.1454 | 0.9933 | 0.9985 |
| emotions | 0.2833 | 0.2000 | 0.5736 | 0.7031 | 0.6782 | 0.7000 | 0.2500 | 1.7000 | 0.2091 | 0.8142 | 0.8810 | 0.8850 |
| enron | 0.1754 | 0.0503 | 0.4988 | 0.6353 | 0.1773 | 0.6035 | 0.3041 | 24.4269 | 0.3524 | 0.6075 | 0.8253 | 0.9798 |
| EukaryoteGO | 0.6482 | 0.0218 | 0.7901 | 0.8588 | 0.7304 | 0.8158 | 0.1701 | 0.8892 | 0.0493 | 0.8914 | 0.9926 | 0.9947 |
| EukaryotePseAAC | 0.1120 | 0.0755 | 0.3140 | 0.4150 | 0.1387 | 0.4158 | 0.5894 | 6.8430 | 0.5442 | 0.4851 | 0.9727 | 0.9758 |
| flags | 0.2500 | 0.2571 | 0.6252 | 0.7403 | 0.5960 | 0.7391 | 0.3000 | 3.6500 | 0.2767 | 0.7802 | 0.7143 | 0.8115 |
| foodtruck | 0.2683 | 0.1565 | 0.4560 | 0.6023 | 0.1484 | 0.5032 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8554 | 0.9574 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9143 | 0.0125 | 0.9500 | 0.9678 | 0.8251 | 0.9527 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9981 |
| GnegativePseAAC | 0.7571 | 0.0554 | 0.7881 | 0.8036 | 0.4927 | 0.7905 | 0.2000 | 0.6500 | 0.1628 | 0.8634 | 0.8583 | 0.9875 |
| GpositiveGO | 0.9038 | 0.0337 | 0.9327 | 0.9469 | 0.8750 | 0.9358 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9968 | 0.9965 |
| GpositivePseAAC | 0.7115 | 0.1442 | 0.7212 | 0.7259 | 0.5544 | 0.7170 | 0.2692 | 0.5577 | 0.2436 | 0.8269 | 0.9676 | 0.9629 |
| HumanGO | 0.6174 | 0.0404 | 0.7572 | 0.8255 | 0.6994 | 0.7783 | 0.1543 | 0.9389 | 0.0919 | 0.8890 | 0.9845 | 0.9881 |
| HumanPseAAC | 0.2894 | 0.0994 | 0.4001 | 0.4568 | 0.1924 | 0.4384 | 0.5563 | 3.6720 | 0.4806 | 0.5649 | 0.9513 | 0.9546 |
| Image | 0.3350 | 0.2240 | 0.5467 | 0.6484 | 0.6015 | 0.5912 | 0.3300 | 1.1350 | 0.2988 | 0.7708 | 0.9066 | 0.9042 |
| IMDB-ECC-F10% | 0.0000 | 0.1450 | 0.1958 | 0.3174 | 0.0564 | 0.3109 | 0.9486 | 15.8753 | 0.9971 | 0.1562 | 0.9998 | 0.9998 |
| IMDB-F10% | 0.0041 | 0.1146 | 0.2479 | 0.3716 | 0.0538 | 0.3623 | 0.9536 | 16.1491 | 0.9949 | 0.1607 | 0.9997 | 0.9997 |
| LLOG-F | 0.1639 | 0.0167 | 0.1960 | 0.2150 | 0.0518 | 0.2817 | 0.7459 | 29.2295 | 0.7917 | 0.2703 | 0.5980 | 0.9977 |
| mediamill10% | 0.0879 | 0.0297 | 0.4756 | 0.6393 | 0.0855 | 0.5892 | 0.2660 | 59.2874 | 0.4523 | 0.5317 | 0.8136 | 0.9940 |
| medical | 0.5816 | 0.0134 | 0.7134 | 0.7805 | 0.3039 | 0.7757 | 0.1837 | 5.1224 | 0.1430 | 0.8292 | 0.5526 | 0.9973 |
| Music | 0.2667 | 0.1889 | 0.5833 | 0.7250 | 0.7082 | 0.7167 | 0.3500 | 2.0667 | 0.2666 | 0.7676 | 0.9160 | 0.9074 |
| NUS-WIDE-bow10% | 0.0343 | 0.0381 | 0.2415 | 0.3781 | 0.0444 | 0.3531 | 0.5576 | 35.6651 | 0.6345 | 0.4074 | 0.8816 | 0.9926 |
| NUS-WIDE-cVLADplus10% | 0.0233 | 0.0337 | 0.2852 | 0.4233 | 0.0682 | 0.4109 | 0.5029 | 33.5338 | 0.5875 | 0.4495 | 0.8813 | 0.9921 |
| OHSUMED-F | 0.1795 | 0.0657 | 0.4300 | 0.5621 | 0.4332 | 0.5634 | 0.3489 | 6.6633 | 0.3495 | 0.6441 | 0.9666 | 0.9708 |
| PlantGO | 0.6979 | 0.0399 | 0.7708 | 0.8051 | 0.6693 | 0.7909 | 0.2396 | 1.2500 | 0.1380 | 0.8291 | 0.9901 | 0.9844 |
| PlantPseAAC | 0.2449 | 0.1156 | 0.3716 | 0.4372 | 0.2253 | 0.4333 | 0.6224 | 2.9694 | 0.4711 | 0.5452 | 0.9365 | 0.9264 |
| rcv1subset1 | 0.0450 | 0.0310 | 0.3197 | 0.4566 | 0.2104 | 0.4571 | 0.4217 | 48.2267 | 0.5303 | 0.4395 | 0.9287 | 0.9885 |
| REUTERS-K500-EX2 | 0.3265 | 0.0120 | 0.4156 | 0.4681 | 0.2483 | 0.5007 | 0.5086 | 32.1151 | 0.5246 | 0.4942 | 0.7836 | 0.9970 |
| scene | 0.5602 | 0.1030 | 0.7012 | 0.7709 | 0.7531 | 0.7381 | 0.2241 | 0.8091 | 0.1656 | 0.8391 | 0.9613 | 0.9672 |
| sider_CDK_ECFP4 | 0.0141 | 0.2363 | 0.6521 | 0.8005 | 0.6331 | 0.7999 | 0.2746 | 19.0282 | 0.1618 | 0.7906 | 0.5960 | 0.7769 |
| sider_MordredDesc | 0.0141 | 0.2624 | 0.6277 | 0.7861 | 0.6095 | 0.7828 | 0.2676 | 19.6479 | 0.1971 | 0.7492 | 0.5882 | 0.7513 |
| sider_RDKit_desc | 0.0141 | 0.2820 | 0.6288 | 0.7808 | 0.6003 | 0.7761 | 0.3099 | 20.4085 | 0.2425 | 0.7207 | 0.5915 | 0.7282 |
| SLASHDOT-F | 0.3942 | 0.0434 | 0.5120 | 0.5749 | 0.3974 | 0.5921 | 0.4339 | 6.1138 | 0.4054 | 0.6110 | 0.7592 | 0.9858 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0418 | 0.0163 | 0.1496 | 0.2187 | 0.0705 | 0.2125 | 0.7723 | 104.4193 | 0.8615 | 0.1681 | 0.9182 | 0.9981 |
| Stackex_chess | 0.0417 | 0.0101 | 0.1654 | 0.2320 | 0.0601 | 0.2847 | 0.6429 | 136.7798 | 0.7998 | 0.2152 | 0.5494 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0233 | 0.0504 | 0.0858 | 0.0154 | 0.1081 | 0.8261 | 78.3043 | 0.8955 | 0.1243 | 0.2566 | 0.9904 |
| Stackex_cooking | 0.0686 | 0.0056 | 0.2117 | 0.2922 | 0.1131 | 0.3272 | 0.6048 | 220.0319 | 0.7479 | 0.2545 | 0.9240 | 0.9989 |
| Stackex_philosophy | 0.0553 | 0.0121 | 0.1974 | 0.2812 | 0.0663 | 0.2768 | 0.6859 | 135.2161 | 0.7917 | 0.2140 | 0.7499 | 0.9987 |
| tmc2007-500 | 0.2510 | 0.0692 | 0.5712 | 0.7191 | 0.6050 | 0.6797 | 0.2360 | 4.1255 | 0.1478 | 0.7802 | 0.9588 | 0.9700 |
| tox21_CDK_ECFP4 | 0.1301 | 0.1875 | 0.3536 | 0.4706 | 0.3903 | 0.4654 | 0.4658 | 5.3801 | 0.5010 | 0.5706 | 0.9046 | 0.9054 |
| tox21_RDKit_desc | 0.0445 | 0.2286 | 0.2977 | 0.4551 | 0.2990 | 0.4200 | 0.5137 | 5.5171 | 0.5106 | 0.5463 | 0.8979 | 0.8993 |
| VirusGO | 0.7619 | 0.0556 | 0.8333 | 0.8611 | 0.6949 | 0.8571 | 0.0952 | 0.4762 | 0.0726 | 0.9246 | 0.8140 | 0.9826 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3677 | 0.6667 | 0.3333 | 0.7619 | 0.1762 | 0.7952 | 0.7293 | 0.9211 |
| Water-quality | 0.0000 | 0.3396 | 0.4303 | 0.6094 | 0.5097 | 0.6013 | 0.3113 | 9.1792 | 0.3559 | 0.6851 | 0.7780 | 0.7708 |
| Yahoo_Arts | 0.1175 | 0.0916 | 0.2736 | 0.3702 | 0.1870 | 0.3354 | 0.5340 | 10.6302 | 0.6023 | 0.4825 | 0.9327 | 0.9705 |
| Yahoo_Business | 0.5428 | 0.0298 | 0.7159 | 0.8160 | 0.3150 | 0.7089 | 0.1034 | 3.1756 | 0.2187 | 0.8802 | 0.8528 | 0.9933 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0830 | 0.2377 | 0.3485 | 0.1783 | 0.3306 | 0.5636 | 9.4480 | 0.5987 | 0.5135 | 0.8884 | 0.9785 |
| Yahoo_Entertainment | 0.3229 | 0.0708 | 0.4132 | 0.4747 | 0.2797 | 0.4564 | 0.4721 | 4.4650 | 0.4705 | 0.6020 | 0.9728 | 0.9676 |
| Yahoo_Health | 0.3333 | 0.0483 | 0.5033 | 0.6006 | 0.2232 | 0.5374 | 0.3681 | 6.7296 | 0.3683 | 0.6596 | 0.8246 | 0.9811 |
| Yahoo_Recreation | 0.0998 | 0.1039 | 0.2648 | 0.3531 | 0.2885 | 0.3336 | 0.5456 | 6.8940 | 0.6215 | 0.5354 | 0.9682 | 0.9695 |
| Yahoo_Reference | 0.4234 | 0.0362 | 0.4981 | 0.5470 | 0.1399 | 0.5034 | 0.4197 | 6.0212 | 0.4437 | 0.6210 | 0.8064 | 0.9870 |
| Yahoo_Science | 0.1602 | 0.0598 | 0.2588 | 0.3265 | 0.1382 | 0.2758 | 0.6874 | 14.6594 | 0.7091 | 0.3764 | 0.9558 | 0.9817 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1240 | 0.2293 | 0.5446 | 0.6912 | 0.4543 | 0.6701 | 0.2314 | 6.1777 | 0.2291 | 0.7641 | 0.8249 | 0.8822 |
| Yelp | 0.3898 | 0.2032 | 0.6431 | 0.7594 | 0.6752 | 0.7292 | 0.2154 | 1.4058 | 0.2445 | 0.8538 | 0.8817 | 0.9030 |

Table 59: Detailed results for Massive (5%) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4243 | 0.0370 | 0.5471 | 0.6117 | 0.6582 | 0.6569 | 0.3086 | 2.2401 | 0.2171 | 0.7654 | 0.9797 | 0.9803 |
| 3s-bbc1000 | 0.1944 | 0.2824 | 0.2917 | 0.3543 | 0.3205 | 0.3441 | 0.7222 | 2.7778 | 0.6387 | 0.4620 | 0.8102 | 0.7558 |
| 3s-guardian1000 | 0.1935 | 0.2903 | 0.3516 | 0.4532 | 0.3052 | 0.4130 | 0.4839 | 2.0323 | 0.4540 | 0.6250 | 0.8287 | 0.8329 |
| 3s-inter3000 | 0.0000 | 0.4510 | 0.2471 | 0.3825 | 0.2534 | 0.3784 | 0.8235 | 2.5294 | 0.8471 | 0.4412 | 0.6563 | 0.8294 |
| 3s-reuters1000 | 0.1000 | 0.3056 | 0.1528 | 0.1847 | 0.2043 | 0.2029 | 0.9000 | 2.5667 | 0.7733 | 0.3828 | 0.8404 | 0.7644 |
| amphibians | 0.1111 | 0.2619 | 0.5758 | 0.7549 | 0.6151 | 0.7442 | 0.2222 | 2.5556 | 0.1111 | 0.8543 | 0.7323 | 0.7963 |
| bibtex | 0.1757 | 0.0122 | 0.3630 | 0.4613 | 0.3271 | 0.4857 | 0.3946 | 68.8149 | 0.5423 | 0.4574 | 0.9971 | 0.9971 |
| birds | 0.1538 | 0.1093 | 0.3678 | 0.4823 | 0.3646 | 0.4636 | 0.4872 | 7.8462 | 0.5158 | 0.5135 | 0.8484 | 0.9450 |
| bookmarks10% | 0.1891 | 0.0088 | 0.2195 | 0.2428 | 0.1118 | 0.2655 | 0.7369 | 105.1412 | 0.7645 | 0.2550 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.2102 | 0.3135 | 0.4755 | 0.1422 | 0.4757 | 0.1373 | 151.0980 | 0.6165 | 0.4403 | 0.8274 | 0.9427 |
| corel16k001 | 0.0000 | 0.0631 | 0.1117 | 0.1935 | 0.0311 | 0.1930 | 0.8671 | 114.8039 | 0.9389 | 0.0920 | 0.9987 | 0.9987 |
| Corel5k | 0.0000 | 0.0181 | 0.1369 | 0.2223 | 0.0243 | 0.2267 | 0.8600 | 162.8740 | 0.9419 | 0.1581 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0454 | 0.1387 | 0.2427 | 0.0890 | 0.2440 | 0.5482 | 906.3238 | 0.8450 | 0.1516 | 0.9927 | 0.9977 |
| emotions | 0.3167 | 0.1972 | 0.6014 | 0.7209 | 0.7018 | 0.7102 | 0.3000 | 1.7500 | 0.2340 | 0.7901 | 0.8662 | 0.8797 |
| enron | 0.1754 | 0.0501 | 0.4931 | 0.6298 | 0.1764 | 0.6045 | 0.2281 | 24.3041 | 0.3499 | 0.6212 | 0.8263 | 0.9804 |
| EukaryoteGO | 0.6611 | 0.0209 | 0.7937 | 0.8574 | 0.7285 | 0.8211 | 0.1662 | 0.8312 | 0.0449 | 0.8956 | 0.9926 | 0.9948 |
| EukaryotePseAAC | 0.1197 | 0.0737 | 0.3373 | 0.4379 | 0.1469 | 0.4392 | 0.5393 | 6.2780 | 0.5101 | 0.5224 | 0.9749 | 0.9775 |
| flags | 0.2000 | 0.2500 | 0.6361 | 0.7552 | 0.6054 | 0.7482 | 0.2000 | 3.6000 | 0.2442 | 0.8013 | 0.7143 | 0.8189 |
| foodtruck | 0.2683 | 0.1585 | 0.4560 | 0.6023 | 0.1470 | 0.5000 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8519 | 0.9559 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0149 | 0.2537 | 0.0012 | 0.9876 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8742 | 0.9981 |
| GnegativePseAAC | 0.7429 | 0.0563 | 0.7810 | 0.8000 | 0.4790 | 0.7864 | 0.1929 | 0.6286 | 0.1628 | 0.8667 | 0.8593 | 0.9869 |
| GpositiveGO | 0.9038 | 0.0337 | 0.9327 | 0.9469 | 0.8750 | 0.9358 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.6923 | 0.1442 | 0.7308 | 0.7495 | 0.5605 | 0.7273 | 0.2692 | 0.5385 | 0.2436 | 0.8301 | 0.9692 | 0.9643 |
| HumanGO | 0.6077 | 0.0418 | 0.7484 | 0.8161 | 0.6946 | 0.7708 | 0.1672 | 0.9550 | 0.0933 | 0.8821 | 0.9842 | 0.9877 |
| HumanPseAAC | 0.2990 | 0.0994 | 0.4113 | 0.4678 | 0.1923 | 0.4470 | 0.5338 | 3.3859 | 0.4777 | 0.5839 | 0.9532 | 0.9541 |
| Image | 0.3850 | 0.2070 | 0.5767 | 0.6723 | 0.6190 | 0.6131 | 0.3350 | 1.1300 | 0.3013 | 0.7698 | 0.9178 | 0.9176 |
| IMDB-ECC-F10% | 0.0000 | 0.2689 | 0.1418 | 0.2445 | 0.0899 | 0.2441 | 0.6331 | 12.3302 | 0.7312 | 0.3752 | 0.9888 | 0.9756 |
| IMDB-F10% | 0.0000 | 0.2908 | 0.1527 | 0.2641 | 0.0933 | 0.2623 | 0.6056 | 13.1425 | 0.7492 | 0.3664 | 0.9925 | 0.9777 |
| LLOG-F | 0.1639 | 0.0163 | 0.1960 | 0.2150 | 0.0523 | 0.2871 | 0.7377 | 28.1230 | 0.7794 | 0.2837 | 0.5984 | 0.9982 |
| mediamill10% | 0.0855 | 0.0299 | 0.4782 | 0.6406 | 0.0728 | 0.5918 | 0.2518 | 59.0831 | 0.4468 | 0.5373 | 0.8136 | 0.9940 |
| medical | 0.6327 | 0.0109 | 0.7619 | 0.8249 | 0.3226 | 0.8154 | 0.1735 | 5.0612 | 0.1275 | 0.8305 | 0.5520 | 0.9960 |
| Music | 0.2833 | 0.1833 | 0.5917 | 0.7278 | 0.7203 | 0.7250 | 0.2333 | 2.1000 | 0.2431 | 0.7965 | 0.8899 | 0.8882 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.1394 | 0.0317 | 0.3377 | 0.4455 | 0.0670 | 0.4091 | 0.5181 | 33.5818 | 0.5788 | 0.4495 | 0.8815 | 0.9923 |
| OHSUMED-F | 0.2283 | 0.0584 | 0.4432 | 0.5542 | 0.4509 | 0.5682 | 0.3553 | 7.6892 | 0.4133 | 0.6154 | 0.9768 | 0.9798 |
| PlantGO | 0.6979 | 0.0399 | 0.7656 | 0.7974 | 0.6683 | 0.7890 | 0.2083 | 1.0729 | 0.1067 | 0.8569 | 0.9903 | 0.9858 |
| PlantPseAAC | 0.2653 | 0.1165 | 0.3716 | 0.4292 | 0.2137 | 0.4170 | 0.6429 | 3.0306 | 0.4901 | 0.5326 | 0.9395 | 0.9327 |
| rcv1subset1 | 0.1017 | 0.0315 | 0.3605 | 0.4876 | 0.2623 | 0.4817 | 0.4417 | 37.7800 | 0.4218 | 0.5022 | 0.9263 | 0.9868 |
| REUTERS-K500-EX2 | 0.3230 | 0.0119 | 0.4025 | 0.4487 | 0.2392 | 0.4936 | 0.5206 | 33.4313 | 0.5448 | 0.4804 | 0.7838 | 0.9972 |
| scene | 0.5685 | 0.1010 | 0.7040 | 0.7713 | 0.7572 | 0.7374 | 0.2199 | 0.8589 | 0.1772 | 0.8367 | 0.9614 | 0.9682 |
| sider_CDK_ECFP4 | 0.0141 | 0.2400 | 0.6565 | 0.8017 | 0.6280 | 0.7993 | 0.2465 | 19.2254 | 0.1611 | 0.7957 | 0.5878 | 0.7766 |
| sider_MordredDesc | 0.0141 | 0.2663 | 0.6291 | 0.7837 | 0.6077 | 0.7820 | 0.0986 | 19.7394 | 0.1847 | 0.7802 | 0.5900 | 0.7685 |
| sider_RDKit_desc | 0.0141 | 0.2788 | 0.6308 | 0.7827 | 0.6013 | 0.7777 | 0.1761 | 19.9718 | 0.2005 | 0.7501 | 0.5851 | 0.7590 |
| SLASHDOT-F | 0.3995 | 0.0418 | 0.5096 | 0.5704 | 0.3760 | 0.5953 | 0.4180 | 5.8492 | 0.3884 | 0.6245 | 0.7583 | 0.9852 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0432 | 0.0161 | 0.1517 | 0.2196 | 0.0753 | 0.2164 | 0.7752 | 104.6037 | 0.8602 | 0.1684 | 0.9183 | 0.9983 |
| Stackex_chess | 0.0417 | 0.0101 | 0.1654 | 0.2347 | 0.0664 | 0.2899 | 0.6607 | 136.7500 | 0.8018 | 0.2107 | 0.5494 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0591 | 0.0967 | 0.0237 | 0.1408 | 0.7826 | 75.4348 | 0.8591 | 0.1501 | 0.2552 | 0.9880 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2029 | 0.2744 | 0.1115 | 0.3209 | 0.6357 | 222.6213 | 0.7694 | 0.2353 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0553 | 0.0120 | 0.1970 | 0.2811 | 0.0637 | 0.2747 | 0.6935 | 134.9975 | 0.7906 | 0.2130 | 0.7499 | 0.9987 |
| tmc2007-500 | 0.2469 | 0.0692 | 0.5718 | 0.7214 | 0.6052 | 0.6811 | 0.2339 | 4.0486 | 0.1445 | 0.7875 | 0.9592 | 0.9703 |
| tox21_CDK_ECFP4 | 0.1336 | 0.1875 | 0.3538 | 0.4750 | 0.3881 | 0.4680 | 0.4760 | 5.4692 | 0.5080 | 0.5608 | 0.9035 | 0.9047 |
| tox21_RDKit_desc | 0.0377 | 0.2300 | 0.2916 | 0.4468 | 0.3069 | 0.4185 | 0.5137 | 5.4315 | 0.4962 | 0.5526 | 0.8938 | 0.8935 |
| VirusGO | 0.7619 | 0.0635 | 0.8333 | 0.8611 | 0.6711 | 0.8400 | 0.0952 | 0.5714 | 0.0874 | 0.9183 | 0.7972 | 0.9715 |
| VirusPseAAC | 0.3333 | 0.1349 | 0.5000 | 0.5811 | 0.3543 | 0.6222 | 0.5238 | 1.0476 | 0.2429 | 0.6881 | 0.7461 | 0.8953 |
| Water-quality | 0.0094 | 0.3363 | 0.4376 | 0.6160 | 0.5086 | 0.6062 | 0.2736 | 9.1509 | 0.3553 | 0.6940 | 0.7692 | 0.7610 |
| Yahoo_Arts | 0.1909 | 0.0682 | 0.2891 | 0.3548 | 0.2100 | 0.3668 | 0.4993 | 10.0895 | 0.5572 | 0.5099 | 0.9341 | 0.9702 |
| Yahoo_Business | 0.5695 | 0.0271 | 0.7277 | 0.8179 | 0.3221 | 0.7253 | 0.0918 | 3.1720 | 0.2226 | 0.8869 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.4017 | 0.0416 | 0.5562 | 0.6456 | 0.2427 | 0.5888 | 0.3138 | 6.4365 | 0.3454 | 0.6951 | 0.8285 | 0.9848 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1322 | 0.2287 | 0.5436 | 0.6883 | 0.4485 | 0.6684 | 0.2397 | 6.2066 | 0.2297 | 0.7570 | 0.8223 | 0.8819 |
| Yelp | 0.3629 | 0.2054 | 0.6332 | 0.7523 | 0.6763 | 0.7287 | 0.2014 | 1.3938 | 0.2281 | 0.8597 | 0.8702 | 0.8948 |

Table 60: Detailed results for Massive (10%) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5073 | 0.0343 | 0.6156 | 0.6735 | 0.6889 | 0.6882 | 0.3013 | 2.4969 | 0.2422 | 0.7602 | 0.9904 | 0.9906 |
| 3s-bbc1000 | 0.1389 | 0.3380 | 0.2713 | 0.3648 | 0.3118 | 0.3423 | 0.6667 | 2.5833 | 0.6088 | 0.5056 | 0.8222 | 0.7771 |
| 3s-guardian1000 | 0.1935 | 0.2957 | 0.3086 | 0.3780 | 0.2560 | 0.3529 | 0.4839 | 2.0968 | 0.4790 | 0.6263 | 0.8581 | 0.8556 |
| 3s-inter3000 | 0.0000 | 0.5490 | 0.2382 | 0.3802 | 0.3281 | 0.3778 | 0.8824 | 2.1765 | 0.5662 | 0.4343 | 0.5299 | 0.7070 |
| 3s-reuters1000 | 0.0667 | 0.3667 | 0.0944 | 0.1106 | 0.1006 | 0.1081 | 0.9333 | 2.6667 | 0.7800 | 0.3594 | 0.7991 | 0.7331 |
| amphibians | 0.1111 | 0.2460 | 0.6054 | 0.7847 | 0.6087 | 0.7520 | 0.2222 | 2.5000 | 0.1111 | 0.8593 | 0.7629 | 0.8205 |
| bibtex | 0.1878 | 0.0120 | 0.3724 | 0.4665 | 0.3332 | 0.4902 | 0.4392 | 72.0892 | 0.5734 | 0.4287 | 0.9977 | 0.9977 |
| birds | 0.1282 | 0.1147 | 0.3319 | 0.4455 | 0.3492 | 0.4295 | 0.5385 | 7.3846 | 0.5038 | 0.4965 | 0.8445 | 0.9413 |
| bookmarks10% | 0.1891 | 0.0088 | 0.2195 | 0.2428 | 0.1118 | 0.2655 | 0.7369 | 105.1412 | 0.7645 | 0.2550 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.2107 | 0.3182 | 0.4805 | 0.1465 | 0.4806 | 0.3333 | 151.1176 | 0.5655 | 0.4423 | 0.8160 | 0.9335 |
| corel16k001 | 0.0000 | 0.0457 | 0.1311 | 0.2193 | 0.0336 | 0.2188 | 0.9477 | 117.8010 | 0.9764 | 0.0577 | 0.9996 | 0.9996 |
| Corel5k | 0.0000 | 0.0180 | 0.1384 | 0.2248 | 0.0274 | 0.2291 | 0.8480 | 163.0860 | 0.9351 | 0.1636 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0454 | 0.1387 | 0.2427 | 0.0890 | 0.2440 | 0.5482 | 906.3238 | 0.8450 | 0.1516 | 0.9927 | 0.9977 |
| emotions | 0.3500 | 0.1944 | 0.6083 | 0.7347 | 0.7020 | 0.7107 | 0.2667 | 1.8833 | 0.2536 | 0.7939 | 0.8879 | 0.8955 |
| enron | 0.1462 | 0.0521 | 0.4796 | 0.6192 | 0.1782 | 0.5931 | 0.3216 | 24.1345 | 0.3680 | 0.6036 | 0.8249 | 0.9804 |
| EukaryoteGO | 0.6611 | 0.0203 | 0.7960 | 0.8596 | 0.7575 | 0.8256 | 0.1688 | 0.8789 | 0.0524 | 0.8922 | 0.9933 | 0.9950 |
| EukaryotePseAAC | 0.1197 | 0.0737 | 0.3373 | 0.4379 | 0.1469 | 0.4392 | 0.5393 | 6.2780 | 0.5101 | 0.5224 | 0.9749 | 0.9775 |
| flags | 0.3000 | 0.2214 | 0.6652 | 0.7813 | 0.6339 | 0.7737 | 0.3500 | 3.7000 | 0.3083 | 0.7649 | 0.7336 | 0.8218 |
| foodtruck | 0.2927 | 0.1585 | 0.4539 | 0.5830 | 0.1349 | 0.4868 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8560 | 0.9574 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0116 | 0.9536 | 0.9696 | 0.8268 | 0.9562 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7714 | 0.0500 | 0.8131 | 0.8339 | 0.5033 | 0.8121 | 0.1857 | 0.6143 | 0.1470 | 0.8736 | 0.8635 | 0.9905 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0962 | 0.1538 | 0.0449 | 0.9471 | 0.9956 | 0.9948 |
| GpositivePseAAC | 0.7308 | 0.1202 | 0.7500 | 0.7595 | 0.5833 | 0.7619 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9841 | 0.9758 |
| HumanGO | 0.6431 | 0.0395 | 0.7618 | 0.8213 | 0.6965 | 0.7795 | 0.1576 | 1.0772 | 0.1016 | 0.8830 | 0.9848 | 0.9884 |
| HumanPseAAC | 0.2990 | 0.0994 | 0.4113 | 0.4678 | 0.1923 | 0.4470 | 0.5338 | 3.3859 | 0.4777 | 0.5839 | 0.9532 | 0.9541 |
| Image | 0.4300 | 0.1890 | 0.6025 | 0.6876 | 0.6468 | 0.6358 | 0.3100 | 1.0150 | 0.2821 | 0.7955 | 0.9331 | 0.9294 |
| IMDB-ECC-F10% | 0.0000 | 0.2672 | 0.1409 | 0.2428 | 0.0922 | 0.2429 | 0.6331 | 12.3302 | 0.7315 | 0.3754 | 0.9885 | 0.9751 |
| IMDB-F10% | 0.0000 | 0.2650 | 0.1544 | 0.2628 | 0.0951 | 0.2629 | 0.5915 | 12.6819 | 0.7184 | 0.3855 | 0.9861 | 0.9746 |
| LLOG-F | 0.1639 | 0.0168 | 0.1960 | 0.2166 | 0.0521 | 0.2870 | 0.7459 | 28.7131 | 0.7876 | 0.2742 | 0.5981 | 0.9978 |
| mediamill10% | 0.0736 | 0.0303 | 0.4723 | 0.6362 | 0.0895 | 0.5932 | 0.2518 | 58.7981 | 0.4434 | 0.5418 | 0.8127 | 0.9937 |
| medical | 0.6633 | 0.0107 | 0.7772 | 0.8345 | 0.3051 | 0.8185 | 0.1837 | 5.0204 | 0.1331 | 0.8342 | 0.5526 | 0.9976 |
| Music | 0.2833 | 0.1833 | 0.6069 | 0.7414 | 0.7343 | 0.7360 | 0.1667 | 2.0167 | 0.2562 | 0.8273 | 0.9145 | 0.9069 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0379 | 0.2690 | 0.4005 | 0.0571 | 0.3850 | 0.5595 | 35.5385 | 0.6571 | 0.4051 | 0.8836 | 0.9950 |
| OHSUMED-F | 0.2283 | 0.0584 | 0.4432 | 0.5542 | 0.4509 | 0.5682 | 0.3553 | 7.6892 | 0.4133 | 0.6154 | 0.9768 | 0.9798 |
| PlantGO | 0.6979 | 0.0399 | 0.7708 | 0.8051 | 0.6695 | 0.7909 | 0.2188 | 1.0833 | 0.1077 | 0.8501 | 0.9884 | 0.9843 |
| PlantPseAAC | 0.2449 | 0.1190 | 0.3520 | 0.4103 | 0.2173 | 0.4017 | 0.6122 | 3.1939 | 0.4989 | 0.5367 | 0.9410 | 0.9333 |
| rcv1subset1 | 0.1017 | 0.0315 | 0.3605 | 0.4876 | 0.2623 | 0.4817 | 0.4417 | 37.7800 | 0.4218 | 0.5022 | 0.9263 | 0.9868 |
| REUTERS-K500-EX2 | 0.3299 | 0.0119 | 0.4133 | 0.4631 | 0.2446 | 0.5007 | 0.5069 | 32.3299 | 0.5319 | 0.4912 | 0.7839 | 0.9972 |
| scene | 0.6017 | 0.0927 | 0.7358 | 0.8025 | 0.7777 | 0.7633 | 0.2033 | 0.8008 | 0.1622 | 0.8503 | 0.9707 | 0.9737 |
| sider_CDK_ECFP4 | 0.0070 | 0.2483 | 0.6479 | 0.7960 | 0.6241 | 0.7941 | 0.2746 | 19.3592 | 0.1585 | 0.7977 | 0.5827 | 0.7843 |
| sider_MordredDesc | 0.0141 | 0.2640 | 0.6275 | 0.7821 | 0.6158 | 0.7825 | 0.3169 | 19.7042 | 0.2028 | 0.7524 | 0.5873 | 0.7476 |
| sider_RDKit_desc | 0.0141 | 0.2799 | 0.6305 | 0.7822 | 0.6049 | 0.7774 | 0.2676 | 20.0986 | 0.2221 | 0.7267 | 0.5809 | 0.7340 |
| SLASHDOT-F | 0.4101 | 0.0417 | 0.5202 | 0.5802 | 0.3992 | 0.5988 | 0.3968 | 5.3624 | 0.3521 | 0.6489 | 0.7560 | 0.9830 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0115 | 0.0200 | 0.1366 | 0.2100 | 0.0677 | 0.2109 | 0.7896 | 105.6110 | 0.8749 | 0.1556 | 0.9188 | 0.9988 |
| Stackex_chess | 0.0357 | 0.0105 | 0.1515 | 0.2163 | 0.0532 | 0.2701 | 0.6786 | 137.8869 | 0.8103 | 0.2021 | 0.5491 | 0.9981 |
| Stackex_coffee | 0.0000 | 0.0212 | 0.0543 | 0.0915 | 0.0159 | 0.1176 | 0.7826 | 73.7826 | 0.8377 | 0.1619 | 0.2559 | 0.9893 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2029 | 0.2744 | 0.1115 | 0.3209 | 0.6357 | 222.6213 | 0.7694 | 0.2353 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0123 | 0.1935 | 0.2790 | 0.0607 | 0.2690 | 0.6809 | 134.8744 | 0.7895 | 0.2165 | 0.7497 | 0.9986 |
| tmc2007-500 | 0.2469 | 0.0692 | 0.5718 | 0.7214 | 0.6052 | 0.6811 | 0.2339 | 4.0486 | 0.1445 | 0.7875 | 0.9592 | 0.9703 |
| tox21_CDK_ECFP4 | 0.1233 | 0.1889 | 0.3505 | 0.4726 | 0.3904 | 0.4635 | 0.4658 | 5.3493 | 0.4885 | 0.5701 | 0.8999 | 0.9008 |
| tox21_RDKit_desc | 0.1164 | 0.1924 | 0.3413 | 0.4716 | 0.3280 | 0.4484 | 0.5000 | 5.5137 | 0.5053 | 0.5543 | 0.9018 | 0.9030 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7926 | 0.9632 |
| VirusPseAAC | 0.3810 | 0.1429 | 0.5635 | 0.6494 | 0.3709 | 0.6400 | 0.2857 | 0.8571 | 0.2048 | 0.8048 | 0.7459 | 0.9253 |
| Water-quality | 0.0000 | 0.4104 | 0.4111 | 0.5865 | 0.5203 | 0.5866 | 0.3113 | 9.1698 | 0.3628 | 0.6839 | 0.7621 | 0.7582 |
| Yahoo_Arts | 0.1909 | 0.0682 | 0.2891 | 0.3548 | 0.2100 | 0.3668 | 0.4993 | 10.0895 | 0.5572 | 0.5099 | 0.9341 | 0.9702 |
| Yahoo_Business | 0.5695 | 0.0271 | 0.7277 | 0.8179 | 0.3221 | 0.7253 | 0.0918 | 3.1720 | 0.2226 | 0.8869 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.4017 | 0.0416 | 0.5562 | 0.6456 | 0.2427 | 0.5888 | 0.3138 | 6.4365 | 0.3454 | 0.6951 | 0.8285 | 0.9848 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1570 | 0.2196 | 0.5548 | 0.7002 | 0.4597 | 0.6776 | 0.2521 | 6.1818 | 0.2340 | 0.7549 | 0.8234 | 0.8832 |
| Yelp | 0.4008 | 0.1898 | 0.6485 | 0.7569 | 0.6858 | 0.7387 | 0.2004 | 1.3659 | 0.2260 | 0.8633 | 0.8806 | 0.9033 |

Table 61: Detailed results for Massive (25%) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5073 | 0.0343 | 0.6156 | 0.6735 | 0.6889 | 0.6882 | 0.3013 | 2.4969 | 0.2422 | 0.7602 | 0.9904 | 0.9906 |
| 3s-bbc1000 | 0.1667 | 0.2917 | 0.2477 | 0.2925 | 0.2766 | 0.2921 | 0.6667 | 2.8333 | 0.6713 | 0.4779 | 0.8472 | 0.7877 |
| 3s-guardian1000 | 0.2258 | 0.2796 | 0.3505 | 0.4245 | 0.2898 | 0.3810 | 0.5806 | 2.0968 | 0.5282 | 0.5874 | 0.8336 | 0.8476 |
| 3s-inter3000 | 0.0000 | 0.6569 | 0.2118 | 0.3495 | 0.2829 | 0.3495 | 0.9412 | 2.7059 | 0.8000 | 0.3657 | 0.5472 | 0.7421 |
| 3s-reuters1000 | 0.0667 | 0.3667 | 0.1167 | 0.1474 | 0.1677 | 0.1538 | 0.9333 | 2.8667 | 0.8200 | 0.3394 | 0.8009 | 0.7314 |
| amphibians | 0.0556 | 0.3095 | 0.5451 | 0.7427 | 0.5383 | 0.6977 | 0.2222 | 2.6111 | 0.1046 | 0.8515 | 0.7224 | 0.7942 |
| bibtex | 0.1878 | 0.0120 | 0.3724 | 0.4665 | 0.3332 | 0.4902 | 0.4392 | 72.0892 | 0.5734 | 0.4287 | 0.9977 | 0.9977 |
| birds | 0.1538 | 0.1107 | 0.3571 | 0.4774 | 0.3509 | 0.4533 | 0.4872 | 7.9744 | 0.5222 | 0.5097 | 0.8428 | 0.9405 |
| bookmarks10% | 0.1891 | 0.0088 | 0.2195 | 0.2428 | 0.1118 | 0.2655 | 0.7369 | 105.1412 | 0.7645 | 0.2550 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.2049 | 0.3192 | 0.4817 | 0.1433 | 0.4815 | 0.3333 | 151.0588 | 0.6169 | 0.4328 | 0.8302 | 0.9429 |
| corel16k001 | 0.0000 | 0.0630 | 0.1123 | 0.1944 | 0.0373 | 0.1941 | 0.8729 | 114.7618 | 0.9397 | 0.0905 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0181 | 0.1355 | 0.2202 | 0.0218 | 0.2242 | 0.8560 | 165.0860 | 0.9460 | 0.1551 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0454 | 0.1387 | 0.2427 | 0.0890 | 0.2440 | 0.5482 | 906.3238 | 0.8450 | 0.1516 | 0.9927 | 0.9977 |
| emotions | 0.2833 | 0.2028 | 0.5778 | 0.7099 | 0.6642 | 0.6920 | 0.3167 | 1.8167 | 0.2082 | 0.7787 | 0.8653 | 0.8680 |
| enron | 0.1520 | 0.0500 | 0.4888 | 0.6327 | 0.1888 | 0.6051 | 0.2339 | 23.7193 | 0.3369 | 0.6311 | 0.8264 | 0.9802 |
| EukaryoteGO | 0.6469 | 0.0211 | 0.7893 | 0.8577 | 0.7370 | 0.8204 | 0.1778 | 0.9111 | 0.0541 | 0.8858 | 0.9927 | 0.9947 |
| EukaryotePseAAC | 0.1197 | 0.0737 | 0.3373 | 0.4379 | 0.1469 | 0.4392 | 0.5393 | 6.2780 | 0.5101 | 0.5224 | 0.9749 | 0.9775 |
| flags | 0.2000 | 0.2571 | 0.6344 | 0.7534 | 0.6020 | 0.7465 | 0.2500 | 3.5000 | 0.2367 | 0.7983 | 0.6755 | 0.7989 |
| foodtruck | 0.2683 | 0.1545 | 0.4600 | 0.6040 | 0.1500 | 0.5065 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8478 | 0.9529 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0125 | 0.9500 | 0.9643 | 0.8247 | 0.9524 | 0.0357 | 0.1143 | 0.0209 | 0.9780 | 0.8739 | 0.9977 |
| GnegativePseAAC | 0.7357 | 0.0598 | 0.7774 | 0.7982 | 0.4699 | 0.7759 | 0.2000 | 0.6143 | 0.1454 | 0.8667 | 0.8581 | 0.9860 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9231 | 0.9419 | 0.8333 | 0.9273 | 0.0769 | 0.1346 | 0.0385 | 0.9567 | 0.9968 | 0.9957 |
| GpositivePseAAC | 0.6923 | 0.1490 | 0.7115 | 0.7210 | 0.5482 | 0.7103 | 0.2692 | 0.5577 | 0.2436 | 0.8269 | 0.9662 | 0.9615 |
| HumanGO | 0.6109 | 0.0411 | 0.7543 | 0.8239 | 0.6920 | 0.7754 | 0.1576 | 0.9293 | 0.0917 | 0.8874 | 0.9843 | 0.9881 |
| HumanPseAAC | 0.2990 | 0.0994 | 0.4113 | 0.4678 | 0.1923 | 0.4470 | 0.5338 | 3.3859 | 0.4777 | 0.5839 | 0.9532 | 0.9541 |
| Image | 0.3650 | 0.2160 | 0.5650 | 0.6615 | 0.6110 | 0.6044 | 0.3150 | 1.1000 | 0.2946 | 0.7822 | 0.9182 | 0.9155 |
| IMDB-ECC-F10% | 0.0000 | 0.2686 | 0.1421 | 0.2448 | 0.0916 | 0.2446 | 0.6321 | 12.1667 | 0.7158 | 0.3819 | 0.9857 | 0.9738 |
| IMDB-F10% | 0.0000 | 0.2908 | 0.1529 | 0.2643 | 0.1100 | 0.2625 | 0.6007 | 12.8492 | 0.7282 | 0.3784 | 0.9865 | 0.9756 |
| LLOG-F | 0.1721 | 0.0165 | 0.2056 | 0.2255 | 0.0547 | 0.2977 | 0.7377 | 27.8443 | 0.7632 | 0.2886 | 0.5980 | 0.9979 |
| mediamill10% | 0.0784 | 0.0302 | 0.4701 | 0.6315 | 0.0851 | 0.5853 | 0.1758 | 60.5487 | 0.4587 | 0.5393 | 0.8139 | 0.9941 |
| medical | 0.6429 | 0.0116 | 0.7551 | 0.8123 | 0.3036 | 0.8031 | 0.1939 | 5.0918 | 0.1339 | 0.8223 | 0.5520 | 0.9973 |
| Music | 0.2667 | 0.2000 | 0.5875 | 0.7207 | 0.7193 | 0.7165 | 0.3333 | 2.1333 | 0.2630 | 0.7665 | 0.8840 | 0.8812 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0379 | 0.2690 | 0.4005 | 0.0571 | 0.3850 | 0.5595 | 35.5385 | 0.6571 | 0.4051 | 0.8836 | 0.9950 |
| OHSUMED-F | 0.2283 | 0.0584 | 0.4432 | 0.5542 | 0.4509 | 0.5682 | 0.3553 | 7.6892 | 0.4133 | 0.6154 | 0.9768 | 0.9798 |
| PlantGO | 0.6979 | 0.0391 | 0.7760 | 0.8128 | 0.6695 | 0.7964 | 0.2292 | 0.9583 | 0.0957 | 0.8510 | 0.9899 | 0.9844 |
| PlantPseAAC | 0.2245 | 0.1190 | 0.3614 | 0.4320 | 0.2230 | 0.4262 | 0.6020 | 2.9286 | 0.4693 | 0.5574 | 0.9360 | 0.9287 |
| rcv1subset1 | 0.1017 | 0.0315 | 0.3605 | 0.4876 | 0.2623 | 0.4817 | 0.4417 | 37.7800 | 0.4218 | 0.5022 | 0.9263 | 0.9868 |
| REUTERS-K500-EX2 | 0.3265 | 0.0119 | 0.4118 | 0.4603 | 0.2480 | 0.4993 | 0.5172 | 32.0103 | 0.5322 | 0.4889 | 0.7839 | 0.9973 |
| scene | 0.5726 | 0.1003 | 0.7095 | 0.7773 | 0.7593 | 0.7443 | 0.2199 | 0.8382 | 0.1730 | 0.8387 | 0.9644 | 0.9693 |
| sider_CDK_ECFP4 | 0.0211 | 0.2394 | 0.6515 | 0.7995 | 0.6358 | 0.7987 | 0.1338 | 19.5211 | 0.1798 | 0.7800 | 0.5792 | 0.7649 |
| sider_MordredDesc | 0.0141 | 0.2640 | 0.6275 | 0.7821 | 0.6158 | 0.7825 | 0.3169 | 19.7042 | 0.2028 | 0.7524 | 0.5873 | 0.7476 |
| sider_RDKit_desc | 0.0141 | 0.2806 | 0.6303 | 0.7818 | 0.6003 | 0.7769 | 0.2958 | 20.2324 | 0.2110 | 0.7366 | 0.5922 | 0.7496 |
| SLASHDOT-F | 0.3968 | 0.0417 | 0.5127 | 0.5745 | 0.3910 | 0.5988 | 0.4153 | 5.6746 | 0.3781 | 0.6309 | 0.7573 | 0.9838 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.6667 | 0.8200 |
| Stackex_chemistry | 0.0432 | 0.0161 | 0.1482 | 0.2137 | 0.0654 | 0.2112 | 0.7810 | 104.5879 | 0.8667 | 0.1638 | 0.9183 | 0.9982 |
| Stackex_chess | 0.0417 | 0.0101 | 0.1611 | 0.2255 | 0.0603 | 0.2799 | 0.6726 | 138.3988 | 0.8099 | 0.2034 | 0.5495 | 0.9985 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0609 | 0.0996 | 0.0208 | 0.1408 | 0.7826 | 75.4348 | 0.8809 | 0.1377 | 0.2568 | 0.9912 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2029 | 0.2744 | 0.1115 | 0.3209 | 0.6357 | 222.6213 | 0.7694 | 0.2353 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0121 | 0.1933 | 0.2781 | 0.0617 | 0.2721 | 0.6859 | 135.1080 | 0.7936 | 0.2150 | 0.7498 | 0.9987 |
| tmc2007-500 | 0.2469 | 0.0692 | 0.5718 | 0.7214 | 0.6052 | 0.6811 | 0.2339 | 4.0486 | 0.1445 | 0.7875 | 0.9592 | 0.9703 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1844 | 0.3574 | 0.4755 | 0.3991 | 0.4679 | 0.4658 | 5.3253 | 0.4937 | 0.5688 | 0.9008 | 0.9019 |
| tox21_RDKit_desc | 0.0479 | 0.2292 | 0.3002 | 0.4554 | 0.3058 | 0.4202 | 0.4966 | 5.4452 | 0.4927 | 0.5591 | 0.8966 | 0.8973 |
| VirusGO | 0.7619 | 0.0556 | 0.8333 | 0.8611 | 0.6949 | 0.8571 | 0.0952 | 0.5238 | 0.0779 | 0.9206 | 0.8024 | 0.9766 |
| VirusPseAAC | 0.2381 | 0.1508 | 0.4524 | 0.5532 | 0.3635 | 0.5957 | 0.5238 | 1.0000 | 0.2143 | 0.6976 | 0.7250 | 0.8995 |
| Water-quality | 0.0000 | 0.3457 | 0.4353 | 0.6118 | 0.5061 | 0.6032 | 0.3302 | 9.2075 | 0.3601 | 0.6822 | 0.7705 | 0.7661 |
| Yahoo_Arts | 0.1909 | 0.0682 | 0.2891 | 0.3548 | 0.2100 | 0.3668 | 0.4993 | 10.0895 | 0.5572 | 0.5099 | 0.9341 | 0.9702 |
| Yahoo_Business | 0.5695 | 0.0271 | 0.7277 | 0.8179 | 0.3221 | 0.7253 | 0.0918 | 3.1720 | 0.2226 | 0.8869 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.4017 | 0.0416 | 0.5562 | 0.6456 | 0.2427 | 0.5888 | 0.3138 | 6.4365 | 0.3454 | 0.6951 | 0.8285 | 0.9848 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1240 | 0.2258 | 0.5477 | 0.6934 | 0.4562 | 0.6727 | 0.2438 | 6.1529 | 0.2236 | 0.7649 | 0.8203 | 0.8810 |
| Yelp | 0.3539 | 0.2072 | 0.6335 | 0.7584 | 0.6788 | 0.7296 | 0.2064 | 1.3779 | 0.2261 | 0.8601 | 0.8768 | 0.8987 |

Table 62: Detailed results for Massive (50%) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4429 | 0.0358 | 0.5545 | 0.6143 | 0.6601 | 0.6621 | 0.2988 | 2.3055 | 0.2213 | 0.7683 | 0.9808 | 0.9810 |
| 3s-bbc1000 | 0.1389 | 0.2778 | 0.2662 | 0.3349 | 0.3588 | 0.3478 | 0.6944 | 2.8889 | 0.6683 | 0.4690 | 0.8550 | 0.7960 |
| 3s-guardian1000 | 0.1935 | 0.3172 | 0.3694 | 0.4830 | 0.2718 | 0.4040 | 0.4839 | 2.1935 | 0.4637 | 0.6121 | 0.7521 | 0.7676 |
| 3s-inter3000 | 0.0000 | 0.5490 | 0.2265 | 0.3666 | 0.2478 | 0.3636 | 0.8824 | 2.2353 | 0.7176 | 0.4343 | 0.5911 | 0.7335 |
| 3s-reuters1000 | 0.1000 | 0.3222 | 0.1944 | 0.2452 | 0.2607 | 0.2564 | 0.9000 | 2.4000 | 0.7342 | 0.4011 | 0.8341 | 0.7612 |
| amphibians | 0.0556 | 0.2540 | 0.5623 | 0.7622 | 0.5590 | 0.7333 | 0.3889 | 2.6111 | 0.1250 | 0.7987 | 0.7512 | 0.8056 |
| bibtex | 0.1811 | 0.0123 | 0.3616 | 0.4571 | 0.3178 | 0.4775 | 0.4081 | 69.9824 | 0.5485 | 0.4522 | 0.9970 | 0.9970 |
| birds | 0.1282 | 0.1039 | 0.3302 | 0.4448 | 0.3395 | 0.4460 | 0.5385 | 7.6154 | 0.5222 | 0.4935 | 0.8392 | 0.9373 |
| bookmarks10% | 0.1891 | 0.0088 | 0.2195 | 0.2428 | 0.1118 | 0.2655 | 0.7369 | 105.1412 | 0.7645 | 0.2550 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.2057 | 0.3136 | 0.4749 | 0.1411 | 0.4748 | 0.2941 | 151.0588 | 0.6258 | 0.4372 | 0.8345 | 0.9478 |
| corel16k001 | 0.0000 | 0.0575 | 0.1173 | 0.2004 | 0.0375 | 0.2002 | 0.8569 | 114.5686 | 0.9373 | 0.0943 | 0.9987 | 0.9987 |
| Corel5k | 0.0000 | 0.0180 | 0.1377 | 0.2238 | 0.0248 | 0.2277 | 0.8480 | 163.8940 | 0.9392 | 0.1599 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0454 | 0.1387 | 0.2427 | 0.0890 | 0.2440 | 0.5482 | 906.3238 | 0.8450 | 0.1516 | 0.9927 | 0.9977 |
| emotions | 0.2833 | 0.2083 | 0.5819 | 0.7125 | 0.6914 | 0.6964 | 0.2667 | 1.6500 | 0.2092 | 0.8211 | 0.8700 | 0.8855 |
| enron | 0.1696 | 0.0504 | 0.4945 | 0.6369 | 0.1867 | 0.6050 | 0.2632 | 23.7427 | 0.3505 | 0.6203 | 0.8273 | 0.9816 |
| EukaryoteGO | 0.6405 | 0.0221 | 0.7855 | 0.8553 | 0.7437 | 0.8138 | 0.1714 | 0.7874 | 0.0424 | 0.8947 | 0.9927 | 0.9946 |
| EukaryotePseAAC | 0.1197 | 0.0737 | 0.3373 | 0.4379 | 0.1469 | 0.4392 | 0.5393 | 6.2780 | 0.5101 | 0.5224 | 0.9749 | 0.9775 |
| flags | 0.2500 | 0.2357 | 0.6450 | 0.7585 | 0.6153 | 0.7591 | 0.2000 | 3.5000 | 0.2142 | 0.8133 | 0.7186 | 0.8121 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1447 | 0.5000 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8504 | 0.9545 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0299 | 0.2537 | 0.0015 | 0.9838 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9214 | 0.0134 | 0.9464 | 0.9589 | 0.8210 | 0.9488 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8737 | 0.9980 |
| GnegativePseAAC | 0.7286 | 0.0598 | 0.7738 | 0.7963 | 0.4792 | 0.7774 | 0.1929 | 0.6214 | 0.1495 | 0.8694 | 0.8579 | 0.9867 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9231 | 0.9326 | 0.8658 | 0.9259 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9979 | 0.9970 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5662 | 0.7308 | 0.2692 | 0.5385 | 0.2436 | 0.8301 | 0.9687 | 0.9633 |
| HumanGO | 0.6334 | 0.0397 | 0.7604 | 0.8232 | 0.6963 | 0.7802 | 0.1543 | 1.0193 | 0.0940 | 0.8867 | 0.9843 | 0.9879 |
| HumanPseAAC | 0.2990 | 0.0994 | 0.4113 | 0.4678 | 0.1923 | 0.4470 | 0.5338 | 3.3859 | 0.4777 | 0.5839 | 0.9532 | 0.9541 |
| Image | 0.3850 | 0.2110 | 0.5725 | 0.6664 | 0.6141 | 0.6085 | 0.3050 | 1.1000 | 0.2908 | 0.7845 | 0.9146 | 0.9123 |
| IMDB-ECC-F10% | 0.0000 | 0.2691 | 0.1417 | 0.2443 | 0.0883 | 0.2440 | 0.6310 | 12.3491 | 0.7276 | 0.3776 | 0.9877 | 0.9755 |
| IMDB-F10% | 0.0000 | 0.2908 | 0.1529 | 0.2643 | 0.1105 | 0.2625 | 0.6023 | 12.9470 | 0.7360 | 0.3739 | 0.9897 | 0.9763 |
| LLOG-F | 0.1721 | 0.0165 | 0.2015 | 0.2192 | 0.0521 | 0.2911 | 0.7377 | 28.6967 | 0.7794 | 0.2806 | 0.5984 | 0.9980 |
| mediamill10% | 0.0641 | 0.0325 | 0.4515 | 0.6226 | 0.0787 | 0.5722 | 0.2375 | 58.3112 | 0.4416 | 0.5377 | 0.8103 | 0.9927 |
| medical | 0.6327 | 0.0122 | 0.7537 | 0.8167 | 0.3062 | 0.7955 | 0.1633 | 4.9796 | 0.1235 | 0.8409 | 0.5517 | 0.9964 |
| Music | 0.2833 | 0.1917 | 0.6014 | 0.7406 | 0.7259 | 0.7251 | 0.2333 | 2.1333 | 0.2624 | 0.7990 | 0.8903 | 0.8877 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.1475 | 0.0320 | 0.3350 | 0.4396 | 0.0580 | 0.4035 | 0.5076 | 33.9619 | 0.5884 | 0.4468 | 0.8813 | 0.9921 |
| OHSUMED-F | 0.2283 | 0.0584 | 0.4432 | 0.5542 | 0.4509 | 0.5682 | 0.3553 | 7.6892 | 0.4133 | 0.6154 | 0.9768 | 0.9798 |
| PlantGO | 0.6771 | 0.0399 | 0.7604 | 0.7996 | 0.6719 | 0.7909 | 0.2396 | 1.0625 | 0.1001 | 0.8432 | 0.9898 | 0.9849 |
| PlantPseAAC | 0.2449 | 0.1148 | 0.3631 | 0.4276 | 0.2221 | 0.4255 | 0.6224 | 3.0714 | 0.4989 | 0.5384 | 0.9347 | 0.9271 |
| rcv1subset1 | 0.1017 | 0.0315 | 0.3605 | 0.4876 | 0.2623 | 0.4817 | 0.4417 | 37.7800 | 0.4218 | 0.5022 | 0.9263 | 0.9868 |
| REUTERS-K500-EX2 | 0.3247 | 0.0119 | 0.4120 | 0.4635 | 0.2461 | 0.5007 | 0.5155 | 31.5550 | 0.5258 | 0.4936 | 0.7837 | 0.9971 |
| scene | 0.5602 | 0.1010 | 0.7061 | 0.7773 | 0.7588 | 0.7439 | 0.2199 | 0.8091 | 0.1656 | 0.8418 | 0.9634 | 0.9684 |
| sider_CDK_ECFP4 | 0.0141 | 0.2431 | 0.6502 | 0.7975 | 0.6273 | 0.7964 | 0.3239 | 19.5634 | 0.1843 | 0.7591 | 0.5905 | 0.7622 |
| sider_MordredDesc | 0.0141 | 0.2647 | 0.6301 | 0.7834 | 0.6132 | 0.7830 | 0.1479 | 19.8239 | 0.1973 | 0.7669 | 0.5853 | 0.7539 |
| sider_RDKit_desc | 0.0141 | 0.2809 | 0.6308 | 0.7827 | 0.6031 | 0.7773 | 0.1761 | 20.2042 | 0.2461 | 0.7118 | 0.5857 | 0.7161 |
| SLASHDOT-F | 0.4048 | 0.0408 | 0.5102 | 0.5678 | 0.3938 | 0.5998 | 0.4180 | 5.9233 | 0.3908 | 0.6241 | 0.7583 | 0.9853 |
| solar_flare-L3 | 0.4000 | 0.2667 | 0.6000 | 0.6857 | 0.4571 | 0.6667 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0432 | 0.0162 | 0.1516 | 0.2207 | 0.0725 | 0.2158 | 0.7695 | 104.7853 | 0.8597 | 0.1686 | 0.9182 | 0.9981 |
| Stackex_chess | 0.0417 | 0.0102 | 0.1584 | 0.2242 | 0.0623 | 0.2783 | 0.6786 | 138.9524 | 0.8137 | 0.1989 | 0.5492 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0219 | 0.0580 | 0.0975 | 0.0224 | 0.1389 | 0.8261 | 75.5217 | 0.8811 | 0.1294 | 0.2545 | 0.9896 |
| Stackex_cooking | 0.0570 | 0.0057 | 0.2076 | 0.2927 | 0.1098 | 0.3255 | 0.6097 | 220.1082 | 0.7439 | 0.2541 | 0.9239 | 0.9988 |
| Stackex_philosophy | 0.0503 | 0.0121 | 0.1953 | 0.2816 | 0.0628 | 0.2776 | 0.6884 | 134.2864 | 0.7859 | 0.2170 | 0.7497 | 0.9986 |
| tmc2007-500 | 0.2469 | 0.0692 | 0.5718 | 0.7214 | 0.6052 | 0.6811 | 0.2339 | 4.0486 | 0.1445 | 0.7875 | 0.9592 | 0.9703 |
| tox21_CDK_ECFP4 | 0.1301 | 0.1898 | 0.3519 | 0.4714 | 0.3872 | 0.4650 | 0.4589 | 5.3082 | 0.4839 | 0.5744 | 0.9019 | 0.9030 |
| tox21_RDKit_desc | 0.0411 | 0.2275 | 0.2965 | 0.4504 | 0.2989 | 0.4187 | 0.5103 | 5.4144 | 0.4934 | 0.5545 | 0.8978 | 0.8977 |
| VirusGO | 0.7619 | 0.0635 | 0.8333 | 0.8611 | 0.6711 | 0.8400 | 0.1905 | 0.5238 | 0.0786 | 0.8944 | 0.7908 | 0.9580 |
| VirusPseAAC | 0.3333 | 0.1349 | 0.5714 | 0.6773 | 0.3983 | 0.6792 | 0.3333 | 0.8095 | 0.1762 | 0.7873 | 0.7310 | 0.9206 |
| Water-quality | 0.0000 | 0.3383 | 0.4374 | 0.6128 | 0.5056 | 0.6047 | 0.2736 | 9.1792 | 0.3537 | 0.6920 | 0.7708 | 0.7648 |
| Yahoo_Arts | 0.1909 | 0.0682 | 0.2891 | 0.3548 | 0.2100 | 0.3668 | 0.4993 | 10.0895 | 0.5572 | 0.5099 | 0.9341 | 0.9702 |
| Yahoo_Business | 0.5695 | 0.0271 | 0.7277 | 0.8179 | 0.3221 | 0.7253 | 0.0918 | 3.1720 | 0.2226 | 0.8869 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.4017 | 0.0416 | 0.5562 | 0.6456 | 0.2427 | 0.5888 | 0.3138 | 6.4365 | 0.3454 | 0.6951 | 0.8285 | 0.9848 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1157 | 0.2279 | 0.5435 | 0.6898 | 0.4526 | 0.6692 | 0.2686 | 6.1612 | 0.2276 | 0.7601 | 0.8218 | 0.8823 |
| Yelp | 0.3739 | 0.2002 | 0.6395 | 0.7556 | 0.6834 | 0.7323 | 0.2124 | 1.4048 | 0.2309 | 0.8547 | 0.8733 | 0.8953 |

Table 63: Detailed results for Massive (1%) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3549 | 0.0370 | 0.3711 | 0.3800 | 0.4846 | 0.5126 | 0.3119 | 1.3870 | 0.0707 | 0.7853 | 0.9111 | 0.9085 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4722 | 1.3333 | 0.2166 | 0.7011 | 0.7981 | 0.7923 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5484 | 1.8065 | 0.3065 | 0.6255 | 0.6627 | 0.7264 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7647 | 1.7059 | 0.3235 | 0.5255 | 0.3746 | 0.6687 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7667 | 2.0000 | 0.3883 | 0.4822 | 0.6989 | 0.5965 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1667 | 2.2222 | 0.0370 | 0.9213 | 0.6672 | 0.7984 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4359 | 5.2051 | 0.1794 | 0.6011 | 0.7455 | 0.8300 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4510 | 136.7059 | 0.2210 | 0.3919 | 0.5189 | 0.7799 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0224 | 0.1524 | 0.2497 | 0.0366 | 0.2508 | 0.7860 | 125.8920 | 0.1512 | 0.1682 | 0.4803 | 0.8515 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 1.5833 | 0.1291 | 0.8273 | 0.8453 | 0.8764 |
| enron | 0.1053 | 0.0558 | 0.2443 | 0.3403 | 0.0581 | 0.3342 | 0.2749 | 13.1462 | 0.0882 | 0.6742 | 0.6463 | 0.9026 |
| EukaryoteGO | 0.6585 | 0.0215 | 0.7601 | 0.8104 | 0.5303 | 0.7993 | 0.2281 | 0.8131 | 0.0280 | 0.8638 | 0.9516 | 0.9542 |
| EukaryotePseAAC | 0.0463 | 0.0813 | 0.0737 | 0.0880 | 0.0460 | 0.1067 | 0.8481 | 12.1544 | 0.5580 | 0.2579 | 0.6828 | 0.4259 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.6000 | 0.1917 | 0.8160 | 0.5701 | 0.7753 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 2.9268 | 0.1381 | 0.7670 | 0.5167 | 0.7862 |
| genbase | 0.8209 | 0.0105 | 0.8731 | 0.8985 | 0.3240 | 0.8671 | 0.0000 | 0.5672 | 0.0072 | 0.9882 | 0.6291 | 0.9879 |
| GnegativeGO | 0.7714 | 0.0384 | 0.7857 | 0.7928 | 0.6041 | 0.8390 | 0.1000 | 0.1571 | 0.0153 | 0.9488 | 0.8642 | 0.9918 |
| GnegativePseAAC | 0.5571 | 0.0625 | 0.5607 | 0.5625 | 0.2279 | 0.6930 | 0.1929 | 0.5429 | 0.0689 | 0.8742 | 0.7390 | 0.9456 |
| GpositiveGO | 0.6923 | 0.1154 | 0.7019 | 0.7067 | 0.7087 | 0.7551 | 0.2500 | 0.3269 | 0.1026 | 0.8654 | 0.9461 | 0.9384 |
| GpositivePseAAC | 0.5577 | 0.1250 | 0.5577 | 0.5577 | 0.5243 | 0.6905 | 0.2692 | 0.4423 | 0.1474 | 0.8397 | 0.8912 | 0.9058 |
| HumanGO | 0.6174 | 0.0404 | 0.6688 | 0.6956 | 0.4147 | 0.7309 | 0.1704 | 0.5145 | 0.0227 | 0.9000 | 0.9750 | 0.9812 |
| HumanPseAAC | 0.0257 | 0.0848 | 0.0257 | 0.0257 | 0.0166 | 0.0416 | 0.5627 | 2.2122 | 0.1444 | 0.6125 | 0.7014 | 0.8536 |
| Image | 0.1400 | 0.2090 | 0.1475 | 0.1512 | 0.2084 | 0.2288 | 0.3350 | 0.9100 | 0.1742 | 0.7888 | 0.8329 | 0.8267 |
| IMDB-ECC-F10% | 0.0052 | 0.1173 | 0.2233 | 0.3437 | 0.0568 | 0.3305 | 0.6583 | 11.0168 | 0.2537 | 0.4412 | 0.5208 | 0.7106 |
| IMDB-F10% | 0.0149 | 0.1065 | 0.0225 | 0.0283 | 0.0040 | 0.0249 | 0.9652 | 18.6860 | 0.5753 | 0.1344 | 0.5657 | 0.4179 |
| LLOG-F | 0.1148 | 0.0167 | 0.1755 | 0.2097 | 0.0449 | 0.2817 | 0.7623 | 11.3197 | 0.1183 | 0.3819 | 0.4605 | 0.8753 |
| mediamill10% | 0.0689 | 0.0320 | 0.3961 | 0.5537 | 0.0281 | 0.4957 | 0.2827 | 17.9739 | 0.0525 | 0.6674 | 0.7178 | 0.9380 |
| medical | 0.4796 | 0.0161 | 0.6480 | 0.7272 | 0.2159 | 0.7237 | 0.3061 | 1.7857 | 0.0258 | 0.7984 | 0.5451 | 0.9695 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 2.0500 | 0.1707 | 0.7907 | 0.8475 | 0.8578 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0062 | 0.0532 | 0.1457 | 0.2413 | 0.0363 | 0.2364 | 0.8045 | 32.9605 | 0.2702 | 0.2780 | 0.5360 | 0.7305 |
| OHSUMED-F | 0.1278 | 0.0672 | 0.1975 | 0.2374 | 0.1400 | 0.2830 | 0.4681 | 6.6949 | 0.2024 | 0.5770 | 0.7858 | 0.7894 |
| PlantGO | 0.2347 | 0.0782 | 0.2500 | 0.2574 | 0.1349 | 0.3611 | 0.3571 | 0.9184 | 0.0685 | 0.7673 | 0.9468 | 0.9374 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.6122 | 2.2755 | 0.1887 | 0.5728 | 0.7864 | 0.8378 |
| rcv1subset1 | 0.0400 | 0.0318 | 0.3120 | 0.4591 | 0.1757 | 0.4384 | 0.6050 | 14.5567 | 0.0599 | 0.4933 | 0.8481 | 0.9304 |
| REUTERS-K500-EX2 | 0.2717 | 0.0136 | 0.3816 | 0.4432 | 0.1644 | 0.4535 | 0.6283 | 9.9917 | 0.0718 | 0.4736 | 0.6919 | 0.9195 |
| scene | 0.4564 | 0.1093 | 0.4751 | 0.4843 | 0.6039 | 0.6010 | 0.2241 | 0.4398 | 0.0668 | 0.8687 | 0.9357 | 0.9453 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2324 | 19.1268 | 0.1452 | 0.8072 | 0.5627 | 0.7805 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1479 | 19.4014 | 0.1555 | 0.7886 | 0.5158 | 0.7756 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.4155 | 0.1390 | 0.8294 | 0.5564 | 0.7901 |
| SLASHDOT-F | 0.3536 | 0.0395 | 0.3967 | 0.4181 | 0.2646 | 0.5053 | 0.3404 | 2.0290 | 0.0738 | 0.7442 | 0.6816 | 0.9278 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.8000 |
| Stackex_chemistry | 0.0086 | 0.0212 | 0.1019 | 0.1659 | 0.0562 | 0.1626 | 0.8836 | 51.9598 | 0.1806 | 0.2184 | 0.5735 | 0.6686 |
| Stackex_chess | 0.0238 | 0.0159 | 0.1857 | 0.2873 | 0.0264 | 0.2800 | 0.8333 | 60.3810 | 0.1433 | 0.1950 | 0.4416 | 0.8540 |
| Stackex_coffee | 0.0000 | 0.0187 | 0.0435 | 0.0580 | 0.0033 | 0.0702 | 0.6522 | 57.3913 | 0.2704 | 0.3182 | 0.1717 | 0.6730 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0352 | 0.0144 | 0.2288 | 0.3433 | 0.0518 | 0.3163 | 0.8216 | 49.3141 | 0.1162 | 0.2722 | 0.5949 | 0.8745 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.0274 | 0.2168 | 0.6122 | 0.6866 | 0.7585 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5000 | 4.1370 | 0.2266 | 0.5990 | 0.6753 | 0.7477 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2381 | 0.8571 | 0.1319 | 0.8471 | 0.7504 | 0.8919 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 0.7143 | 0.1202 | 0.7992 | 0.6320 | 0.8962 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3019 | 9.2642 | 0.2833 | 0.6741 | 0.6621 | 0.6980 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2149 | 6.2190 | 0.1648 | 0.7629 | 0.6977 | 0.8352 |
| Yelp | 0.0090 | 0.3579 | 0.0090 | 0.0090 | 0.0084 | 0.0099 | 0.1974 | 1.3081 | 0.1212 | 0.8678 | 0.8164 | 0.8616 |

Table 64: Detailed results for Massive (5%) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3549 | 0.0370 | 0.3711 | 0.3800 | 0.4846 | 0.5126 | 0.3119 | 1.3870 | 0.0707 | 0.7853 | 0.9111 | 0.9085 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4722 | 1.3889 | 0.2243 | 0.6905 | 0.7934 | 0.7858 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5484 | 1.8065 | 0.3032 | 0.6167 | 0.6621 | 0.6767 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 1.8824 | 0.3588 | 0.4696 | 0.4199 | 0.6548 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7333 | 2.0333 | 0.3908 | 0.5000 | 0.6916 | 0.5893 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5000 | 0.0787 | 0.8700 | 0.6846 | 0.7870 |
| bibtex | 0.0932 | 0.0151 | 0.2170 | 0.2967 | 0.0884 | 0.2939 | 0.6514 | 26.2027 | 0.0941 | 0.3932 | 0.8626 | 0.8694 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4359 | 4.3590 | 0.1432 | 0.6496 | 0.7599 | 0.8606 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1373 | 140.0196 | 0.1964 | 0.4739 | 0.5181 | 0.8047 |
| corel16k001 | 0.0000 | 0.1045 | 0.0271 | 0.0509 | 0.0140 | 0.0501 | 0.9303 | 99.4089 | 0.3764 | 0.0912 | 0.6515 | 0.6197 |
| Corel5k | 0.0000 | 0.0180 | 0.1389 | 0.2286 | 0.0286 | 0.2322 | 0.7860 | 126.5040 | 0.1551 | 0.1704 | 0.4766 | 0.8461 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.5833 | 0.1309 | 0.8162 | 0.8460 | 0.8640 |
| enron | 0.1111 | 0.0594 | 0.2180 | 0.2960 | 0.0363 | 0.2380 | 0.2456 | 12.3158 | 0.0814 | 0.6843 | 0.6480 | 0.9100 |
| EukaryoteGO | 0.5889 | 0.0261 | 0.6889 | 0.7396 | 0.4695 | 0.7399 | 0.2899 | 1.3196 | 0.0455 | 0.8058 | 0.9416 | 0.9063 |
| EukaryotePseAAC | 0.1004 | 0.0956 | 0.1849 | 0.2384 | 0.0877 | 0.2427 | 0.7503 | 3.8842 | 0.1689 | 0.4556 | 0.6009 | 0.7559 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.8000 | 0.2033 | 0.8056 | 0.5663 | 0.7687 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 2.9024 | 0.1317 | 0.7716 | 0.5272 | 0.7908 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3116 | 0.8592 | 0.0149 | 0.5224 | 0.0066 | 0.9870 | 0.6296 | 0.9892 |
| GnegativeGO | 0.7786 | 0.0375 | 0.7929 | 0.7999 | 0.6061 | 0.8433 | 0.1000 | 0.1571 | 0.0153 | 0.9488 | 0.8654 | 0.9917 |
| GnegativePseAAC | 0.5429 | 0.0652 | 0.5429 | 0.5429 | 0.2320 | 0.6756 | 0.1786 | 0.5214 | 0.0658 | 0.8813 | 0.7334 | 0.9455 |
| GpositiveGO | 0.6731 | 0.1154 | 0.6827 | 0.6875 | 0.7141 | 0.7500 | 0.1731 | 0.2115 | 0.0641 | 0.9103 | 0.9451 | 0.9345 |
| GpositivePseAAC | 0.5577 | 0.1250 | 0.5577 | 0.5577 | 0.5283 | 0.6905 | 0.2885 | 0.4615 | 0.1538 | 0.8301 | 0.8772 | 0.8950 |
| HumanGO | 0.6238 | 0.0395 | 0.6710 | 0.6948 | 0.4388 | 0.7252 | 0.1543 | 0.4823 | 0.0204 | 0.9103 | 0.9740 | 0.9813 |
| HumanPseAAC | 0.0225 | 0.0850 | 0.0225 | 0.0225 | 0.0153 | 0.0365 | 0.5627 | 2.2283 | 0.1451 | 0.6152 | 0.7032 | 0.8517 |
| Image | 0.1100 | 0.2150 | 0.1175 | 0.1211 | 0.1712 | 0.1887 | 0.3650 | 1.0200 | 0.1938 | 0.7627 | 0.8317 | 0.8112 |
| IMDB-ECC-F10% | 0.0010 | 0.1726 | 0.0732 | 0.1258 | 0.0310 | 0.1357 | 0.9413 | 15.1017 | 0.4036 | 0.2130 | 0.5726 | 0.5868 |
| IMDB-F10% | 0.0017 | 0.0746 | 0.0080 | 0.0119 | 0.0114 | 0.0210 | 0.6810 | 8.5998 | 0.1968 | 0.4241 | 0.5789 | 0.7732 |
| LLOG-F | 0.1557 | 0.0162 | 0.1851 | 0.2016 | 0.0451 | 0.2673 | 0.6148 | 12.8770 | 0.1337 | 0.4448 | 0.4612 | 0.8623 |
| mediamill10% | 0.0570 | 0.0333 | 0.3842 | 0.5365 | 0.0242 | 0.4879 | 0.3468 | 18.4893 | 0.0557 | 0.6400 | 0.7085 | 0.9349 |
| medical | 0.4898 | 0.0147 | 0.6616 | 0.7464 | 0.2092 | 0.7471 | 0.2347 | 1.5612 | 0.0191 | 0.8518 | 0.5437 | 0.9746 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 2.0000 | 0.1722 | 0.7874 | 0.8543 | 0.8590 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0052 | 0.0566 | 0.1006 | 0.1699 | 0.0369 | 0.1622 | 0.9605 | 36.0090 | 0.2816 | 0.1941 | 0.5519 | 0.5964 |
| OHSUMED-F | 0.1278 | 0.0672 | 0.1975 | 0.2374 | 0.1400 | 0.2830 | 0.4681 | 6.6949 | 0.2024 | 0.5770 | 0.7858 | 0.7894 |
| PlantGO | 0.3333 | 0.0703 | 0.3385 | 0.3411 | 0.1779 | 0.4490 | 0.2083 | 0.4479 | 0.0279 | 0.8847 | 0.9687 | 0.9745 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.5714 | 2.2041 | 0.1829 | 0.5955 | 0.7794 | 0.8389 |
| rcv1subset1 | 0.0400 | 0.0318 | 0.3120 | 0.4591 | 0.1757 | 0.4384 | 0.6050 | 14.5567 | 0.0599 | 0.4933 | 0.8481 | 0.9304 |
| REUTERS-K500-EX2 | 0.1838 | 0.0163 | 0.3610 | 0.4602 | 0.1924 | 0.4480 | 0.6701 | 10.7784 | 0.0750 | 0.4690 | 0.6556 | 0.8843 |
| scene | 0.4647 | 0.1072 | 0.4876 | 0.4987 | 0.6163 | 0.6135 | 0.2282 | 0.4357 | 0.0660 | 0.8677 | 0.9353 | 0.9451 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.0352 | 0.1418 | 0.8106 | 0.5648 | 0.7870 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1408 | 19.4014 | 0.1419 | 0.8166 | 0.5188 | 0.7883 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.3380 | 0.1321 | 0.8261 | 0.5563 | 0.7961 |
| SLASHDOT-F | 0.2778 | 0.0445 | 0.3025 | 0.3147 | 0.1813 | 0.4013 | 0.4127 | 2.2011 | 0.0823 | 0.7031 | 0.6781 | 0.9173 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.8400 |
| Stackex_chemistry | 0.0130 | 0.0198 | 0.1404 | 0.2232 | 0.0393 | 0.2172 | 0.8012 | 47.7522 | 0.1670 | 0.2618 | 0.5434 | 0.6580 |
| Stackex_chess | 0.0060 | 0.0148 | 0.1860 | 0.2990 | 0.0319 | 0.3024 | 0.8274 | 64.7798 | 0.1559 | 0.2238 | 0.4290 | 0.8398 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8261 | 57.9130 | 0.2591 | 0.2668 | 0.1732 | 0.6874 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0276 | 0.0156 | 0.2055 | 0.3210 | 0.0375 | 0.2853 | 0.8568 | 51.8015 | 0.1247 | 0.2447 | 0.5699 | 0.8622 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4966 | 4.1473 | 0.2252 | 0.6072 | 0.6820 | 0.7562 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4966 | 4.1438 | 0.2239 | 0.6027 | 0.6758 | 0.7487 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1905 | 0.8095 | 0.1224 | 0.8709 | 0.7620 | 0.8907 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4762 | 0.8571 | 0.1452 | 0.7278 | 0.6256 | 0.8940 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2736 | 9.0566 | 0.2689 | 0.6935 | 0.6635 | 0.7094 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2479 | 6.3058 | 0.1638 | 0.7577 | 0.7046 | 0.8366 |
| Yelp | 0.0040 | 0.3589 | 0.0040 | 0.0040 | 0.0035 | 0.0044 | 0.2144 | 1.3360 | 0.1283 | 0.8580 | 0.7983 | 0.8537 |

Table 65: Detailed results for Massive (10%) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3549 | 0.0370 | 0.3711 | 0.3800 | 0.4846 | 0.5126 | 0.3119 | 1.3870 | 0.0707 | 0.7853 | 0.9111 | 0.9085 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4444 | 1.4722 | 0.2389 | 0.7030 | 0.7974 | 0.7834 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4516 | 1.7742 | 0.2968 | 0.6645 | 0.6684 | 0.7038 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6471 | 1.5294 | 0.2882 | 0.5941 | 0.3783 | 0.6726 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 2.0333 | 0.3950 | 0.4656 | 0.6991 | 0.5957 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1667 | 2.3889 | 0.0648 | 0.9006 | 0.6850 | 0.7904 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4615 | 4.2821 | 0.1405 | 0.6434 | 0.7556 | 0.8634 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1765 | 135.0392 | 0.1908 | 0.4868 | 0.5077 | 0.8104 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0148 | 0.1580 | 0.2500 | 0.0368 | 0.2580 | 0.8340 | 125.8460 | 0.1468 | 0.1771 | 0.4739 | 0.8551 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 1.7333 | 0.1541 | 0.7781 | 0.8428 | 0.8647 |
| enron | 0.0877 | 0.0578 | 0.2133 | 0.3012 | 0.0440 | 0.2722 | 0.2924 | 11.8889 | 0.0762 | 0.6865 | 0.6403 | 0.9120 |
| EukaryoteGO | 0.6585 | 0.0215 | 0.7601 | 0.8104 | 0.5303 | 0.7993 | 0.2281 | 0.8131 | 0.0280 | 0.8638 | 0.9516 | 0.9542 |
| EukaryotePseAAC | 0.1004 | 0.0956 | 0.1849 | 0.2384 | 0.0877 | 0.2427 | 0.7503 | 3.8842 | 0.1689 | 0.4556 | 0.6009 | 0.7559 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.7000 | 0.1958 | 0.8125 | 0.5832 | 0.7736 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.1220 | 0.1340 | 0.7721 | 0.5276 | 0.7835 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3116 | 0.8592 | 0.0000 | 0.4776 | 0.0054 | 0.9933 | 0.6291 | 0.9905 |
| GnegativeGO | 0.7857 | 0.0366 | 0.8000 | 0.8071 | 0.6161 | 0.8476 | 0.1000 | 0.1643 | 0.0163 | 0.9476 | 0.8642 | 0.9910 |
| GnegativePseAAC | 0.5571 | 0.0625 | 0.5643 | 0.5678 | 0.2284 | 0.6957 | 0.1714 | 0.5071 | 0.0638 | 0.8854 | 0.7350 | 0.9443 |
| GpositiveGO | 0.7308 | 0.1154 | 0.7404 | 0.7452 | 0.7098 | 0.7647 | 0.2308 | 0.2885 | 0.0897 | 0.8782 | 0.9439 | 0.9447 |
| GpositivePseAAC | 0.6538 | 0.1250 | 0.6538 | 0.6538 | 0.5411 | 0.7234 | 0.2692 | 0.4231 | 0.1410 | 0.8413 | 0.8838 | 0.8771 |
| HumanGO | 0.6174 | 0.0404 | 0.6688 | 0.6956 | 0.4147 | 0.7309 | 0.1704 | 0.5145 | 0.0227 | 0.9000 | 0.9750 | 0.9812 |
| HumanPseAAC | 0.0225 | 0.0850 | 0.0225 | 0.0225 | 0.0153 | 0.0365 | 0.5627 | 2.2283 | 0.1451 | 0.6152 | 0.7032 | 0.8517 |
| Image | 0.1450 | 0.2080 | 0.1525 | 0.1562 | 0.2133 | 0.2353 | 0.3300 | 0.9050 | 0.1725 | 0.7905 | 0.8343 | 0.8274 |
| IMDB-ECC-F10% | 0.0052 | 0.1173 | 0.2233 | 0.3437 | 0.0568 | 0.3305 | 0.6583 | 11.0168 | 0.2537 | 0.4412 | 0.5208 | 0.7106 |
| IMDB-F10% | 0.0149 | 0.1065 | 0.0225 | 0.0283 | 0.0040 | 0.0249 | 0.9652 | 18.6860 | 0.5753 | 0.1344 | 0.5657 | 0.4179 |
| LLOG-F | 0.1393 | 0.0162 | 0.1776 | 0.1979 | 0.0398 | 0.2673 | 0.5984 | 11.1721 | 0.1142 | 0.4659 | 0.4682 | 0.8827 |
| mediamill10% | 0.0618 | 0.0326 | 0.4003 | 0.5651 | 0.0268 | 0.5053 | 0.2090 | 17.2043 | 0.0505 | 0.6667 | 0.7214 | 0.9409 |
| medical | 0.4796 | 0.0152 | 0.6361 | 0.7096 | 0.1997 | 0.7287 | 0.2857 | 1.7143 | 0.0219 | 0.8134 | 0.5384 | 0.9736 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.9667 | 0.1631 | 0.7970 | 0.8516 | 0.8597 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0262 | 0.0374 | 0.1383 | 0.2213 | 0.0388 | 0.2217 | 0.8121 | 28.7507 | 0.2199 | 0.2794 | 0.5848 | 0.7504 |
| OHSUMED-F | 0.1278 | 0.0672 | 0.1975 | 0.2374 | 0.1400 | 0.2830 | 0.4681 | 6.6949 | 0.2024 | 0.5770 | 0.7858 | 0.7894 |
| PlantGO | 0.2449 | 0.0774 | 0.2602 | 0.2676 | 0.1444 | 0.3724 | 0.3571 | 0.8061 | 0.0579 | 0.7833 | 0.9465 | 0.9407 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.5408 | 2.1735 | 0.1792 | 0.6119 | 0.7811 | 0.8405 |
| rcv1subset1 | 0.0400 | 0.0318 | 0.3120 | 0.4591 | 0.1757 | 0.4384 | 0.6050 | 14.5567 | 0.0599 | 0.4933 | 0.8481 | 0.9304 |
| REUTERS-K500-EX2 | 0.2285 | 0.0156 | 0.4019 | 0.4996 | 0.2199 | 0.4777 | 0.5859 | 7.2818 | 0.0498 | 0.5414 | 0.7082 | 0.9418 |
| scene | 0.4523 | 0.1086 | 0.4751 | 0.4862 | 0.6068 | 0.6045 | 0.2241 | 0.4398 | 0.0668 | 0.8687 | 0.9356 | 0.9457 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1197 | 19.2394 | 0.1339 | 0.8305 | 0.5614 | 0.7910 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 19.6268 | 0.1540 | 0.7929 | 0.5225 | 0.7796 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.2817 | 0.1247 | 0.8320 | 0.5546 | 0.8027 |
| SLASHDOT-F | 0.3694 | 0.0383 | 0.4081 | 0.4275 | 0.2863 | 0.5174 | 0.3430 | 1.9393 | 0.0696 | 0.7455 | 0.6810 | 0.9325 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0179 | 0.0124 | 0.1938 | 0.3006 | 0.0385 | 0.3034 | 0.6726 | 58.6071 | 0.1355 | 0.3112 | 0.4478 | 0.8626 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7391 | 63.2609 | 0.2931 | 0.2740 | 0.1692 | 0.6545 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0402 | 0.0133 | 0.2236 | 0.3308 | 0.0461 | 0.3065 | 0.7965 | 48.7412 | 0.1147 | 0.2894 | 0.5919 | 0.8771 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.0959 | 0.2183 | 0.6120 | 0.6843 | 0.7590 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4966 | 4.1438 | 0.2239 | 0.6027 | 0.6758 | 0.7487 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.9048 | 0.1414 | 0.8233 | 0.7489 | 0.8859 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.6667 | 0.1107 | 0.8230 | 0.6286 | 0.8915 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2642 | 8.9340 | 0.2661 | 0.6925 | 0.6660 | 0.7122 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1983 | 6.1694 | 0.1573 | 0.7724 | 0.7015 | 0.8398 |
| Yelp | 0.0050 | 0.3585 | 0.0050 | 0.0050 | 0.0047 | 0.0055 | 0.2024 | 1.3200 | 0.1238 | 0.8651 | 0.8153 | 0.8612 |

Table 66: Detailed results for Massive (25%) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3549 | 0.0370 | 0.3711 | 0.3800 | 0.4846 | 0.5126 | 0.3119 | 1.3870 | 0.0707 | 0.7853 | 0.9111 | 0.9085 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4444 | 1.3333 | 0.2153 | 0.7127 | 0.7953 | 0.7852 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5161 | 1.8710 | 0.3202 | 0.6331 | 0.6595 | 0.6837 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6471 | 1.7059 | 0.3162 | 0.5725 | 0.3869 | 0.6746 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 1.8333 | 0.3508 | 0.4922 | 0.6861 | 0.6208 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.6111 | 0.0889 | 0.8663 | 0.6753 | 0.7829 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2564 | 4.7949 | 0.1580 | 0.6850 | 0.7563 | 0.8424 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5490 | 137.5294 | 0.2161 | 0.4155 | 0.5224 | 0.7851 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0148 | 0.1580 | 0.2500 | 0.0368 | 0.2580 | 0.8340 | 125.8460 | 0.1468 | 0.1771 | 0.4739 | 0.8551 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.6833 | 0.1454 | 0.7990 | 0.8464 | 0.8710 |
| enron | 0.0877 | 0.0578 | 0.2133 | 0.3012 | 0.0440 | 0.2722 | 0.2924 | 11.8889 | 0.0762 | 0.6865 | 0.6403 | 0.9120 |
| EukaryoteGO | 0.6585 | 0.0215 | 0.7601 | 0.8104 | 0.5303 | 0.7993 | 0.2281 | 0.8131 | 0.0280 | 0.8638 | 0.9516 | 0.9542 |
| EukaryotePseAAC | 0.1004 | 0.0956 | 0.1849 | 0.2384 | 0.0877 | 0.2427 | 0.7503 | 3.8842 | 0.1689 | 0.4556 | 0.6009 | 0.7559 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 3.6000 | 0.2133 | 0.7975 | 0.5958 | 0.7716 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 2.9512 | 0.1400 | 0.7697 | 0.5312 | 0.7795 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3116 | 0.8592 | 0.0000 | 0.4776 | 0.0054 | 0.9933 | 0.6291 | 0.9905 |
| GnegativeGO | 0.7857 | 0.0366 | 0.8000 | 0.8071 | 0.6161 | 0.8476 | 0.1000 | 0.1643 | 0.0163 | 0.9476 | 0.8642 | 0.9910 |
| GnegativePseAAC | 0.5571 | 0.0625 | 0.5607 | 0.5625 | 0.2279 | 0.6930 | 0.1786 | 0.5143 | 0.0652 | 0.8818 | 0.7369 | 0.9464 |
| GpositiveGO | 0.7308 | 0.1202 | 0.7404 | 0.7452 | 0.7015 | 0.7573 | 0.2308 | 0.3269 | 0.1026 | 0.8734 | 0.9472 | 0.9367 |
| GpositivePseAAC | 0.6346 | 0.1106 | 0.6346 | 0.6346 | 0.5709 | 0.7416 | 0.2692 | 0.4231 | 0.1410 | 0.8429 | 0.8931 | 0.9093 |
| HumanGO | 0.6174 | 0.0404 | 0.6688 | 0.6956 | 0.4147 | 0.7309 | 0.1704 | 0.5145 | 0.0227 | 0.9000 | 0.9750 | 0.9812 |
| HumanPseAAC | 0.0225 | 0.0850 | 0.0225 | 0.0225 | 0.0153 | 0.0365 | 0.5627 | 2.2283 | 0.1451 | 0.6152 | 0.7032 | 0.8517 |
| Image | 0.1650 | 0.2040 | 0.1750 | 0.1799 | 0.2447 | 0.2662 | 0.3350 | 0.9100 | 0.1737 | 0.7872 | 0.8331 | 0.8280 |
| IMDB-ECC-F10% | 0.0052 | 0.1173 | 0.2233 | 0.3437 | 0.0568 | 0.3305 | 0.6583 | 11.0168 | 0.2537 | 0.4412 | 0.5208 | 0.7106 |
| IMDB-F10% | 0.0149 | 0.1065 | 0.0225 | 0.0283 | 0.0040 | 0.0249 | 0.9652 | 18.6860 | 0.5753 | 0.1344 | 0.5657 | 0.4179 |
| LLOG-F | 0.1393 | 0.0162 | 0.1776 | 0.1979 | 0.0398 | 0.2673 | 0.5984 | 11.1721 | 0.1142 | 0.4659 | 0.4682 | 0.8827 |
| mediamill10% | 0.0618 | 0.0329 | 0.3924 | 0.5517 | 0.0258 | 0.4951 | 0.2233 | 18.7791 | 0.0559 | 0.6662 | 0.7184 | 0.9346 |
| medical | 0.4796 | 0.0152 | 0.6361 | 0.7096 | 0.1997 | 0.7287 | 0.2857 | 1.7143 | 0.0219 | 0.8134 | 0.5384 | 0.9736 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.9667 | 0.1593 | 0.8018 | 0.8509 | 0.8631 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0262 | 0.0374 | 0.1383 | 0.2213 | 0.0388 | 0.2217 | 0.8121 | 28.7507 | 0.2199 | 0.2794 | 0.5848 | 0.7504 |
| OHSUMED-F | 0.1278 | 0.0672 | 0.1975 | 0.2374 | 0.1400 | 0.2830 | 0.4681 | 6.6949 | 0.2024 | 0.5770 | 0.7858 | 0.7894 |
| PlantGO | 0.2449 | 0.0774 | 0.2602 | 0.2676 | 0.1444 | 0.3724 | 0.3571 | 0.8061 | 0.0579 | 0.7833 | 0.9465 | 0.9407 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.5408 | 2.1735 | 0.1792 | 0.6119 | 0.7811 | 0.8405 |
| rcv1subset1 | 0.0400 | 0.0318 | 0.3120 | 0.4591 | 0.1757 | 0.4384 | 0.6050 | 14.5567 | 0.0599 | 0.4933 | 0.8481 | 0.9304 |
| REUTERS-K500-EX2 | 0.2533 | 0.0131 | 0.3607 | 0.4209 | 0.1659 | 0.4443 | 0.6683 | 10.0083 | 0.0711 | 0.4659 | 0.6878 | 0.9191 |
| scene | 0.4606 | 0.1079 | 0.4834 | 0.4945 | 0.6136 | 0.6100 | 0.2241 | 0.4315 | 0.0655 | 0.8701 | 0.9356 | 0.9448 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1197 | 19.2394 | 0.1339 | 0.8305 | 0.5614 | 0.7910 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 19.6268 | 0.1540 | 0.7929 | 0.5225 | 0.7796 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.2817 | 0.1247 | 0.8320 | 0.5546 | 0.8027 |
| SLASHDOT-F | 0.3694 | 0.0383 | 0.4081 | 0.4275 | 0.2863 | 0.5174 | 0.3430 | 1.9393 | 0.0696 | 0.7455 | 0.6810 | 0.9325 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.3889 | 0.7200 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0179 | 0.0124 | 0.1938 | 0.3006 | 0.0385 | 0.3034 | 0.6726 | 58.6071 | 0.1355 | 0.3112 | 0.4478 | 0.8626 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7391 | 63.2609 | 0.2931 | 0.2740 | 0.1692 | 0.6545 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0402 | 0.0133 | 0.2236 | 0.3308 | 0.0461 | 0.3065 | 0.7965 | 48.7412 | 0.1147 | 0.2894 | 0.5919 | 0.8771 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.0959 | 0.2183 | 0.6120 | 0.6843 | 0.7590 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4966 | 4.1438 | 0.2239 | 0.6027 | 0.6758 | 0.7487 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1905 | 0.8095 | 0.1171 | 0.8566 | 0.7545 | 0.8844 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.6667 | 0.1107 | 0.8190 | 0.6243 | 0.8962 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2830 | 9.2075 | 0.2793 | 0.6796 | 0.6671 | 0.6993 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1983 | 6.1694 | 0.1573 | 0.7724 | 0.7015 | 0.8398 |
| Yelp | 0.0050 | 0.3585 | 0.0050 | 0.0050 | 0.0047 | 0.0055 | 0.2024 | 1.3200 | 0.1238 | 0.8651 | 0.8153 | 0.8612 |

Table 67: Detailed results for Massive (50%) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3549 | 0.0370 | 0.3711 | 0.3800 | 0.4846 | 0.5126 | 0.3119 | 1.3870 | 0.0707 | 0.7853 | 0.9111 | 0.9085 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4444 | 1.3333 | 0.2170 | 0.7100 | 0.8023 | 0.7955 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5806 | 1.7097 | 0.2927 | 0.6212 | 0.6750 | 0.6753 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6471 | 1.6471 | 0.3044 | 0.5716 | 0.3948 | 0.7057 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.0333 | 0.3908 | 0.4433 | 0.6995 | 0.5792 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1667 | 2.3889 | 0.0593 | 0.9126 | 0.6740 | 0.7914 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4359 | 4.7692 | 0.1550 | 0.6356 | 0.7617 | 0.8545 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4118 | 135.3725 | 0.1927 | 0.4716 | 0.5174 | 0.8083 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0148 | 0.1580 | 0.2500 | 0.0368 | 0.2580 | 0.8340 | 125.8460 | 0.1468 | 0.1771 | 0.4739 | 0.8551 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.6000 | 0.1329 | 0.8142 | 0.8464 | 0.8721 |
| enron | 0.1170 | 0.0562 | 0.2463 | 0.3365 | 0.0531 | 0.3168 | 0.4035 | 13.4327 | 0.0956 | 0.5759 | 0.6500 | 0.8963 |
| EukaryoteGO | 0.6585 | 0.0215 | 0.7601 | 0.8104 | 0.5303 | 0.7993 | 0.2281 | 0.8131 | 0.0280 | 0.8638 | 0.9516 | 0.9542 |
| EukaryotePseAAC | 0.1004 | 0.0956 | 0.1849 | 0.2384 | 0.0877 | 0.2427 | 0.7503 | 3.8842 | 0.1689 | 0.4556 | 0.6009 | 0.7559 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 3.6000 | 0.2092 | 0.8002 | 0.5735 | 0.7782 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.1220 | 0.1408 | 0.7653 | 0.5359 | 0.7809 |
| genbase | 0.8358 | 0.0111 | 0.8582 | 0.8693 | 0.3371 | 0.8592 | 0.0149 | 0.3881 | 0.0039 | 0.9827 | 0.6319 | 0.9926 |
| GnegativeGO | 0.7857 | 0.0366 | 0.8000 | 0.8071 | 0.6106 | 0.8476 | 0.0929 | 0.1643 | 0.0159 | 0.9500 | 0.8632 | 0.9910 |
| GnegativePseAAC | 0.5286 | 0.0670 | 0.5286 | 0.5286 | 0.2180 | 0.6637 | 0.1929 | 0.5071 | 0.0642 | 0.8768 | 0.7441 | 0.9478 |
| GpositiveGO | 0.7500 | 0.1106 | 0.7596 | 0.7644 | 0.7167 | 0.7767 | 0.2500 | 0.3077 | 0.0962 | 0.8686 | 0.9465 | 0.9436 |
| GpositivePseAAC | 0.5385 | 0.1298 | 0.5385 | 0.5385 | 0.5132 | 0.6747 | 0.3269 | 0.4808 | 0.1603 | 0.8141 | 0.8926 | 0.8985 |
| HumanGO | 0.6174 | 0.0404 | 0.6688 | 0.6956 | 0.4147 | 0.7309 | 0.1704 | 0.5145 | 0.0227 | 0.9000 | 0.9750 | 0.9812 |
| HumanPseAAC | 0.0225 | 0.0850 | 0.0225 | 0.0225 | 0.0153 | 0.0365 | 0.5627 | 2.2283 | 0.1451 | 0.6152 | 0.7032 | 0.8517 |
| Image | 0.1550 | 0.2070 | 0.1625 | 0.1662 | 0.2274 | 0.2473 | 0.3500 | 0.9400 | 0.1833 | 0.7795 | 0.8322 | 0.8174 |
| IMDB-ECC-F10% | 0.0052 | 0.1173 | 0.2233 | 0.3437 | 0.0568 | 0.3305 | 0.6583 | 11.0168 | 0.2537 | 0.4412 | 0.5208 | 0.7106 |
| IMDB-F10% | 0.0149 | 0.1065 | 0.0225 | 0.0283 | 0.0040 | 0.0249 | 0.9652 | 18.6860 | 0.5753 | 0.1344 | 0.5657 | 0.4179 |
| LLOG-F | 0.1557 | 0.0161 | 0.2029 | 0.2272 | 0.0521 | 0.3033 | 0.7377 | 12.6066 | 0.1327 | 0.3862 | 0.4681 | 0.8629 |
| mediamill10% | 0.0333 | 0.0335 | 0.4102 | 0.5887 | 0.0347 | 0.5364 | 0.1853 | 20.6366 | 0.0643 | 0.5689 | 0.6249 | 0.9268 |
| medical | 0.4694 | 0.0161 | 0.6156 | 0.6863 | 0.1830 | 0.7078 | 0.3061 | 1.8776 | 0.0257 | 0.7904 | 0.5452 | 0.9708 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 1.8500 | 0.1431 | 0.8218 | 0.8627 | 0.8642 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0086 | 0.0550 | 0.0770 | 0.1305 | 0.0271 | 0.1273 | 0.8625 | 39.9672 | 0.3598 | 0.2185 | 0.5279 | 0.6613 |
| OHSUMED-F | 0.1278 | 0.0672 | 0.1975 | 0.2374 | 0.1400 | 0.2830 | 0.4681 | 6.6949 | 0.2024 | 0.5770 | 0.7858 | 0.7894 |
| PlantGO | 0.2449 | 0.0774 | 0.2602 | 0.2676 | 0.1444 | 0.3724 | 0.3571 | 0.8061 | 0.0579 | 0.7833 | 0.9465 | 0.9407 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.5918 | 2.2041 | 0.1820 | 0.5930 | 0.7836 | 0.8400 |
| rcv1subset1 | 0.0400 | 0.0318 | 0.3120 | 0.4591 | 0.1757 | 0.4384 | 0.6050 | 14.5567 | 0.0599 | 0.4933 | 0.8481 | 0.9304 |
| REUTERS-K500-EX2 | 0.2217 | 0.0149 | 0.3453 | 0.4141 | 0.1628 | 0.4175 | 0.6317 | 10.1233 | 0.0724 | 0.4809 | 0.6809 | 0.9097 |
| scene | 0.4481 | 0.1106 | 0.4710 | 0.4821 | 0.6019 | 0.5980 | 0.2324 | 0.4440 | 0.0670 | 0.8653 | 0.9356 | 0.9446 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1197 | 19.2394 | 0.1339 | 0.8305 | 0.5614 | 0.7910 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2254 | 19.6761 | 0.1513 | 0.7977 | 0.5213 | 0.7794 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.3239 | 0.1331 | 0.8301 | 0.5590 | 0.7938 |
| SLASHDOT-F | 0.3694 | 0.0383 | 0.4081 | 0.4275 | 0.2863 | 0.5174 | 0.3430 | 1.9393 | 0.0696 | 0.7455 | 0.6810 | 0.9325 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4000 | 0.8000 | 0.4000 | 0.7333 | 0.3333 | 0.6000 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0000 | 0.0136 | 0.1960 | 0.3086 | 0.0406 | 0.3067 | 0.7440 | 58.9405 | 0.1393 | 0.2893 | 0.4398 | 0.8588 |
| Stackex_coffee | 0.0000 | 0.0187 | 0.0217 | 0.0290 | 0.0020 | 0.0364 | 0.8261 | 67.4783 | 0.3046 | 0.2058 | 0.1799 | 0.6555 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0402 | 0.0133 | 0.2236 | 0.3308 | 0.0461 | 0.3065 | 0.7965 | 48.7412 | 0.1147 | 0.2894 | 0.5919 | 0.8771 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.0959 | 0.2183 | 0.6120 | 0.6843 | 0.7590 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5171 | 4.2534 | 0.2317 | 0.5895 | 0.6751 | 0.7484 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.8571 | 0.1361 | 0.8257 | 0.7548 | 0.8891 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3810 | 0.7619 | 0.1357 | 0.7794 | 0.6168 | 0.8907 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2736 | 9.2925 | 0.2904 | 0.6667 | 0.6646 | 0.6851 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2231 | 6.2314 | 0.1618 | 0.7614 | 0.7018 | 0.8406 |
| Yelp | 0.0070 | 0.3581 | 0.0070 | 0.0070 | 0.0065 | 0.0077 | 0.2173 | 1.3499 | 0.1336 | 0.8562 | 0.8225 | 0.8517 |

Table 68: Detailed results for Massive (1%) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0311 | 0.0896 | 0.0953 | 0.1316 | 0.1466 | 0.1896 | 0.7505 | 4.6660 | 0.2421 | 0.4427 | 0.8368 | 0.7382 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6389 | 2.3056 | 0.3919 | 0.5483 | 0.6686 | 0.6233 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5161 | 2.1613 | 0.3540 | 0.6156 | 0.5448 | 0.6246 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.8235 | 0.5544 | 0.3324 | 0.3304 | 0.4458 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.4333 | 0.4792 | 0.4019 | 0.6176 | 0.5336 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.4444 | 0.0685 | 0.8759 | 0.6882 | 0.7840 |
| bibtex | 0.0892 | 0.0179 | 0.2114 | 0.2943 | 0.1157 | 0.2781 | 0.6324 | 30.9473 | 0.1050 | 0.4185 | 0.6978 | 0.7268 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4359 | 4.9744 | 0.1779 | 0.6314 | 0.7192 | 0.8219 |
| bookmarks10% | 0.0000 | 0.0329 | 0.0577 | 0.0987 | 0.0443 | 0.0846 | 0.9647 | 77.3827 | 0.2568 | 0.1191 | 0.7509 | 0.7167 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1373 | 139.5686 | 0.2107 | 0.4652 | 0.5102 | 0.7886 |
| corel16k001 | 0.0000 | 0.0569 | 0.0339 | 0.0611 | 0.0141 | 0.0600 | 0.9601 | 69.3929 | 0.2466 | 0.1093 | 0.6964 | 0.7488 |
| Corel5k | 0.0000 | 0.0178 | 0.1559 | 0.2533 | 0.0312 | 0.2549 | 0.8200 | 128.6380 | 0.1590 | 0.1833 | 0.4749 | 0.8434 |
| delicious | 0.0000 | 0.0638 | 0.0564 | 0.1069 | 0.0366 | 0.1064 | 0.9888 | 896.2927 | 0.2894 | 0.0644 | 0.6874 | 0.7123 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 1.5500 | 0.1229 | 0.8323 | 0.8467 | 0.8753 |
| enron | 0.0819 | 0.0601 | 0.1655 | 0.2255 | 0.0302 | 0.2021 | 0.2749 | 12.4737 | 0.0830 | 0.6779 | 0.6499 | 0.9087 |
| EukaryoteGO | 0.5709 | 0.0314 | 0.6770 | 0.7359 | 0.5443 | 0.7055 | 0.2358 | 3.1585 | 0.1164 | 0.7979 | 0.9129 | 0.8644 |
| EukaryotePseAAC | 0.1493 | 0.0703 | 0.2137 | 0.2524 | 0.0881 | 0.2804 | 0.6680 | 6.5753 | 0.2674 | 0.4678 | 0.5792 | 0.6146 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 3.7000 | 0.2267 | 0.7905 | 0.6062 | 0.7658 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3415 | 3.2683 | 0.1609 | 0.7163 | 0.5448 | 0.7703 |
| genbase | 0.8806 | 0.0083 | 0.9030 | 0.9140 | 0.3981 | 0.8980 | 0.0000 | 0.4030 | 0.0039 | 0.9911 | 0.6352 | 0.9933 |
| GnegativeGO | 0.8786 | 0.0214 | 0.8893 | 0.8946 | 0.6452 | 0.9130 | 0.0357 | 0.0929 | 0.0057 | 0.9810 | 0.8524 | 0.9913 |
| GnegativePseAAC | 0.5214 | 0.0670 | 0.5250 | 0.5268 | 0.2173 | 0.6637 | 0.2143 | 0.5286 | 0.0685 | 0.8664 | 0.7376 | 0.9423 |
| GpositiveGO | 0.9038 | 0.0337 | 0.9135 | 0.9182 | 0.9367 | 0.9320 | 0.0577 | 0.0769 | 0.0192 | 0.9712 | 0.9978 | 0.9960 |
| GpositivePseAAC | 0.5577 | 0.1346 | 0.5577 | 0.5577 | 0.5125 | 0.6744 | 0.2885 | 0.4615 | 0.1538 | 0.8301 | 0.8686 | 0.8681 |
| HumanGO | 0.6013 | 0.0411 | 0.6468 | 0.6701 | 0.4280 | 0.7108 | 0.1608 | 0.4984 | 0.0216 | 0.9064 | 0.9743 | 0.9820 |
| HumanPseAAC | 0.0257 | 0.0845 | 0.0257 | 0.0257 | 0.0167 | 0.0417 | 0.5756 | 2.2637 | 0.1491 | 0.6035 | 0.7007 | 0.8517 |
| Image | 0.0600 | 0.2260 | 0.0625 | 0.0637 | 0.0966 | 0.1032 | 0.3350 | 0.9700 | 0.1850 | 0.7829 | 0.8369 | 0.8189 |
| IMDB-ECC-F10% | 0.0000 | 0.2269 | 0.0541 | 0.0970 | 0.0419 | 0.1025 | 0.9214 | 18.9476 | 0.5561 | 0.1625 | 0.5443 | 0.4591 |
| IMDB-F10% | 0.0000 | 0.2014 | 0.1242 | 0.2162 | 0.0499 | 0.2128 | 0.7531 | 11.5700 | 0.2984 | 0.3029 | 0.5665 | 0.6855 |
| LLOG-F | 0.1557 | 0.0165 | 0.1865 | 0.2024 | 0.0371 | 0.2634 | 0.6639 | 13.0000 | 0.1355 | 0.4176 | 0.4308 | 0.8558 |
| mediamill10% | 0.0665 | 0.0323 | 0.4108 | 0.5678 | 0.0294 | 0.5096 | 0.1520 | 17.7577 | 0.0498 | 0.7139 | 0.7145 | 0.9407 |
| medical | 0.6122 | 0.0118 | 0.7109 | 0.7592 | 0.2320 | 0.7851 | 0.1531 | 1.6939 | 0.0202 | 0.8879 | 0.5137 | 0.9727 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.9667 | 0.1591 | 0.8004 | 0.8507 | 0.8607 |
| NUS-WIDE-bow10% | 0.0000 | 0.1194 | 0.0361 | 0.0687 | 0.0250 | 0.0691 | 0.9534 | 29.3677 | 0.2271 | 0.1383 | 0.5553 | 0.7431 |
| NUS-WIDE-cVLADplus10% | 0.0014 | 0.0786 | 0.0848 | 0.1684 | 0.0340 | 0.1350 | 0.9006 | 39.3102 | 0.3227 | 0.1666 | 0.5350 | 0.6114 |
| OHSUMED-F | 0.0014 | 0.1572 | 0.1136 | 0.1833 | 0.0880 | 0.1893 | 0.8363 | 9.7538 | 0.3395 | 0.2892 | 0.6696 | 0.6570 |
| PlantGO | 0.3958 | 0.0642 | 0.4062 | 0.4114 | 0.2180 | 0.5195 | 0.2188 | 0.4479 | 0.0284 | 0.8796 | 0.9693 | 0.9760 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.6020 | 2.1939 | 0.1821 | 0.5828 | 0.7791 | 0.8399 |
| rcv1subset1 | 0.0133 | 0.0350 | 0.2172 | 0.3340 | 0.0773 | 0.3330 | 0.5767 | 27.5700 | 0.1087 | 0.4260 | 0.8417 | 0.8804 |
| REUTERS-K500-EX2 | 0.1375 | 0.0202 | 0.3244 | 0.4343 | 0.1900 | 0.4045 | 0.6753 | 11.1100 | 0.0704 | 0.4896 | 0.5684 | 0.7787 |
| scene | 0.4564 | 0.1093 | 0.4751 | 0.4843 | 0.6020 | 0.6010 | 0.2241 | 0.4398 | 0.0674 | 0.8687 | 0.9359 | 0.9460 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1197 | 18.8310 | 0.1276 | 0.8266 | 0.5655 | 0.7964 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1690 | 19.2394 | 0.1271 | 0.8279 | 0.5177 | 0.7949 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.1761 | 0.1250 | 0.8367 | 0.5561 | 0.8010 |
| SLASHDOT-F | 0.3069 | 0.0428 | 0.3422 | 0.3599 | 0.2045 | 0.4489 | 0.3783 | 2.1799 | 0.0817 | 0.7195 | 0.6786 | 0.9177 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.8000 |
| Stackex_chemistry | 0.0014 | 0.0489 | 0.0736 | 0.1354 | 0.0439 | 0.1159 | 0.9063 | 50.8919 | 0.1822 | 0.1587 | 0.6952 | 0.8132 |
| Stackex_chess | 0.0060 | 0.0149 | 0.1921 | 0.3027 | 0.0370 | 0.3022 | 0.7024 | 65.6845 | 0.1554 | 0.2726 | 0.4316 | 0.8457 |
| Stackex_coffee | 0.0000 | 0.0194 | 0.0906 | 0.1279 | 0.0045 | 0.1538 | 0.7391 | 53.4783 | 0.2662 | 0.3011 | 0.2118 | 0.6964 |
| Stackex_cooking | 0.0058 | 0.0099 | 0.1054 | 0.1695 | 0.0578 | 0.1731 | 0.7758 | 153.3169 | 0.2213 | 0.2064 | 0.5561 | 0.6379 |
| Stackex_philosophy | 0.0151 | 0.0142 | 0.1966 | 0.3088 | 0.0374 | 0.2793 | 0.6508 | 50.8618 | 0.1208 | 0.3549 | 0.5812 | 0.8680 |
| tmc2007-500 | 0.0622 | 0.1016 | 0.2641 | 0.3797 | 0.1580 | 0.3696 | 0.4622 | 10.6829 | 0.3238 | 0.4642 | 0.7586 | 0.6775 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.0856 | 0.2208 | 0.6119 | 0.6834 | 0.7556 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5137 | 4.1815 | 0.2276 | 0.5990 | 0.6792 | 0.7461 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0952 | 0.5238 | 0.0589 | 0.9206 | 0.7495 | 0.9481 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4286 | 0.6667 | 0.1167 | 0.7754 | 0.6278 | 0.9088 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2830 | 9.2925 | 0.2817 | 0.6868 | 0.6661 | 0.7008 |
| Yahoo_Arts | 0.0000 | 0.2886 | 0.0851 | 0.1506 | 0.0528 | 0.1505 | 0.8959 | 12.6515 | 0.4037 | 0.2562 | 0.5811 | 0.5806 |
| Yahoo_Business | 0.4510 | 0.0331 | 0.6230 | 0.7267 | 0.0721 | 0.6423 | 0.1533 | 5.3021 | 0.1032 | 0.7895 | 0.5385 | 0.8429 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0042 | 0.0986 | 0.1061 | 0.1681 | 0.0471 | 0.1715 | 0.8936 | 14.0781 | 0.3461 | 0.2512 | 0.5782 | 0.6455 |
| Yahoo_Entertainment | 0.1618 | 0.0674 | 0.1962 | 0.2168 | 0.1267 | 0.2566 | 0.6544 | 7.5570 | 0.3006 | 0.4523 | 0.6531 | 0.6251 |
| Yahoo_Health | 0.0185 | 0.0757 | 0.2394 | 0.3530 | 0.0811 | 0.3311 | 0.8610 | 11.6102 | 0.2488 | 0.3887 | 0.5219 | 0.6071 |
| Yahoo_Recreation | 0.0725 | 0.0629 | 0.0902 | 0.1003 | 0.0944 | 0.1395 | 0.6532 | 6.9860 | 0.2692 | 0.4581 | 0.6276 | 0.6712 |
| Yahoo_Reference | 0.2889 | 0.0345 | 0.3267 | 0.3482 | 0.0533 | 0.3952 | 0.6015 | 10.6600 | 0.2962 | 0.4672 | 0.5550 | 0.6884 |
| Yahoo_Science | 0.0078 | 0.1147 | 0.0773 | 0.1262 | 0.0497 | 0.1184 | 0.9658 | 8.9129 | 0.1770 | 0.2390 | 0.6700 | 0.7353 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2107 | 6.3223 | 0.1659 | 0.7584 | 0.7040 | 0.8342 |
| Yelp | 0.0030 | 0.3589 | 0.0030 | 0.0030 | 0.0025 | 0.0033 | 0.2064 | 1.3370 | 0.1280 | 0.8607 | 0.8002 | 0.8543 |

Table 69: Detailed results for Massive (5%) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6667 | 2.4722 | 0.4267 | 0.5088 | 0.6286 | 0.5955 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5484 | 1.9677 | 0.3250 | 0.6070 | 0.5135 | 0.6552 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5882 | 1.8824 | 0.3515 | 0.5598 | 0.3059 | 0.6078 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9000 | 2.6000 | 0.5167 | 0.3800 | 0.5642 | 0.5068 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.6667 | 0.0991 | 0.8496 | 0.6766 | 0.7778 |
| bibtex | 0.0932 | 0.0151 | 0.2170 | 0.2967 | 0.0884 | 0.2939 | 0.6514 | 26.2027 | 0.0941 | 0.3932 | 0.8626 | 0.8694 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4103 | 5.0769 | 0.1705 | 0.6352 | 0.7145 | 0.8230 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1373 | 142.8824 | 0.2113 | 0.4591 | 0.5171 | 0.7897 |
| corel16k001 | 0.0000 | 0.1045 | 0.0271 | 0.0509 | 0.0140 | 0.0501 | 0.9303 | 99.4089 | 0.3764 | 0.0912 | 0.6515 | 0.6197 |
| Corel5k | 0.0000 | 0.0180 | 0.1389 | 0.2286 | 0.0286 | 0.2322 | 0.7860 | 126.5040 | 0.1551 | 0.1704 | 0.4766 | 0.8461 |
| delicious | 0.0000 | 0.5170 | 0.0050 | 0.0498 | 0.0289 | 0.0417 | 0.8861 | 902.8624 | 0.5287 | 0.0604 | 0.8269 | 0.6930 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 1.6333 | 0.1447 | 0.8031 | 0.8424 | 0.8658 |
| enron | 0.1111 | 0.0594 | 0.2180 | 0.2960 | 0.0363 | 0.2380 | 0.2456 | 12.3158 | 0.0814 | 0.6843 | 0.6480 | 0.9100 |
| EukaryoteGO | 0.5889 | 0.0261 | 0.6889 | 0.7396 | 0.4695 | 0.7399 | 0.2899 | 1.3196 | 0.0455 | 0.8058 | 0.9416 | 0.9063 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 3.6500 | 0.2175 | 0.7941 | 0.6115 | 0.7714 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.0000 | 0.1505 | 0.7602 | 0.5379 | 0.7827 |
| genbase | 0.8209 | 0.0100 | 0.8731 | 0.9055 | 0.3171 | 0.8750 | 0.0000 | 0.5970 | 0.0078 | 0.9906 | 0.6291 | 0.9872 |
| GnegativeGO | 0.8929 | 0.0187 | 0.9071 | 0.9142 | 0.6488 | 0.9247 | 0.0357 | 0.0929 | 0.0057 | 0.9810 | 0.8516 | 0.9930 |
| GnegativePseAAC | 0.5571 | 0.0616 | 0.5643 | 0.5678 | 0.2287 | 0.6987 | 0.2214 | 0.5714 | 0.0734 | 0.8574 | 0.7371 | 0.9419 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9038 | 0.9038 | 0.8656 | 0.9216 | 0.0577 | 0.0769 | 0.0192 | 0.9712 | 0.9975 | 0.9960 |
| GpositivePseAAC | 0.5577 | 0.1250 | 0.5577 | 0.5577 | 0.5223 | 0.6905 | 0.5769 | 0.7885 | 0.2628 | 0.6779 | 0.8916 | 0.8171 |
| HumanGO | 0.6238 | 0.0395 | 0.6710 | 0.6948 | 0.4388 | 0.7252 | 0.1543 | 0.4823 | 0.0204 | 0.9103 | 0.9740 | 0.9813 |
| HumanPseAAC | 0.0096 | 0.0838 | 0.0096 | 0.0096 | 0.0064 | 0.0162 | 0.5498 | 2.1768 | 0.1415 | 0.6213 | 0.7146 | 0.8572 |
| Image | 0.1300 | 0.2110 | 0.1375 | 0.1411 | 0.1955 | 0.2156 | 0.3300 | 0.9050 | 0.1729 | 0.7891 | 0.8363 | 0.8300 |
| IMDB-ECC-F10% | 0.0010 | 0.1726 | 0.0732 | 0.1258 | 0.0310 | 0.1357 | 0.9413 | 15.1017 | 0.4036 | 0.2130 | 0.5726 | 0.5868 |
| IMDB-F10% | 0.0017 | 0.0746 | 0.0080 | 0.0119 | 0.0114 | 0.0210 | 0.6810 | 8.5998 | 0.1968 | 0.4241 | 0.5789 | 0.7732 |
| LLOG-F | 0.1230 | 0.0173 | 0.1530 | 0.1702 | 0.0373 | 0.2255 | 0.6885 | 12.6721 | 0.1331 | 0.4104 | 0.4346 | 0.8618 |
| mediamill10% | 0.0736 | 0.0328 | 0.3821 | 0.5348 | 0.0225 | 0.4748 | 0.1496 | 18.5796 | 0.0561 | 0.6982 | 0.7277 | 0.9359 |
| medical | 0.5714 | 0.0125 | 0.6973 | 0.7586 | 0.2169 | 0.7791 | 0.1633 | 2.0000 | 0.0257 | 0.8782 | 0.5155 | 0.9684 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.9500 | 0.1570 | 0.8045 | 0.8582 | 0.8657 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0052 | 0.0566 | 0.1006 | 0.1699 | 0.0369 | 0.1622 | 0.9605 | 36.0090 | 0.2816 | 0.1941 | 0.5519 | 0.5964 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.3333 | 0.0703 | 0.3385 | 0.3411 | 0.1779 | 0.4490 | 0.2083 | 0.4479 | 0.0279 | 0.8847 | 0.9687 | 0.9745 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.5714 | 2.1939 | 0.1797 | 0.6005 | 0.7795 | 0.8384 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.1838 | 0.0163 | 0.3610 | 0.4602 | 0.1924 | 0.4480 | 0.6701 | 10.7784 | 0.0750 | 0.4690 | 0.6556 | 0.8843 |
| scene | 0.4523 | 0.1086 | 0.4730 | 0.4832 | 0.6046 | 0.6025 | 0.2324 | 0.4440 | 0.0676 | 0.8653 | 0.9353 | 0.9449 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.0352 | 0.1418 | 0.8106 | 0.5648 | 0.7870 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1408 | 19.4014 | 0.1419 | 0.8166 | 0.5188 | 0.7883 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.6690 | 0.1319 | 0.8368 | 0.5538 | 0.7972 |
| SLASHDOT-F | 0.2778 | 0.0445 | 0.3025 | 0.3147 | 0.1813 | 0.4013 | 0.4127 | 2.2011 | 0.0823 | 0.7031 | 0.6781 | 0.9173 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0130 | 0.0198 | 0.1404 | 0.2232 | 0.0393 | 0.2172 | 0.8012 | 47.7522 | 0.1670 | 0.2618 | 0.5434 | 0.6580 |
| Stackex_chess | 0.0060 | 0.0148 | 0.1860 | 0.2990 | 0.0319 | 0.3024 | 0.8274 | 64.7798 | 0.1559 | 0.2238 | 0.4290 | 0.8398 |
| Stackex_coffee | 0.0000 | 0.0180 | 0.0471 | 0.0692 | 0.0049 | 0.1053 | 0.8261 | 57.0000 | 0.2572 | 0.2754 | 0.2139 | 0.6996 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0276 | 0.0156 | 0.2055 | 0.3210 | 0.0375 | 0.2853 | 0.8568 | 51.8015 | 0.1247 | 0.2447 | 0.5699 | 0.8622 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4966 | 4.1473 | 0.2252 | 0.6072 | 0.6820 | 0.7562 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5068 | 4.0993 | 0.2235 | 0.6028 | 0.6777 | 0.7491 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0952 | 0.5714 | 0.0684 | 0.9183 | 0.7493 | 0.9291 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5238 | 0.9524 | 0.1679 | 0.6960 | 0.6144 | 0.8675 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3019 | 9.0000 | 0.2740 | 0.6837 | 0.6644 | 0.7048 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2025 | 6.3099 | 0.1645 | 0.7666 | 0.6999 | 0.8323 |
| Yelp | 0.0040 | 0.3589 | 0.0040 | 0.0040 | 0.0035 | 0.0044 | 0.2144 | 1.3360 | 0.1283 | 0.8580 | 0.7983 | 0.8537 |

Table 70: Detailed results for Massive (10%) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5833 | 2.0833 | 0.3631 | 0.5849 | 0.6181 | 0.6157 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8065 | 2.8387 | 0.5250 | 0.4258 | 0.5726 | 0.4852 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7059 | 2.0000 | 0.3794 | 0.4961 | 0.2939 | 0.5966 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.9667 | 0.5717 | 0.3706 | 0.6111 | 0.4614 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5556 | 0.0824 | 0.8630 | 0.6766 | 0.7860 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4615 | 5.5385 | 0.1941 | 0.5943 | 0.7172 | 0.8150 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2941 | 133.6275 | 0.2022 | 0.4546 | 0.5194 | 0.7988 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0135 | 0.1639 | 0.2610 | 0.0267 | 0.2655 | 0.7500 | 108.4880 | 0.1265 | 0.2308 | 0.4850 | 0.8744 |
| delicious | 0.0130 | 0.5052 | 0.0148 | 0.0538 | 0.0419 | 0.0533 | 0.8914 | 902.8774 | 0.5175 | 0.0631 | 0.8342 | 0.6862 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.5667 | 0.1316 | 0.8104 | 0.8482 | 0.8714 |
| enron | 0.1170 | 0.0569 | 0.2569 | 0.3468 | 0.0497 | 0.3138 | 0.2573 | 12.5029 | 0.0820 | 0.6800 | 0.6480 | 0.9093 |
| EukaryoteGO | 0.6314 | 0.0233 | 0.6992 | 0.7336 | 0.3826 | 0.7608 | 0.2049 | 0.4897 | 0.0150 | 0.8861 | 0.9857 | 0.9856 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1000 | 3.6000 | 0.1900 | 0.8371 | 0.6227 | 0.7802 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2927 | 3.0000 | 0.1422 | 0.7434 | 0.5521 | 0.7901 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3206 | 0.8592 | 0.0000 | 0.5373 | 0.0066 | 0.9907 | 0.6291 | 0.9896 |
| GnegativeGO | 0.9071 | 0.0179 | 0.9179 | 0.9232 | 0.6779 | 0.9286 | 0.0357 | 0.1214 | 0.0089 | 0.9776 | 0.8521 | 0.9899 |
| GnegativePseAAC | 0.5643 | 0.0625 | 0.5679 | 0.5696 | 0.2276 | 0.6957 | 0.1786 | 0.4786 | 0.0607 | 0.8839 | 0.7386 | 0.9453 |
| GpositiveGO | 0.8654 | 0.0481 | 0.8654 | 0.8654 | 0.8406 | 0.9000 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9968 | 0.9923 |
| GpositivePseAAC | 0.5962 | 0.1154 | 0.5962 | 0.5962 | 0.5437 | 0.7209 | 0.2692 | 0.4231 | 0.1410 | 0.8413 | 0.9060 | 0.9100 |
| HumanGO | 0.5498 | 0.0459 | 0.5718 | 0.5831 | 0.3252 | 0.6491 | 0.1543 | 0.4920 | 0.0220 | 0.9083 | 0.9723 | 0.9792 |
| HumanPseAAC | 0.0096 | 0.0838 | 0.0096 | 0.0096 | 0.0064 | 0.0162 | 0.5498 | 2.1768 | 0.1415 | 0.6213 | 0.7146 | 0.8572 |
| Image | 0.1900 | 0.2020 | 0.2000 | 0.2049 | 0.2683 | 0.2937 | 0.2950 | 0.8550 | 0.1592 | 0.8105 | 0.8487 | 0.8405 |
| IMDB-ECC-F10% | 0.0168 | 0.1174 | 0.1287 | 0.1953 | 0.0338 | 0.1967 | 0.7358 | 9.1866 | 0.2391 | 0.3592 | 0.5525 | 0.7518 |
| IMDB-F10% | 0.0066 | 0.0792 | 0.0223 | 0.0320 | 0.0149 | 0.0470 | 0.7523 | 9.2568 | 0.2185 | 0.4176 | 0.5699 | 0.7623 |
| LLOG-F | 0.0492 | 0.0174 | 0.0574 | 0.0612 | 0.0126 | 0.0914 | 0.6803 | 13.2213 | 0.1425 | 0.4156 | 0.4463 | 0.8565 |
| mediamill10% | 0.0689 | 0.0326 | 0.3942 | 0.5429 | 0.0273 | 0.4921 | 0.2090 | 19.9691 | 0.0628 | 0.5811 | 0.7289 | 0.9277 |
| medical | 0.6122 | 0.0116 | 0.7160 | 0.7668 | 0.2361 | 0.7901 | 0.1429 | 1.4592 | 0.0176 | 0.8921 | 0.5447 | 0.9777 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2167 | 1.9167 | 0.1543 | 0.8142 | 0.8613 | 0.8666 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0363 | 0.1928 | 0.2935 | 0.0394 | 0.2841 | 0.7041 | 27.6889 | 0.2006 | 0.3803 | 0.5622 | 0.7702 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.3542 | 0.0668 | 0.3594 | 0.3620 | 0.1958 | 0.4762 | 0.2083 | 0.4062 | 0.0254 | 0.8860 | 0.9736 | 0.9762 |
| PlantPseAAC | 0.0306 | 0.0910 | 0.0357 | 0.0381 | 0.0354 | 0.0696 | 0.5714 | 2.1837 | 0.1808 | 0.6000 | 0.7766 | 0.8330 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.3144 | 0.0121 | 0.4145 | 0.4733 | 0.1777 | 0.4941 | 0.4725 | 6.2302 | 0.0417 | 0.6266 | 0.7165 | 0.9519 |
| scene | 0.5187 | 0.0968 | 0.5394 | 0.5496 | 0.6641 | 0.6585 | 0.2116 | 0.3900 | 0.0581 | 0.8800 | 0.9445 | 0.9526 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0845 | 19.1127 | 0.1195 | 0.8555 | 0.5679 | 0.8049 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.2606 | 0.1237 | 0.8378 | 0.5363 | 0.8029 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.2746 | 0.1226 | 0.8318 | 0.5642 | 0.8038 |
| SLASHDOT-F | 0.2937 | 0.0437 | 0.3223 | 0.3365 | 0.2095 | 0.4229 | 0.3624 | 2.0688 | 0.0765 | 0.7297 | 0.6794 | 0.9209 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0115 | 0.0214 | 0.0720 | 0.1145 | 0.0185 | 0.1102 | 0.9107 | 45.0043 | 0.1577 | 0.2125 | 0.5317 | 0.6461 |
| Stackex_chess | 0.0298 | 0.0110 | 0.1645 | 0.2424 | 0.0176 | 0.2584 | 0.6012 | 57.5060 | 0.1360 | 0.3392 | 0.4258 | 0.8628 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7391 | 48.9565 | 0.2154 | 0.3043 | 0.1987 | 0.7405 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0804 | 0.0103 | 0.2140 | 0.2941 | 0.0253 | 0.2840 | 0.6181 | 49.5050 | 0.1158 | 0.3587 | 0.5784 | 0.8732 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4726 | 4.0719 | 0.2180 | 0.6174 | 0.6850 | 0.7560 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5068 | 4.0993 | 0.2235 | 0.6028 | 0.6777 | 0.7491 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1429 | 0.6190 | 0.0815 | 0.9008 | 0.7227 | 0.9117 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3810 | 0.8571 | 0.1548 | 0.7675 | 0.6263 | 0.8898 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2358 | 9.3208 | 0.2901 | 0.6818 | 0.6625 | 0.6834 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2190 | 6.2149 | 0.1590 | 0.7689 | 0.7163 | 0.8440 |
| Yelp | 0.0080 | 0.3583 | 0.0080 | 0.0080 | 0.0074 | 0.0088 | 0.2104 | 1.3539 | 0.1303 | 0.8566 | 0.8012 | 0.8537 |

Table 71: Detailed results for Massive (25%) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7222 | 2.2500 | 0.3819 | 0.4988 | 0.6662 | 0.6292 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5484 | 1.9677 | 0.3282 | 0.6089 | 0.4995 | 0.6495 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 1.8824 | 0.3588 | 0.4647 | 0.3437 | 0.6395 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.7333 | 0.5400 | 0.3742 | 0.6109 | 0.4842 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5556 | 0.0889 | 0.8617 | 0.6662 | 0.7775 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4615 | 5.3333 | 0.1848 | 0.6117 | 0.7175 | 0.8129 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1373 | 138.0000 | 0.2181 | 0.4470 | 0.5122 | 0.7839 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0135 | 0.1639 | 0.2610 | 0.0267 | 0.2655 | 0.7500 | 108.4880 | 0.1265 | 0.2308 | 0.4850 | 0.8744 |
| delicious | 0.0062 | 0.5131 | 0.0232 | 0.0653 | 0.0378 | 0.0539 | 0.8930 | 902.8822 | 0.5050 | 0.0723 | 0.8218 | 0.6876 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.6167 | 0.1337 | 0.8156 | 0.8439 | 0.8744 |
| enron | 0.1111 | 0.0608 | 0.1871 | 0.2388 | 0.0353 | 0.2049 | 0.3567 | 12.8187 | 0.0869 | 0.6405 | 0.6470 | 0.9032 |
| EukaryoteGO | 0.6314 | 0.0233 | 0.6992 | 0.7336 | 0.3826 | 0.7608 | 0.2049 | 0.4897 | 0.0150 | 0.8861 | 0.9857 | 0.9856 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 3.5500 | 0.2208 | 0.8070 | 0.6153 | 0.7714 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.0488 | 0.1346 | 0.7731 | 0.5363 | 0.7845 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3206 | 0.8592 | 0.0000 | 0.5373 | 0.0066 | 0.9907 | 0.6291 | 0.9896 |
| GnegativeGO | 0.9071 | 0.0187 | 0.9143 | 0.9178 | 0.6728 | 0.9247 | 0.0500 | 0.1071 | 0.0077 | 0.9738 | 0.8537 | 0.9923 |
| GnegativePseAAC | 0.5571 | 0.0625 | 0.5643 | 0.5678 | 0.2282 | 0.6957 | 0.1857 | 0.5214 | 0.0662 | 0.8766 | 0.7402 | 0.9465 |
| GpositiveGO | 0.9038 | 0.0433 | 0.9038 | 0.9038 | 0.8548 | 0.9126 | 0.0577 | 0.0769 | 0.0192 | 0.9712 | 0.9975 | 0.9961 |
| GpositivePseAAC | 0.6154 | 0.1298 | 0.6250 | 0.6298 | 0.5308 | 0.7097 | 0.2692 | 0.4423 | 0.1474 | 0.8381 | 0.8718 | 0.8973 |
| HumanGO | 0.6141 | 0.0407 | 0.6581 | 0.6805 | 0.4354 | 0.7159 | 0.1543 | 0.4984 | 0.0210 | 0.9092 | 0.9740 | 0.9818 |
| HumanPseAAC | 0.0096 | 0.0838 | 0.0096 | 0.0096 | 0.0064 | 0.0162 | 0.5498 | 2.1768 | 0.1415 | 0.6213 | 0.7146 | 0.8572 |
| Image | 0.1100 | 0.2160 | 0.1150 | 0.1174 | 0.1699 | 0.1818 | 0.3500 | 0.9200 | 0.1783 | 0.7842 | 0.8313 | 0.8227 |
| IMDB-ECC-F10% | 0.0168 | 0.1174 | 0.1287 | 0.1953 | 0.0338 | 0.1967 | 0.7358 | 9.1866 | 0.2391 | 0.3592 | 0.5525 | 0.7518 |
| IMDB-F10% | 0.0066 | 0.0792 | 0.0223 | 0.0320 | 0.0149 | 0.0470 | 0.7523 | 9.2568 | 0.2185 | 0.4176 | 0.5699 | 0.7623 |
| LLOG-F | 0.1393 | 0.0168 | 0.1803 | 0.2029 | 0.0416 | 0.2667 | 0.8115 | 13.8770 | 0.1473 | 0.3416 | 0.4470 | 0.8455 |
| mediamill10% | 0.0618 | 0.0323 | 0.3931 | 0.5571 | 0.0336 | 0.5029 | 0.2067 | 18.5938 | 0.0598 | 0.6451 | 0.7119 | 0.9317 |
| medical | 0.6122 | 0.0118 | 0.7313 | 0.7895 | 0.2500 | 0.7920 | 0.1735 | 1.9388 | 0.0269 | 0.8647 | 0.5185 | 0.9705 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1833 | 1.8833 | 0.1435 | 0.8337 | 0.8520 | 0.8642 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0363 | 0.1928 | 0.2935 | 0.0394 | 0.2841 | 0.7041 | 27.6889 | 0.2006 | 0.3803 | 0.5622 | 0.7702 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.4375 | 0.0625 | 0.4427 | 0.4453 | 0.2337 | 0.5443 | 0.2083 | 0.4375 | 0.0278 | 0.8832 | 0.9717 | 0.9764 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.6020 | 2.3265 | 0.1932 | 0.5726 | 0.7771 | 0.8306 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.0739 | 0.0247 | 0.2858 | 0.4009 | 0.1854 | 0.3639 | 0.6753 | 8.1392 | 0.0587 | 0.4618 | 0.6772 | 0.9010 |
| scene | 0.4481 | 0.1100 | 0.4668 | 0.4760 | 0.5958 | 0.5954 | 0.2241 | 0.4440 | 0.0670 | 0.8684 | 0.9359 | 0.9447 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1197 | 19.2465 | 0.1285 | 0.8269 | 0.5661 | 0.7999 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.2606 | 0.1237 | 0.8378 | 0.5363 | 0.8029 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.3732 | 0.1427 | 0.8060 | 0.5445 | 0.7865 |
| SLASHDOT-F | 0.2778 | 0.0438 | 0.3078 | 0.3225 | 0.1922 | 0.4129 | 0.4153 | 2.1825 | 0.0817 | 0.6996 | 0.6802 | 0.9176 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0115 | 0.0214 | 0.0720 | 0.1145 | 0.0185 | 0.1102 | 0.9107 | 45.0043 | 0.1577 | 0.2125 | 0.5317 | 0.6461 |
| Stackex_chess | 0.0000 | 0.0157 | 0.1798 | 0.2935 | 0.0307 | 0.2928 | 0.6429 | 65.6429 | 0.1568 | 0.2954 | 0.4188 | 0.8422 |
| Stackex_coffee | 0.0000 | 0.0180 | 0.0616 | 0.0910 | 0.0073 | 0.1356 | 0.7826 | 53.3478 | 0.2517 | 0.2485 | 0.2105 | 0.7042 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0804 | 0.0103 | 0.2140 | 0.2941 | 0.0253 | 0.2840 | 0.6181 | 49.5050 | 0.1158 | 0.3587 | 0.5784 | 0.8732 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5000 | 4.1233 | 0.2220 | 0.6045 | 0.6838 | 0.7555 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5068 | 4.1473 | 0.2266 | 0.5981 | 0.6782 | 0.7460 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0952 | 0.6190 | 0.0737 | 0.9159 | 0.7563 | 0.9271 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4286 | 0.8095 | 0.1393 | 0.7516 | 0.6148 | 0.8932 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2642 | 9.2170 | 0.2844 | 0.6854 | 0.6643 | 0.6971 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2562 | 6.3678 | 0.1686 | 0.7506 | 0.7044 | 0.8320 |
| Yelp | 0.0080 | 0.3579 | 0.0083 | 0.0086 | 0.0069 | 0.0099 | 0.2134 | 1.3470 | 0.1291 | 0.8567 | 0.8025 | 0.8530 |

### 3.0.3 Poisson's $\lambda$ study

Table 72: Detailed results for Massive (50%) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0057 | 0.0519 | 0.0065 | 0.0069 | 0.0143 | 0.0148 | 0.4217 | 1.6961 | 0.0874 | 0.7183 | 0.9271 | 0.8973 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7222 | 2.3611 | 0.4217 | 0.5081 | 0.6297 | 0.5890 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9355 | 2.3871 | 0.4339 | 0.4081 | 0.4834 | 0.5722 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.3529 | 0.4529 | 0.3892 | 0.2885 | 0.5562 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.7000 | 0.5350 | 0.3783 | 0.5760 | 0.4930 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.3889 | 0.0630 | 0.8778 | 0.6799 | 0.7917 |
| bibtex | 0.1081 | 0.0146 | 0.2358 | 0.3118 | 0.1010 | 0.3080 | 0.6176 | 26.8811 | 0.0959 | 0.4037 | 0.8923 | 0.8934 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4872 | 5.1795 | 0.1796 | 0.5737 | 0.7248 | 0.8235 |
| bookmarks10% | 0.0843 | 0.0125 | 0.1416 | 0.1770 | 0.0406 | 0.1617 | 0.7927 | 67.8736 | 0.2235 | 0.2729 | 0.5784 | 0.5761 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1373 | 136.5098 | 0.1979 | 0.4699 | 0.5184 | 0.8027 |
| corel16k001 | 0.0000 | 0.0543 | 0.0285 | 0.0515 | 0.0116 | 0.0534 | 0.9194 | 66.0123 | 0.2315 | 0.1356 | 0.6944 | 0.7696 |
| Corel5k | 0.0000 | 0.0190 | 0.1503 | 0.2451 | 0.0319 | 0.2496 | 0.7820 | 134.6460 | 0.1641 | 0.1742 | 0.4622 | 0.8380 |
| delicious | 0.0108 | 0.4977 | 0.0248 | 0.0610 | 0.0356 | 0.0554 | 0.8924 | 902.8646 | 0.5089 | 0.0697 | 0.8293 | 0.6734 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 1.7167 | 0.1562 | 0.7665 | 0.8437 | 0.8648 |
| enron | 0.1170 | 0.0566 | 0.2615 | 0.3588 | 0.0544 | 0.3329 | 0.2515 | 12.9883 | 0.0850 | 0.6758 | 0.6413 | 0.9039 |
| EukaryoteGO | 0.4923 | 0.0321 | 0.5743 | 0.6166 | 0.4408 | 0.6562 | 0.3106 | 3.2062 | 0.1339 | 0.7617 | 0.8015 | 0.6752 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 3.7000 | 0.2133 | 0.7999 | 0.5871 | 0.7765 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 2.8293 | 0.1365 | 0.7646 | 0.5372 | 0.7965 |
| genbase | 0.7910 | 0.0100 | 0.8582 | 0.8974 | 0.3171 | 0.8750 | 0.0149 | 0.5970 | 0.0080 | 0.9856 | 0.6296 | 0.9869 |
| GnegativeGO | 0.8357 | 0.0277 | 0.8429 | 0.8464 | 0.5161 | 0.8848 | 0.0357 | 0.1000 | 0.0063 | 0.9804 | 0.8512 | 0.9919 |
| GnegativePseAAC | 0.5357 | 0.0652 | 0.5357 | 0.5357 | 0.2218 | 0.6726 | 0.1929 | 0.5286 | 0.0673 | 0.8732 | 0.7429 | 0.9457 |
| GpositiveGO | 0.8846 | 0.0385 | 0.8846 | 0.8846 | 0.9371 | 0.9200 | 0.0577 | 0.0769 | 0.0192 | 0.9712 | 0.9934 | 0.9934 |
| GpositivePseAAC | 0.5769 | 0.1298 | 0.5865 | 0.5913 | 0.5251 | 0.6966 | 0.3077 | 0.4808 | 0.1603 | 0.8173 | 0.8729 | 0.8840 |
| HumanGO | 0.6302 | 0.0400 | 0.6742 | 0.6966 | 0.4440 | 0.7247 | 0.1672 | 0.5209 | 0.0229 | 0.9010 | 0.9734 | 0.9812 |
| HumanPseAAC | 0.0096 | 0.0838 | 0.0096 | 0.0096 | 0.0064 | 0.0162 | 0.5498 | 2.1768 | 0.1415 | 0.6213 | 0.7146 | 0.8572 |
| Image | 0.1100 | 0.2160 | 0.1150 | 0.1174 | 0.1667 | 0.1818 | 0.3400 | 0.9150 | 0.1750 | 0.7845 | 0.8344 | 0.8300 |
| IMDB-ECC-F10% | 0.0010 | 0.1034 | 0.0145 | 0.0238 | 0.0097 | 0.0302 | 0.9371 | 8.9004 | 0.2291 | 0.3044 | 0.5467 | 0.7242 |
| IMDB-F10% | 0.0000 | 0.2259 | 0.0458 | 0.0797 | 0.0293 | 0.0840 | 0.9130 | 14.9221 | 0.4111 | 0.1990 | 0.5967 | 0.6067 |
| LLOG-F | 0.1639 | 0.0163 | 0.1947 | 0.2107 | 0.0396 | 0.2732 | 0.7049 | 12.9016 | 0.1360 | 0.3915 | 0.4419 | 0.8583 |
| mediamill10% | 0.0451 | 0.0330 | 0.4237 | 0.5968 | 0.0461 | 0.5547 | 0.2755 | 20.6271 | 0.0611 | 0.6366 | 0.6293 | 0.9269 |
| medical | 0.5918 | 0.0120 | 0.7126 | 0.7726 | 0.2381 | 0.7854 | 0.1531 | 2.1735 | 0.0270 | 0.8756 | 0.5208 | 0.9658 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 2.0000 | 0.1681 | 0.7906 | 0.8450 | 0.8602 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0033 | 0.0585 | 0.1022 | 0.1840 | 0.0404 | 0.1845 | 0.8030 | 20.4924 | 0.1462 | 0.2719 | 0.5459 | 0.7875 |
| OHSUMED-F | 0.0388 | 0.0876 | 0.0915 | 0.1215 | 0.0569 | 0.1465 | 0.6698 | 8.5980 | 0.2785 | 0.4530 | 0.7015 | 0.7172 |
| PlantGO | 0.3438 | 0.0686 | 0.3490 | 0.3515 | 0.1874 | 0.4626 | 0.2188 | 0.4375 | 0.0283 | 0.8782 | 0.9702 | 0.9757 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.5816 | 2.1837 | 0.1807 | 0.5973 | 0.7818 | 0.8373 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.2406 | 0.0135 | 0.4075 | 0.4959 | 0.1908 | 0.4981 | 0.5258 | 7.2268 | 0.0501 | 0.5764 | 0.7049 | 0.9439 |
| scene | 0.4647 | 0.1093 | 0.4855 | 0.4956 | 0.6107 | 0.6070 | 0.2490 | 0.4564 | 0.0704 | 0.8565 | 0.9356 | 0.9401 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1479 | 19.5704 | 0.1456 | 0.8036 | 0.5641 | 0.7874 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.2535 | 0.1390 | 0.8218 | 0.5197 | 0.7871 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.6127 | 0.1506 | 0.8170 | 0.5536 | 0.7812 |
| SLASHDOT-F | 0.2884 | 0.0441 | 0.3183 | 0.3333 | 0.1860 | 0.4184 | 0.3810 | 2.1852 | 0.0820 | 0.7129 | 0.6779 | 0.9189 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.3333 | 0.7000 |
| Stackex_chemistry | 0.0360 | 0.0152 | 0.1319 | 0.1911 | 0.0269 | 0.1922 | 0.8343 | 46.6974 | 0.1642 | 0.2270 | 0.7192 | 0.8303 |
| Stackex_chess | 0.0000 | 0.0174 | 0.1614 | 0.2657 | 0.0291 | 0.2570 | 0.6786 | 62.0536 | 0.1551 | 0.2859 | 0.4401 | 0.8488 |
| Stackex_coffee | 0.0000 | 0.0180 | 0.0362 | 0.0512 | 0.0041 | 0.0727 | 0.8261 | 55.0000 | 0.2674 | 0.2581 | 0.2164 | 0.7039 |
| Stackex_cooking | 0.0097 | 0.0102 | 0.1037 | 0.1731 | 0.0429 | 0.1621 | 0.8251 | 154.7449 | 0.2254 | 0.1735 | 0.7094 | 0.7581 |
| Stackex_philosophy | 0.0804 | 0.0103 | 0.2140 | 0.2941 | 0.0253 | 0.2840 | 0.6181 | 49.5050 | 0.1158 | 0.3587 | 0.5784 | 0.8732 |
| tmc2007-500 | 0.0231 | 0.0941 | 0.0560 | 0.0740 | 0.0728 | 0.0965 | 0.2867 | 3.7654 | 0.0771 | 0.7508 | 0.8522 | 0.8869 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4692 | 4.1199 | 0.2200 | 0.6155 | 0.6852 | 0.7570 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4966 | 4.1884 | 0.2272 | 0.6008 | 0.6790 | 0.7454 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0952 | 0.5714 | 0.0684 | 0.9183 | 0.7385 | 0.9255 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6190 | 1.0000 | 0.1774 | 0.6524 | 0.6131 | 0.8793 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2547 | 9.2264 | 0.2791 | 0.6873 | 0.6660 | 0.6969 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2314 | 6.2397 | 0.1644 | 0.7619 | 0.7067 | 0.8360 |
| Yelp | 0.0120 | 0.3573 | 0.0120 | 0.0120 | 0.0111 | 0.0132 | 0.2104 | 1.3420 | 0.1326 | 0.8581 | 0.8018 | 0.8519 |

Table 73: Detailed results for lambda = 2 for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5078 | 0.0286 | 0.5641 | 0.5930 | 0.6835 | 0.6899 | 0.3128 | 2.4984 | 0.2450 | 0.7543 | 0.9870 | 0.9871 |
| 3s-bbc1000 | 0.1667 | 0.2685 | 0.2315 | 0.2665 | 0.2146 | 0.2750 | 0.7500 | 2.8889 | 0.6650 | 0.4370 | 0.8001 | 0.7517 |
| 3s-guardian1000 | 0.2258 | 0.2796 | 0.3172 | 0.3703 | 0.2265 | 0.3500 | 0.5484 | 2.2258 | 0.4815 | 0.5890 | 0.7934 | 0.8007 |
| 3s-inter3000 | 0.2353 | 0.2353 | 0.2941 | 0.3235 | 0.0870 | 0.3333 | 0.8824 | 2.1765 | 0.5897 | 0.4304 | 0.4949 | 0.6819 |
| 3s-reuters1000 | 0.0667 | 0.3278 | 0.1167 | 0.1373 | 0.1019 | 0.1449 | 0.9000 | 2.5667 | 0.7600 | 0.3828 | 0.8277 | 0.7502 |
| amphibians | 0.1111 | 0.3095 | 0.4619 | 0.6784 | 0.2762 | 0.5618 | 0.2222 | 2.4444 | 0.0833 | 0.8750 | 0.7457 | 0.8084 |
| bibtex | 0.1838 | 0.0120 | 0.3547 | 0.4451 | 0.3074 | 0.4724 | 0.4311 | 72.7608 | 0.5786 | 0.4289 | 0.9977 | 0.9977 |
| birds | 0.2308 | 0.0877 | 0.3636 | 0.4265 | 0.3091 | 0.4444 | 0.5385 | 8.3077 | 0.5738 | 0.4874 | 0.8503 | 0.9518 |
| bookmarks10% | 0.1834 | 0.0088 | 0.2150 | 0.2373 | 0.1118 | 0.2626 | 0.7255 | 105.0171 | 0.7631 | 0.2604 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1386 | 0.1686 | 0.2873 | 0.0350 | 0.2807 | 0.3922 | 151.0588 | 0.6948 | 0.4137 | 0.8459 | 0.9625 |
| corel16k001 | 0.0051 | 0.0189 | 0.0471 | 0.0699 | 0.0305 | 0.0893 | 0.8744 | 114.6253 | 0.9426 | 0.0895 | 0.9989 | 0.9989 |
| Corel5k | 0.0100 | 0.0091 | 0.0500 | 0.0713 | 0.0196 | 0.1003 | 0.8460 | 164.6020 | 0.9346 | 0.1630 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.6084 | 0.0213 | 0.0418 | 0.0488 | 0.0418 | 0.6967 | 920.1815 | 0.9614 | 0.0574 | 0.9945 | 0.9996 |
| emotions | 0.3167 | 0.1889 | 0.5875 | 0.7120 | 0.6714 | 0.6991 | 0.3167 | 1.7833 | 0.2324 | 0.7851 | 0.8825 | 0.8883 |
| enron | 0.1813 | 0.0515 | 0.4486 | 0.5705 | 0.1389 | 0.5540 | 0.3392 | 25.2515 | 0.4107 | 0.5773 | 0.8287 | 0.9838 |
| EukaryoteGO | 0.6804 | 0.0187 | 0.7893 | 0.8423 | 0.6855 | 0.8308 | 0.1830 | 0.9188 | 0.0538 | 0.8844 | 0.9927 | 0.9947 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.2500 | 0.2357 | 0.6144 | 0.7346 | 0.5739 | 0.7402 | 0.2000 | 3.4500 | 0.2117 | 0.8233 | 0.7004 | 0.7958 |
| foodtruck | 0.3415 | 0.1484 | 0.4714 | 0.5913 | 0.1014 | 0.4748 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8541 | 0.9561 |
| genbase | 0.9403 | 0.0033 | 0.9677 | 0.9813 | 0.5761 | 0.9634 | 0.0299 | 0.2537 | 0.0015 | 0.9838 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9357 | 0.0125 | 0.9500 | 0.9571 | 0.8192 | 0.9517 | 0.0357 | 0.1143 | 0.0215 | 0.9774 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7571 | 0.0527 | 0.7845 | 0.7982 | 0.4486 | 0.7944 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8617 | 0.9894 |
| GpositiveGO | 0.9231 | 0.0385 | 0.9231 | 0.9231 | 0.8601 | 0.9231 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1298 | 0.7404 | 0.7452 | 0.5629 | 0.7429 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9841 | 0.9758 |
| HumanGO | 0.6752 | 0.0345 | 0.7604 | 0.8030 | 0.6555 | 0.7911 | 0.1576 | 1.1865 | 0.1210 | 0.8761 | 0.9853 | 0.9887 |
| HumanPseAAC | 0.3537 | 0.0914 | 0.4068 | 0.4347 | 0.1844 | 0.4265 | 0.5434 | 3.6109 | 0.5035 | 0.5704 | 0.9581 | 0.9589 |
| Image | 0.5400 | 0.1650 | 0.6183 | 0.6583 | 0.6374 | 0.6325 | 0.3100 | 1.0150 | 0.2804 | 0.7947 | 0.9298 | 0.9259 |
| IMDB-ECC-F10% | 0.0587 | 0.0845 | 0.1437 | 0.1892 | 0.0219 | 0.1884 | 0.7788 | 14.1918 | 0.8727 | 0.2647 | 0.9904 | 0.9893 |
| IMDB-F10% | 0.0481 | 0.0908 | 0.1319 | 0.1784 | 0.0213 | 0.1783 | 0.8045 | 15.0348 | 0.8985 | 0.2434 | 0.9900 | 0.9909 |
| LLOG-F | 0.1639 | 0.0161 | 0.1892 | 0.2046 | 0.0498 | 0.2759 | 0.7377 | 29.1803 | 0.7862 | 0.2743 | 0.5988 | 0.9986 |
| mediamill10% | 0.0855 | 0.0317 | 0.4249 | 0.5831 | 0.0402 | 0.5245 | 0.2637 | 60.8599 | 0.4727 | 0.5174 | 0.8141 | 0.9944 |
| medical | 0.6531 | 0.0100 | 0.7577 | 0.8085 | 0.3110 | 0.8240 | 0.1735 | 5.0306 | 0.1334 | 0.8351 | 0.5533 | 0.9978 |
| Music | 0.2833 | 0.1667 | 0.6028 | 0.7438 | 0.7311 | 0.7414 | 0.3000 | 1.9667 | 0.2518 | 0.8015 | 0.9085 | 0.9044 |
| NUS-WIDE-bow10% | 0.1836 | 0.0250 | 0.3109 | 0.3772 | 0.0418 | 0.3791 | 0.5219 | 34.2350 | 0.5868 | 0.4398 | 0.8803 | 0.9913 |
| NUS-WIDE-cVLADplus10% | 0.1970 | 0.0296 | 0.3220 | 0.3867 | 0.0416 | 0.3527 | 0.6327 | 38.3635 | 0.7183 | 0.3576 | 0.8856 | 0.9967 |
| OHSUMED-F | 0.2340 | 0.0569 | 0.4327 | 0.5372 | 0.4387 | 0.5582 | 0.3575 | 7.6382 | 0.4113 | 0.6145 | 0.9765 | 0.9795 |
| PlantGO | 0.6562 | 0.0399 | 0.7188 | 0.7478 | 0.6464 | 0.7767 | 0.2188 | 1.1458 | 0.1185 | 0.8438 | 0.9914 | 0.9882 |
| PlantPseAAC | 0.2959 | 0.1063 | 0.3367 | 0.3622 | 0.1833 | 0.3781 | 0.5918 | 3.2449 | 0.5477 | 0.5419 | 0.9564 | 0.9524 |
| rcv1subset1 | 0.0717 | 0.0293 | 0.2496 | 0.3422 | 0.1932 | 0.3629 | 0.4850 | 50.4900 | 0.6263 | 0.3878 | 0.9314 | 0.9917 |
| REUTERS-K500-EX2 | 0.3024 | 0.0114 | 0.3677 | 0.4036 | 0.2245 | 0.4700 | 0.5584 | 35.9364 | 0.5871 | 0.4433 | 0.7845 | 0.9980 |
| scene | 0.6639 | 0.0837 | 0.7158 | 0.7414 | 0.7665 | 0.7546 | 0.2075 | 0.7967 | 0.1581 | 0.8482 | 0.9685 | 0.9722 |
| sider_CDK_ECFP4 | 0.0000 | 0.2504 | 0.6467 | 0.7935 | 0.6479 | 0.7942 | 0.0986 | 19.7113 | 0.1987 | 0.7692 | 0.6021 | 0.7638 |
| sider_MordredDesc | 0.0141 | 0.2681 | 0.6151 | 0.7774 | 0.6106 | 0.7782 | 0.3169 | 19.4085 | 0.1817 | 0.7627 | 0.5686 | 0.7624 |
| sider_RDKit_desc | 0.0141 | 0.2809 | 0.6279 | 0.7805 | 0.5817 | 0.7758 | 0.3380 | 19.8099 | 0.2124 | 0.7306 | 0.5706 | 0.7543 |
| SLASHDOT-F | 0.3889 | 0.0396 | 0.4824 | 0.5312 | 0.3873 | 0.5872 | 0.4577 | 6.6217 | 0.4464 | 0.5837 | 0.7631 | 0.9898 |
| solar_flare-L3 | 0.4000 | 0.4000 | 0.4000 | 0.4000 | 0.1905 | 0.4000 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7600 |
| Stackex_chemistry | 0.0389 | 0.0120 | 0.0991 | 0.1347 | 0.0535 | 0.1684 | 0.7925 | 105.9726 | 0.8776 | 0.1538 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0476 | 0.0100 | 0.1453 | 0.1993 | 0.0514 | 0.2573 | 0.6964 | 139.3333 | 0.8202 | 0.1908 | 0.5495 | 0.9985 |
| Stackex_coffee | 0.0435 | 0.0191 | 0.0717 | 0.0864 | 0.0199 | 0.1290 | 0.9130 | 75.3913 | 0.8922 | 0.0978 | 0.2569 | 0.9926 |
| Stackex_cooking | 0.0589 | 0.0052 | 0.1915 | 0.2597 | 0.1002 | 0.3072 | 0.6406 | 223.4725 | 0.7720 | 0.2311 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0678 | 0.0092 | 0.1701 | 0.2285 | 0.0550 | 0.2685 | 0.6834 | 134.9121 | 0.7897 | 0.2140 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2780 | 0.0630 | 0.5630 | 0.6997 | 0.5803 | 0.6752 | 0.2839 | 4.5206 | 0.1786 | 0.7539 | 0.9611 | 0.9714 |
| tox21_CDK_ECFP4 | 0.1575 | 0.1658 | 0.3369 | 0.4296 | 0.3910 | 0.4524 | 0.4829 | 5.6575 | 0.5543 | 0.5470 | 0.9171 | 0.9208 |
| tox21_RDKit_desc | 0.1404 | 0.1815 | 0.2892 | 0.3860 | 0.2471 | 0.3837 | 0.5103 | 5.6918 | 0.5877 | 0.5260 | 0.9210 | 0.9255 |
| VirusGO | 0.7143 | 0.0714 | 0.8254 | 0.8651 | 0.6590 | 0.8235 | 0.1429 | 0.5714 | 0.0934 | 0.8968 | 0.8034 | 0.9695 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.2857 | 0.8095 | 0.1762 | 0.8071 | 0.7229 | 0.9202 |
| Water-quality | 0.0000 | 0.3174 | 0.3132 | 0.4673 | 0.3216 | 0.4666 | 0.3113 | 9.5660 | 0.3936 | 0.6803 | 0.7767 | 0.7827 |
| Yahoo_Arts | 0.1469 | 0.0636 | 0.2054 | 0.2458 | 0.1781 | 0.2958 | 0.5501 | 11.2483 | 0.7077 | 0.4581 | 0.9412 | 0.9812 |
| Yahoo_Business | 0.5793 | 0.0256 | 0.7334 | 0.8194 | 0.2952 | 0.7354 | 0.0882 | 3.1907 | 0.2239 | 0.8874 | 0.8569 | 0.9952 |
| Yahoo_Computers | 0.3920 | 0.0410 | 0.4780 | 0.5378 | 0.2522 | 0.5085 | 0.3831 | 6.5799 | 0.4260 | 0.6112 | 0.8897 | 0.9823 |
| Yahoo_Education | 0.1463 | 0.0457 | 0.2027 | 0.2431 | 0.1515 | 0.3118 | 0.6160 | 9.3067 | 0.6590 | 0.4864 | 0.8866 | 0.9795 |
| Yahoo_Entertainment | 0.4184 | 0.0743 | 0.5347 | 0.5793 | 0.3536 | 0.5342 | 0.3891 | 3.9963 | 0.3942 | 0.6735 | 0.9767 | 0.9757 |
| Yahoo_Health | 0.4104 | 0.0392 | 0.5493 | 0.6289 | 0.2476 | 0.5895 | 0.3105 | 6.4235 | 0.3456 | 0.6967 | 0.8294 | 0.9855 |
| Yahoo_Recreation | 0.2198 | 0.0626 | 0.2776 | 0.3199 | 0.3043 | 0.3779 | 0.5323 | 6.8239 | 0.6201 | 0.5445 | 0.9725 | 0.9739 |
| Yahoo_Reference | 0.4271 | 0.0304 | 0.4770 | 0.5099 | 0.1467 | 0.5223 | 0.4197 | 5.7310 | 0.4533 | 0.6225 | 0.8076 | 0.9898 |
| Yahoo_Science | 0.2053 | 0.0383 | 0.2613 | 0.3035 | 0.1578 | 0.3349 | 0.6407 | 13.8989 | 0.6690 | 0.4129 | 0.9578 | 0.9843 |
| Yahoo_Social | 0.4711 | 0.0267 | 0.5308 | 0.5679 | 0.1706 | 0.5473 | 0.3738 | 7.6955 | 0.4058 | 0.6427 | 0.9160 | 0.9921 |
| Yahoo_Society | 0.3238 | 0.0840 | 0.4556 | 0.5531 | 0.2266 | 0.4651 | 0.3610 | 8.3493 | 0.4732 | 0.5868 | 0.9487 | 0.9836 |
| yeast | 0.1860 | 0.1983 | 0.5440 | 0.6764 | 0.3737 | 0.6653 | 0.2603 | 6.2727 | 0.2619 | 0.7467 | 0.8388 | 0.8923 |
| Yelp | 0.3968 | 0.1952 | 0.6162 | 0.7140 | 0.6611 | 0.7113 | 0.2004 | 1.3759 | 0.2164 | 0.8607 | 0.8619 | 0.8886 |

Table 74: Detailed results for lambda = 3 for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5628 | 0.0260 | 0.6010 | 0.6199 | 0.7099 | 0.7150 | 0.3268 | 2.8345 | 0.2742 | 0.7373 | 0.9922 | 0.9922 |
| 3s-bbc1000 | 0.1111 | 0.3148 | 0.1806 | 0.2243 | 0.1773 | 0.2273 | 0.7500 | 2.9722 | 0.6852 | 0.4284 | 0.7815 | 0.7349 |
| 3s-guardian1000 | 0.2581 | 0.2527 | 0.3720 | 0.4314 | 0.2353 | 0.4051 | 0.5161 | 2.0968 | 0.4661 | 0.6121 | 0.8150 | 0.8243 |
| 3s-inter3000 | 0.2941 | 0.2255 | 0.3235 | 0.3376 | 0.0870 | 0.3429 | 0.8235 | 2.1176 | 0.5647 | 0.4520 | 0.5061 | 0.6978 |
| 3s-reuters1000 | 0.0667 | 0.3222 | 0.1333 | 0.1600 | 0.1302 | 0.1714 | 0.9000 | 2.4667 | 0.7067 | 0.3900 | 0.7786 | 0.7253 |
| amphibians | 0.1111 | 0.3016 | 0.4685 | 0.6839 | 0.3885 | 0.5870 | 0.2222 | 2.5000 | 0.0889 | 0.8570 | 0.7419 | 0.8002 |
| bibtex | 0.1838 | 0.0120 | 0.3547 | 0.4451 | 0.3074 | 0.4724 | 0.4311 | 72.7608 | 0.5786 | 0.4289 | 0.9977 | 0.9977 |
| birds | 0.2051 | 0.0918 | 0.3536 | 0.4220 | 0.3042 | 0.4333 | 0.4872 | 7.9744 | 0.5157 | 0.5160 | 0.8467 | 0.9451 |
| bookmarks10% | 0.1834 | 0.0088 | 0.2150 | 0.2373 | 0.1118 | 0.2626 | 0.7255 | 105.0171 | 0.7631 | 0.2604 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1382 | 0.1717 | 0.2924 | 0.0356 | 0.2864 | 0.2157 | 151.0588 | 0.6309 | 0.4302 | 0.8354 | 0.9507 |
| corel16k001 | 0.0051 | 0.0189 | 0.0471 | 0.0699 | 0.0305 | 0.0893 | 0.8744 | 114.6253 | 0.9426 | 0.0895 | 0.9989 | 0.9989 |
| Corel5k | 0.0100 | 0.0091 | 0.0500 | 0.0713 | 0.0196 | 0.1003 | 0.8460 | 164.6020 | 0.9346 | 0.1630 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.6084 | 0.0213 | 0.0418 | 0.0488 | 0.0418 | 0.6967 | 920.1815 | 0.9614 | 0.0574 | 0.9945 | 0.9996 |
| emotions | 0.3500 | 0.1778 | 0.5875 | 0.6985 | 0.6688 | 0.7037 | 0.3000 | 1.7167 | 0.2361 | 0.7965 | 0.8818 | 0.8891 |
| enron | 0.1813 | 0.0512 | 0.4506 | 0.5735 | 0.1399 | 0.5573 | 0.2690 | 24.6959 | 0.3882 | 0.5982 | 0.8273 | 0.9823 |
| EukaryoteGO | 0.6830 | 0.0189 | 0.7865 | 0.8370 | 0.6811 | 0.8278 | 0.1727 | 0.8647 | 0.0504 | 0.8907 | 0.9927 | 0.9947 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.2500 | 0.2500 | 0.5811 | 0.7009 | 0.5557 | 0.7200 | 0.2000 | 3.5500 | 0.2125 | 0.8170 | 0.6911 | 0.7946 |
| foodtruck | 0.3415 | 0.1443 | 0.4755 | 0.5927 | 0.1045 | 0.4818 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8536 | 0.9560 |
| genbase | 0.9552 | 0.0022 | 0.9776 | 0.9888 | 0.6144 | 0.9756 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9357 | 0.0125 | 0.9500 | 0.9571 | 0.8192 | 0.9517 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7571 | 0.0536 | 0.7845 | 0.7982 | 0.4479 | 0.7917 | 0.1714 | 0.6214 | 0.1454 | 0.8772 | 0.8612 | 0.9890 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8652 | 0.9333 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9959 | 0.9965 |
| GpositivePseAAC | 0.7500 | 0.1154 | 0.7500 | 0.7500 | 0.5801 | 0.7647 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9845 | 0.9762 |
| HumanGO | 0.6785 | 0.0361 | 0.7481 | 0.7860 | 0.6810 | 0.7715 | 0.1576 | 1.1318 | 0.1139 | 0.8788 | 0.9849 | 0.9886 |
| HumanPseAAC | 0.3215 | 0.0907 | 0.3746 | 0.4022 | 0.1665 | 0.4131 | 0.5434 | 3.6302 | 0.5180 | 0.5694 | 0.9619 | 0.9618 |
| Image | 0.5400 | 0.1690 | 0.6167 | 0.6558 | 0.6339 | 0.6269 | 0.3100 | 1.0200 | 0.2775 | 0.7950 | 0.9299 | 0.9260 |
| IMDB-ECC-F10% | 0.0597 | 0.0846 | 0.1434 | 0.1882 | 0.0218 | 0.1865 | 0.6845 | 13.1080 | 0.7950 | 0.3317 | 0.9911 | 0.9835 |
| IMDB-F10% | 0.0489 | 0.0907 | 0.1319 | 0.1782 | 0.0213 | 0.1784 | 0.6239 | 13.4366 | 0.7733 | 0.3503 | 0.9899 | 0.9804 |
| LLOG-F | 0.1557 | 0.0161 | 0.1892 | 0.2087 | 0.0500 | 0.2829 | 0.7377 | 28.1393 | 0.7821 | 0.2818 | 0.5983 | 0.9981 |
| mediamill10% | 0.0903 | 0.0317 | 0.4195 | 0.5788 | 0.0410 | 0.5224 | 0.2494 | 60.8741 | 0.4665 | 0.5252 | 0.8132 | 0.9942 |
| medical | 0.6429 | 0.0109 | 0.7440 | 0.7948 | 0.2830 | 0.8095 | 0.1735 | 5.0408 | 0.1382 | 0.8325 | 0.5526 | 0.9976 |
| Music | 0.2667 | 0.1722 | 0.5917 | 0.7354 | 0.7221 | 0.7328 | 0.3167 | 2.0000 | 0.2530 | 0.7918 | 0.9111 | 0.8989 |
| NUS-WIDE-bow10% | 0.1836 | 0.0250 | 0.3109 | 0.3772 | 0.0418 | 0.3791 | 0.5219 | 34.2350 | 0.5868 | 0.4398 | 0.8803 | 0.9913 |
| NUS-WIDE-cVLADplus10% | 0.1970 | 0.0296 | 0.3220 | 0.3867 | 0.0416 | 0.3527 | 0.6327 | 38.3635 | 0.7183 | 0.3576 | 0.8856 | 0.9967 |
| OHSUMED-F | 0.2340 | 0.0569 | 0.4327 | 0.5372 | 0.4387 | 0.5582 | 0.3575 | 7.6382 | 0.4113 | 0.6145 | 0.9765 | 0.9795 |
| PlantGO | 0.6875 | 0.0417 | 0.7170 | 0.7335 | 0.6365 | 0.7576 | 0.2292 | 1.1458 | 0.1191 | 0.8412 | 0.9905 | 0.9867 |
| PlantPseAAC | 0.2551 | 0.1046 | 0.3010 | 0.3290 | 0.1666 | 0.3627 | 0.6020 | 3.1735 | 0.5101 | 0.5415 | 0.9498 | 0.9443 |
| rcv1subset1 | 0.1150 | 0.0306 | 0.3271 | 0.4323 | 0.2374 | 0.4350 | 0.4100 | 38.4417 | 0.4071 | 0.5133 | 0.9261 | 0.9867 |
| REUTERS-K500-EX2 | 0.3316 | 0.0112 | 0.4011 | 0.4399 | 0.2343 | 0.4947 | 0.5309 | 32.4003 | 0.5454 | 0.4754 | 0.7842 | 0.9976 |
| scene | 0.6473 | 0.0864 | 0.7047 | 0.7340 | 0.7611 | 0.7485 | 0.2033 | 0.8091 | 0.1598 | 0.8489 | 0.9692 | 0.9727 |
| sider_CDK_ECFP4 | 0.0352 | 0.2447 | 0.6547 | 0.7996 | 0.6329 | 0.7983 | 0.2606 | 19.2254 | 0.1793 | 0.7664 | 0.5983 | 0.7662 |
| sider_MordredDesc | 0.0141 | 0.2681 | 0.6151 | 0.7774 | 0.6106 | 0.7782 | 0.3169 | 19.4085 | 0.1817 | 0.7627 | 0.5686 | 0.7624 |
| sider_RDKit_desc | 0.0141 | 0.2843 | 0.6266 | 0.7796 | 0.5902 | 0.7743 | 0.1127 | 20.3380 | 0.2160 | 0.7641 | 0.5952 | 0.7518 |
| SLASHDOT-F | 0.3995 | 0.0399 | 0.4943 | 0.5447 | 0.3586 | 0.5891 | 0.4339 | 6.3228 | 0.4190 | 0.6042 | 0.7612 | 0.9874 |
| solar_flare-L3 | 0.4000 | 0.2667 | 0.6000 | 0.6857 | 0.4571 | 0.6667 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.4444 | 0.8600 |
| Stackex_chemistry | 0.0389 | 0.0120 | 0.0991 | 0.1347 | 0.0535 | 0.1684 | 0.7925 | 105.9726 | 0.8776 | 0.1538 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0000 | 0.2594 | 0.0145 | 0.0283 | 0.0394 | 0.0285 | 0.8988 | 149.5060 | 0.9363 | 0.0805 | 0.5503 | 0.9996 |
| Stackex_coffee | 0.0000 | 0.0205 | 0.0652 | 0.0904 | 0.0278 | 0.1471 | 0.8696 | 75.3478 | 0.8918 | 0.1231 | 0.2562 | 0.9917 |
| Stackex_cooking | 0.0589 | 0.0052 | 0.1915 | 0.2597 | 0.1002 | 0.3072 | 0.6406 | 223.4725 | 0.7720 | 0.2311 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0678 | 0.0092 | 0.1701 | 0.2285 | 0.0550 | 0.2685 | 0.6834 | 134.9121 | 0.7897 | 0.2140 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2930 | 0.0620 | 0.5604 | 0.6922 | 0.5671 | 0.6697 | 0.2517 | 4.1269 | 0.1467 | 0.7761 | 0.9583 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1507 | 0.1635 | 0.3336 | 0.4249 | 0.3764 | 0.4485 | 0.4658 | 5.4726 | 0.5030 | 0.5639 | 0.9066 | 0.9087 |
| tox21_RDKit_desc | 0.1404 | 0.1764 | 0.2995 | 0.3956 | 0.2660 | 0.3953 | 0.4897 | 5.5342 | 0.5400 | 0.5495 | 0.9117 | 0.9156 |
| VirusGO | 0.7143 | 0.0794 | 0.8095 | 0.8491 | 0.6257 | 0.8000 | 0.0952 | 0.6190 | 0.0980 | 0.9159 | 0.7988 | 0.9679 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.4286 | 0.9524 | 0.1952 | 0.7437 | 0.7138 | 0.9092 |
| Water-quality | 0.0189 | 0.3201 | 0.3188 | 0.4752 | 0.3272 | 0.4621 | 0.2830 | 9.3491 | 0.3738 | 0.6897 | 0.7825 | 0.7785 |
| Yahoo_Arts | 0.2003 | 0.0637 | 0.2876 | 0.3439 | 0.2097 | 0.3680 | 0.5180 | 10.4152 | 0.6266 | 0.4939 | 0.9390 | 0.9785 |
| Yahoo_Business | 0.5793 | 0.0256 | 0.7334 | 0.8194 | 0.2952 | 0.7354 | 0.0882 | 3.1907 | 0.2239 | 0.8874 | 0.8569 | 0.9952 |
| Yahoo_Computers | 0.3920 | 0.0410 | 0.4780 | 0.5378 | 0.2522 | 0.5085 | 0.3831 | 6.5799 | 0.4260 | 0.6112 | 0.8897 | 0.9823 |
| Yahoo_Education | 0.1463 | 0.0457 | 0.2027 | 0.2431 | 0.1515 | 0.3118 | 0.6160 | 9.3067 | 0.6590 | 0.4864 | 0.8866 | 0.9795 |
| Yahoo_Entertainment | 0.4184 | 0.0743 | 0.5347 | 0.5793 | 0.3536 | 0.5342 | 0.3891 | 3.9963 | 0.3942 | 0.6735 | 0.9767 | 0.9757 |
| Yahoo_Health | 0.4104 | 0.0392 | 0.5493 | 0.6289 | 0.2476 | 0.5895 | 0.3105 | 6.4235 | 0.3456 | 0.6967 | 0.8294 | 0.9855 |
| Yahoo_Recreation | 0.2307 | 0.0615 | 0.2849 | 0.3232 | 0.3008 | 0.3825 | 0.5269 | 6.7373 | 0.6038 | 0.5496 | 0.9698 | 0.9710 |
| Yahoo_Reference | 0.4508 | 0.0308 | 0.5126 | 0.5513 | 0.1769 | 0.5411 | 0.4035 | 5.4707 | 0.4356 | 0.6373 | 0.8089 | 0.9906 |
| Yahoo_Science | 0.2053 | 0.0383 | 0.2613 | 0.3035 | 0.1578 | 0.3349 | 0.6407 | 13.8989 | 0.6690 | 0.4129 | 0.9578 | 0.9843 |
| Yahoo_Social | 0.4785 | 0.0274 | 0.5385 | 0.5760 | 0.1629 | 0.5440 | 0.3696 | 7.3960 | 0.3816 | 0.6518 | 0.9133 | 0.9898 |
| Yahoo_Society | 0.3238 | 0.0840 | 0.4556 | 0.5531 | 0.2266 | 0.4651 | 0.3610 | 8.3493 | 0.4732 | 0.5868 | 0.9487 | 0.9836 |
| yeast | 0.2025 | 0.1948 | 0.5483 | 0.6760 | 0.4021 | 0.6707 | 0.2645 | 6.2149 | 0.2410 | 0.7501 | 0.8291 | 0.8870 |
| Yelp | 0.3898 | 0.1964 | 0.6156 | 0.7154 | 0.6633 | 0.7114 | 0.2333 | 1.4048 | 0.2283 | 0.8454 | 0.8647 | 0.8892 |

Table 75: Detailed results for lambda = 4 for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5628 | 0.0260 | 0.6010 | 0.6199 | 0.7099 | 0.7150 | 0.3268 | 2.8345 | 0.2742 | 0.7373 | 0.9922 | 0.9922 |
| 3s-bbc1000 | 0.1111 | 0.2963 | 0.1667 | 0.2037 | 0.1722 | 0.2195 | 0.7778 | 3.0000 | 0.7019 | 0.4241 | 0.7818 | 0.7305 |
| 3s-guardian1000 | 0.2903 | 0.2204 | 0.3978 | 0.4510 | 0.2865 | 0.4384 | 0.5161 | 2.2258 | 0.5290 | 0.5978 | 0.8749 | 0.8588 |
| 3s-inter3000 | 0.2941 | 0.2353 | 0.3235 | 0.3376 | 0.0870 | 0.3333 | 0.7647 | 2.7059 | 0.9529 | 0.4510 | 0.7734 | 0.9411 |
| 3s-reuters1000 | 0.1333 | 0.3111 | 0.1333 | 0.1333 | 0.0670 | 0.1250 | 0.8667 | 2.6667 | 0.8000 | 0.3833 | 0.8355 | 0.7542 |
| amphibians | 0.0556 | 0.3095 | 0.4452 | 0.6732 | 0.2792 | 0.5714 | 0.2222 | 2.5000 | 0.1167 | 0.8570 | 0.7364 | 0.8030 |
| bibtex | 0.1838 | 0.0120 | 0.3547 | 0.4451 | 0.3074 | 0.4724 | 0.4311 | 72.7608 | 0.5786 | 0.4289 | 0.9977 | 0.9977 |
| birds | 0.1795 | 0.0864 | 0.3226 | 0.3930 | 0.2697 | 0.4182 | 0.5128 | 7.8462 | 0.5060 | 0.5024 | 0.8441 | 0.9359 |
| bookmarks10% | 0.1834 | 0.0088 | 0.2150 | 0.2373 | 0.1118 | 0.2626 | 0.7255 | 105.0171 | 0.7631 | 0.2604 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1601 | 0.1562 | 0.2719 | 0.0430 | 0.2664 | 0.5098 | 151.0588 | 0.7115 | 0.3898 | 0.8475 | 0.9597 |
| corel16k001 | 0.0051 | 0.0189 | 0.0471 | 0.0699 | 0.0305 | 0.0893 | 0.8744 | 114.6253 | 0.9426 | 0.0895 | 0.9989 | 0.9989 |
| Corel5k | 0.0100 | 0.0091 | 0.0500 | 0.0713 | 0.0196 | 0.1003 | 0.8460 | 164.6020 | 0.9346 | 0.1630 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.6084 | 0.0213 | 0.0418 | 0.0488 | 0.0418 | 0.6967 | 920.1815 | 0.9614 | 0.0574 | 0.9945 | 0.9996 |
| emotions | 0.3167 | 0.1944 | 0.5847 | 0.7062 | 0.6785 | 0.6983 | 0.3000 | 1.7833 | 0.2448 | 0.7869 | 0.9006 | 0.8901 |
| enron | 0.1813 | 0.0522 | 0.4449 | 0.5669 | 0.1351 | 0.5439 | 0.2807 | 23.7895 | 0.3654 | 0.6072 | 0.8255 | 0.9809 |
| EukaryoteGO | 0.7101 | 0.0188 | 0.7889 | 0.8283 | 0.7341 | 0.8224 | 0.1701 | 0.8969 | 0.0525 | 0.8918 | 0.9933 | 0.9948 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.1500 | 0.2571 | 0.5750 | 0.7091 | 0.5478 | 0.7143 | 0.4000 | 3.4500 | 0.2817 | 0.7815 | 0.7472 | 0.8164 |
| foodtruck | 0.3659 | 0.1402 | 0.4917 | 0.6008 | 0.1075 | 0.4889 | 0.2439 | 4.6098 | 0.4729 | 0.7172 | 0.8604 | 0.9604 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0149 | 0.2985 | 0.0024 | 0.9885 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9357 | 0.0125 | 0.9500 | 0.9571 | 0.8192 | 0.9517 | 0.0357 | 0.1214 | 0.0245 | 0.9768 | 0.8740 | 0.9981 |
| GnegativePseAAC | 0.7714 | 0.0509 | 0.7952 | 0.8071 | 0.4683 | 0.8014 | 0.1714 | 0.6214 | 0.1515 | 0.8772 | 0.8629 | 0.9903 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8699 | 0.9333 | 0.0577 | 0.1538 | 0.0449 | 0.9615 | 0.9986 | 0.9983 |
| GpositivePseAAC | 0.7500 | 0.1250 | 0.7500 | 0.7500 | 0.5688 | 0.7500 | 0.2500 | 0.5385 | 0.2500 | 0.8365 | 0.9841 | 0.9760 |
| HumanGO | 0.7010 | 0.0358 | 0.7629 | 0.7959 | 0.7029 | 0.7726 | 0.1608 | 1.0643 | 0.0996 | 0.8818 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.3537 | 0.0914 | 0.4068 | 0.4347 | 0.1844 | 0.4265 | 0.5434 | 3.6109 | 0.5035 | 0.5704 | 0.9581 | 0.9589 |
| Image | 0.5450 | 0.1690 | 0.6175 | 0.6545 | 0.6308 | 0.6253 | 0.3050 | 1.0200 | 0.2850 | 0.7959 | 0.9347 | 0.9312 |
| IMDB-ECC-F10% | 0.0597 | 0.0844 | 0.1470 | 0.1947 | 0.0277 | 0.1938 | 0.6321 | 12.3386 | 0.7342 | 0.3751 | 0.9907 | 0.9763 |
| IMDB-F10% | 0.0522 | 0.0904 | 0.1408 | 0.1910 | 0.0279 | 0.1925 | 0.5857 | 12.7755 | 0.7197 | 0.3867 | 0.9855 | 0.9750 |
| LLOG-F | 0.1639 | 0.0158 | 0.1933 | 0.2109 | 0.0521 | 0.2857 | 0.7459 | 28.7049 | 0.7876 | 0.2752 | 0.5982 | 0.9978 |
| mediamill10% | 0.0879 | 0.0317 | 0.4129 | 0.5683 | 0.0370 | 0.5116 | 0.2399 | 57.9976 | 0.4335 | 0.5504 | 0.8123 | 0.9932 |
| medical | 0.6633 | 0.0100 | 0.7662 | 0.8162 | 0.3063 | 0.8240 | 0.1735 | 5.0510 | 0.1336 | 0.8325 | 0.5526 | 0.9975 |
| Music | 0.2833 | 0.1694 | 0.5861 | 0.7192 | 0.7288 | 0.7359 | 0.3167 | 2.0000 | 0.2543 | 0.7904 | 0.9088 | 0.8972 |
| NUS-WIDE-bow10% | 0.1836 | 0.0250 | 0.3109 | 0.3772 | 0.0418 | 0.3791 | 0.5219 | 34.2350 | 0.5868 | 0.4398 | 0.8803 | 0.9913 |
| NUS-WIDE-cVLADplus10% | 0.1970 | 0.0296 | 0.3220 | 0.3867 | 0.0416 | 0.3527 | 0.6327 | 38.3635 | 0.7183 | 0.3576 | 0.8856 | 0.9967 |
| OHSUMED-F | 0.2340 | 0.0569 | 0.4327 | 0.5372 | 0.4387 | 0.5582 | 0.3575 | 7.6382 | 0.4113 | 0.6145 | 0.9765 | 0.9795 |
| PlantGO | 0.6979 | 0.0443 | 0.7240 | 0.7370 | 0.6173 | 0.7463 | 0.2292 | 0.9479 | 0.0957 | 0.8527 | 0.9895 | 0.9843 |
| PlantPseAAC | 0.2653 | 0.1114 | 0.3197 | 0.3485 | 0.1915 | 0.3610 | 0.6020 | 3.2653 | 0.5468 | 0.5340 | 0.9503 | 0.9440 |
| rcv1subset1 | 0.1150 | 0.0306 | 0.3271 | 0.4323 | 0.2374 | 0.4350 | 0.4100 | 38.4417 | 0.4071 | 0.5133 | 0.9261 | 0.9867 |
| REUTERS-K500-EX2 | 0.3333 | 0.0117 | 0.4060 | 0.4497 | 0.2318 | 0.4924 | 0.5258 | 32.0979 | 0.5321 | 0.4838 | 0.7839 | 0.9972 |
| scene | 0.7012 | 0.0809 | 0.7531 | 0.7786 | 0.7795 | 0.7683 | 0.1992 | 0.9544 | 0.2000 | 0.8373 | 0.9774 | 0.9792 |
| sider_CDK_ECFP4 | 0.0141 | 0.2546 | 0.6488 | 0.7955 | 0.6205 | 0.7930 | 0.2324 | 19.0352 | 0.1617 | 0.7985 | 0.5797 | 0.7717 |
| sider_MordredDesc | 0.0141 | 0.2681 | 0.6151 | 0.7774 | 0.6106 | 0.7782 | 0.3169 | 19.4085 | 0.1817 | 0.7627 | 0.5686 | 0.7624 |
| sider_RDKit_desc | 0.0141 | 0.2848 | 0.6273 | 0.7796 | 0.5943 | 0.7745 | 0.2535 | 20.0141 | 0.2104 | 0.7390 | 0.5873 | 0.7505 |
| SLASHDOT-F | 0.3995 | 0.0420 | 0.5064 | 0.5638 | 0.3643 | 0.5880 | 0.4048 | 5.7910 | 0.3764 | 0.6339 | 0.7581 | 0.9849 |
| solar_flare-L3 | 0.8000 | 0.1333 | 0.8000 | 0.8000 | 0.5333 | 0.8000 | 0.2000 | 0.2000 | 0.2000 | 0.9000 | 0.6667 | 0.9800 |
| Stackex_chemistry | 0.0389 | 0.0120 | 0.0991 | 0.1347 | 0.0535 | 0.1684 | 0.7925 | 105.9726 | 0.8776 | 0.1538 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0298 | 0.0100 | 0.1373 | 0.1921 | 0.0497 | 0.2563 | 0.6548 | 137.7798 | 0.8088 | 0.2050 | 0.5490 | 0.9981 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0507 | 0.0732 | 0.0221 | 0.1159 | 0.7391 | 72.3043 | 0.8229 | 0.1898 | 0.2549 | 0.9871 |
| Stackex_cooking | 0.0589 | 0.0052 | 0.1915 | 0.2597 | 0.1002 | 0.3072 | 0.6406 | 223.4725 | 0.7720 | 0.2311 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0678 | 0.0092 | 0.1701 | 0.2285 | 0.0550 | 0.2685 | 0.6834 | 134.9121 | 0.7897 | 0.2140 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2930 | 0.0620 | 0.5604 | 0.6922 | 0.5671 | 0.6697 | 0.2517 | 4.1269 | 0.1467 | 0.7761 | 0.9583 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1575 | 0.1632 | 0.3243 | 0.4099 | 0.3492 | 0.4280 | 0.4726 | 5.4007 | 0.4838 | 0.5688 | 0.8987 | 0.8990 |
| tox21_RDKit_desc | 0.1575 | 0.1732 | 0.2887 | 0.3766 | 0.2566 | 0.3684 | 0.4966 | 5.4521 | 0.4993 | 0.5586 | 0.9004 | 0.9013 |
| VirusGO | 0.7143 | 0.0556 | 0.8175 | 0.8607 | 0.6894 | 0.8511 | 0.2381 | 0.6667 | 0.1135 | 0.8587 | 0.8176 | 0.9790 |
| VirusPseAAC | 0.5714 | 0.1032 | 0.5952 | 0.6069 | 0.3833 | 0.6829 | 0.3333 | 1.0476 | 0.2524 | 0.7667 | 0.7592 | 0.9337 |
| Water-quality | 0.0094 | 0.3255 | 0.2704 | 0.4183 | 0.2612 | 0.4117 | 0.2642 | 9.0377 | 0.3439 | 0.6913 | 0.7708 | 0.7588 |
| Yahoo_Arts | 0.2003 | 0.0637 | 0.2876 | 0.3439 | 0.2097 | 0.3680 | 0.5180 | 10.4152 | 0.6266 | 0.4939 | 0.9390 | 0.9785 |
| Yahoo_Business | 0.5793 | 0.0256 | 0.7334 | 0.8194 | 0.2952 | 0.7354 | 0.0882 | 3.1907 | 0.2239 | 0.8874 | 0.8569 | 0.9952 |
| Yahoo_Computers | 0.3920 | 0.0410 | 0.4780 | 0.5378 | 0.2522 | 0.5085 | 0.3831 | 6.5799 | 0.4260 | 0.6112 | 0.8897 | 0.9823 |
| Yahoo_Education | 0.1463 | 0.0457 | 0.2027 | 0.2431 | 0.1515 | 0.3118 | 0.6160 | 9.3067 | 0.6590 | 0.4864 | 0.8866 | 0.9795 |
| Yahoo_Entertainment | 0.4184 | 0.0743 | 0.5347 | 0.5793 | 0.3536 | 0.5342 | 0.3891 | 3.9963 | 0.3942 | 0.6735 | 0.9767 | 0.9757 |
| Yahoo_Health | 0.4104 | 0.0392 | 0.5493 | 0.6289 | 0.2476 | 0.5895 | 0.3105 | 6.4235 | 0.3456 | 0.6967 | 0.8294 | 0.9855 |
| Yahoo_Recreation | 0.2377 | 0.0599 | 0.2948 | 0.3333 | 0.3080 | 0.3954 | 0.5152 | 6.4973 | 0.5465 | 0.5640 | 0.9606 | 0.9621 |
| Yahoo_Reference | 0.4508 | 0.0308 | 0.5126 | 0.5513 | 0.1769 | 0.5411 | 0.4035 | 5.4707 | 0.4356 | 0.6373 | 0.8089 | 0.9906 |
| Yahoo_Science | 0.2053 | 0.0383 | 0.2613 | 0.3035 | 0.1578 | 0.3349 | 0.6407 | 13.8989 | 0.6690 | 0.4129 | 0.9578 | 0.9843 |
| Yahoo_Social | 0.4785 | 0.0274 | 0.5385 | 0.5760 | 0.1629 | 0.5440 | 0.3696 | 7.3960 | 0.3816 | 0.6518 | 0.9133 | 0.9898 |
| Yahoo_Society | 0.3238 | 0.0840 | 0.4556 | 0.5531 | 0.2266 | 0.4651 | 0.3610 | 8.3493 | 0.4732 | 0.5868 | 0.9487 | 0.9836 |
| yeast | 0.2273 | 0.1942 | 0.5444 | 0.6690 | 0.3953 | 0.6643 | 0.2562 | 6.2025 | 0.2344 | 0.7530 | 0.8266 | 0.8841 |
| Yelp | 0.4187 | 0.1886 | 0.6332 | 0.7290 | 0.6715 | 0.7239 | 0.1974 | 1.3689 | 0.2289 | 0.8636 | 0.8774 | 0.9012 |

Table 76: Detailed results for lambda = 5 for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5187 | 0.0279 | 0.5676 | 0.5928 | 0.6893 | 0.6940 | 0.2993 | 2.1385 | 0.2020 | 0.7747 | 0.9816 | 0.9819 |
| 3s-bbc1000 | 0.1111 | 0.3056 | 0.1690 | 0.2037 | 0.1746 | 0.2143 | 0.7778 | 2.9722 | 0.6796 | 0.4269 | 0.7947 | 0.7427 |
| 3s-guardian1000 | 0.1613 | 0.2634 | 0.2392 | 0.2971 | 0.2556 | 0.3288 | 0.5161 | 2.1290 | 0.4790 | 0.6121 | 0.7933 | 0.8067 |
| 3s-inter3000 | 0.2941 | 0.2255 | 0.3235 | 0.3376 | 0.0870 | 0.3429 | 0.9412 | 2.4706 | 0.6603 | 0.3804 | 0.4945 | 0.6693 |
| 3s-reuters1000 | 0.0333 | 0.3000 | 0.0500 | 0.0571 | 0.0519 | 0.0690 | 0.9000 | 2.5667 | 0.7667 | 0.3800 | 0.8274 | 0.7559 |
| amphibians | 0.1111 | 0.3175 | 0.4560 | 0.6773 | 0.3048 | 0.5652 | 0.2222 | 2.4444 | 0.0944 | 0.8663 | 0.7558 | 0.8161 |
| bibtex | 0.1716 | 0.0119 | 0.3485 | 0.4427 | 0.2989 | 0.4713 | 0.3986 | 68.0973 | 0.5305 | 0.4639 | 0.9967 | 0.9968 |
| birds | 0.1795 | 0.0958 | 0.3242 | 0.3882 | 0.2386 | 0.3826 | 0.4359 | 7.1026 | 0.4333 | 0.5496 | 0.8368 | 0.9256 |
| bookmarks10% | 0.1834 | 0.0088 | 0.2150 | 0.2373 | 0.1118 | 0.2626 | 0.7255 | 105.0171 | 0.7631 | 0.2604 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1380 | 0.1512 | 0.2616 | 0.0308 | 0.2580 | 0.3725 | 151.0392 | 0.6120 | 0.4262 | 0.8262 | 0.9417 |
| corel16k001 | 0.0051 | 0.0189 | 0.0471 | 0.0699 | 0.0305 | 0.0893 | 0.8744 | 114.6253 | 0.9426 | 0.0895 | 0.9989 | 0.9989 |
| Corel5k | 0.0100 | 0.0091 | 0.0500 | 0.0713 | 0.0196 | 0.1003 | 0.8460 | 164.6020 | 0.9346 | 0.1630 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.6084 | 0.0213 | 0.0418 | 0.0488 | 0.0418 | 0.6967 | 920.1815 | 0.9614 | 0.0574 | 0.9945 | 0.9996 |
| emotions | 0.3167 | 0.1806 | 0.5736 | 0.6944 | 0.6716 | 0.6977 | 0.3000 | 1.7667 | 0.2400 | 0.7920 | 0.8758 | 0.8887 |
| enron | 0.1930 | 0.0517 | 0.4465 | 0.5668 | 0.1405 | 0.5469 | 0.3333 | 23.2047 | 0.3608 | 0.6042 | 0.8255 | 0.9804 |
| EukaryoteGO | 0.7178 | 0.0191 | 0.7803 | 0.8119 | 0.6220 | 0.8146 | 0.1714 | 0.7706 | 0.0433 | 0.8940 | 0.9926 | 0.9947 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.2500 | 0.2357 | 0.6244 | 0.7381 | 0.5981 | 0.7481 | 0.2000 | 3.6000 | 0.2475 | 0.8105 | 0.6799 | 0.7903 |
| foodtruck | 0.3415 | 0.1443 | 0.4755 | 0.5882 | 0.0926 | 0.4741 | 0.2439 | 4.4390 | 0.4354 | 0.7207 | 0.8536 | 0.9559 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0000 | 0.2537 | 0.0009 | 0.9938 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0134 | 0.9464 | 0.9553 | 0.8175 | 0.9481 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7500 | 0.0545 | 0.7810 | 0.7964 | 0.4464 | 0.7889 | 0.1786 | 0.6071 | 0.1460 | 0.8772 | 0.8620 | 0.9896 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8699 | 0.9333 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9956 | 0.9957 |
| GpositivePseAAC | 0.7308 | 0.1154 | 0.7404 | 0.7452 | 0.5790 | 0.7647 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.7010 | 0.0351 | 0.7631 | 0.7967 | 0.7028 | 0.7760 | 0.1672 | 1.0932 | 0.1061 | 0.8769 | 0.9849 | 0.9883 |
| HumanPseAAC | 0.3537 | 0.0914 | 0.4068 | 0.4347 | 0.1844 | 0.4265 | 0.5434 | 3.6109 | 0.5035 | 0.5704 | 0.9581 | 0.9589 |
| Image | 0.5400 | 0.1650 | 0.6208 | 0.6620 | 0.6402 | 0.6341 | 0.3100 | 1.0200 | 0.2787 | 0.7950 | 0.9303 | 0.9263 |
| IMDB-ECC-F10% | 0.0597 | 0.0843 | 0.1450 | 0.1914 | 0.0230 | 0.1910 | 0.6373 | 12.2065 | 0.7228 | 0.3778 | 0.9889 | 0.9751 |
| IMDB-F10% | 0.0539 | 0.0904 | 0.1449 | 0.1983 | 0.0267 | 0.1987 | 0.5957 | 12.6935 | 0.7184 | 0.3846 | 0.9851 | 0.9744 |
| LLOG-F | 0.1639 | 0.0160 | 0.1933 | 0.2109 | 0.0518 | 0.2843 | 0.7459 | 29.2131 | 0.7917 | 0.2713 | 0.5984 | 0.9981 |
| mediamill10% | 0.0903 | 0.0316 | 0.4166 | 0.5721 | 0.0412 | 0.5150 | 0.1378 | 59.6603 | 0.4509 | 0.5584 | 0.8135 | 0.9938 |
| medical | 0.6429 | 0.0109 | 0.7423 | 0.7925 | 0.2829 | 0.8065 | 0.1531 | 4.9082 | 0.1274 | 0.8512 | 0.5523 | 0.9975 |
| Music | 0.2833 | 0.1694 | 0.6028 | 0.7438 | 0.7261 | 0.7382 | 0.3167 | 2.0000 | 0.2613 | 0.7918 | 0.9076 | 0.9039 |
| NUS-WIDE-bow10% | 0.1836 | 0.0250 | 0.3109 | 0.3772 | 0.0418 | 0.3791 | 0.5219 | 34.2350 | 0.5868 | 0.4398 | 0.8803 | 0.9913 |
| NUS-WIDE-cVLADplus10% | 0.1970 | 0.0296 | 0.3220 | 0.3867 | 0.0416 | 0.3527 | 0.6327 | 38.3635 | 0.7183 | 0.3576 | 0.8856 | 0.9967 |
| OHSUMED-F | 0.2268 | 0.0584 | 0.4195 | 0.5219 | 0.3949 | 0.5443 | 0.3467 | 6.5305 | 0.3373 | 0.6495 | 0.9639 | 0.9682 |
| PlantGO | 0.6875 | 0.0434 | 0.7083 | 0.7187 | 0.6147 | 0.7423 | 0.2188 | 0.9479 | 0.0947 | 0.8562 | 0.9882 | 0.9839 |
| PlantPseAAC | 0.2857 | 0.1071 | 0.3384 | 0.3682 | 0.2081 | 0.3824 | 0.6020 | 3.1020 | 0.4933 | 0.5458 | 0.9408 | 0.9343 |
| rcv1subset1 | 0.0867 | 0.0299 | 0.2901 | 0.3961 | 0.2194 | 0.4088 | 0.4383 | 38.8267 | 0.4327 | 0.4940 | 0.9261 | 0.9868 |
| REUTERS-K500-EX2 | 0.3368 | 0.0116 | 0.4145 | 0.4593 | 0.2393 | 0.5004 | 0.5069 | 31.5739 | 0.5224 | 0.4966 | 0.7836 | 0.9970 |
| scene | 0.6598 | 0.0844 | 0.7178 | 0.7467 | 0.7678 | 0.7550 | 0.2116 | 0.8216 | 0.1622 | 0.8444 | 0.9689 | 0.9726 |
| sider_CDK_ECFP4 | 0.0141 | 0.2744 | 0.6362 | 0.7835 | 0.6543 | 0.7842 | 0.2042 | 19.5141 | 0.1762 | 0.7819 | 0.5825 | 0.7648 |
| sider_MordredDesc | 0.0141 | 0.2681 | 0.6151 | 0.7774 | 0.6106 | 0.7782 | 0.3169 | 19.4085 | 0.1817 | 0.7627 | 0.5686 | 0.7624 |
| sider_RDKit_desc | 0.0141 | 0.2869 | 0.6276 | 0.7799 | 0.6035 | 0.7744 | 0.2746 | 19.8662 | 0.1727 | 0.7763 | 0.5979 | 0.7825 |
| SLASHDOT-F | 0.3942 | 0.0417 | 0.4933 | 0.5464 | 0.3513 | 0.5784 | 0.4048 | 5.6931 | 0.3713 | 0.6363 | 0.7569 | 0.9837 |
| solar_flare-L3 | 0.6000 | 0.2667 | 0.6000 | 0.6000 | 0.3889 | 0.6000 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.5556 | 0.8600 |
| Stackex_chemistry | 0.0389 | 0.0120 | 0.0991 | 0.1347 | 0.0535 | 0.1684 | 0.7925 | 105.9726 | 0.8776 | 0.1538 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0298 | 0.0099 | 0.1317 | 0.1869 | 0.0490 | 0.2500 | 0.6845 | 138.0714 | 0.8155 | 0.1926 | 0.5495 | 0.9985 |
| Stackex_coffee | 0.0435 | 0.0191 | 0.0616 | 0.0739 | 0.0159 | 0.1000 | 0.7826 | 78.3478 | 0.8632 | 0.1490 | 0.2531 | 0.9864 |
| Stackex_cooking | 0.0589 | 0.0052 | 0.1915 | 0.2597 | 0.1002 | 0.3072 | 0.6406 | 223.4725 | 0.7720 | 0.2311 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0678 | 0.0092 | 0.1701 | 0.2285 | 0.0550 | 0.2685 | 0.6834 | 134.9121 | 0.7897 | 0.2140 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2930 | 0.0620 | 0.5604 | 0.6922 | 0.5671 | 0.6697 | 0.2517 | 4.1269 | 0.1467 | 0.7761 | 0.9583 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1610 | 0.1607 | 0.3327 | 0.4191 | 0.3672 | 0.4398 | 0.4692 | 5.3322 | 0.4761 | 0.5739 | 0.8975 | 0.8974 |
| tox21_RDKit_desc | 0.1575 | 0.1732 | 0.2887 | 0.3766 | 0.2566 | 0.3684 | 0.4966 | 5.4521 | 0.4993 | 0.5586 | 0.9004 | 0.9013 |
| VirusGO | 0.7143 | 0.0635 | 0.8254 | 0.8651 | 0.6868 | 0.8400 | 0.1429 | 0.6190 | 0.0927 | 0.8892 | 0.8003 | 0.9699 |
| VirusPseAAC | 0.4762 | 0.1190 | 0.5000 | 0.5116 | 0.3265 | 0.5946 | 0.3333 | 0.7619 | 0.1667 | 0.7952 | 0.7223 | 0.9249 |
| Water-quality | 0.0094 | 0.3261 | 0.2817 | 0.4298 | 0.2984 | 0.4238 | 0.2830 | 9.1509 | 0.3522 | 0.6880 | 0.7707 | 0.7571 |
| Yahoo_Arts | 0.2003 | 0.0637 | 0.2876 | 0.3439 | 0.2097 | 0.3680 | 0.5180 | 10.4152 | 0.6266 | 0.4939 | 0.9390 | 0.9785 |
| Yahoo_Business | 0.5793 | 0.0256 | 0.7334 | 0.8194 | 0.2952 | 0.7354 | 0.0882 | 3.1907 | 0.2239 | 0.8874 | 0.8569 | 0.9952 |
| Yahoo_Computers | 0.3920 | 0.0410 | 0.4780 | 0.5378 | 0.2522 | 0.5085 | 0.3831 | 6.5799 | 0.4260 | 0.6112 | 0.8897 | 0.9823 |
| Yahoo_Education | 0.1463 | 0.0457 | 0.2027 | 0.2431 | 0.1515 | 0.3118 | 0.6160 | 9.3067 | 0.6590 | 0.4864 | 0.8866 | 0.9795 |
| Yahoo_Entertainment | 0.4184 | 0.0743 | 0.5347 | 0.5793 | 0.3536 | 0.5342 | 0.3891 | 3.9963 | 0.3942 | 0.6735 | 0.9767 | 0.9757 |
| Yahoo_Health | 0.4104 | 0.0392 | 0.5493 | 0.6289 | 0.2476 | 0.5895 | 0.3105 | 6.4235 | 0.3456 | 0.6967 | 0.8294 | 0.9855 |
| Yahoo_Recreation | 0.2377 | 0.0599 | 0.2948 | 0.3333 | 0.3080 | 0.3954 | 0.5152 | 6.4973 | 0.5465 | 0.5640 | 0.9606 | 0.9621 |
| Yahoo_Reference | 0.4508 | 0.0308 | 0.5126 | 0.5513 | 0.1769 | 0.5411 | 0.4035 | 5.4707 | 0.4356 | 0.6373 | 0.8089 | 0.9906 |
| Yahoo_Science | 0.2053 | 0.0383 | 0.2613 | 0.3035 | 0.1578 | 0.3349 | 0.6407 | 13.8989 | 0.6690 | 0.4129 | 0.9578 | 0.9843 |
| Yahoo_Social | 0.4785 | 0.0274 | 0.5385 | 0.5760 | 0.1629 | 0.5440 | 0.3696 | 7.3960 | 0.3816 | 0.6518 | 0.9133 | 0.9898 |
| Yahoo_Society | 0.2851 | 0.0622 | 0.4022 | 0.4832 | 0.1629 | 0.4270 | 0.3967 | 8.3333 | 0.4815 | 0.5809 | 0.9338 | 0.9708 |
| yeast | 0.2231 | 0.1945 | 0.5418 | 0.6674 | 0.3960 | 0.6629 | 0.2521 | 6.1736 | 0.2388 | 0.7560 | 0.8264 | 0.8841 |
| Yelp | 0.4058 | 0.1944 | 0.6185 | 0.7158 | 0.6596 | 0.7106 | 0.2074 | 1.3719 | 0.2105 | 0.8589 | 0.8632 | 0.8898 |

Table 77: Detailed results for lambda = 6 for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5119 | 0.0282 | 0.5633 | 0.5891 | 0.6840 | 0.6901 | 0.2982 | 2.0825 | 0.1962 | 0.7767 | 0.9798 | 0.9799 |
| 3s-bbc1000 | 0.0833 | 0.2778 | 0.1852 | 0.2446 | 0.2362 | 0.2683 | 0.7222 | 2.9444 | 0.6928 | 0.4505 | 0.8209 | 0.7644 |
| 3s-guardian1000 | 0.1935 | 0.2581 | 0.3306 | 0.3997 | 0.1977 | 0.3846 | 0.5161 | 2.1935 | 0.4855 | 0.6003 | 0.7839 | 0.8039 |
| 3s-inter3000 | 0.1765 | 0.2451 | 0.2941 | 0.3505 | 0.1346 | 0.3590 | 0.8235 | 2.4706 | 0.6206 | 0.4412 | 0.4798 | 0.6587 |
| 3s-reuters1000 | 0.0667 | 0.3167 | 0.0833 | 0.0909 | 0.0385 | 0.0952 | 0.8667 | 2.6667 | 0.8067 | 0.3883 | 0.8174 | 0.7447 |
| amphibians | 0.0000 | 0.3175 | 0.4175 | 0.6609 | 0.2754 | 0.5652 | 0.2222 | 2.5000 | 0.0889 | 0.8593 | 0.7443 | 0.8081 |
| bibtex | 0.0000 | 0.0305 | 0.1155 | 0.1982 | 0.1925 | 0.2090 | 0.4649 | 76.4784 | 0.6222 | 0.3931 | 0.9982 | 0.9982 |
| birds | 0.1795 | 0.0904 | 0.3242 | 0.3882 | 0.2406 | 0.3964 | 0.4872 | 7.7692 | 0.4703 | 0.5135 | 0.8315 | 0.9238 |
| bookmarks10% | 0.1834 | 0.0088 | 0.2150 | 0.2373 | 0.1118 | 0.2626 | 0.7255 | 105.0171 | 0.7631 | 0.2604 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1393 | 0.1343 | 0.2354 | 0.0265 | 0.2313 | 0.1373 | 151.0588 | 0.5712 | 0.4458 | 0.8165 | 0.9321 |
| corel16k001 | 0.0051 | 0.0189 | 0.0471 | 0.0699 | 0.0305 | 0.0893 | 0.8744 | 114.6253 | 0.9426 | 0.0895 | 0.9989 | 0.9989 |
| Corel5k | 0.0100 | 0.0091 | 0.0500 | 0.0713 | 0.0196 | 0.1003 | 0.8460 | 164.6020 | 0.9346 | 0.1630 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.6084 | 0.0213 | 0.0418 | 0.0488 | 0.0418 | 0.6967 | 920.1815 | 0.9614 | 0.0574 | 0.9945 | 0.9996 |
| emotions | 0.3333 | 0.1917 | 0.5778 | 0.6888 | 0.6828 | 0.6933 | 0.2500 | 1.7167 | 0.2173 | 0.8081 | 0.8758 | 0.8844 |
| enron | 0.1871 | 0.0516 | 0.4331 | 0.5563 | 0.1355 | 0.5339 | 0.2632 | 23.6608 | 0.3587 | 0.6138 | 0.8254 | 0.9803 |
| EukaryoteGO | 0.7242 | 0.0187 | 0.7854 | 0.8164 | 0.6903 | 0.8180 | 0.1675 | 0.7539 | 0.0385 | 0.8981 | 0.9926 | 0.9947 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.2500 | 0.2357 | 0.6192 | 0.7293 | 0.5914 | 0.7442 | 0.2000 | 3.5500 | 0.2375 | 0.8142 | 0.6899 | 0.8106 |
| foodtruck | 0.3415 | 0.1443 | 0.4747 | 0.5885 | 0.0718 | 0.4662 | 0.2439 | 4.6341 | 0.4507 | 0.7166 | 0.8540 | 0.9560 |
| genbase | 0.9403 | 0.0022 | 0.9652 | 0.9751 | 0.5802 | 0.9753 | 0.0149 | 0.2537 | 0.0012 | 0.9900 | 0.6661 | 0.9988 |
| GnegativeGO | 0.9286 | 0.0134 | 0.9464 | 0.9553 | 0.8175 | 0.9481 | 0.0357 | 0.1143 | 0.0215 | 0.9774 | 0.8737 | 0.9980 |
| GnegativePseAAC | 0.7571 | 0.0536 | 0.7845 | 0.7982 | 0.4476 | 0.7917 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8619 | 0.9895 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8699 | 0.9333 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7500 | 0.1154 | 0.7500 | 0.7500 | 0.5801 | 0.7647 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.7042 | 0.0354 | 0.7706 | 0.8059 | 0.6923 | 0.7768 | 0.1576 | 1.0354 | 0.0953 | 0.8855 | 0.9850 | 0.9883 |
| HumanPseAAC | 0.3537 | 0.0914 | 0.4068 | 0.4347 | 0.1844 | 0.4265 | 0.5434 | 3.6109 | 0.5035 | 0.5704 | 0.9581 | 0.9589 |
| Image | 0.5500 | 0.1660 | 0.6225 | 0.6594 | 0.6369 | 0.6311 | 0.3100 | 1.0200 | 0.2775 | 0.7950 | 0.9302 | 0.9261 |
| IMDB-ECC-F10% | 0.0597 | 0.0847 | 0.1424 | 0.1863 | 0.0182 | 0.1852 | 0.6373 | 12.1730 | 0.7138 | 0.3806 | 0.9833 | 0.9721 |
| IMDB-F10% | 0.0522 | 0.0904 | 0.1408 | 0.1910 | 0.0279 | 0.1925 | 0.5857 | 12.7755 | 0.7197 | 0.3867 | 0.9855 | 0.9750 |
| LLOG-F | 0.1721 | 0.0160 | 0.2015 | 0.2187 | 0.0523 | 0.2913 | 0.7459 | 28.4262 | 0.7714 | 0.2815 | 0.5978 | 0.9976 |
| mediamill10% | 0.0926 | 0.0315 | 0.4180 | 0.5730 | 0.0441 | 0.5166 | 0.1639 | 57.9644 | 0.4374 | 0.5589 | 0.8128 | 0.9935 |
| medical | 0.6429 | 0.0107 | 0.7526 | 0.8078 | 0.2973 | 0.8112 | 0.1429 | 4.9184 | 0.1273 | 0.8537 | 0.5521 | 0.9975 |
| Music | 0.2667 | 0.1778 | 0.5861 | 0.7245 | 0.7156 | 0.7265 | 0.2667 | 2.0000 | 0.2412 | 0.8043 | 0.9114 | 0.9047 |
| NUS-WIDE-bow10% | 0.1836 | 0.0250 | 0.3109 | 0.3772 | 0.0418 | 0.3791 | 0.5219 | 34.2350 | 0.5868 | 0.4398 | 0.8803 | 0.9913 |
| NUS-WIDE-cVLADplus10% | 0.1970 | 0.0296 | 0.3220 | 0.3867 | 0.0416 | 0.3527 | 0.6327 | 38.3635 | 0.7183 | 0.3576 | 0.8856 | 0.9967 |
| OHSUMED-F | 0.2333 | 0.0573 | 0.4207 | 0.5211 | 0.3966 | 0.5407 | 0.3439 | 6.2807 | 0.3179 | 0.6592 | 0.9605 | 0.9649 |
| PlantGO | 0.6875 | 0.0443 | 0.7170 | 0.7335 | 0.6347 | 0.7463 | 0.2292 | 0.9583 | 0.0957 | 0.8510 | 0.9884 | 0.9832 |
| PlantPseAAC | 0.2959 | 0.1071 | 0.3401 | 0.3639 | 0.2073 | 0.3762 | 0.6224 | 3.1020 | 0.4859 | 0.5378 | 0.9399 | 0.9331 |
| rcv1subset1 | 0.0800 | 0.0301 | 0.2963 | 0.4039 | 0.2237 | 0.4129 | 0.4067 | 35.2400 | 0.3748 | 0.5279 | 0.9242 | 0.9853 |
| REUTERS-K500-EX2 | 0.3333 | 0.0114 | 0.4033 | 0.4453 | 0.2424 | 0.4956 | 0.5172 | 31.7045 | 0.5244 | 0.4904 | 0.7835 | 0.9968 |
| scene | 0.6432 | 0.0885 | 0.7047 | 0.7360 | 0.7550 | 0.7430 | 0.2116 | 0.8257 | 0.1647 | 0.8447 | 0.9692 | 0.9725 |
| sider_CDK_ECFP4 | 0.0211 | 0.2697 | 0.6375 | 0.7857 | 0.6431 | 0.7859 | 0.1972 | 19.2535 | 0.1555 | 0.8074 | 0.5795 | 0.7806 |
| sider_MordredDesc | 0.0141 | 0.2681 | 0.6151 | 0.7774 | 0.6106 | 0.7782 | 0.3169 | 19.4085 | 0.1817 | 0.7627 | 0.5686 | 0.7624 |
| sider_RDKit_desc | 0.0070 | 0.2890 | 0.6257 | 0.7775 | 0.6056 | 0.7734 | 0.3169 | 19.8944 | 0.1943 | 0.7521 | 0.5965 | 0.7608 |
| SLASHDOT-F | 0.4048 | 0.0422 | 0.5098 | 0.5667 | 0.3712 | 0.5895 | 0.3968 | 5.3360 | 0.3490 | 0.6490 | 0.7547 | 0.9814 |
| solar_flare-L3 | 0.4000 | 0.3333 | 0.5000 | 0.5455 | 0.3571 | 0.5455 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.7600 |
| Stackex_chemistry | 0.0389 | 0.0120 | 0.0991 | 0.1347 | 0.0535 | 0.1684 | 0.7925 | 105.9726 | 0.8776 | 0.1538 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0357 | 0.0101 | 0.1362 | 0.1931 | 0.0509 | 0.2543 | 0.6667 | 136.7143 | 0.8041 | 0.2095 | 0.5491 | 0.9981 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0380 | 0.0594 | 0.0154 | 0.0896 | 0.7391 | 75.5652 | 0.8593 | 0.1579 | 0.2539 | 0.9818 |
| Stackex_cooking | 0.0589 | 0.0052 | 0.1915 | 0.2597 | 0.1002 | 0.3072 | 0.6406 | 223.4725 | 0.7720 | 0.2311 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0678 | 0.0092 | 0.1701 | 0.2285 | 0.0550 | 0.2685 | 0.6834 | 134.9121 | 0.7897 | 0.2140 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2930 | 0.0620 | 0.5604 | 0.6922 | 0.5671 | 0.6697 | 0.2517 | 4.1269 | 0.1467 | 0.7761 | 0.9583 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1575 | 0.1632 | 0.3243 | 0.4099 | 0.3492 | 0.4280 | 0.4726 | 5.4007 | 0.4838 | 0.5688 | 0.8987 | 0.8990 |
| tox21_RDKit_desc | 0.1575 | 0.1732 | 0.2887 | 0.3766 | 0.2566 | 0.3684 | 0.4966 | 5.4521 | 0.4993 | 0.5586 | 0.9004 | 0.9013 |
| VirusGO | 0.7143 | 0.0635 | 0.8254 | 0.8651 | 0.6868 | 0.8400 | 0.0952 | 0.5238 | 0.0779 | 0.9206 | 0.7926 | 0.9667 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.3333 | 0.9524 | 0.1952 | 0.7730 | 0.7232 | 0.9152 |
| Water-quality | 0.0000 | 0.3315 | 0.2776 | 0.4320 | 0.2649 | 0.4129 | 0.2830 | 9.0566 | 0.3490 | 0.6865 | 0.7665 | 0.7534 |
| Yahoo_Arts | 0.2363 | 0.0719 | 0.3280 | 0.3922 | 0.1918 | 0.3596 | 0.5220 | 9.6636 | 0.5244 | 0.5134 | 0.9240 | 0.9602 |
| Yahoo_Business | 0.5793 | 0.0256 | 0.7334 | 0.8194 | 0.2952 | 0.7354 | 0.0882 | 3.1907 | 0.2239 | 0.8874 | 0.8569 | 0.9952 |
| Yahoo_Computers | 0.3920 | 0.0410 | 0.4780 | 0.5378 | 0.2522 | 0.5085 | 0.3831 | 6.5799 | 0.4260 | 0.6112 | 0.8897 | 0.9823 |
| Yahoo_Education | 0.1463 | 0.0457 | 0.2027 | 0.2431 | 0.1515 | 0.3118 | 0.6160 | 9.3067 | 0.6590 | 0.4864 | 0.8866 | 0.9795 |
| Yahoo_Entertainment | 0.4184 | 0.0743 | 0.5347 | 0.5793 | 0.3536 | 0.5342 | 0.3891 | 3.9963 | 0.3942 | 0.6735 | 0.9767 | 0.9757 |
| Yahoo_Health | 0.4104 | 0.0392 | 0.5493 | 0.6289 | 0.2476 | 0.5895 | 0.3105 | 6.4235 | 0.3456 | 0.6967 | 0.8294 | 0.9855 |
| Yahoo_Recreation | 0.2377 | 0.0599 | 0.2948 | 0.3333 | 0.3080 | 0.3954 | 0.5152 | 6.4973 | 0.5465 | 0.5640 | 0.9606 | 0.9621 |
| Yahoo_Reference | 0.4508 | 0.0308 | 0.5126 | 0.5513 | 0.1769 | 0.5411 | 0.4035 | 5.4707 | 0.4356 | 0.6373 | 0.8089 | 0.9906 |
| Yahoo_Science | 0.2053 | 0.0383 | 0.2613 | 0.3035 | 0.1578 | 0.3349 | 0.6407 | 13.8989 | 0.6690 | 0.4129 | 0.9578 | 0.9843 |
| Yahoo_Social | 0.4785 | 0.0274 | 0.5385 | 0.5760 | 0.1629 | 0.5440 | 0.3696 | 7.3960 | 0.3816 | 0.6518 | 0.9133 | 0.9898 |
| Yahoo_Society | 0.3238 | 0.0840 | 0.4556 | 0.5531 | 0.2266 | 0.4651 | 0.3610 | 8.3493 | 0.4732 | 0.5868 | 0.9487 | 0.9836 |
| yeast | 0.2273 | 0.1942 | 0.5444 | 0.6690 | 0.3953 | 0.6643 | 0.2562 | 6.2025 | 0.2344 | 0.7530 | 0.8266 | 0.8841 |
| Yelp | 0.4108 | 0.1930 | 0.6303 | 0.7319 | 0.6657 | 0.7186 | 0.2084 | 1.3769 | 0.2109 | 0.8590 | 0.8649 | 0.8904 |

Table 78: Detailed results for lambda = 2 for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5026 | 0.0279 | 0.5528 | 0.5778 | 0.6828 | 0.6883 | 0.3200 | 2.5591 | 0.2501 | 0.7492 | 0.9868 | 0.9871 |
| 3s-bbc1000 | 0.0833 | 0.2731 | 0.1644 | 0.2141 | 0.2379 | 0.2532 | 0.7500 | 3.0278 | 0.6852 | 0.4293 | 0.7995 | 0.7342 |
| 3s-guardian1000 | 0.0968 | 0.2419 | 0.1962 | 0.2526 | 0.2221 | 0.3077 | 0.5484 | 2.1613 | 0.4806 | 0.5906 | 0.8112 | 0.8195 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.5294 | 0.6132 | 0.4078 | 0.4921 | 0.6733 |
| 3s-reuters1000 | 0.0000 | 0.2556 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9000 | 2.5667 | 0.7867 | 0.3800 | 0.8155 | 0.7424 |
| amphibians | 0.0000 | 0.2937 | 0.5025 | 0.7293 | 0.4908 | 0.6726 | 0.2222 | 2.5000 | 0.1000 | 0.8570 | 0.7305 | 0.8017 |
| bibtex | 0.1851 | 0.0120 | 0.3562 | 0.4465 | 0.3072 | 0.4744 | 0.4405 | 72.2851 | 0.5818 | 0.4259 | 0.9977 | 0.9978 |
| birds | 0.2051 | 0.0918 | 0.3443 | 0.4103 | 0.3065 | 0.4237 | 0.5385 | 8.3077 | 0.5741 | 0.4903 | 0.8510 | 0.9509 |
| bookmarks10% | 0.1879 | 0.0088 | 0.2175 | 0.2392 | 0.1100 | 0.2617 | 0.7244 | 105.2403 | 0.7626 | 0.2589 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1387 | 0.2048 | 0.3426 | 0.0618 | 0.3335 | 0.3333 | 151.0392 | 0.6796 | 0.4178 | 0.8464 | 0.9596 |
| corel16k001 | 0.0087 | 0.0188 | 0.0439 | 0.0631 | 0.0327 | 0.0824 | 0.8824 | 115.2622 | 0.9461 | 0.0863 | 0.9990 | 0.9991 |
| Corel5k | 0.0060 | 0.0091 | 0.0567 | 0.0834 | 0.0235 | 0.1145 | 0.8460 | 163.4020 | 0.9382 | 0.1610 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0252 | 0.0929 | 0.1613 | 0.0835 | 0.1716 | 0.5357 | 906.4891 | 0.8490 | 0.1489 | 0.9934 | 0.9986 |
| emotions | 0.3000 | 0.1889 | 0.5542 | 0.6764 | 0.6525 | 0.6852 | 0.2667 | 1.7500 | 0.2213 | 0.8017 | 0.8775 | 0.8901 |
| enron | 0.1813 | 0.0498 | 0.4566 | 0.5907 | 0.1563 | 0.5709 | 0.3099 | 25.6023 | 0.4109 | 0.5858 | 0.8288 | 0.9835 |
| EukaryoteGO | 0.6791 | 0.0193 | 0.7859 | 0.8383 | 0.6743 | 0.8256 | 0.1753 | 0.9214 | 0.0547 | 0.8873 | 0.9929 | 0.9947 |
| EukaryotePseAAC | 0.1441 | 0.0512 | 0.1682 | 0.1802 | 0.0804 | 0.2564 | 0.6937 | 7.5843 | 0.6827 | 0.3992 | 0.9834 | 0.9849 |
| flags | 0.2500 | 0.2143 | 0.6517 | 0.7661 | 0.6317 | 0.7727 | 0.2000 | 3.6000 | 0.2258 | 0.8225 | 0.7016 | 0.8018 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1444 | 0.5000 | 0.2439 | 4.6098 | 0.4507 | 0.7172 | 0.8594 | 0.9590 |
| genbase | 0.9552 | 0.0028 | 0.9751 | 0.9850 | 0.6132 | 0.9697 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6448 | 0.9995 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9981 |
| GnegativePseAAC | 0.7429 | 0.0491 | 0.7607 | 0.7696 | 0.4471 | 0.7985 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8617 | 0.9892 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9135 | 0.9279 | 0.8639 | 0.9245 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9962 |
| GpositivePseAAC | 0.7308 | 0.1058 | 0.7308 | 0.7308 | 0.5890 | 0.7755 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9841 | 0.9760 |
| HumanGO | 0.6559 | 0.0370 | 0.7529 | 0.8015 | 0.6863 | 0.7821 | 0.1704 | 1.1961 | 0.1164 | 0.8698 | 0.9854 | 0.9887 |
| HumanPseAAC | 0.2733 | 0.0852 | 0.3012 | 0.3160 | 0.1618 | 0.3592 | 0.5273 | 3.3794 | 0.4662 | 0.5885 | 0.9534 | 0.9539 |
| Image | 0.5550 | 0.1560 | 0.6108 | 0.6392 | 0.6378 | 0.6355 | 0.3050 | 1.0150 | 0.2779 | 0.7971 | 0.9306 | 0.9263 |
| IMDB-ECC-F10% | 0.0283 | 0.0683 | 0.0513 | 0.0646 | 0.0295 | 0.0834 | 0.6960 | 13.1950 | 0.7991 | 0.3278 | 0.9916 | 0.9825 |
| IMDB-F10% | 0.0199 | 0.0727 | 0.0499 | 0.0659 | 0.0315 | 0.0890 | 0.5899 | 12.7531 | 0.7194 | 0.3837 | 0.9868 | 0.9750 |
| LLOG-F | 0.1639 | 0.0160 | 0.1933 | 0.2109 | 0.0530 | 0.2843 | 0.7377 | 28.6311 | 0.7862 | 0.2780 | 0.5989 | 0.9987 |
| mediamill10% | 0.0808 | 0.0298 | 0.4521 | 0.6113 | 0.0876 | 0.5665 | 0.2304 | 60.7767 | 0.4747 | 0.5304 | 0.8143 | 0.9947 |
| medical | 0.6429 | 0.0111 | 0.7474 | 0.8017 | 0.3044 | 0.8063 | 0.1939 | 5.1531 | 0.1543 | 0.8182 | 0.5528 | 0.9975 |
| Music | 0.2833 | 0.1750 | 0.5833 | 0.7143 | 0.7135 | 0.7249 | 0.1833 | 2.0000 | 0.2449 | 0.8237 | 0.9088 | 0.9017 |
| NUS-WIDE-bow10% | 0.1180 | 0.0248 | 0.2243 | 0.2782 | 0.0452 | 0.3345 | 0.5442 | 35.1289 | 0.6004 | 0.4253 | 0.8806 | 0.9914 |
| NUS-WIDE-cVLADplus10% | 0.1418 | 0.0235 | 0.2496 | 0.3053 | 0.0536 | 0.3673 | 0.5485 | 35.4358 | 0.6363 | 0.4177 | 0.8835 | 0.9946 |
| OHSUMED-F | 0.2319 | 0.0567 | 0.4292 | 0.5327 | 0.4335 | 0.5556 | 0.3561 | 7.6698 | 0.4119 | 0.6159 | 0.9768 | 0.9797 |
| PlantGO | 0.6562 | 0.0399 | 0.7240 | 0.7555 | 0.6564 | 0.7788 | 0.1979 | 1.0312 | 0.0967 | 0.8614 | 0.9924 | 0.9886 |
| PlantPseAAC | 0.2041 | 0.0952 | 0.2398 | 0.2626 | 0.1834 | 0.3333 | 0.5816 | 3.2755 | 0.5754 | 0.5400 | 0.9607 | 0.9549 |
| rcv1subset1 | 0.1217 | 0.0307 | 0.3238 | 0.4299 | 0.2556 | 0.4323 | 0.4317 | 38.0800 | 0.4266 | 0.4998 | 0.9262 | 0.9869 |
| REUTERS-K500-EX2 | 0.3007 | 0.0111 | 0.3634 | 0.3979 | 0.2272 | 0.4756 | 0.5395 | 34.4828 | 0.5680 | 0.4611 | 0.7844 | 0.9978 |
| scene | 0.6432 | 0.0864 | 0.7095 | 0.7426 | 0.7604 | 0.7505 | 0.2075 | 0.8133 | 0.1647 | 0.8472 | 0.9692 | 0.9726 |
| sider_CDK_ECFP4 | 0.0070 | 0.2405 | 0.6499 | 0.7978 | 0.6441 | 0.7974 | 0.1338 | 19.4789 | 0.1822 | 0.7753 | 0.5973 | 0.7694 |
| sider_MordredDesc | 0.0141 | 0.2564 | 0.6260 | 0.7841 | 0.6114 | 0.7842 | 0.1408 | 19.9085 | 0.1811 | 0.7867 | 0.5776 | 0.7692 |
| sider_RDKit_desc | 0.0211 | 0.2553 | 0.6379 | 0.7915 | 0.5898 | 0.7862 | 0.3803 | 20.2324 | 0.2307 | 0.7147 | 0.5848 | 0.7428 |
| SLASHDOT-F | 0.3968 | 0.0397 | 0.4751 | 0.5166 | 0.3656 | 0.5736 | 0.4550 | 6.5820 | 0.4426 | 0.5864 | 0.7620 | 0.9886 |
| solar_flare-L3 | 0.4000 | 0.2667 | 0.6000 | 0.6857 | 0.4444 | 0.6667 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.5556 | 0.8000 |
| Stackex_chemistry | 0.0461 | 0.0120 | 0.1055 | 0.1416 | 0.0659 | 0.1787 | 0.7867 | 105.2104 | 0.8745 | 0.1573 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0417 | 0.0100 | 0.1515 | 0.2114 | 0.0578 | 0.2682 | 0.6964 | 139.8155 | 0.8254 | 0.1855 | 0.5495 | 0.9987 |
| Stackex_coffee | 0.0000 | 0.0205 | 0.0609 | 0.0993 | 0.0240 | 0.1471 | 0.8261 | 78.1739 | 0.9058 | 0.1246 | 0.2567 | 0.9923 |
| Stackex_cooking | 0.0667 | 0.0052 | 0.2018 | 0.2710 | 0.1090 | 0.3157 | 0.6367 | 224.2184 | 0.7726 | 0.2322 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0553 | 0.0093 | 0.1705 | 0.2386 | 0.0650 | 0.2775 | 0.6809 | 134.6357 | 0.7823 | 0.2203 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2850 | 0.0614 | 0.5578 | 0.6908 | 0.5705 | 0.6695 | 0.2538 | 4.0867 | 0.1450 | 0.7759 | 0.9586 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1370 | 0.1567 | 0.2897 | 0.3660 | 0.3846 | 0.4311 | 0.4692 | 5.5822 | 0.5446 | 0.5549 | 0.9181 | 0.9215 |
| tox21_RDKit_desc | 0.0822 | 0.1630 | 0.1890 | 0.2525 | 0.2289 | 0.3129 | 0.5308 | 5.9178 | 0.6335 | 0.5022 | 0.9333 | 0.9369 |
| VirusGO | 0.7619 | 0.0476 | 0.8492 | 0.8768 | 0.7283 | 0.8800 | 0.0952 | 0.5238 | 0.0779 | 0.9206 | 0.7942 | 0.9695 |
| VirusPseAAC | 0.4762 | 0.1111 | 0.5000 | 0.5116 | 0.3000 | 0.6111 | 0.3333 | 9.0048 | 0.1857 | 0.7810 | 0.7183 | 0.9164 |
| Water-quality | 0.0094 | 0.3167 | 0.3476 | 0.5130 | 0.4207 | 0.5224 | 0.2925 | 9.5094 | 0.4004 | 0.6827 | 0.7919 | 0.7967 |
| Yahoo_Arts | 0.1348 | 0.0618 | 0.1875 | 0.2216 | 0.1741 | 0.2773 | 0.5501 | 11.3738 | 0.7041 | 0.4567 | 0.9418 | 0.9816 |
| Yahoo_Business | 0.5731 | 0.0265 | 0.7307 | 0.8194 | 0.3200 | 0.7298 | 0.0891 | 3.1604 | 0.2225 | 0.8873 | 0.8566 | 0.9951 |
| Yahoo_Computers | 0.3847 | 0.0371 | 0.4604 | 0.5108 | 0.2407 | 0.5137 | 0.3831 | 6.5839 | 0.4216 | 0.6125 | 0.8889 | 0.9817 |
| Yahoo_Education | 0.1397 | 0.0417 | 0.1825 | 0.2117 | 0.1536 | 0.2942 | 0.5495 | 9.1579 | 0.5635 | 0.5264 | 0.8887 | 0.9768 |
| Yahoo_Entertainment | 0.2765 | 0.0559 | 0.3293 | 0.3620 | 0.2424 | 0.4309 | 0.4368 | 4.1815 | 0.3822 | 0.6370 | 0.9667 | 0.9637 |
| Yahoo_Health | 0.3757 | 0.0386 | 0.4913 | 0.5591 | 0.2173 | 0.5473 | 0.3409 | 6.7937 | 0.3663 | 0.6718 | 0.8278 | 0.9841 |
| Yahoo_Recreation | 0.2159 | 0.0567 | 0.2583 | 0.2849 | 0.2965 | 0.3639 | 0.5300 | 6.7638 | 0.6066 | 0.5473 | 0.9722 | 0.9733 |
| Yahoo_Reference | 0.3998 | 0.0283 | 0.4381 | 0.4627 | 0.1668 | 0.5130 | 0.4122 | 5.6451 | 0.4481 | 0.6281 | 0.8077 | 0.9899 |
| Yahoo_Science | 0.2271 | 0.0394 | 0.2830 | 0.3277 | 0.1742 | 0.3433 | 0.6190 | 13.6796 | 0.6455 | 0.4273 | 0.9575 | 0.9840 |
| Yahoo_Social | 0.4150 | 0.0239 | 0.4615 | 0.4886 | 0.1615 | 0.5335 | 0.3812 | 7.8738 | 0.4114 | 0.6355 | 0.9157 | 0.9916 |
| Yahoo_Society | 0.3153 | 0.0802 | 0.4385 | 0.5541 | 0.2054 | 0.4627 | 0.3731 | 8.3514 | 0.4842 | 0.5898 | 0.9421 | 0.9714 |
| yeast | 0.1736 | 0.1895 | 0.5295 | 0.6676 | 0.3882 | 0.6607 | 0.2686 | 6.2397 | 0.2589 | 0.7464 | 0.8382 | 0.8926 |
| Yelp | 0.4028 | 0.1916 | 0.6261 | 0.7248 | 0.6680 | 0.7196 | 0.2173 | 1.3908 | 0.2181 | 0.8532 | 0.8634 | 0.8892 |

Table 79: Detailed results for lambda = 3 for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5633 | 0.0254 | 0.5957 | 0.6118 | 0.7121 | 0.7161 | 0.2930 | 2.4015 | 0.2273 | 0.7693 | 0.9900 | 0.9904 |
| 3s-bbc1000 | 0.1667 | 0.2315 | 0.2083 | 0.2382 | 0.2354 | 0.2857 | 0.6944 | 2.8611 | 0.6630 | 0.4664 | 0.7805 | 0.7307 |
| 3s-guardian1000 | 0.0000 | 0.2634 | 0.0989 | 0.1586 | 0.2057 | 0.2462 | 0.5806 | 2.0968 | 0.4935 | 0.5876 | 0.7948 | 0.8076 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.1176 | 0.6588 | 0.4716 | 0.5398 | 0.7202 |
| 3s-reuters1000 | 0.0000 | 0.2500 | 0.0167 | 0.0222 | 0.0476 | 0.0426 | 0.9000 | 2.7333 | 0.7933 | 0.3661 | 0.7986 | 0.7302 |
| amphibians | 0.1111 | 0.2857 | 0.5468 | 0.7598 | 0.4724 | 0.6604 | 0.2222 | 2.4444 | 0.1056 | 0.8663 | 0.7490 | 0.8007 |
| bibtex | 0.1851 | 0.0120 | 0.3562 | 0.4465 | 0.3072 | 0.4744 | 0.4405 | 72.2851 | 0.5818 | 0.4259 | 0.9977 | 0.9978 |
| birds | 0.2051 | 0.0891 | 0.3419 | 0.4116 | 0.3137 | 0.4310 | 0.5641 | 7.9744 | 0.5477 | 0.4864 | 0.8418 | 0.9419 |
| bookmarks10% | 0.1879 | 0.0088 | 0.2175 | 0.2392 | 0.1100 | 0.2617 | 0.7244 | 105.2403 | 0.7626 | 0.2589 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1397 | 0.2175 | 0.3582 | 0.0641 | 0.3494 | 0.4118 | 151.0588 | 0.6907 | 0.4190 | 0.8496 | 0.9617 |
| corel16k001 | 0.0087 | 0.0188 | 0.0439 | 0.0631 | 0.0327 | 0.0824 | 0.8824 | 115.2622 | 0.9461 | 0.0863 | 0.9990 | 0.9991 |
| Corel5k | 0.0060 | 0.0091 | 0.0567 | 0.0834 | 0.0235 | 0.1145 | 0.8460 | 163.4020 | 0.9382 | 0.1610 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0252 | 0.0929 | 0.1613 | 0.0835 | 0.1716 | 0.5357 | 906.4891 | 0.8490 | 0.1489 | 0.9934 | 0.9986 |
| emotions | 0.3167 | 0.1917 | 0.5625 | 0.6805 | 0.6512 | 0.6820 | 0.3167 | 1.7667 | 0.2465 | 0.7859 | 0.8748 | 0.8871 |
| enron | 0.1754 | 0.0498 | 0.4582 | 0.5912 | 0.1595 | 0.5733 | 0.2456 | 24.4444 | 0.3794 | 0.6116 | 0.8277 | 0.9825 |
| EukaryoteGO | 0.6778 | 0.0190 | 0.7848 | 0.8371 | 0.6972 | 0.8277 | 0.1662 | 0.8918 | 0.0514 | 0.8931 | 0.9928 | 0.9948 |
| EukaryotePseAAC | 0.1892 | 0.0510 | 0.2192 | 0.2341 | 0.1125 | 0.3090 | 0.5380 | 6.2021 | 0.4996 | 0.5262 | 0.9741 | 0.9765 |
| flags | 0.2000 | 0.2286 | 0.6267 | 0.7472 | 0.6139 | 0.7576 | 0.2000 | 3.5500 | 0.2208 | 0.8167 | 0.6735 | 0.7917 |
| foodtruck | 0.2927 | 0.1524 | 0.4673 | 0.6096 | 0.1313 | 0.5033 | 0.2439 | 4.4146 | 0.4408 | 0.7212 | 0.8519 | 0.9559 |
| genbase | 0.9552 | 0.0022 | 0.9801 | 0.9899 | 0.6502 | 0.9759 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7429 | 0.0500 | 0.7571 | 0.7642 | 0.4249 | 0.7941 | 0.1714 | 0.6214 | 0.1454 | 0.8772 | 0.8616 | 0.9891 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9135 | 0.9279 | 0.8639 | 0.9245 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.6923 | 0.1154 | 0.6923 | 0.6923 | 0.5559 | 0.7500 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9845 | 0.9763 |
| HumanGO | 0.6881 | 0.0340 | 0.7594 | 0.7950 | 0.7034 | 0.7892 | 0.1608 | 1.1318 | 0.1100 | 0.8774 | 0.9854 | 0.9887 |
| HumanPseAAC | 0.2733 | 0.0852 | 0.3012 | 0.3160 | 0.1618 | 0.3592 | 0.5273 | 3.3794 | 0.4662 | 0.5885 | 0.9534 | 0.9539 |
| Image | 0.5300 | 0.1610 | 0.5883 | 0.6179 | 0.6171 | 0.6212 | 0.3150 | 1.0400 | 0.2917 | 0.7900 | 0.9335 | 0.9293 |
| IMDB-ECC-F10% | 0.0304 | 0.0690 | 0.0575 | 0.0730 | 0.0326 | 0.0962 | 0.6342 | 12.3197 | 0.7278 | 0.3762 | 0.9876 | 0.9750 |
| IMDB-F10% | 0.0199 | 0.0727 | 0.0499 | 0.0659 | 0.0315 | 0.0890 | 0.5899 | 12.7531 | 0.7194 | 0.3837 | 0.9868 | 0.9750 |
| LLOG-F | 0.1721 | 0.0160 | 0.2015 | 0.2187 | 0.0539 | 0.2913 | 0.7295 | 28.6393 | 0.7753 | 0.2849 | 0.5986 | 0.9983 |
| mediamill10% | 0.0831 | 0.0296 | 0.4593 | 0.6187 | 0.0923 | 0.5764 | 0.1710 | 60.5036 | 0.4653 | 0.5369 | 0.8139 | 0.9944 |
| medical | 0.6327 | 0.0116 | 0.7364 | 0.7910 | 0.2810 | 0.7984 | 0.1735 | 5.1224 | 0.1430 | 0.8301 | 0.5529 | 0.9976 |
| Music | 0.3000 | 0.1722 | 0.5806 | 0.7006 | 0.7133 | 0.7232 | 0.3000 | 2.0000 | 0.2551 | 0.7959 | 0.9117 | 0.9046 |
| NUS-WIDE-bow10% | 0.1180 | 0.0248 | 0.2243 | 0.2782 | 0.0452 | 0.3345 | 0.5442 | 35.1289 | 0.6004 | 0.4253 | 0.8806 | 0.9914 |
| NUS-WIDE-cVLADplus10% | 0.1418 | 0.0235 | 0.2496 | 0.3053 | 0.0536 | 0.3673 | 0.5485 | 35.4358 | 0.6363 | 0.4177 | 0.8835 | 0.9946 |
| OHSUMED-F | 0.2319 | 0.0567 | 0.4292 | 0.5327 | 0.4335 | 0.5556 | 0.3561 | 7.6698 | 0.4119 | 0.6159 | 0.9768 | 0.9797 |
| PlantGO | 0.6771 | 0.0391 | 0.7344 | 0.7609 | 0.6575 | 0.7826 | 0.2292 | 1.0521 | 0.0992 | 0.8484 | 0.9906 | 0.9861 |
| PlantPseAAC | 0.2245 | 0.0901 | 0.2534 | 0.2694 | 0.1973 | 0.3457 | 0.5918 | 3.1020 | 0.4985 | 0.5517 | 0.9492 | 0.9419 |
| rcv1subset1 | 0.1217 | 0.0307 | 0.3238 | 0.4299 | 0.2556 | 0.4323 | 0.4317 | 38.0800 | 0.4266 | 0.4998 | 0.9262 | 0.9869 |
| REUTERS-K500-EX2 | 0.3127 | 0.0114 | 0.3766 | 0.4120 | 0.2306 | 0.4750 | 0.5206 | 32.9845 | 0.5407 | 0.4822 | 0.7840 | 0.9974 |
| scene | 0.6473 | 0.0885 | 0.7109 | 0.7434 | 0.7616 | 0.7470 | 0.2116 | 0.8257 | 0.1681 | 0.8447 | 0.9706 | 0.9735 |
| sider_CDK_ECFP4 | 0.0141 | 0.2407 | 0.6510 | 0.7983 | 0.6320 | 0.7981 | 0.0986 | 19.3944 | 0.1734 | 0.8015 | 0.5908 | 0.7746 |
| sider_MordredDesc | 0.0141 | 0.2564 | 0.6260 | 0.7841 | 0.6114 | 0.7842 | 0.1408 | 19.9085 | 0.1811 | 0.7867 | 0.5776 | 0.7692 |
| sider_RDKit_desc | 0.0141 | 0.2660 | 0.6368 | 0.7874 | 0.5983 | 0.7841 | 0.2746 | 19.9577 | 0.1876 | 0.7651 | 0.6048 | 0.7767 |
| SLASHDOT-F | 0.3889 | 0.0406 | 0.4729 | 0.5191 | 0.3578 | 0.5700 | 0.4365 | 6.3148 | 0.4193 | 0.6033 | 0.7609 | 0.9877 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.5556 | 0.7800 |
| Stackex_chemistry | 0.0461 | 0.0120 | 0.1055 | 0.1416 | 0.0659 | 0.1787 | 0.7867 | 105.2104 | 0.8745 | 0.1573 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0536 | 0.0101 | 0.1593 | 0.2179 | 0.0578 | 0.2689 | 0.6667 | 137.7083 | 0.8044 | 0.2067 | 0.5493 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0209 | 0.0497 | 0.0708 | 0.0159 | 0.1194 | 0.8261 | 75.4783 | 0.8808 | 0.1355 | 0.2567 | 0.9915 |
| Stackex_cooking | 0.0667 | 0.0052 | 0.2018 | 0.2710 | 0.1090 | 0.3157 | 0.6367 | 224.2184 | 0.7726 | 0.2322 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0553 | 0.0093 | 0.1705 | 0.2386 | 0.0650 | 0.2775 | 0.6809 | 134.6357 | 0.7823 | 0.2203 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2850 | 0.0614 | 0.5578 | 0.6908 | 0.5705 | 0.6695 | 0.2538 | 4.0867 | 0.1450 | 0.7759 | 0.9586 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1438 | 0.1590 | 0.3022 | 0.3816 | 0.3821 | 0.4311 | 0.4760 | 5.4486 | 0.5106 | 0.5620 | 0.9044 | 0.9058 |
| tox21_RDKit_desc | 0.0856 | 0.1624 | 0.1849 | 0.2472 | 0.2167 | 0.3035 | 0.4897 | 5.4658 | 0.5166 | 0.5582 | 0.9101 | 0.9127 |
| VirusGO | 0.7143 | 0.0635 | 0.8095 | 0.8491 | 0.6773 | 0.8333 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7988 | 0.9691 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.2857 | 0.9048 | 0.1762 | 0.7992 | 0.7285 | 0.9194 |
| Water-quality | 0.0000 | 0.3106 | 0.3633 | 0.5361 | 0.4199 | 0.5329 | 0.2830 | 9.3679 | 0.3852 | 0.6852 | 0.7836 | 0.7824 |
| Yahoo_Arts | 0.1362 | 0.0638 | 0.1955 | 0.2351 | 0.1729 | 0.2829 | 0.5327 | 11.0347 | 0.6821 | 0.4710 | 0.9387 | 0.9790 |
| Yahoo_Business | 0.5731 | 0.0265 | 0.7307 | 0.8194 | 0.3200 | 0.7298 | 0.0891 | 3.1604 | 0.2225 | 0.8873 | 0.8566 | 0.9951 |
| Yahoo_Computers | 0.3847 | 0.0371 | 0.4604 | 0.5108 | 0.2407 | 0.5137 | 0.3831 | 6.5839 | 0.4216 | 0.6125 | 0.8889 | 0.9817 |
| Yahoo_Education | 0.1397 | 0.0417 | 0.1825 | 0.2117 | 0.1536 | 0.2942 | 0.5495 | 9.1579 | 0.5635 | 0.5264 | 0.8887 | 0.9768 |
| Yahoo_Entertainment | 0.2765 | 0.0559 | 0.3293 | 0.3620 | 0.2424 | 0.4309 | 0.4368 | 4.1815 | 0.3822 | 0.6370 | 0.9667 | 0.9637 |
| Yahoo_Health | 0.4202 | 0.0382 | 0.5384 | 0.6098 | 0.2428 | 0.5848 | 0.3105 | 6.5190 | 0.3491 | 0.6932 | 0.8292 | 0.9853 |
| Yahoo_Recreation | 0.2128 | 0.0560 | 0.2592 | 0.2872 | 0.3045 | 0.3694 | 0.5269 | 6.6360 | 0.6012 | 0.5518 | 0.9691 | 0.9703 |
| Yahoo_Reference | 0.4134 | 0.0294 | 0.4590 | 0.4870 | 0.1711 | 0.5180 | 0.3923 | 5.4296 | 0.4257 | 0.6441 | 0.8090 | 0.9903 |
| Yahoo_Science | 0.2271 | 0.0394 | 0.2830 | 0.3277 | 0.1742 | 0.3433 | 0.6190 | 13.6796 | 0.6455 | 0.4273 | 0.9575 | 0.9840 |
| Yahoo_Social | 0.4398 | 0.0236 | 0.4848 | 0.5118 | 0.1596 | 0.5489 | 0.3721 | 7.5792 | 0.3928 | 0.6463 | 0.9132 | 0.9896 |
| Yahoo_Society | 0.3153 | 0.0802 | 0.4385 | 0.5541 | 0.2054 | 0.4627 | 0.3731 | 8.3514 | 0.4842 | 0.5898 | 0.9421 | 0.9714 |
| yeast | 0.2025 | 0.1898 | 0.5290 | 0.6629 | 0.3834 | 0.6571 | 0.2603 | 6.1901 | 0.2385 | 0.7566 | 0.8287 | 0.8854 |
| Yelp | 0.4158 | 0.1936 | 0.6285 | 0.7251 | 0.6587 | 0.7143 | 0.2064 | 1.4018 | 0.2242 | 0.8562 | 0.8714 | 0.8948 |

Table 80: Detailed results for lambda = 4 for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5633 | 0.0254 | 0.5957 | 0.6118 | 0.7121 | 0.7161 | 0.2930 | 2.4015 | 0.2273 | 0.7693 | 0.9900 | 0.9904 |
| 3s-bbc1000 | 0.1667 | 0.2176 | 0.2315 | 0.2684 | 0.2801 | 0.3188 | 0.7222 | 2.6944 | 0.6935 | 0.4699 | 0.8773 | 0.8295 |
| 3s-guardian1000 | 0.1290 | 0.2527 | 0.2376 | 0.2980 | 0.2609 | 0.3380 | 0.5161 | 2.0323 | 0.4976 | 0.6183 | 0.8442 | 0.8419 |
| 3s-inter3000 | 0.0000 | 0.1961 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.5882 | 0.8118 | 0.3755 | 0.6110 | 0.7817 |
| 3s-reuters1000 | 0.0000 | 0.2389 | 0.0167 | 0.0222 | 0.0556 | 0.0444 | 0.9000 | 2.3667 | 0.7200 | 0.4083 | 0.8353 | 0.7627 |
| amphibians | 0.1111 | 0.2619 | 0.5757 | 0.7796 | 0.5485 | 0.7179 | 0.3333 | 2.6111 | 0.1148 | 0.8126 | 0.7674 | 0.8061 |
| bibtex | 0.1851 | 0.0120 | 0.3562 | 0.4465 | 0.3072 | 0.4744 | 0.4405 | 72.2851 | 0.5818 | 0.4259 | 0.9977 | 0.9978 |
| birds | 0.1795 | 0.0931 | 0.3391 | 0.4115 | 0.2703 | 0.4103 | 0.4872 | 7.7436 | 0.5208 | 0.5088 | 0.8404 | 0.9349 |
| bookmarks10% | 0.1879 | 0.0088 | 0.2175 | 0.2392 | 0.1100 | 0.2617 | 0.7244 | 105.2403 | 0.7626 | 0.2589 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1398 | 0.2214 | 0.3660 | 0.0725 | 0.3573 | 0.3725 | 151.1176 | 0.5721 | 0.4383 | 0.8215 | 0.9334 |
| corel16k001 | 0.0087 | 0.0188 | 0.0439 | 0.0631 | 0.0327 | 0.0824 | 0.8824 | 115.2622 | 0.9461 | 0.0863 | 0.9990 | 0.9991 |
| Corel5k | 0.0060 | 0.0091 | 0.0567 | 0.0834 | 0.0235 | 0.1145 | 0.8460 | 163.4020 | 0.9382 | 0.1610 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0252 | 0.0929 | 0.1613 | 0.0835 | 0.1716 | 0.5357 | 906.4891 | 0.8490 | 0.1489 | 0.9934 | 0.9986 |
| emotions | 0.2833 | 0.1889 | 0.5667 | 0.6956 | 0.6557 | 0.6881 | 0.2833 | 1.7500 | 0.2454 | 0.8004 | 0.8866 | 0.8932 |
| enron | 0.1871 | 0.0487 | 0.4713 | 0.6055 | 0.1688 | 0.5859 | 0.3041 | 23.9825 | 0.3603 | 0.6047 | 0.8246 | 0.9802 |
| EukaryoteGO | 0.7242 | 0.0190 | 0.7848 | 0.8155 | 0.6970 | 0.8157 | 0.1701 | 0.8570 | 0.0500 | 0.8930 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.1892 | 0.0510 | 0.2192 | 0.2341 | 0.1125 | 0.3090 | 0.5380 | 6.2021 | 0.4996 | 0.5262 | 0.9741 | 0.9765 |
| flags | 0.2000 | 0.2357 | 0.6002 | 0.7259 | 0.5930 | 0.7402 | 0.2000 | 3.7000 | 0.2958 | 0.7894 | 0.6871 | 0.8111 |
| foodtruck | 0.2927 | 0.1545 | 0.4612 | 0.6031 | 0.1245 | 0.4933 | 0.2439 | 4.4390 | 0.4354 | 0.7207 | 0.8544 | 0.9573 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2985 | 0.0018 | 0.9922 | 0.6667 | 0.9994 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8741 | 0.9981 |
| GnegativePseAAC | 0.7429 | 0.0482 | 0.7607 | 0.7695 | 0.4536 | 0.8015 | 0.1786 | 0.6214 | 0.1526 | 0.8742 | 0.8632 | 0.9902 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.6923 | 0.1154 | 0.6923 | 0.6923 | 0.5556 | 0.7500 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6881 | 0.0358 | 0.7663 | 0.8059 | 0.6960 | 0.7790 | 0.1576 | 1.0740 | 0.1010 | 0.8831 | 0.9846 | 0.9883 |
| HumanPseAAC | 0.2733 | 0.0852 | 0.3012 | 0.3160 | 0.1618 | 0.3592 | 0.5273 | 3.3794 | 0.4662 | 0.5885 | 0.9534 | 0.9539 |
| Image | 0.5500 | 0.1580 | 0.6083 | 0.6379 | 0.6349 | 0.6326 | 0.3000 | 1.0500 | 0.2917 | 0.7935 | 0.9339 | 0.9298 |
| IMDB-ECC-F10% | 0.0304 | 0.0690 | 0.0575 | 0.0730 | 0.0326 | 0.0962 | 0.6342 | 12.3197 | 0.7278 | 0.3762 | 0.9876 | 0.9750 |
| IMDB-F10% | 0.0199 | 0.0727 | 0.0499 | 0.0659 | 0.0315 | 0.0890 | 0.5899 | 12.7531 | 0.7194 | 0.3837 | 0.9868 | 0.9750 |
| LLOG-F | 0.1721 | 0.0161 | 0.2015 | 0.2187 | 0.0533 | 0.2899 | 0.7295 | 28.5984 | 0.7781 | 0.2847 | 0.5982 | 0.9978 |
| mediamill10% | 0.0879 | 0.0295 | 0.4653 | 0.6266 | 0.0881 | 0.5814 | 0.1615 | 59.6366 | 0.4481 | 0.5501 | 0.8131 | 0.9938 |
| medical | 0.6633 | 0.0104 | 0.7526 | 0.7993 | 0.2863 | 0.8130 | 0.1735 | 5.0306 | 0.1329 | 0.8368 | 0.5527 | 0.9974 |
| Music | 0.2500 | 0.1806 | 0.5583 | 0.6878 | 0.7045 | 0.7137 | 0.3000 | 1.9833 | 0.2712 | 0.7884 | 0.9207 | 0.9109 |
| NUS-WIDE-bow10% | 0.1180 | 0.0248 | 0.2243 | 0.2782 | 0.0452 | 0.3345 | 0.5442 | 35.1289 | 0.6004 | 0.4253 | 0.8806 | 0.9914 |
| NUS-WIDE-cVLADplus10% | 0.1418 | 0.0235 | 0.2496 | 0.3053 | 0.0536 | 0.3673 | 0.5485 | 35.4358 | 0.6363 | 0.4177 | 0.8835 | 0.9946 |
| OHSUMED-F | 0.2319 | 0.0567 | 0.4292 | 0.5327 | 0.4335 | 0.5556 | 0.3561 | 7.6698 | 0.4119 | 0.6159 | 0.9768 | 0.9797 |
| PlantGO | 0.7083 | 0.0408 | 0.7396 | 0.7535 | 0.6399 | 0.7707 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9884 | 0.9843 |
| PlantPseAAC | 0.2449 | 0.0901 | 0.2738 | 0.2898 | 0.2090 | 0.3614 | 0.6020 | 3.3469 | 0.5649 | 0.5273 | 0.9524 | 0.9445 |
| rcv1subset1 | 0.1217 | 0.0307 | 0.3238 | 0.4299 | 0.2556 | 0.4323 | 0.4317 | 38.0800 | 0.4266 | 0.4998 | 0.9262 | 0.9869 |
| REUTERS-K500-EX2 | 0.3076 | 0.0112 | 0.3766 | 0.4134 | 0.2349 | 0.4839 | 0.5069 | 32.3900 | 0.5342 | 0.4910 | 0.7839 | 0.9972 |
| scene | 0.6888 | 0.0809 | 0.7407 | 0.7662 | 0.7750 | 0.7655 | 0.2033 | 0.9046 | 0.1838 | 0.8403 | 0.9754 | 0.9780 |
| sider_CDK_ECFP4 | 0.0141 | 0.2431 | 0.6522 | 0.7977 | 0.6281 | 0.7978 | 0.0986 | 19.1056 | 0.1362 | 0.8306 | 0.5956 | 0.7950 |
| sider_MordredDesc | 0.0141 | 0.2564 | 0.6260 | 0.7841 | 0.6114 | 0.7842 | 0.1408 | 19.9085 | 0.1811 | 0.7867 | 0.5776 | 0.7692 |
| sider_RDKit_desc | 0.0141 | 0.2801 | 0.6300 | 0.7821 | 0.5951 | 0.7770 | 0.3239 | 20.2746 | 0.2339 | 0.7148 | 0.5848 | 0.7335 |
| SLASHDOT-F | 0.4021 | 0.0397 | 0.4852 | 0.5305 | 0.3868 | 0.5823 | 0.4021 | 5.5556 | 0.3668 | 0.6405 | 0.7571 | 0.9841 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0461 | 0.0120 | 0.1055 | 0.1416 | 0.0659 | 0.1787 | 0.7867 | 105.2104 | 0.8745 | 0.1573 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0298 | 0.0100 | 0.1309 | 0.1844 | 0.0554 | 0.2539 | 0.6726 | 137.4881 | 0.8052 | 0.2032 | 0.5493 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0533 | 0.0900 | 0.0172 | 0.1159 | 0.8261 | 73.8696 | 0.8247 | 0.1573 | 0.2564 | 0.9874 |
| Stackex_cooking | 0.0667 | 0.0052 | 0.2018 | 0.2710 | 0.1090 | 0.3157 | 0.6367 | 224.2184 | 0.7726 | 0.2322 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0553 | 0.0093 | 0.1705 | 0.2386 | 0.0650 | 0.2775 | 0.6809 | 134.6357 | 0.7823 | 0.2203 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2850 | 0.0614 | 0.5578 | 0.6908 | 0.5705 | 0.6695 | 0.2538 | 4.0867 | 0.1450 | 0.7759 | 0.9586 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1572 | 0.2846 | 0.3570 | 0.3706 | 0.4132 | 0.4726 | 5.3527 | 0.4770 | 0.5724 | 0.8971 | 0.8969 |
| tox21_RDKit_desc | 0.0959 | 0.1621 | 0.1916 | 0.2526 | 0.2172 | 0.2918 | 0.5000 | 5.4932 | 0.4999 | 0.5574 | 0.8995 | 0.9004 |
| VirusGO | 0.7619 | 0.0476 | 0.8492 | 0.8768 | 0.7283 | 0.8800 | 0.0952 | 0.6190 | 0.1171 | 0.9143 | 0.8080 | 0.9814 |
| VirusPseAAC | 0.4762 | 0.1190 | 0.5238 | 0.5476 | 0.3295 | 0.6154 | 0.3333 | 0.9048 | 0.1952 | 0.7754 | 0.7121 | 0.9139 |
| Water-quality | 0.0094 | 0.3160 | 0.3636 | 0.5254 | 0.4177 | 0.5333 | 0.2925 | 9.1509 | 0.3542 | 0.6877 | 0.7696 | 0.7563 |
| Yahoo_Arts | 0.1802 | 0.0631 | 0.2615 | 0.3156 | 0.2136 | 0.3555 | 0.5020 | 10.3792 | 0.6090 | 0.5016 | 0.9374 | 0.9770 |
| Yahoo_Business | 0.5731 | 0.0265 | 0.7307 | 0.8194 | 0.3200 | 0.7298 | 0.0891 | 3.1604 | 0.2225 | 0.8873 | 0.8566 | 0.9951 |
| Yahoo_Computers | 0.3847 | 0.0371 | 0.4604 | 0.5108 | 0.2407 | 0.5137 | 0.3831 | 6.5839 | 0.4216 | 0.6125 | 0.8889 | 0.9817 |
| Yahoo_Education | 0.1397 | 0.0417 | 0.1825 | 0.2117 | 0.1536 | 0.2942 | 0.5495 | 9.1579 | 0.5635 | 0.5264 | 0.8887 | 0.9768 |
| Yahoo_Entertainment | 0.2765 | 0.0559 | 0.3293 | 0.3620 | 0.2424 | 0.4309 | 0.4368 | 4.1815 | 0.3822 | 0.6370 | 0.9667 | 0.9637 |
| Yahoo_Health | 0.4202 | 0.0382 | 0.5384 | 0.6098 | 0.2428 | 0.5848 | 0.3105 | 6.5190 | 0.3491 | 0.6932 | 0.8292 | 0.9853 |
| Yahoo_Recreation | 0.2778 | 0.0210 | 0.4000 | 0.4295 | 0.4058 | 0.5034 | 0.4776 | 6.1482 | 0.4855 | 0.6065 | 0.9655 | 0.9705 |
| Yahoo_Reference | 0.4134 | 0.0294 | 0.4590 | 0.4870 | 0.1711 | 0.5180 | 0.3923 | 5.4296 | 0.4257 | 0.6441 | 0.8090 | 0.9903 |
| Yahoo_Science | 0.2271 | 0.0394 | 0.2830 | 0.3277 | 0.1742 | 0.3433 | 0.6190 | 13.6796 | 0.6455 | 0.4273 | 0.9575 | 0.9840 |
| Yahoo_Social | 0.4398 | 0.0236 | 0.4848 | 0.5118 | 0.1596 | 0.5489 | 0.3721 | 7.5792 | 0.3928 | 0.6463 | 0.9132 | 0.9896 |
| Yahoo_Society | 0.3153 | 0.0802 | 0.4385 | 0.5541 | 0.2054 | 0.4627 | 0.3731 | 8.3514 | 0.4842 | 0.5898 | 0.9421 | 0.9714 |
| yeast | 0.2025 | 0.1898 | 0.5290 | 0.6629 | 0.3834 | 0.6571 | 0.2603 | 6.1901 | 0.2385 | 0.7566 | 0.8287 | 0.8854 |
| Yelp | 0.4317 | 0.1862 | 0.6527 | 0.7506 | 0.6708 | 0.7321 | 0.2014 | 1.3819 | 0.2495 | 0.8619 | 0.8926 | 0.9130 |

Table 81: Detailed results for lambda = 5 for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5633 | 0.0254 | 0.5957 | 0.6118 | 0.7121 | 0.7161 | 0.2930 | 2.4015 | 0.2273 | 0.7693 | 0.9900 | 0.9904 |
| 3s-bbc1000 | 0.1111 | 0.2546 | 0.1481 | 0.1667 | 0.1678 | 0.2029 | 0.7778 | 3.0833 | 0.7241 | 0.4143 | 0.7965 | 0.7457 |
| 3s-guardian1000 | 0.1290 | 0.2419 | 0.2151 | 0.2687 | 0.2493 | 0.3077 | 0.4839 | 2.0323 | 0.4597 | 0.6293 | 0.8171 | 0.8231 |
| 3s-inter3000 | 0.0588 | 0.1863 | 0.0588 | 0.0588 | 0.0556 | 0.0952 | 0.8824 | 2.4118 | 0.6971 | 0.4059 | 0.4695 | 0.6587 |
| 3s-reuters1000 | 0.0000 | 0.2222 | 0.0278 | 0.0392 | 0.0893 | 0.0909 | 0.9000 | 2.6333 | 0.8000 | 0.3756 | 0.8477 | 0.7673 |
| amphibians | 0.0000 | 0.2698 | 0.5353 | 0.7592 | 0.5008 | 0.6964 | 0.2222 | 2.5000 | 0.1111 | 0.8570 | 0.7363 | 0.8017 |
| bibtex | 0.1851 | 0.0120 | 0.3562 | 0.4465 | 0.3072 | 0.4744 | 0.4405 | 72.2851 | 0.5818 | 0.4259 | 0.9977 | 0.9978 |
| birds | 0.2051 | 0.0918 | 0.3496 | 0.4214 | 0.3035 | 0.4333 | 0.5128 | 7.3590 | 0.4639 | 0.5181 | 0.8375 | 0.9312 |
| bookmarks10% | 0.1879 | 0.0088 | 0.2175 | 0.2392 | 0.1100 | 0.2617 | 0.7244 | 105.2403 | 0.7626 | 0.2589 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1395 | 0.2088 | 0.3499 | 0.0656 | 0.3415 | 0.3333 | 151.0784 | 0.6216 | 0.4279 | 0.8319 | 0.9471 |
| corel16k001 | 0.0087 | 0.0188 | 0.0439 | 0.0631 | 0.0327 | 0.0824 | 0.8824 | 115.2622 | 0.9461 | 0.0863 | 0.9990 | 0.9991 |
| Corel5k | 0.0060 | 0.0091 | 0.0567 | 0.0834 | 0.0235 | 0.1145 | 0.8460 | 163.4020 | 0.9382 | 0.1610 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0252 | 0.0929 | 0.1613 | 0.0835 | 0.1716 | 0.5357 | 906.4891 | 0.8490 | 0.1489 | 0.9934 | 0.9986 |
| emotions | 0.3167 | 0.1806 | 0.5708 | 0.6901 | 0.6676 | 0.6977 | 0.2500 | 1.7500 | 0.2298 | 0.8054 | 0.8813 | 0.8895 |
| enron | 0.1696 | 0.0481 | 0.4575 | 0.5905 | 0.1709 | 0.5848 | 0.2982 | 23.6433 | 0.3640 | 0.6101 | 0.8250 | 0.9805 |
| EukaryotеGO | 0.7126 | 0.0188 | 0.7850 | 0.8211 | 0.7190 | 0.8194 | 0.1688 | 0.8209 | 0.0470 | 0.8939 | 0.9927 | 0.9947 |
| EukaryotePseAAC | 0.1892 | 0.0510 | 0.2192 | 0.2341 | 0.1125 | 0.3090 | 0.5380 | 6.2021 | 0.4996 | 0.5262 | 0.9741 | 0.9765 |
| flags | 0.2500 | 0.2214 | 0.6442 | 0.7576 | 0.6218 | 0.7669 | 0.2000 | 3.4500 | 0.2033 | 0.8233 | 0.7241 | 0.8162 |
| foodtruck | 0.2927 | 0.1524 | 0.4661 | 0.6027 | 0.1470 | 0.5033 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8568 | 0.9575 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2388 | 0.0006 | 0.9950 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8737 | 0.9980 |
| GnegativePseAAC | 0.7357 | 0.0500 | 0.7571 | 0.7678 | 0.4430 | 0.7956 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8620 | 0.9894 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1202 | 0.7308 | 0.7308 | 0.5716 | 0.7525 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.7074 | 0.0345 | 0.7712 | 0.8055 | 0.6870 | 0.7851 | 0.1576 | 1.0611 | 0.1015 | 0.8825 | 0.9851 | 0.9886 |
| HumanPseAAC | 0.2733 | 0.0852 | 0.3012 | 0.3160 | 0.1618 | 0.3592 | 0.5273 | 3.3794 | 0.4662 | 0.5885 | 0.9534 | 0.9539 |
| Image | 0.5600 | 0.1550 | 0.6133 | 0.6404 | 0.6392 | 0.6370 | 0.3050 | 1.0150 | 0.2804 | 0.7969 | 0.9301 | 0.9257 |
| IMDB-ECC-F10% | 0.0304 | 0.0690 | 0.0575 | 0.0730 | 0.0326 | 0.0962 | 0.6342 | 12.3197 | 0.7278 | 0.3762 | 0.9876 | 0.9750 |
| IMDB-F10% | 0.0199 | 0.0727 | 0.0499 | 0.0659 | 0.0315 | 0.0890 | 0.5899 | 12.7531 | 0.7194 | 0.3837 | 0.9868 | 0.9750 |
| LLOG-F | 0.1721 | 0.0157 | 0.2015 | 0.2187 | 0.0556 | 0.2941 | 0.7377 | 28.1393 | 0.7821 | 0.2809 | 0.5984 | 0.9981 |
| mediamill10% | 0.0855 | 0.0299 | 0.4524 | 0.6119 | 0.0751 | 0.5680 | 0.1710 | 59.6675 | 0.4594 | 0.5387 | 0.8133 | 0.9941 |
| medical | 0.6327 | 0.0111 | 0.7355 | 0.7890 | 0.2816 | 0.8032 | 0.1531 | 5.0204 | 0.1325 | 0.8470 | 0.5525 | 0.9976 |
| Music | 0.2833 | 0.1694 | 0.5889 | 0.7219 | 0.7196 | 0.7313 | 0.1500 | 1.8833 | 0.2218 | 0.8547 | 0.9149 | 0.9065 |
| NUS-WIDE-bow10% | 0.1180 | 0.0248 | 0.2243 | 0.2782 | 0.0452 | 0.3345 | 0.5442 | 35.1289 | 0.6004 | 0.4253 | 0.8806 | 0.9914 |
| NUS-WIDE-cVLADplus10% | 0.1418 | 0.0235 | 0.2496 | 0.3053 | 0.0536 | 0.3673 | 0.5485 | 35.4358 | 0.6363 | 0.4177 | 0.8835 | 0.9946 |
| OHSUMED-F | 0.2319 | 0.0567 | 0.4292 | 0.5327 | 0.4335 | 0.5556 | 0.3561 | 7.6698 | 0.4119 | 0.6159 | 0.9768 | 0.9797 |
| PlantGO | 0.7083 | 0.0417 | 0.7396 | 0.7535 | 0.6307 | 0.7670 | 0.2188 | 0.9583 | 0.0957 | 0.8545 | 0.9890 | 0.9841 |
| PlantPseAAC | 0.2347 | 0.0918 | 0.2687 | 0.2874 | 0.2046 | 0.3571 | 0.6122 | 3.2551 | 0.5115 | 0.5328 | 0.9399 | 0.9345 |
| rcv1subset1 | 0.0850 | 0.0304 | 0.2922 | 0.3970 | 0.2198 | 0.4058 | 0.4033 | 37.7117 | 0.3972 | 0.5191 | 0.9249 | 0.9859 |
| REUTERS-K500-EX2 | 0.3041 | 0.0112 | 0.3708 | 0.4062 | 0.2353 | 0.4819 | 0.5069 | 31.7938 | 0.5232 | 0.4982 | 0.7837 | 0.9971 |
| scene | 0.6515 | 0.0837 | 0.7178 | 0.7509 | 0.7681 | 0.7585 | 0.2116 | 0.7967 | 0.1581 | 0.8468 | 0.9698 | 0.9731 |
| sider_CDK_ECFP4 | 0.0211 | 0.2420 | 0.6522 | 0.7983 | 0.6312 | 0.7983 | 0.1761 | 19.3239 | 0.1712 | 0.7893 | 0.5895 | 0.7679 |
| sider_MordredDesc | 0.0141 | 0.2564 | 0.6260 | 0.7841 | 0.6114 | 0.7842 | 0.1408 | 19.9085 | 0.1811 | 0.7867 | 0.5776 | 0.7692 |
| sider_RDKit_desc | 0.0141 | 0.2765 | 0.6327 | 0.7843 | 0.6015 | 0.7794 | 0.0986 | 19.9296 | 0.1806 | 0.7817 | 0.5892 | 0.7708 |
| SLASHDOT-F | 0.3942 | 0.0405 | 0.4733 | 0.5156 | 0.3652 | 0.5663 | 0.3968 | 5.7275 | 0.3726 | 0.6382 | 0.7558 | 0.9824 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.8400 |
| Stackex_chemistry | 0.0461 | 0.0120 | 0.1055 | 0.1416 | 0.0659 | 0.1787 | 0.7867 | 105.2104 | 0.8745 | 0.1573 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0476 | 0.0101 | 0.1465 | 0.2009 | 0.0607 | 0.2610 | 0.6488 | 136.8214 | 0.7981 | 0.2169 | 0.5492 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0209 | 0.0533 | 0.0900 | 0.0169 | 0.1194 | 0.7391 | 72.1304 | 0.7983 | 0.1871 | 0.2565 | 0.9868 |
| Stackex_cooking | 0.0667 | 0.0052 | 0.2018 | 0.2710 | 0.1090 | 0.3157 | 0.6367 | 224.2184 | 0.7726 | 0.2322 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0553 | 0.0093 | 0.1705 | 0.2386 | 0.0650 | 0.2775 | 0.6809 | 134.6357 | 0.7823 | 0.2203 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2850 | 0.0614 | 0.5578 | 0.6908 | 0.5705 | 0.6695 | 0.2538 | 4.0867 | 0.1450 | 0.7759 | 0.9586 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1336 | 0.1575 | 0.2767 | 0.3478 | 0.3718 | 0.4077 | 0.4692 | 5.3356 | 0.4801 | 0.5721 | 0.8980 | 0.8975 |
| tox21_RDKit_desc | 0.0959 | 0.1621 | 0.1916 | 0.2526 | 0.2172 | 0.2918 | 0.5000 | 5.4932 | 0.4999 | 0.5574 | 0.8995 | 0.9004 |
| VirusGO | 0.7619 | 0.0476 | 0.8492 | 0.8768 | 0.7283 | 0.8800 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.7926 | 0.9636 |
| VirusPseAAC | 0.5238 | 0.1190 | 0.5714 | 0.5943 | 0.3667 | 0.6341 | 0.2857 | 0.8571 | 0.1762 | 0.8008 | 0.7266 | 0.9228 |
| Water-quality | 0.0094 | 0.3133 | 0.3643 | 0.5313 | 0.4227 | 0.5364 | 0.2642 | 9.2736 | 0.3535 | 0.6909 | 0.7661 | 0.7552 |
| Yahoo_Arts | 0.1495 | 0.0621 | 0.2097 | 0.2488 | 0.1816 | 0.2990 | 0.5194 | 9.7677 | 0.5456 | 0.5119 | 0.9284 | 0.9645 |
| Yahoo_Business | 0.5731 | 0.0265 | 0.7307 | 0.8194 | 0.3200 | 0.7298 | 0.0891 | 3.1604 | 0.2225 | 0.8873 | 0.8566 | 0.9951 |
| Yahoo_Computers | 0.3847 | 0.0371 | 0.4598 | 0.5092 | 0.2495 | 0.5142 | 0.3799 | 6.5189 | 0.4258 | 0.6132 | 0.8891 | 0.9817 |
| Yahoo_Education | 0.1397 | 0.0417 | 0.1825 | 0.2117 | 0.1536 | 0.2942 | 0.5495 | 9.1579 | 0.5635 | 0.5264 | 0.8887 | 0.9768 |
| Yahoo_Entertainment | 0.2765 | 0.0559 | 0.3293 | 0.3620 | 0.2424 | 0.4309 | 0.4368 | 4.1815 | 0.3822 | 0.6370 | 0.9667 | 0.9637 |
| Yahoo_Health | 0.4202 | 0.0382 | 0.5384 | 0.6098 | 0.2428 | 0.5848 | 0.3105 | 6.5190 | 0.3491 | 0.6932 | 0.8292 | 0.9853 |
| Yahoo_Recreation | 0.2778 | 0.0210 | 0.4000 | 0.4295 | 0.4058 | 0.5034 | 0.4776 | 6.1482 | 0.4855 | 0.6065 | 0.9655 | 0.9705 |
| Yahoo_Reference | 0.4134 | 0.0294 | 0.4590 | 0.4870 | 0.1711 | 0.5180 | 0.3923 | 5.4296 | 0.4257 | 0.6441 | 0.8090 | 0.9903 |
| Yahoo_Science | 0.2271 | 0.0394 | 0.2830 | 0.3277 | 0.1742 | 0.3433 | 0.6190 | 13.6796 | 0.6455 | 0.4273 | 0.9575 | 0.9840 |
| Yahoo_Social | 0.4398 | 0.0236 | 0.4848 | 0.5118 | 0.1596 | 0.5489 | 0.3721 | 7.5792 | 0.3928 | 0.6463 | 0.9132 | 0.9896 |
| Yahoo_Society | 0.3153 | 0.0802 | 0.4385 | 0.5541 | 0.2054 | 0.4627 | 0.3731 | 8.3514 | 0.4842 | 0.5898 | 0.9421 | 0.9714 |
| yeast | 0.2025 | 0.1898 | 0.5290 | 0.6629 | 0.3834 | 0.6571 | 0.2603 | 6.1901 | 0.2385 | 0.7566 | 0.8287 | 0.8854 |
| Yelp | 0.4078 | 0.1888 | 0.6259 | 0.7248 | 0.6667 | 0.7206 | 0.2124 | 1.3799 | 0.2085 | 0.8564 | 0.8645 | 0.8906 |

Table 82: Detailed results for lambda = 6 for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5633 | 0.0254 | 0.5957 | 0.6118 | 0.7121 | 0.7161 | 0.2930 | 2.4015 | 0.2273 | 0.7693 | 0.9900 | 0.9904 |
| 3s-bbc1000 | 0.1111 | 0.2639 | 0.1551 | 0.1826 | 0.1826 | 0.2192 | 0.7500 | 3.0556 | 0.6852 | 0.4254 | 0.7578 | 0.7128 |
| 3s-guardian1000 | 0.0968 | 0.2742 | 0.1747 | 0.2320 | 0.2429 | 0.2817 | 0.5161 | 2.0645 | 0.4468 | 0.6116 | 0.8014 | 0.8135 |
| 3s-inter3000 | 0.0588 | 0.1863 | 0.0588 | 0.0588 | 0.0556 | 0.0952 | 0.8824 | 2.2941 | 0.5897 | 0.4225 | 0.5136 | 0.6832 |
| 3s-reuters1000 | 0.0333 | 0.2667 | 0.0778 | 0.0972 | 0.1383 | 0.1429 | 0.9000 | 2.5333 | 0.7408 | 0.3900 | 0.8296 | 0.7563 |
| amphibians | 0.0556 | 0.2778 | 0.5377 | 0.7382 | 0.5398 | 0.7009 | 0.2222 | 2.5000 | 0.1000 | 0.8593 | 0.7203 | 0.7999 |
| bibtex | 0.1851 | 0.0120 | 0.3562 | 0.4465 | 0.3072 | 0.4744 | 0.4405 | 72.2851 | 0.5818 | 0.4259 | 0.9977 | 0.9978 |
| birds | 0.2051 | 0.0877 | 0.3513 | 0.4183 | 0.2894 | 0.4348 | 0.4872 | 7.1026 | 0.4109 | 0.5451 | 0.8280 | 0.9186 |
| bookmarks10% | 0.1879 | 0.0088 | 0.2175 | 0.2392 | 0.1100 | 0.2617 | 0.7244 | 105.2403 | 0.7626 | 0.2589 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1389 | 0.1950 | 0.3281 | 0.0544 | 0.3207 | 0.3333 | 151.0784 | 0.5765 | 0.4397 | 0.8179 | 0.9325 |
| corel16k001 | 0.0087 | 0.0188 | 0.0439 | 0.0631 | 0.0327 | 0.0824 | 0.8824 | 115.2622 | 0.9461 | 0.0863 | 0.9990 | 0.9991 |
| Corel5k | 0.0060 | 0.0091 | 0.0567 | 0.0834 | 0.0235 | 0.1145 | 0.8460 | 163.4020 | 0.9382 | 0.1610 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0252 | 0.0929 | 0.1613 | 0.0835 | 0.1716 | 0.5357 | 906.4891 | 0.8490 | 0.1489 | 0.9934 | 0.9986 |
| emotions | 0.3333 | 0.1750 | 0.5958 | 0.7194 | 0.6797 | 0.7123 | 0.2667 | 1.8167 | 0.2373 | 0.7943 | 0.8784 | 0.8875 |
| enron | 0.1579 | 0.0490 | 0.4472 | 0.5796 | 0.1697 | 0.5779 | 0.3216 | 23.1520 | 0.3563 | 0.6096 | 0.8244 | 0.9798 |
| EukaryoteGO | 0.7101 | 0.0188 | 0.7923 | 0.8321 | 0.6920 | 0.8241 | 0.1624 | 0.7384 | 0.0391 | 0.9001 | 0.9925 | 0.9947 |
| EukaryotePseAAC | 0.1892 | 0.0510 | 0.2192 | 0.2341 | 0.1125 | 0.3090 | 0.5380 | 6.2021 | 0.4996 | 0.5262 | 0.9741 | 0.9765 |
| flags | 0.2500 | 0.2214 | 0.6442 | 0.7594 | 0.6235 | 0.7669 | 0.1000 | 3.5500 | 0.2150 | 0.8400 | 0.6936 | 0.7998 |
| foodtruck | 0.3171 | 0.1524 | 0.4633 | 0.5869 | 0.1330 | 0.4898 | 0.2439 | 4.4634 | 0.4408 | 0.7166 | 0.8506 | 0.9557 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0149 | 0.3134 | 0.0024 | 0.9882 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7500 | 0.0482 | 0.7643 | 0.7714 | 0.4483 | 0.8015 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8618 | 0.9892 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9962 |
| GpositivePseAAC | 0.7115 | 0.1106 | 0.7115 | 0.7115 | 0.5633 | 0.7629 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.7170 | 0.0347 | 0.7795 | 0.8121 | 0.6992 | 0.7852 | 0.1576 | 1.0997 | 0.1050 | 0.8816 | 0.9847 | 0.9884 |
| HumanPseAAC | 0.2733 | 0.0852 | 0.3012 | 0.3160 | 0.1618 | 0.3592 | 0.5273 | 3.3794 | 0.4662 | 0.5885 | 0.9534 | 0.9539 |
| Image | 0.5650 | 0.1530 | 0.6208 | 0.6491 | 0.6456 | 0.6434 | 0.3050 | 1.0150 | 0.2775 | 0.7975 | 0.9303 | 0.9268 |
| IMDB-ECC-F10% | 0.0304 | 0.0690 | 0.0575 | 0.0730 | 0.0326 | 0.0962 | 0.6342 | 12.3197 | 0.7278 | 0.3762 | 0.9876 | 0.9750 |
| IMDB-F10% | 0.0199 | 0.0727 | 0.0499 | 0.0659 | 0.0315 | 0.0890 | 0.5899 | 12.7531 | 0.7194 | 0.3837 | 0.9868 | 0.9750 |
| LLOG-F | 0.1639 | 0.0161 | 0.1974 | 0.2169 | 0.0539 | 0.2899 | 0.7295 | 28.2459 | 0.7631 | 0.2924 | 0.5981 | 0.9978 |
| mediamill10% | 0.0831 | 0.0297 | 0.4533 | 0.6128 | 0.0761 | 0.5658 | 0.2447 | 58.6057 | 0.4401 | 0.5446 | 0.8117 | 0.9930 |
| medical | 0.6531 | 0.0107 | 0.7543 | 0.8086 | 0.2986 | 0.8112 | 0.1531 | 4.4490 | 0.1073 | 0.8626 | 0.5527 | 0.9974 |
| Music | 0.2833 | 0.1750 | 0.5778 | 0.7052 | 0.7136 | 0.7225 | 0.3000 | 2.0167 | 0.2475 | 0.7931 | 0.9082 | 0.9031 |
| NUS-WIDE-bow10% | 0.1180 | 0.0248 | 0.2243 | 0.2782 | 0.0452 | 0.3345 | 0.5442 | 35.1289 | 0.6004 | 0.4253 | 0.8806 | 0.9914 |
| NUS-WIDE-cVLADplus10% | 0.1418 | 0.0235 | 0.2496 | 0.3053 | 0.0536 | 0.3673 | 0.5485 | 35.4358 | 0.6363 | 0.4177 | 0.8835 | 0.9946 |
| OHSUMED-F | 0.2319 | 0.0567 | 0.4292 | 0.5327 | 0.4335 | 0.5556 | 0.3561 | 7.6698 | 0.4119 | 0.6159 | 0.9768 | 0.9797 |
| PlantGO | 0.6979 | 0.0443 | 0.7257 | 0.7413 | 0.6385 | 0.7488 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9895 | 0.9839 |
| PlantPseAAC | 0.2245 | 0.0952 | 0.2534 | 0.2694 | 0.1791 | 0.3333 | 0.6224 | 3.0408 | 0.4859 | 0.5389 | 0.9402 | 0.9332 |
| rcv1subset1 | 0.0917 | 0.0301 | 0.3056 | 0.4140 | 0.2423 | 0.4220 | 0.4183 | 35.5433 | 0.3808 | 0.5193 | 0.9244 | 0.9854 |
| REUTERS-K500-EX2 | 0.3127 | 0.0112 | 0.3789 | 0.4146 | 0.2428 | 0.4775 | 0.4931 | 30.1770 | 0.5079 | 0.5128 | 0.7835 | 0.9968 |
| scene | 0.6722 | 0.0858 | 0.7213 | 0.7462 | 0.7654 | 0.7510 | 0.2158 | 0.8050 | 0.1598 | 0.8441 | 0.9694 | 0.9726 |
| sider_CDK_ECFP4 | 0.0141 | 0.2483 | 0.6482 | 0.7944 | 0.6283 | 0.7957 | 0.2254 | 19.1831 | 0.1440 | 0.8192 | 0.5810 | 0.7839 |
| sider_MordredDesc | 0.0141 | 0.2564 | 0.6260 | 0.7841 | 0.6114 | 0.7842 | 0.1408 | 19.9085 | 0.1811 | 0.7867 | 0.5776 | 0.7692 |
| sider_RDKit_desc | 0.0141 | 0.2835 | 0.6275 | 0.7806 | 0.5940 | 0.7749 | 0.1761 | 20.0845 | 0.1991 | 0.7539 | 0.5680 | 0.7564 |
| SLASHDOT-F | 0.3942 | 0.0411 | 0.4808 | 0.5279 | 0.3667 | 0.5704 | 0.3968 | 5.4683 | 0.3606 | 0.6449 | 0.7569 | 0.9839 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.4000 | 0.4000 | 0.3000 | 0.8000 | 0.4444 | 0.8000 |
| Stackex_chemistry | 0.0461 | 0.0120 | 0.1055 | 0.1416 | 0.0659 | 0.1787 | 0.7867 | 105.2104 | 0.8745 | 0.1573 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0476 | 0.0101 | 0.1532 | 0.2110 | 0.0588 | 0.2727 | 0.6845 | 138.1726 | 0.8076 | 0.2014 | 0.5494 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0198 | 0.0558 | 0.0943 | 0.0196 | 0.1250 | 0.7826 | 74.0000 | 0.8069 | 0.1693 | 0.2527 | 0.9819 |
| Stackex_cooking | 0.0667 | 0.0052 | 0.2018 | 0.2710 | 0.1090 | 0.3157 | 0.6367 | 224.2184 | 0.7726 | 0.2322 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0553 | 0.0093 | 0.1705 | 0.2386 | 0.0650 | 0.2775 | 0.6809 | 134.6357 | 0.7823 | 0.2203 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2850 | 0.0614 | 0.5578 | 0.6908 | 0.5705 | 0.6695 | 0.2538 | 4.0867 | 0.1450 | 0.7759 | 0.9586 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1301 | 0.1584 | 0.2720 | 0.3440 | 0.3639 | 0.4013 | 0.4692 | 5.3356 | 0.4780 | 0.5732 | 0.8952 | 0.8946 |
| tox21_RDKit_desc | 0.0959 | 0.1621 | 0.1916 | 0.2526 | 0.2172 | 0.2918 | 0.5000 | 5.4932 | 0.4999 | 0.5574 | 0.8995 | 0.9004 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.8003 | 0.9707 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.2857 | 0.8571 | 0.1857 | 0.7992 | 0.7149 | 0.9190 |
| Water-quality | 0.0000 | 0.3174 | 0.3512 | 0.5224 | 0.4166 | 0.5266 | 0.2925 | 9.0377 | 0.3463 | 0.6842 | 0.7540 | 0.7457 |
| Yahoo_Arts | 0.1629 | 0.0608 | 0.2248 | 0.2648 | 0.1884 | 0.3156 | 0.5167 | 10.0748 | 0.5522 | 0.5060 | 0.9266 | 0.9633 |
| Yahoo_Business | 0.5686 | 0.0259 | 0.7230 | 0.8090 | 0.2977 | 0.7250 | 0.0980 | 3.0695 | 0.2051 | 0.8858 | 0.8505 | 0.9927 |
| Yahoo_Computers | 0.3847 | 0.0371 | 0.4604 | 0.5108 | 0.2407 | 0.5137 | 0.3831 | 6.5839 | 0.4216 | 0.6125 | 0.8889 | 0.9817 |
| Yahoo_Education | 0.1397 | 0.0417 | 0.1825 | 0.2117 | 0.1536 | 0.2942 | 0.5495 | 9.1579 | 0.5635 | 0.5264 | 0.8887 | 0.9768 |
| Yahoo_Entertainment | 0.2765 | 0.0559 | 0.3293 | 0.3620 | 0.2424 | 0.4309 | 0.4368 | 4.1815 | 0.3822 | 0.6370 | 0.9667 | 0.9637 |
| Yahoo_Health | 0.4202 | 0.0382 | 0.5384 | 0.6098 | 0.2428 | 0.5848 | 0.3105 | 6.5190 | 0.3491 | 0.6932 | 0.8292 | 0.9853 |
| Yahoo_Recreation | 0.2778 | 0.0210 | 0.4000 | 0.4295 | 0.4058 | 0.5034 | 0.4776 | 6.1482 | 0.4855 | 0.6065 | 0.9655 | 0.9705 |
| Yahoo_Reference | 0.4134 | 0.0294 | 0.4590 | 0.4870 | 0.1711 | 0.5180 | 0.3923 | 5.4296 | 0.4257 | 0.6441 | 0.8090 | 0.9903 |
| Yahoo_Science | 0.2271 | 0.0394 | 0.2830 | 0.3277 | 0.1742 | 0.3433 | 0.6190 | 13.6796 | 0.6455 | 0.4273 | 0.9575 | 0.9840 |
| Yahoo_Social | 0.4398 | 0.0236 | 0.4848 | 0.5118 | 0.1596 | 0.5489 | 0.3721 | 7.5792 | 0.3928 | 0.6463 | 0.9132 | 0.9896 |
| Yahoo_Society | 0.3153 | 0.0802 | 0.4385 | 0.5541 | 0.2054 | 0.4627 | 0.3731 | 8.3514 | 0.4842 | 0.5898 | 0.9421 | 0.9714 |
| yeast | 0.2025 | 0.1898 | 0.5290 | 0.6629 | 0.3834 | 0.6571 | 0.2603 | 6.1901 | 0.2385 | 0.7566 | 0.8287 | 0.8854 |
| Yelp | 0.3938 | 0.1932 | 0.6199 | 0.7216 | 0.6644 | 0.7142 | 0.1874 | 1.3599 | 0.2070 | 0.8676 | 0.8630 | 0.8889 |

Table 83: Detailed results for lambda = 2 for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4787 | 0.0322 | 0.5759 | 0.6259 | 0.6823 | 0.6840 | 0.3096 | 2.5762 | 0.2469 | 0.7545 | 0.9871 | 0.9873 |
| 3s-bbc1000 | 0.1111 | 0.3611 | 0.2269 | 0.3108 | 0.2878 | 0.3036 | 0.7222 | 2.9722 | 0.6678 | 0.4414 | 0.7812 | 0.7310 |
| 3s-guardian1000 | 0.1935 | 0.2849 | 0.3629 | 0.4674 | 0.2950 | 0.4176 | 0.4839 | 2.0968 | 0.4766 | 0.6199 | 0.8240 | 0.8284 |
| 3s-inter3000 | 0.0000 | 0.4314 | 0.2549 | 0.3915 | 0.2534 | 0.3889 | 0.8824 | 2.1765 | 0.6132 | 0.4382 | 0.5071 | 0.6865 |
| 3s-reuters1000 | 0.1000 | 0.3222 | 0.1333 | 0.1481 | 0.1076 | 0.1471 | 0.9000 | 2.5000 | 0.7467 | 0.3928 | 0.8245 | 0.7519 |
| amphibians | 0.0000 | 0.2619 | 0.5446 | 0.7648 | 0.5310 | 0.7080 | 0.2222 | 2.5000 | 0.0907 | 0.8635 | 0.7664 | 0.8002 |
| bibtex | 0.1919 | 0.0120 | 0.3673 | 0.4610 | 0.3257 | 0.4853 | 0.4324 | 72.3973 | 0.5751 | 0.4301 | 0.9977 | 0.9978 |
| birds | 0.1795 | 0.0958 | 0.3457 | 0.4284 | 0.3349 | 0.4409 | 0.5128 | 8.0513 | 0.5655 | 0.5024 | 0.8520 | 0.9534 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.2104 | 0.3150 | 0.4764 | 0.1401 | 0.4772 | 0.3529 | 151.0392 | 0.6638 | 0.4202 | 0.8416 | 0.9572 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1946 | 0.0408 | 0.1944 | 0.8751 | 115.1089 | 0.9440 | 0.0885 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0138 | 0.1438 | 0.2289 | 0.0265 | 0.2362 | 0.8500 | 163.3540 | 0.9344 | 0.1641 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.3333 | 0.1889 | 0.5972 | 0.7188 | 0.6949 | 0.7094 | 0.3000 | 1.7667 | 0.2400 | 0.7920 | 0.8739 | 0.8875 |
| enron | 0.1871 | 0.0509 | 0.4830 | 0.6105 | 0.1617 | 0.5917 | 0.2749 | 25.6608 | 0.4130 | 0.5910 | 0.8290 | 0.9837 |
| EukaryoteGO | 0.6624 | 0.0197 | 0.7932 | 0.8563 | 0.7258 | 0.8280 | 0.1817 | 0.9330 | 0.0558 | 0.8838 | 0.9928 | 0.9946 |
| EukaryotePseAAC | 0.1223 | 0.0737 | 0.3089 | 0.3987 | 0.1195 | 0.4131 | 0.6680 | 7.3848 | 0.6538 | 0.4196 | 0.9821 | 0.9840 |
| flags | 0.2500 | 0.2357 | 0.6419 | 0.7571 | 0.6117 | 0.7591 | 0.2000 | 3.4500 | 0.2117 | 0.8233 | 0.6718 | 0.8047 |
| foodtruck | 0.2683 | 0.1585 | 0.4499 | 0.5959 | 0.1416 | 0.4935 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8546 | 0.9560 |
| genbase | 0.9552 | 0.0022 | 0.9801 | 0.9899 | 0.6502 | 0.9759 | 0.0149 | 0.2687 | 0.0015 | 0.9893 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1143 | 0.0215 | 0.9774 | 0.8738 | 0.9979 |
| GnegativePseAAC | 0.7429 | 0.0518 | 0.7952 | 0.8214 | 0.4896 | 0.8041 | 0.1786 | 0.6071 | 0.1460 | 0.8772 | 0.8619 | 0.9894 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8652 | 0.9333 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9968 |
| GpositivePseAAC | 0.7500 | 0.1154 | 0.7596 | 0.7644 | 0.5896 | 0.7692 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6238 | 0.0411 | 0.7487 | 0.8097 | 0.6869 | 0.7702 | 0.1672 | 1.1801 | 0.1190 | 0.8711 | 0.9851 | 0.9886 |
| HumanPseAAC | 0.2830 | 0.0882 | 0.3419 | 0.3730 | 0.1655 | 0.4037 | 0.5820 | 4.0932 | 0.5827 | 0.5323 | 0.9705 | 0.9712 |
| Image | 0.5300 | 0.1730 | 0.6217 | 0.6683 | 0.6370 | 0.6296 | 0.3100 | 1.0200 | 0.2775 | 0.7950 | 0.9301 | 0.9260 |
| IMDB-ECC-F10% | 0.0000 | 0.2388 | 0.1490 | 0.2534 | 0.0840 | 0.2530 | 0.6824 | 13.0367 | 0.7978 | 0.3320 | 0.9916 | 0.9836 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1537 | 0.2614 | 0.1076 | 0.2616 | 0.7514 | 14.5932 | 0.8617 | 0.2749 | 0.9882 | 0.9880 |
| LLOG-F | 0.1639 | 0.0162 | 0.1974 | 0.2169 | 0.0539 | 0.2885 | 0.7377 | 29.1721 | 0.7862 | 0.2754 | 0.5989 | 0.9987 |
| mediamill10% | 0.0808 | 0.0303 | 0.4563 | 0.6178 | 0.0744 | 0.5697 | 0.2637 | 61.6651 | 0.4817 | 0.5071 | 0.8142 | 0.9947 |
| medical | 0.6327 | 0.0113 | 0.7389 | 0.7922 | 0.2842 | 0.8032 | 0.1735 | 5.5204 | 0.1638 | 0.8227 | 0.5526 | 0.9976 |
| Music | 0.3000 | 0.1750 | 0.5833 | 0.7060 | 0.7182 | 0.7249 | 0.2667 | 2.0000 | 0.2563 | 0.8056 | 0.9100 | 0.9012 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.1989 | 0.0618 | 0.4303 | 0.5489 | 0.4435 | 0.5625 | 0.3625 | 7.4286 | 0.3969 | 0.6203 | 0.9727 | 0.9764 |
| PlantGO | 0.6562 | 0.0434 | 0.7292 | 0.7634 | 0.6348 | 0.7664 | 0.2083 | 1.1458 | 0.1147 | 0.8519 | 0.9911 | 0.9876 |
| PlantPseAAC | 0.2857 | 0.1105 | 0.3486 | 0.3878 | 0.2116 | 0.3925 | 0.5918 | 3.1531 | 0.5324 | 0.5492 | 0.9569 | 0.9501 |
| rcv1subset1 | 0.0700 | 0.0307 | 0.2989 | 0.4154 | 0.2334 | 0.4141 | 0.4317 | 48.4067 | 0.5780 | 0.4209 | 0.9298 | 0.9901 |
| REUTERS-K500-EX2 | 0.3076 | 0.0116 | 0.3803 | 0.4221 | 0.2411 | 0.4807 | 0.5550 | 35.6220 | 0.5804 | 0.4482 | 0.7844 | 0.9977 |
| scene | 0.6473 | 0.0878 | 0.7393 | 0.7858 | 0.7756 | 0.7635 | 0.2075 | 0.8133 | 0.1606 | 0.8472 | 0.9686 | 0.9723 |
| sider_CDK_ECFP4 | 0.0211 | 0.2413 | 0.6513 | 0.7972 | 0.6421 | 0.7983 | 0.2535 | 19.4225 | 0.1779 | 0.7779 | 0.5904 | 0.7686 |
| sider_MordredDesc | 0.0141 | 0.2655 | 0.6320 | 0.7824 | 0.6148 | 0.7838 | 0.1690 | 20.0211 | 0.2010 | 0.7727 | 0.5734 | 0.7631 |
| sider_RDKit_desc | 0.0141 | 0.2791 | 0.6325 | 0.7832 | 0.6069 | 0.7788 | 0.3099 | 19.9718 | 0.2031 | 0.7538 | 0.5974 | 0.7624 |
| SLASHDOT-F | 0.3915 | 0.0406 | 0.4839 | 0.5328 | 0.3758 | 0.5806 | 0.4630 | 6.8360 | 0.4620 | 0.5736 | 0.7627 | 0.9892 |
| solar_flare-L3 | 0.2000 | 0.2667 | 0.6000 | 0.7500 | 0.4722 | 0.7143 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.6667 | 0.9400 |
| Stackex_chemistry | 0.0447 | 0.0159 | 0.1454 | 0.2070 | 0.0565 | 0.2017 | 0.7983 | 105.5317 | 0.8778 | 0.1525 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0476 | 0.0101 | 0.1500 | 0.2094 | 0.0546 | 0.2672 | 0.7024 | 140.2917 | 0.8238 | 0.1878 | 0.5496 | 0.9987 |
| Stackex_coffee | 0.0000 | 0.0194 | 0.0754 | 0.1155 | 0.0332 | 0.1791 | 0.8261 | 75.3478 | 0.8914 | 0.1342 | 0.2577 | 0.9930 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0628 | 0.0092 | 0.1691 | 0.2319 | 0.0618 | 0.2709 | 0.7085 | 135.4824 | 0.7993 | 0.2046 | 0.7500 | 0.9989 |
| tmc2007-500 | 0.2584 | 0.0671 | 0.5720 | 0.7166 | 0.5985 | 0.6812 | 0.2559 | 4.1045 | 0.1458 | 0.7757 | 0.9585 | 0.9699 |
| tox21_CDK_ECFP4 | 0.1541 | 0.1769 | 0.3541 | 0.4621 | 0.4011 | 0.4664 | 0.4726 | 5.5788 | 0.5368 | 0.5556 | 0.9187 | 0.9212 |
| tox21_RDKit_desc | 0.0514 | 0.2200 | 0.2969 | 0.4428 | 0.3120 | 0.4155 | 0.4932 | 5.6199 | 0.5557 | 0.5387 | 0.9178 | 0.9209 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7864 | 0.9620 |
| VirusPseAAC | 0.4762 | 0.1190 | 0.5476 | 0.5831 | 0.3545 | 0.6341 | 0.2857 | 0.7143 | 0.1571 | 0.8190 | 0.7105 | 0.9202 |
| Water-quality | 0.0189 | 0.3248 | 0.4330 | 0.6005 | 0.4933 | 0.5983 | 0.3113 | 9.4434 | 0.3935 | 0.6796 | 0.7879 | 0.7923 |
| Yahoo_Arts | 0.1656 | 0.0687 | 0.2406 | 0.2966 | 0.1899 | 0.3242 | 0.5407 | 11.0761 | 0.6928 | 0.4668 | 0.9415 | 0.9813 |
| Yahoo_Business | 0.5606 | 0.0284 | 0.7207 | 0.8119 | 0.3151 | 0.7110 | 0.1052 | 3.1996 | 0.2190 | 0.8803 | 0.8536 | 0.9939 |
| Yahoo_Computers | 0.3791 | 0.0452 | 0.4883 | 0.5656 | 0.2416 | 0.5035 | 0.3863 | 6.6956 | 0.4415 | 0.6049 | 0.8928 | 0.9844 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.2647 | 0.0645 | 0.3394 | 0.3900 | 0.2899 | 0.4411 | 0.5475 | 4.5892 | 0.5712 | 0.5569 | 0.9784 | 0.9810 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2136 | 0.0721 | 0.2884 | 0.3448 | 0.3087 | 0.3760 | 0.5238 | 6.7662 | 0.6121 | 0.5498 | 0.9725 | 0.9739 |
| Yahoo_Reference | 0.4296 | 0.0342 | 0.4913 | 0.5346 | 0.1604 | 0.5092 | 0.4010 | 5.6663 | 0.4419 | 0.6341 | 0.8081 | 0.9897 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4596 | 0.0288 | 0.5361 | 0.5858 | 0.1820 | 0.5432 | 0.3845 | 7.7863 | 0.4109 | 0.6360 | 0.9162 | 0.9923 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.1901 | 0.2060 | 0.5620 | 0.6965 | 0.4329 | 0.6810 | 0.2479 | 6.2355 | 0.2522 | 0.7522 | 0.8347 | 0.8909 |
| Yelp | 0.4038 | 0.1914 | 0.6432 | 0.7463 | 0.6820 | 0.7309 | 0.2004 | 1.3759 | 0.2193 | 0.8614 | 0.8648 | 0.8901 |

Table 84: Detailed results for lambda = 3 for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4735 | 0.0324 | 0.5693 | 0.6186 | 0.6788 | 0.6805 | 0.2962 | 2.2931 | 0.2216 | 0.7697 | 0.9852 | 0.9853 |
| 3s-bbc1000 | 0.0833 | 0.3472 | 0.2060 | 0.2724 | 0.1934 | 0.2574 | 0.7222 | 2.9167 | 0.6713 | 0.4499 | 0.8156 | 0.7562 |
| 3s-guardian1000 | 0.1613 | 0.3065 | 0.3113 | 0.4148 | 0.2924 | 0.3871 | 0.5161 | 1.9032 | 0.4403 | 0.6306 | 0.8082 | 0.8234 |
| 3s-inter3000 | 0.0000 | 0.3235 | 0.2941 | 0.4194 | 0.2044 | 0.4211 | 0.8824 | 2.5882 | 0.6603 | 0.3971 | 0.4718 | 0.6601 |
| 3s-reuters1000 | 0.1000 | 0.3444 | 0.1333 | 0.1481 | 0.0935 | 0.1389 | 0.9000 | 2.7667 | 0.8133 | 0.3628 | 0.8561 | 0.7551 |
| amphibians | 0.1111 | 0.2698 | 0.5747 | 0.7725 | 0.5298 | 0.6964 | 0.2222 | 2.5000 | 0.1056 | 0.8570 | 0.7494 | 0.8027 |
| bibtex | 0.1919 | 0.0120 | 0.3673 | 0.4610 | 0.3257 | 0.4853 | 0.4324 | 72.3973 | 0.5751 | 0.4301 | 0.9977 | 0.9978 |
| birds | 0.1282 | 0.1026 | 0.3212 | 0.4202 | 0.3126 | 0.4242 | 0.5385 | 8.4359 | 0.5625 | 0.4828 | 0.8410 | 0.9395 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.2080 | 0.3167 | 0.4788 | 0.1425 | 0.4791 | 0.1373 | 151.0588 | 0.6446 | 0.4362 | 0.8354 | 0.9537 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1946 | 0.0408 | 0.1944 | 0.8751 | 115.1089 | 0.9440 | 0.0885 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0138 | 0.1438 | 0.2289 | 0.0265 | 0.2362 | 0.8500 | 163.3540 | 0.9344 | 0.1641 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.3333 | 0.1889 | 0.6000 | 0.7235 | 0.6965 | 0.7094 | 0.3000 | 1.7333 | 0.2373 | 0.7943 | 0.8747 | 0.8872 |
| enron | 0.1813 | 0.0504 | 0.4878 | 0.6136 | 0.1805 | 0.6002 | 0.3099 | 24.1637 | 0.3925 | 0.5917 | 0.8278 | 0.9823 |
| EukaryoteGO | 0.6778 | 0.0195 | 0.7927 | 0.8473 | 0.7004 | 0.8259 | 0.1804 | 0.9008 | 0.0499 | 0.8866 | 0.9927 | 0.9946 |
| EukaryotePseAAC | 0.3063 | 0.0563 | 0.4008 | 0.4503 | 0.1481 | 0.4587 | 0.5380 | 6.1094 | 0.4983 | 0.5282 | 0.9744 | 0.9770 |
| flags | 0.2500 | 0.2429 | 0.6402 | 0.7547 | 0.6074 | 0.7536 | 0.2000 | 3.6000 | 0.2117 | 0.8167 | 0.6878 | 0.7977 |
| foodtruck | 0.2927 | 0.1565 | 0.4621 | 0.6010 | 0.1431 | 0.4967 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8535 | 0.9560 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0299 | 0.2537 | 0.0015 | 0.9838 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8262 | 0.9556 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8740 | 0.9980 |
| GnegativePseAAC | 0.7429 | 0.0527 | 0.7952 | 0.8214 | 0.4884 | 0.8013 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8618 | 0.9894 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1250 | 0.7500 | 0.7595 | 0.5774 | 0.7547 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6334 | 0.0413 | 0.7481 | 0.8059 | 0.6883 | 0.7656 | 0.1640 | 1.1640 | 0.1130 | 0.8738 | 0.9851 | 0.9883 |
| HumanPseAAC | 0.3087 | 0.0978 | 0.4070 | 0.4568 | 0.1915 | 0.4380 | 0.5370 | 3.3505 | 0.4701 | 0.5840 | 0.9527 | 0.9534 |
| Image | 0.4950 | 0.1810 | 0.6092 | 0.6662 | 0.6288 | 0.6221 | 0.3200 | 1.0200 | 0.2758 | 0.7921 | 0.9301 | 0.9260 |
| IMDB-ECC-F10% | 0.0000 | 0.2682 | 0.1412 | 0.2431 | 0.0865 | 0.2432 | 0.7044 | 13.3145 | 0.8161 | 0.3150 | 0.9891 | 0.9845 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1536 | 0.2611 | 0.1064 | 0.2613 | 0.6023 | 12.9727 | 0.7373 | 0.3731 | 0.9906 | 0.9766 |
| LLOG-F | 0.1557 | 0.0164 | 0.1933 | 0.2150 | 0.0517 | 0.2857 | 0.7377 | 28.5000 | 0.7740 | 0.2819 | 0.5986 | 0.9983 |
| mediamill10% | 0.0855 | 0.0301 | 0.4650 | 0.6257 | 0.0833 | 0.5764 | 0.1686 | 59.7126 | 0.4662 | 0.5364 | 0.8136 | 0.9944 |
| medical | 0.6531 | 0.0102 | 0.7679 | 0.8237 | 0.2936 | 0.8235 | 0.1429 | 5.0000 | 0.1324 | 0.8496 | 0.5531 | 0.9977 |
| Music | 0.3000 | 0.1778 | 0.5972 | 0.7220 | 0.7317 | 0.7333 | 0.2833 | 2.0167 | 0.2597 | 0.7973 | 0.9095 | 0.9051 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.2024 | 0.0616 | 0.4338 | 0.5551 | 0.4271 | 0.5654 | 0.3453 | 6.9900 | 0.3680 | 0.6382 | 0.9692 | 0.9732 |
| PlantGO | 0.6667 | 0.0425 | 0.7292 | 0.7582 | 0.6400 | 0.7678 | 0.2188 | 1.0417 | 0.0982 | 0.8536 | 0.9910 | 0.9876 |
| PlantPseAAC | 0.2857 | 0.1097 | 0.3741 | 0.4240 | 0.2231 | 0.4215 | 0.5816 | 3.1837 | 0.5273 | 0.5507 | 0.9511 | 0.9450 |
| rcv1subset1 | 0.0917 | 0.0314 | 0.3116 | 0.4274 | 0.2326 | 0.4259 | 0.4267 | 44.2867 | 0.5264 | 0.4532 | 0.9280 | 0.9885 |
| REUTERS-K500-EX2 | 0.3162 | 0.0114 | 0.3824 | 0.4206 | 0.2379 | 0.4849 | 0.5567 | 34.9605 | 0.5761 | 0.4502 | 0.7842 | 0.9977 |
| scene | 0.6722 | 0.0858 | 0.7400 | 0.7745 | 0.7708 | 0.7615 | 0.2033 | 0.8050 | 0.1598 | 0.8496 | 0.9688 | 0.9723 |
| sider_CDK_ECFP4 | 0.0141 | 0.2397 | 0.6547 | 0.8000 | 0.6346 | 0.7996 | 0.2465 | 19.2676 | 0.1500 | 0.8045 | 0.5945 | 0.7884 |
| sider_MordredDesc | 0.0141 | 0.2713 | 0.6279 | 0.7815 | 0.6128 | 0.7799 | 0.3099 | 19.8803 | 0.2231 | 0.7418 | 0.5733 | 0.7340 |
| sider_RDKit_desc | 0.0141 | 0.2835 | 0.6291 | 0.7802 | 0.6037 | 0.7760 | 0.3662 | 19.8028 | 0.2226 | 0.7191 | 0.5951 | 0.7390 |
| SLASHDOT-F | 0.4074 | 0.0397 | 0.5049 | 0.5570 | 0.3881 | 0.5985 | 0.4259 | 6.2910 | 0.4200 | 0.6078 | 0.7613 | 0.9877 |
| solar_flare-L3 | 0.4000 | 0.2667 | 0.6000 | 0.6857 | 0.4571 | 0.6667 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.6667 | 0.9000 |
| Stackex_chemistry | 0.0447 | 0.0159 | 0.1454 | 0.2070 | 0.0565 | 0.2017 | 0.7983 | 105.5317 | 0.8778 | 0.1525 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0417 | 0.0100 | 0.1562 | 0.2177 | 0.0588 | 0.2814 | 0.7024 | 137.7143 | 0.8188 | 0.1913 | 0.5494 | 0.9985 |
| Stackex_coffee | 0.0000 | 0.0205 | 0.0667 | 0.1061 | 0.0237 | 0.1471 | 0.8261 | 73.7826 | 0.8376 | 0.1567 | 0.2568 | 0.9916 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0094 | 0.1649 | 0.2302 | 0.0616 | 0.2718 | 0.6910 | 135.1181 | 0.7947 | 0.2115 | 0.7498 | 0.9987 |
| tmc2007-500 | 0.2584 | 0.0671 | 0.5720 | 0.7166 | 0.5985 | 0.6812 | 0.2559 | 4.1045 | 0.1458 | 0.7757 | 0.9585 | 0.9699 |
| tox21_CDK_ECFP4 | 0.1507 | 0.1798 | 0.3500 | 0.4539 | 0.3873 | 0.4578 | 0.4795 | 5.4589 | 0.5182 | 0.5599 | 0.9105 | 0.9130 |
| tox21_RDKit_desc | 0.1336 | 0.1821 | 0.3322 | 0.4534 | 0.3153 | 0.4354 | 0.5000 | 5.6233 | 0.5405 | 0.5384 | 0.9124 | 0.9152 |
| VirusGO | 0.7619 | 0.0714 | 0.8413 | 0.8686 | 0.6600 | 0.8302 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.8003 | 0.9651 |
| VirusPseAAC | 0.4762 | 0.1349 | 0.5635 | 0.6069 | 0.3487 | 0.6222 | 0.2857 | 0.8095 | 0.1762 | 0.8032 | 0.7136 | 0.9177 |
| Water-quality | 0.0094 | 0.3315 | 0.4289 | 0.6052 | 0.4956 | 0.5987 | 0.2830 | 9.3208 | 0.3716 | 0.6904 | 0.7752 | 0.7738 |
| Yahoo_Arts | 0.1776 | 0.0675 | 0.2550 | 0.3117 | 0.1983 | 0.3362 | 0.5194 | 10.6529 | 0.5986 | 0.4863 | 0.9331 | 0.9710 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3775 | 0.0454 | 0.4822 | 0.5566 | 0.2348 | 0.4962 | 0.3912 | 6.7759 | 0.4486 | 0.6002 | 0.8916 | 0.9833 |
| Yahoo_Education | 0.1887 | 0.0604 | 0.3236 | 0.4062 | 0.2030 | 0.3676 | 0.6168 | 9.3026 | 0.6805 | 0.4819 | 0.8892 | 0.9819 |
| Yahoo_Entertainment | 0.2922 | 0.0672 | 0.3839 | 0.4458 | 0.2906 | 0.4625 | 0.4643 | 4.3739 | 0.4787 | 0.6089 | 0.9733 | 0.9739 |
| Yahoo_Health | 0.3898 | 0.0428 | 0.5232 | 0.6049 | 0.2305 | 0.5547 | 0.3366 | 6.8274 | 0.3674 | 0.6729 | 0.8276 | 0.9838 |
| Yahoo_Recreation | 0.2229 | 0.0698 | 0.2956 | 0.3506 | 0.3161 | 0.3856 | 0.5214 | 6.6742 | 0.5983 | 0.5535 | 0.9702 | 0.9718 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1882 | 0.0436 | 0.2420 | 0.2858 | 0.1664 | 0.3016 | 0.6376 | 13.8958 | 0.6674 | 0.4131 | 0.9573 | 0.9834 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.2700 | 0.0688 | 0.4077 | 0.5067 | 0.1708 | 0.4266 | 0.4022 | 8.5806 | 0.5009 | 0.5720 | 0.9353 | 0.9734 |
| yeast | 0.1942 | 0.2054 | 0.5573 | 0.6868 | 0.4384 | 0.6772 | 0.2355 | 6.2273 | 0.2401 | 0.7600 | 0.8325 | 0.8890 |
| Yelp | 0.3878 | 0.1964 | 0.6376 | 0.7451 | 0.6860 | 0.7320 | 0.2064 | 1.3689 | 0.2089 | 0.8584 | 0.8615 | 0.8883 |

Table 85: Detailed results for lambda = 4 for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5368 | 0.0306 | 0.6222 | 0.6662 | 0.7034 | 0.7049 | 0.3019 | 2.5057 | 0.2421 | 0.7604 | 0.9901 | 0.9904 |
| 3s-bbc1000 | 0.1111 | 0.3519 | 0.2162 | 0.2745 | 0.2328 | 0.2692 | 0.7222 | 2.7500 | 0.6324 | 0.4675 | 0.7753 | 0.7300 |
| 3s-guardian1000 | 0.1290 | 0.2957 | 0.2554 | 0.3254 | 0.2543 | 0.3373 | 0.5161 | 2.1290 | 0.5008 | 0.6118 | 0.8080 | 0.8266 |
| 3s-inter3000 | 0.0000 | 0.3137 | 0.3039 | 0.4287 | 0.2103 | 0.4286 | 0.8824 | 2.5294 | 0.6956 | 0.3951 | 0.4825 | 0.6700 |
| 3s-reuters1000 | 0.1333 | 0.2889 | 0.1833 | 0.2053 | 0.1758 | 0.2121 | 0.9333 | 2.5667 | 0.7733 | 0.3689 | 0.8342 | 0.7614 |
| amphibians | 0.0000 | 0.2619 | 0.5540 | 0.7626 | 0.5638 | 0.7227 | 0.3333 | 2.6111 | 0.1259 | 0.8126 | 0.7689 | 0.8187 |
| bibtex | 0.1919 | 0.0120 | 0.3673 | 0.4610 | 0.3257 | 0.4853 | 0.4324 | 72.3973 | 0.5751 | 0.4301 | 0.9977 | 0.9978 |
| birds | 0.1795 | 0.1012 | 0.3528 | 0.4478 | 0.3480 | 0.4444 | 0.4615 | 6.6410 | 0.3973 | 0.5683 | 0.8327 | 0.9241 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.2121 | 0.3160 | 0.4776 | 0.1442 | 0.4781 | 0.3529 | 151.0588 | 0.6057 | 0.4346 | 0.8233 | 0.9410 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1946 | 0.0408 | 0.1944 | 0.8751 | 115.1089 | 0.9440 | 0.0885 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0138 | 0.1438 | 0.2289 | 0.0265 | 0.2362 | 0.8500 | 163.3540 | 0.9344 | 0.1641 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.3333 | 0.1778 | 0.6097 | 0.7359 | 0.7134 | 0.7265 | 0.2833 | 1.7167 | 0.2209 | 0.8100 | 0.8949 | 0.8973 |
| enron | 0.1871 | 0.0516 | 0.4874 | 0.6162 | 0.1837 | 0.5952 | 0.2924 | 23.5848 | 0.3608 | 0.6091 | 0.8256 | 0.9809 |
| EukaryoteGO | 0.7139 | 0.0190 | 0.7912 | 0.8293 | 0.7279 | 0.8204 | 0.1637 | 0.8673 | 0.0510 | 0.8948 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.3063 | 0.0563 | 0.4008 | 0.4503 | 0.1481 | 0.4587 | 0.5380 | 6.1094 | 0.4983 | 0.5282 | 0.9744 | 0.9770 |
| flags | 0.2500 | 0.2286 | 0.6533 | 0.7664 | 0.6261 | 0.7647 | 0.3000 | 3.5000 | 0.2642 | 0.7969 | 0.7058 | 0.8092 |
| foodtruck | 0.2927 | 0.1565 | 0.4621 | 0.6010 | 0.1431 | 0.4967 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8553 | 0.9573 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6369 | 0.9989 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7643 | 0.0500 | 0.8060 | 0.8268 | 0.4948 | 0.8095 | 0.1857 | 0.6143 | 0.1470 | 0.8736 | 0.8626 | 0.9901 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9231 | 0.9326 | 0.8658 | 0.9259 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9968 |
| GpositivePseAAC | 0.7500 | 0.1202 | 0.7596 | 0.7644 | 0.5833 | 0.7619 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6785 | 0.0388 | 0.7666 | 0.8139 | 0.6950 | 0.7744 | 0.1704 | 1.0900 | 0.1057 | 0.8758 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.3087 | 0.0978 | 0.4070 | 0.4568 | 0.1915 | 0.4380 | 0.5370 | 3.3505 | 0.4701 | 0.5840 | 0.9527 | 0.9534 |
| Image | 0.5250 | 0.1740 | 0.6258 | 0.6779 | 0.6433 | 0.6345 | 0.2900 | 1.0050 | 0.2838 | 0.8026 | 0.9344 | 0.9316 |
| IMDB-ECC-F10% | 0.0000 | 0.2376 | 0.1474 | 0.2504 | 0.0847 | 0.2502 | 0.6331 | 12.3941 | 0.7320 | 0.3750 | 0.9883 | 0.9755 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1549 | 0.2640 | 0.0967 | 0.2638 | 0.5866 | 12.6819 | 0.7149 | 0.3875 | 0.9845 | 0.9741 |
| LLOG-F | 0.1721 | 0.0166 | 0.2001 | 0.2173 | 0.0526 | 0.2897 | 0.7377 | 28.5820 | 0.7822 | 0.2814 | 0.5984 | 0.9981 |
| mediamill10% | 0.0760 | 0.0302 | 0.4709 | 0.6365 | 0.0942 | 0.5882 | 0.1686 | 59.1829 | 0.4511 | 0.5468 | 0.8136 | 0.9940 |
| medical | 0.6735 | 0.0104 | 0.7747 | 0.8288 | 0.3108 | 0.8203 | 0.1735 | 4.9388 | 0.1278 | 0.8427 | 0.5527 | 0.9976 |
| Music | 0.2833 | 0.1889 | 0.5792 | 0.7041 | 0.7057 | 0.7143 | 0.2333 | 2.0667 | 0.2549 | 0.8015 | 0.9072 | 0.8981 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.2261 | 0.0592 | 0.4444 | 0.5574 | 0.4408 | 0.5686 | 0.3546 | 7.6497 | 0.4158 | 0.6150 | 0.9770 | 0.9800 |
| PlantGO | 0.7292 | 0.0365 | 0.7865 | 0.8133 | 0.6773 | 0.8037 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9888 | 0.9836 |
| PlantPseAAC | 0.2551 | 0.1190 | 0.3503 | 0.4049 | 0.2145 | 0.3966 | 0.6224 | 3.1633 | 0.4977 | 0.5348 | 0.9382 | 0.9327 |
| rcv1subset1 | 0.1000 | 0.0316 | 0.3562 | 0.4783 | 0.2658 | 0.4708 | 0.3933 | 37.5533 | 0.4104 | 0.5188 | 0.9255 | 0.9864 |
| REUTERS-K500-EX2 | 0.3402 | 0.0116 | 0.4244 | 0.4731 | 0.2553 | 0.5133 | 0.5052 | 31.1787 | 0.5163 | 0.5018 | 0.7839 | 0.9972 |
| scene | 0.6722 | 0.0858 | 0.7448 | 0.7811 | 0.7711 | 0.7615 | 0.1992 | 0.9004 | 0.1913 | 0.8426 | 0.9784 | 0.9802 |
| sider_CDK_ECFP4 | 0.0141 | 0.2415 | 0.6503 | 0.7981 | 0.6298 | 0.7976 | 0.2676 | 19.1620 | 0.1673 | 0.7814 | 0.5891 | 0.7700 |
| sider_MordredDesc | 0.0141 | 0.2713 | 0.6279 | 0.7815 | 0.6128 | 0.7799 | 0.3099 | 19.8803 | 0.2231 | 0.7418 | 0.5733 | 0.7340 |
| sider_RDKit_desc | 0.0141 | 0.2817 | 0.6302 | 0.7816 | 0.6048 | 0.7770 | 0.4366 | 20.1901 | 0.2124 | 0.7188 | 0.5680 | 0.7430 |
| SLASHDOT-F | 0.4048 | 0.0416 | 0.5226 | 0.5858 | 0.4132 | 0.6023 | 0.3942 | 5.5026 | 0.3613 | 0.6456 | 0.7563 | 0.9834 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.5556 | 0.8000 |
| Stackex_chemistry | 0.0447 | 0.0159 | 0.1454 | 0.2070 | 0.0565 | 0.2017 | 0.7983 | 105.5317 | 0.8778 | 0.1525 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0357 | 0.0102 | 0.1546 | 0.2204 | 0.0545 | 0.2788 | 0.6667 | 137.8571 | 0.8081 | 0.2036 | 0.5493 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0543 | 0.0915 | 0.0156 | 0.1159 | 0.8261 | 75.4348 | 0.8596 | 0.1437 | 0.2562 | 0.9893 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0094 | 0.1649 | 0.2302 | 0.0616 | 0.2718 | 0.6910 | 135.1181 | 0.7947 | 0.2115 | 0.7498 | 0.9987 |
| tmc2007-500 | 0.2584 | 0.0671 | 0.5720 | 0.7166 | 0.5985 | 0.6812 | 0.2559 | 4.1045 | 0.1458 | 0.7757 | 0.9585 | 0.9699 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1744 | 0.3474 | 0.4547 | 0.3847 | 0.4530 | 0.4726 | 5.3014 | 0.4819 | 0.5704 | 0.8999 | 0.8998 |
| tox21_RDKit_desc | 0.1062 | 0.1915 | 0.3377 | 0.4665 | 0.3235 | 0.4468 | 0.5103 | 5.5103 | 0.5054 | 0.5515 | 0.9005 | 0.9011 |
| VirusGO | 0.7619 | 0.0556 | 0.8413 | 0.8686 | 0.7005 | 0.8627 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.8034 | 0.9699 |
| VirusPseAAC | 0.5238 | 0.1190 | 0.6349 | 0.6897 | 0.3892 | 0.6809 | 0.2857 | 0.9048 | 0.2333 | 0.7968 | 0.7556 | 0.9379 |
| Water-quality | 0.0000 | 0.3336 | 0.4263 | 0.6046 | 0.4911 | 0.5953 | 0.2736 | 9.2170 | 0.3555 | 0.6840 | 0.7591 | 0.7537 |
| Yahoo_Arts | 0.2043 | 0.0686 | 0.3003 | 0.3653 | 0.2145 | 0.3734 | 0.4993 | 10.2163 | 0.5747 | 0.5043 | 0.9355 | 0.9738 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.1942 | 0.2081 | 0.5549 | 0.6878 | 0.4481 | 0.6756 | 0.2521 | 6.2025 | 0.2346 | 0.7556 | 0.8250 | 0.8836 |
| Yelp | 0.4566 | 0.1819 | 0.6612 | 0.7560 | 0.6758 | 0.7338 | 0.1795 | 1.4008 | 0.2710 | 0.8672 | 0.9082 | 0.9253 |

Table 86: Detailed results for lambda = 5 for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5368 | 0.0306 | 0.6222 | 0.6662 | 0.7034 | 0.7049 | 0.3019 | 2.5057 | 0.2421 | 0.7604 | 0.9901 | 0.9904 |
| 3s-bbc1000 | 0.1944 | 0.3565 | 0.2764 | 0.3410 | 0.2836 | 0.3063 | 0.7500 | 2.9444 | 0.6553 | 0.4367 | 0.7746 | 0.7192 |
| 3s-guardian1000 | 0.2581 | 0.2796 | 0.3742 | 0.4499 | 0.2791 | 0.4091 | 0.5161 | 2.1613 | 0.4734 | 0.6075 | 0.7847 | 0.8058 |
| 3s-inter3000 | 0.0000 | 0.3137 | 0.3137 | 0.4377 | 0.2103 | 0.4286 | 0.8824 | 2.4706 | 0.6132 | 0.4127 | 0.4982 | 0.6806 |
| 3s-reuters1000 | 0.0667 | 0.3500 | 0.1417 | 0.1850 | 0.2083 | 0.2025 | 0.9333 | 2.6000 | 0.7533 | 0.3667 | 0.7670 | 0.7209 |
| amphibians | 0.0556 | 0.2619 | 0.5669 | 0.7629 | 0.5614 | 0.7273 | 0.2222 | 2.5556 | 0.1056 | 0.8543 | 0.7487 | 0.8032 |
| bibtex | 0.1919 | 0.0120 | 0.3673 | 0.4610 | 0.3257 | 0.4853 | 0.4324 | 72.3973 | 0.5751 | 0.4301 | 0.9977 | 0.9978 |
| birds | 0.1282 | 0.1053 | 0.3171 | 0.4146 | 0.2841 | 0.4179 | 0.5128 | 7.5897 | 0.4756 | 0.5146 | 0.8400 | 0.9361 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.2092 | 0.3147 | 0.4763 | 0.1433 | 0.4769 | 0.3725 | 151.0588 | 0.5851 | 0.4318 | 0.8163 | 0.9324 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1946 | 0.0408 | 0.1944 | 0.8751 | 115.1089 | 0.9440 | 0.0885 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0138 | 0.1438 | 0.2289 | 0.0265 | 0.2362 | 0.8500 | 163.3540 | 0.9344 | 0.1641 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.3167 | 0.2000 | 0.5722 | 0.6876 | 0.6733 | 0.6897 | 0.3000 | 1.8000 | 0.2392 | 0.7851 | 0.8761 | 0.8843 |
| enron | 0.1813 | 0.0510 | 0.4913 | 0.6241 | 0.1913 | 0.6024 | 0.3041 | 23.6023 | 0.3664 | 0.6047 | 0.8256 | 0.9809 |
| EukaryoteGO | 0.7178 | 0.0185 | 0.7973 | 0.8370 | 0.7179 | 0.8266 | 0.1765 | 0.8312 | 0.0464 | 0.8904 | 0.9928 | 0.9947 |
| EukaryotePseAAC | 0.2677 | 0.0597 | 0.3917 | 0.4582 | 0.1595 | 0.4626 | 0.5444 | 5.4749 | 0.4348 | 0.5509 | 0.9656 | 0.9693 |
| flags | 0.2000 | 0.2429 | 0.6294 | 0.7499 | 0.6064 | 0.7536 | 0.2500 | 3.5500 | 0.2325 | 0.8150 | 0.6894 | 0.7952 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1444 | 0.5000 | 0.2439 | 4.6098 | 0.4399 | 0.7172 | 0.8551 | 0.9586 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9357 | 0.0107 | 0.9571 | 0.9679 | 0.8279 | 0.9592 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7500 | 0.0518 | 0.7952 | 0.8178 | 0.4785 | 0.8027 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8621 | 0.9895 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8652 | 0.9333 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9960 |
| GpositivePseAAC | 0.7500 | 0.1106 | 0.7596 | 0.7644 | 0.5935 | 0.7767 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6817 | 0.0372 | 0.7741 | 0.8222 | 0.7032 | 0.7851 | 0.1576 | 1.0932 | 0.1063 | 0.8809 | 0.9847 | 0.9883 |
| HumanPseAAC | 0.3087 | 0.0978 | 0.4070 | 0.4568 | 0.1915 | 0.4380 | 0.5370 | 3.3505 | 0.4701 | 0.5840 | 0.9527 | 0.9534 |
| Image | 0.4800 | 0.1810 | 0.6108 | 0.6765 | 0.6384 | 0.6314 | 0.3150 | 1.0200 | 0.2983 | 0.7909 | 0.9334 | 0.9317 |
| IMDB-ECC-F10% | 0.0000 | 0.2376 | 0.1474 | 0.2504 | 0.0847 | 0.2502 | 0.6331 | 12.3941 | 0.7320 | 0.3750 | 0.9883 | 0.9755 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1549 | 0.2640 | 0.0967 | 0.2638 | 0.5866 | 12.6819 | 0.7149 | 0.3875 | 0.9845 | 0.9741 |
| LLOG-F | 0.1721 | 0.0168 | 0.2015 | 0.2192 | 0.0519 | 0.2870 | 0.7459 | 28.3525 | 0.7848 | 0.2778 | 0.5976 | 0.9974 |
| mediamill10% | 0.0855 | 0.0303 | 0.4725 | 0.6353 | 0.0863 | 0.5882 | 0.1520 | 59.2969 | 0.4493 | 0.5540 | 0.8136 | 0.9939 |
| medical | 0.6633 | 0.0104 | 0.7721 | 0.8289 | 0.3051 | 0.8189 | 0.1327 | 5.0000 | 0.1321 | 0.8546 | 0.5528 | 0.9977 |
| Music | 0.2833 | 0.1639 | 0.6167 | 0.7652 | 0.7397 | 0.7489 | 0.2833 | 2.0167 | 0.2572 | 0.7973 | 0.9141 | 0.9064 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.2125 | 0.0625 | 0.4350 | 0.5535 | 0.4293 | 0.5623 | 0.3403 | 6.5284 | 0.3324 | 0.6552 | 0.9625 | 0.9671 |
| PlantGO | 0.7188 | 0.0399 | 0.7674 | 0.7934 | 0.6678 | 0.7830 | 0.2188 | 1.0417 | 0.0982 | 0.8536 | 0.9895 | 0.9843 |
| PlantPseAAC | 0.2755 | 0.1148 | 0.3656 | 0.4170 | 0.2152 | 0.4053 | 0.6224 | 3.1327 | 0.5040 | 0.5348 | 0.9427 | 0.9354 |
| rcv1subset1 | 0.1000 | 0.0316 | 0.3562 | 0.4783 | 0.2658 | 0.4708 | 0.3933 | 37.5533 | 0.4104 | 0.5188 | 0.9255 | 0.9864 |
| REUTERS-K500-EX2 | 0.3385 | 0.0119 | 0.4231 | 0.4734 | 0.2423 | 0.5107 | 0.5000 | 30.5052 | 0.5101 | 0.5066 | 0.7838 | 0.9971 |
| scene | 0.6473 | 0.0878 | 0.7400 | 0.7869 | 0.7750 | 0.7626 | 0.2033 | 0.8050 | 0.1606 | 0.8496 | 0.9692 | 0.9725 |
| sider_CDK_ECFP4 | 0.0141 | 0.2449 | 0.6531 | 0.7992 | 0.6354 | 0.7971 | 0.1338 | 19.3310 | 0.1448 | 0.8164 | 0.5814 | 0.7914 |
| sider_MordredDesc | 0.0141 | 0.2713 | 0.6279 | 0.7815 | 0.6128 | 0.7799 | 0.3099 | 19.8803 | 0.2231 | 0.7418 | 0.5733 | 0.7340 |
| sider_RDKit_desc | 0.0141 | 0.2840 | 0.6276 | 0.7798 | 0.6019 | 0.7750 | 0.2887 | 19.6972 | 0.1816 | 0.7599 | 0.5880 | 0.7687 |
| SLASHDOT-F | 0.3942 | 0.0420 | 0.5140 | 0.5774 | 0.3832 | 0.5984 | 0.4074 | 5.5635 | 0.3678 | 0.6376 | 0.7573 | 0.9841 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.5556 | 0.7800 |
| Stackex_chemistry | 0.0447 | 0.0159 | 0.1454 | 0.2070 | 0.0565 | 0.2017 | 0.7983 | 105.5317 | 0.8778 | 0.1525 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0476 | 0.0102 | 0.1618 | 0.2249 | 0.0607 | 0.2815 | 0.6845 | 138.0357 | 0.8076 | 0.2024 | 0.5493 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0219 | 0.0642 | 0.1013 | 0.0224 | 0.1389 | 0.8261 | 75.3913 | 0.8704 | 0.1359 | 0.2542 | 0.9870 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0094 | 0.1649 | 0.2302 | 0.0616 | 0.2718 | 0.6910 | 135.1181 | 0.7947 | 0.2115 | 0.7498 | 0.9987 |
| tmc2007-500 | 0.2580 | 0.0677 | 0.5733 | 0.7188 | 0.6008 | 0.6818 | 0.2483 | 4.2563 | 0.1566 | 0.7770 | 0.9601 | 0.9709 |
| tox21_CDK_ECFP4 | 0.1438 | 0.1784 | 0.3464 | 0.4500 | 0.3806 | 0.4454 | 0.4658 | 5.3664 | 0.4889 | 0.5695 | 0.8967 | 0.8972 |
| tox21_RDKit_desc | 0.1062 | 0.1915 | 0.3377 | 0.4665 | 0.3235 | 0.4468 | 0.5103 | 5.5103 | 0.5054 | 0.5515 | 0.9005 | 0.9011 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7005 | 0.8627 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.8003 | 0.9663 |
| VirusPseAAC | 0.4762 | 0.1111 | 0.5952 | 0.6545 | 0.3826 | 0.6818 | 0.2857 | 0.8095 | 0.1762 | 0.8032 | 0.7088 | 0.9185 |
| Water-quality | 0.0000 | 0.3235 | 0.4375 | 0.6168 | 0.5074 | 0.6098 | 0.2830 | 9.1415 | 0.3477 | 0.6826 | 0.7616 | 0.7533 |
| Yahoo_Arts | 0.1749 | 0.0682 | 0.2621 | 0.3225 | 0.1926 | 0.3452 | 0.5194 | 10.5073 | 0.6319 | 0.4909 | 0.9334 | 0.9739 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.2769 | 0.0672 | 0.4122 | 0.5074 | 0.1700 | 0.4285 | 0.4001 | 8.2941 | 0.4777 | 0.5806 | 0.9329 | 0.9701 |
| yeast | 0.1942 | 0.2081 | 0.5549 | 0.6878 | 0.4481 | 0.6756 | 0.2521 | 6.2025 | 0.2346 | 0.7556 | 0.8250 | 0.8836 |
| Yelp | 0.3709 | 0.2042 | 0.6285 | 0.7401 | 0.6704 | 0.7234 | 0.2183 | 1.4048 | 0.2153 | 0.8504 | 0.8596 | 0.8852 |

Table 87: Detailed results for lambda = 6 for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4959 | 0.0310 | 0.5752 | 0.6170 | 0.6838 | 0.6868 | 0.2977 | 2.1053 | 0.1984 | 0.7764 | 0.9802 | 0.9806 |
| 3s-bbc1000 | 0.1111 | 0.3889 | 0.2495 | 0.3386 | 0.2898 | 0.3115 | 0.7778 | 2.8056 | 0.6373 | 0.4390 | 0.7590 | 0.7086 |
| 3s-guardian1000 | 0.2258 | 0.2957 | 0.3683 | 0.4568 | 0.2666 | 0.3956 | 0.4839 | 2.0323 | 0.4403 | 0.6309 | 0.8067 | 0.8174 |
| 3s-inter3000 | 0.0000 | 0.4216 | 0.2696 | 0.4153 | 0.2930 | 0.4110 | 0.9412 | 2.2941 | 0.5662 | 0.3882 | 0.4985 | 0.6812 |
| 3s-reuters1000 | 0.1000 | 0.3389 | 0.1444 | 0.1677 | 0.1431 | 0.1644 | 0.9000 | 2.6000 | 0.7667 | 0.3808 | 0.8120 | 0.7428 |
| amphibians | 0.1667 | 0.2698 | 0.5825 | 0.7731 | 0.5396 | 0.7167 | 0.2222 | 2.5556 | 0.1056 | 0.8543 | 0.7091 | 0.7912 |
| bibtex | 0.1784 | 0.0122 | 0.3600 | 0.4554 | 0.3134 | 0.4758 | 0.3973 | 69.5243 | 0.5436 | 0.4563 | 0.9966 | 0.9966 |
| birds | 0.1538 | 0.1107 | 0.3536 | 0.4662 | 0.3129 | 0.4225 | 0.4359 | 7.1026 | 0.4281 | 0.5661 | 0.8257 | 0.9149 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.2039 | 0.3134 | 0.4755 | 0.1429 | 0.4752 | 0.1961 | 150.9804 | 0.5732 | 0.4432 | 0.8160 | 0.9345 |
| corel16k001 | 0.0000 | 0.0459 | 0.1359 | 0.2275 | 0.0531 | 0.2272 | 0.8272 | 111.9332 | 0.9116 | 0.1167 | 0.9981 | 0.9981 |
| Corel5k | 0.0000 | 0.0139 | 0.1434 | 0.2286 | 0.0269 | 0.2363 | 0.8480 | 162.7680 | 0.9327 | 0.1654 | 0.6788 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.3167 | 0.1972 | 0.5861 | 0.7059 | 0.6887 | 0.7004 | 0.3000 | 1.7667 | 0.2454 | 0.7920 | 0.8797 | 0.8885 |
| enron | 0.1871 | 0.0514 | 0.4943 | 0.6302 | 0.1832 | 0.6010 | 0.2690 | 22.8947 | 0.3507 | 0.6175 | 0.8243 | 0.9797 |
| EukaryoteGO | 0.7204 | 0.0193 | 0.7955 | 0.8338 | 0.7343 | 0.8183 | 0.1714 | 0.7500 | 0.0386 | 0.8958 | 0.9926 | 0.9948 |
| EukaryotePseAAC | 0.2690 | 0.0616 | 0.4090 | 0.4822 | 0.1600 | 0.4759 | 0.5405 | 5.2420 | 0.4114 | 0.5601 | 0.9646 | 0.9681 |
| flags | 0.2000 | 0.2357 | 0.6461 | 0.7654 | 0.6176 | 0.7626 | 0.2500 | 3.5500 | 0.2325 | 0.8042 | 0.7164 | 0.7961 |
| foodtruck | 0.3171 | 0.1524 | 0.4661 | 0.5879 | 0.1397 | 0.4966 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8565 | 0.9575 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7571 | 0.0509 | 0.8024 | 0.8249 | 0.4907 | 0.8081 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8620 | 0.9894 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1202 | 0.7500 | 0.7595 | 0.5833 | 0.7619 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6881 | 0.0377 | 0.7733 | 0.8185 | 0.6974 | 0.7796 | 0.1672 | 1.0579 | 0.0999 | 0.8798 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.3151 | 0.0967 | 0.4078 | 0.4541 | 0.1915 | 0.4394 | 0.5370 | 3.4116 | 0.4640 | 0.5832 | 0.9508 | 0.9530 |
| Image | 0.5250 | 0.1740 | 0.6233 | 0.6733 | 0.6381 | 0.6314 | 0.3050 | 1.0150 | 0.2854 | 0.7959 | 0.9326 | 0.9283 |
| IMDB-ECC-F10% | 0.0000 | 0.2386 | 0.1488 | 0.2531 | 0.0830 | 0.2524 | 0.6415 | 12.1572 | 0.7108 | 0.3806 | 0.9827 | 0.9721 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1543 | 0.2625 | 0.0905 | 0.2625 | 0.5957 | 12.2212 | 0.6752 | 0.4035 | 0.9758 | 0.9692 |
| LLOG-F | 0.1721 | 0.0163 | 0.2015 | 0.2192 | 0.0535 | 0.2938 | 0.7377 | 28.6066 | 0.7795 | 0.2817 | 0.5980 | 0.9978 |
| mediamill10% | 0.0903 | 0.0302 | 0.4747 | 0.6375 | 0.0814 | 0.5881 | 0.2304 | 58.2185 | 0.4437 | 0.5458 | 0.8124 | 0.9932 |
| medical | 0.6735 | 0.0102 | 0.7764 | 0.8298 | 0.2910 | 0.8221 | 0.1327 | 4.9796 | 0.1320 | 0.8572 | 0.5528 | 0.9975 |
| Music | 0.3000 | 0.1722 | 0.6000 | 0.7263 | 0.7389 | 0.7395 | 0.3333 | 2.0667 | 0.2626 | 0.7779 | 0.9099 | 0.9037 |
| NUS-WIDE-bow10% | 0.1413 | 0.0279 | 0.3165 | 0.4144 | 0.0481 | 0.4038 | 0.5561 | 34.1432 | 0.5959 | 0.4261 | 0.8801 | 0.9912 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.2046 | 0.0629 | 0.4369 | 0.5584 | 0.4256 | 0.5632 | 0.3331 | 6.2757 | 0.3151 | 0.6625 | 0.9605 | 0.9653 |
| PlantGO | 0.7188 | 0.0434 | 0.7465 | 0.7621 | 0.6500 | 0.7596 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9879 | 0.9836 |
| PlantPseAAC | 0.2755 | 0.1122 | 0.3639 | 0.4113 | 0.2187 | 0.4054 | 0.6224 | 3.1939 | 0.4986 | 0.5313 | 0.9370 | 0.9309 |
| rcv1subset1 | 0.0950 | 0.0309 | 0.3394 | 0.4597 | 0.2566 | 0.4550 | 0.4067 | 35.3933 | 0.3748 | 0.5255 | 0.9244 | 0.9853 |
| REUTERS-K500-EX2 | 0.3282 | 0.0123 | 0.4179 | 0.4705 | 0.2441 | 0.5003 | 0.5069 | 30.6581 | 0.5074 | 0.5037 | 0.7835 | 0.9968 |
| scene | 0.6432 | 0.0878 | 0.7324 | 0.7769 | 0.7730 | 0.7590 | 0.2075 | 0.8216 | 0.1631 | 0.8468 | 0.9695 | 0.9729 |
| sider_CDK_ECFP4 | 0.0070 | 0.2475 | 0.6488 | 0.7965 | 0.6293 | 0.7956 | 0.1338 | 18.8380 | 0.1387 | 0.8143 | 0.5789 | 0.7882 |
| sider_MordredDesc | 0.0211 | 0.2634 | 0.6365 | 0.7868 | 0.6187 | 0.7863 | 0.2676 | 19.5000 | 0.1739 | 0.7794 | 0.5744 | 0.7637 |
| sider_RDKit_desc | 0.0141 | 0.2856 | 0.6275 | 0.7801 | 0.6018 | 0.7748 | 0.1338 | 19.9859 | 0.2036 | 0.7443 | 0.5941 | 0.7538 |
| SLASHDOT-F | 0.3968 | 0.0437 | 0.5217 | 0.5903 | 0.3883 | 0.5944 | 0.3915 | 5.3175 | 0.3489 | 0.6532 | 0.7530 | 0.9804 |
| solar_flare-L3 | 0.4000 | 0.2667 | 0.6000 | 0.6857 | 0.4444 | 0.6667 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.5556 | 0.8000 |
| Stackex_chemistry | 0.0447 | 0.0159 | 0.1454 | 0.2070 | 0.0565 | 0.2017 | 0.7983 | 105.5317 | 0.8778 | 0.1525 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0476 | 0.0101 | 0.1667 | 0.2319 | 0.0620 | 0.2889 | 0.6548 | 137.1369 | 0.8046 | 0.2107 | 0.5491 | 0.9982 |
| Stackex_coffee | 0.0000 | 0.0212 | 0.0525 | 0.0891 | 0.0199 | 0.1176 | 0.8261 | 75.4783 | 0.8491 | 0.1433 | 0.2540 | 0.9838 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0603 | 0.0093 | 0.1716 | 0.2371 | 0.0646 | 0.2778 | 0.6910 | 135.0553 | 0.7892 | 0.2125 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2587 | 0.0674 | 0.5743 | 0.7200 | 0.6047 | 0.6832 | 0.2413 | 4.0573 | 0.1395 | 0.7832 | 0.9580 | 0.9695 |
| tox21_CDK_ECFP4 | 0.1301 | 0.1838 | 0.3467 | 0.4612 | 0.3840 | 0.4561 | 0.4726 | 5.3459 | 0.4774 | 0.5729 | 0.8953 | 0.8953 |
| tox21_RDKit_desc | 0.1062 | 0.1912 | 0.3331 | 0.4605 | 0.3204 | 0.4398 | 0.5034 | 5.5034 | 0.4963 | 0.5548 | 0.8970 | 0.8974 |
| VirusGO | 0.7619 | 0.0714 | 0.8175 | 0.8532 | 0.6211 | 0.8163 | 0.1905 | 0.6667 | 0.1040 | 0.8802 | 0.7957 | 0.9644 |
| VirusPseAAC | 0.3810 | 0.1508 | 0.5159 | 0.5811 | 0.3492 | 0.5957 | 0.3333 | 0.9048 | 0.1952 | 0.7754 | 0.7119 | 0.9164 |
| Water-quality | 0.0000 | 0.3302 | 0.4244 | 0.6039 | 0.4919 | 0.5944 | 0.2642 | 8.9906 | 0.3434 | 0.6892 | 0.7644 | 0.7519 |
| Yahoo_Arts | 0.2350 | 0.0757 | 0.3345 | 0.4057 | 0.1962 | 0.3639 | 0.5247 | 10.0641 | 0.5425 | 0.5022 | 0.9242 | 0.9604 |
| Yahoo_Business | 0.5677 | 0.0277 | 0.7239 | 0.8125 | 0.2660 | 0.7167 | 0.0980 | 3.1168 | 0.2056 | 0.8849 | 0.8503 | 0.9927 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2452 | 0.0544 | 0.3383 | 0.4047 | 0.1901 | 0.3770 | 0.5445 | 8.8845 | 0.5265 | 0.5338 | 0.8843 | 0.9719 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.3898 | 0.0425 | 0.5242 | 0.6045 | 0.2275 | 0.5574 | 0.3431 | 6.4289 | 0.3434 | 0.6804 | 0.8226 | 0.9804 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.2107 | 0.1978 | 0.5577 | 0.6849 | 0.4521 | 0.6785 | 0.2521 | 6.1901 | 0.2356 | 0.7543 | 0.8216 | 0.8816 |
| Yelp | 0.3988 | 0.1936 | 0.6366 | 0.7417 | 0.6779 | 0.7284 | 0.1984 | 1.3689 | 0.2109 | 0.8617 | 0.8609 | 0.8882 |

Table 88: Detailed results for lambda = 2 for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4393 | 0.0375 | 0.5691 | 0.6375 | 0.6642 | 0.6636 | 0.3076 | 2.4907 | 0.2433 | 0.7571 | 0.9872 | 0.9875 |
| 3s-bbc1000 | 0.1389 | 0.3519 | 0.2611 | 0.3453 | 0.2923 | 0.3214 | 0.7500 | 2.8889 | 0.6630 | 0.4390 | 0.7977 | 0.7401 |
| 3s-guardian1000 | 0.1613 | 0.3226 | 0.3468 | 0.4571 | 0.2279 | 0.3878 | 0.5484 | 2.2258 | 0.4919 | 0.5852 | 0.8185 | 0.8217 |
| 3s-inter3000 | 0.0000 | 0.6569 | 0.2118 | 0.3495 | 0.2829 | 0.3495 | 0.8235 | 2.2353 | 0.6353 | 0.4520 | 0.5167 | 0.6938 |
| 3s-reuters1000 | 0.0667 | 0.3389 | 0.1389 | 0.1826 | 0.2090 | 0.2078 | 0.9000 | 2.7000 | 0.7933 | 0.3672 | 0.8209 | 0.7458 |
| amphibians | 0.0556 | 0.2619 | 0.5614 | 0.7661 | 0.5743 | 0.7273 | 0.2222 | 2.5000 | 0.0833 | 0.8570 | 0.7529 | 0.8063 |
| bibtex | 0.1743 | 0.0124 | 0.3523 | 0.4487 | 0.3002 | 0.4664 | 0.4135 | 70.7473 | 0.5567 | 0.4434 | 0.9971 | 0.9972 |
| birds | 0.1282 | 0.0999 | 0.3298 | 0.4393 | 0.3629 | 0.4559 | 0.5128 | 8.1026 | 0.5411 | 0.5007 | 0.8467 | 0.9496 |
| bookmarks10% | 0.1856 | 0.0092 | 0.2211 | 0.2480 | 0.1193 | 0.2670 | 0.7232 | 105.0011 | 0.7561 | 0.2614 | 0.9846 | 0.9990 |
| CAL500 | 0.0000 | 0.2177 | 0.3139 | 0.4761 | 0.1446 | 0.4759 | 0.4118 | 151.0392 | 0.6975 | 0.4096 | 0.8473 | 0.9619 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1945 | 0.0382 | 0.1942 | 0.8533 | 114.5541 | 0.9348 | 0.0976 | 0.9986 | 0.9986 |
| Corel5k | 0.0000 | 0.0303 | 0.0990 | 0.1714 | 0.0244 | 0.1732 | 0.8700 | 165.2460 | 0.9495 | 0.1516 | 0.6790 | 0.9999 |
| delicious | 0.0000 | 0.2435 | 0.0514 | 0.0977 | 0.0770 | 0.0977 | 0.5786 | 913.5774 | 0.8822 | 0.1211 | 0.9937 | 0.9989 |
| emotions | 0.2500 | 0.2139 | 0.5806 | 0.7217 | 0.6873 | 0.6957 | 0.3000 | 1.7667 | 0.2454 | 0.7920 | 0.8783 | 0.8874 |
| enron | 0.1696 | 0.0499 | 0.4805 | 0.6142 | 0.1709 | 0.5921 | 0.2573 | 25.2105 | 0.4119 | 0.5951 | 0.8298 | 0.9845 |
| EukaryoteGO | 0.6418 | 0.0214 | 0.7865 | 0.8563 | 0.7213 | 0.8187 | 0.1688 | 0.9137 | 0.0552 | 0.8907 | 0.9930 | 0.9948 |
| EukaryotePseAAC | 0.0000 | 0.1293 | 0.2403 | 0.3562 | 0.1124 | 0.3537 | 0.6577 | 7.2986 | 0.6416 | 0.4280 | 0.9806 | 0.9826 |
| flags | 0.2000 | 0.2571 | 0.6261 | 0.7441 | 0.5971 | 0.7429 | 0.2000 | 3.6500 | 0.2292 | 0.8125 | 0.6887 | 0.7934 |
| foodtruck | 0.2683 | 0.1585 | 0.4499 | 0.5959 | 0.1416 | 0.4935 | 0.2439 | 4.6098 | 0.4507 | 0.7172 | 0.8561 | 0.9573 |
| genbase | 0.9552 | 0.0022 | 0.9801 | 0.9899 | 0.6502 | 0.9759 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9571 | 0.9714 | 0.8300 | 0.9595 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8737 | 0.9980 |
| GnegativePseAAC | 0.7429 | 0.0545 | 0.7952 | 0.8212 | 0.4841 | 0.7987 | 0.1714 | 0.6143 | 0.1464 | 0.8778 | 0.8619 | 0.9896 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7500 | 0.1202 | 0.7500 | 0.7500 | 0.5751 | 0.7573 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6077 | 0.0425 | 0.7414 | 0.8072 | 0.6839 | 0.7643 | 0.1736 | 1.2540 | 0.1246 | 0.8655 | 0.9852 | 0.9887 |
| HumanPseAAC | 0.0675 | 0.1226 | 0.3057 | 0.4089 | 0.1765 | 0.4132 | 0.5884 | 4.1447 | 0.5918 | 0.5265 | 0.9699 | 0.9703 |
| Image | 0.4050 | 0.1940 | 0.5925 | 0.6862 | 0.6435 | 0.6326 | 0.3050 | 1.0150 | 0.2762 | 0.7975 | 0.9294 | 0.9252 |
| IMDB-ECC-F10% | 0.0000 | 0.2688 | 0.1415 | 0.2438 | 0.0895 | 0.2439 | 0.7180 | 13.4455 | 0.8175 | 0.3112 | 0.9892 | 0.9856 |
| IMDB-F10% | 0.0000 | 0.2908 | 0.1529 | 0.2644 | 0.1066 | 0.2625 | 0.8774 | 15.6587 | 0.9479 | 0.2019 | 0.9944 | 0.9956 |
| LLOG-F | 0.1721 | 0.0161 | 0.2001 | 0.2185 | 0.0544 | 0.2967 | 0.7377 | 28.6475 | 0.7821 | 0.2794 | 0.5988 | 0.9987 |
| mediamill10% | 0.0760 | 0.0300 | 0.4608 | 0.6221 | 0.0843 | 0.5762 | 0.1734 | 61.7268 | 0.4805 | 0.5245 | 0.8141 | 0.9949 |
| medical | 0.6531 | 0.0109 | 0.7594 | 0.8143 | 0.2904 | 0.8125 | 0.1735 | 5.4184 | 0.1538 | 0.8269 | 0.5531 | 0.9978 |
| Music | 0.2667 | 0.1972 | 0.5931 | 0.7223 | 0.7216 | 0.7216 | 0.1667 | 1.9833 | 0.2362 | 0.8334 | 0.9102 | 0.9038 |
| NUS-WIDE-bow10% | 0.0228 | 0.0336 | 0.2556 | 0.3835 | 0.0372 | 0.3698 | 0.5918 | 37.0214 | 0.6614 | 0.3876 | 0.8824 | 0.9934 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0381 | 0.2686 | 0.4033 | 0.0506 | 0.3839 | 0.5771 | 35.9210 | 0.6484 | 0.4071 | 0.8837 | 0.9945 |
| OHSUMED-F | 0.1917 | 0.0653 | 0.4283 | 0.5532 | 0.4404 | 0.5593 | 0.3582 | 7.3295 | 0.3965 | 0.6229 | 0.9724 | 0.9758 |
| PlantGO | 0.6667 | 0.0408 | 0.7552 | 0.7972 | 0.6695 | 0.7854 | 0.2188 | 1.1146 | 0.1162 | 0.8485 | 0.9910 | 0.9878 |
| PlantPseAAC | 0.2755 | 0.1122 | 0.3452 | 0.3859 | 0.1901 | 0.3889 | 0.6122 | 3.2551 | 0.5421 | 0.5309 | 0.9537 | 0.9471 |
| rcv1subset1 | 0.0667 | 0.0317 | 0.2962 | 0.4169 | 0.2256 | 0.4180 | 0.4717 | 47.7817 | 0.5722 | 0.4165 | 0.9292 | 0.9894 |
| REUTERS-K500-EX2 | 0.3110 | 0.0112 | 0.3842 | 0.4251 | 0.2303 | 0.4878 | 0.5601 | 35.2062 | 0.5817 | 0.4444 | 0.7846 | 0.9980 |
| scene | 0.5726 | 0.0975 | 0.7248 | 0.7998 | 0.7738 | 0.7565 | 0.2158 | 0.8174 | 0.1622 | 0.8434 | 0.9689 | 0.9724 |
| sider_CDK_ECFP4 | 0.0141 | 0.2394 | 0.6567 | 0.8023 | 0.6380 | 0.7998 | 0.1338 | 19.4296 | 0.1737 | 0.7982 | 0.5935 | 0.7753 |
| sider_MordredDesc | 0.0141 | 0.2598 | 0.6285 | 0.7814 | 0.6094 | 0.7835 | 0.3028 | 19.8451 | 0.1984 | 0.7605 | 0.5702 | 0.7578 |
| sider_RDKit_desc | 0.0141 | 0.2796 | 0.6302 | 0.7822 | 0.5979 | 0.7771 | 0.3944 | 20.3944 | 0.2333 | 0.7222 | 0.5920 | 0.7438 |
| SLASHDOT-F | 0.3968 | 0.0398 | 0.4832 | 0.5290 | 0.3815 | 0.5836 | 0.4630 | 6.8598 | 0.4619 | 0.5733 | 0.7632 | 0.9898 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.6667 | 0.8800 |
| Stackex_chemistry | 0.0101 | 0.0203 | 0.1375 | 0.2122 | 0.0701 | 0.2134 | 0.7810 | 104.8818 | 0.8707 | 0.1615 | 0.9185 | 0.9984 |
| Stackex_chess | 0.0000 | 0.0143 | 0.1019 | 0.1617 | 0.0534 | 0.2041 | 0.7143 | 140.0119 | 0.8353 | 0.1728 | 0.5496 | 0.9987 |
| Stackex_coffee | 0.0000 | 0.0212 | 0.0543 | 0.0771 | 0.0251 | 0.1429 | 0.8696 | 75.3913 | 0.8921 | 0.1052 | 0.2576 | 0.9923 |
| Stackex_cooking | 0.0000 | 0.0154 | 0.0740 | 0.1279 | 0.1030 | 0.1420 | 0.6435 | 223.8068 | 0.7697 | 0.2320 | 0.9242 | 0.9991 |
| Stackex_philosophy | 0.0528 | 0.0120 | 0.1905 | 0.2728 | 0.0601 | 0.2648 | 0.7161 | 135.8392 | 0.8041 | 0.1996 | 0.7500 | 0.9989 |
| tmc2007-500 | 0.2448 | 0.0699 | 0.5679 | 0.7174 | 0.5991 | 0.6783 | 0.2416 | 4.5056 | 0.1779 | 0.7700 | 0.9610 | 0.9717 |
| tox21_CDK_ECFP4 | 0.1610 | 0.1701 | 0.3452 | 0.4420 | 0.3900 | 0.4621 | 0.4897 | 5.5822 | 0.5582 | 0.5454 | 0.9231 | 0.9264 |
| tox21_RDKit_desc | 0.0171 | 0.2377 | 0.2877 | 0.4365 | 0.2978 | 0.4267 | 0.5068 | 5.6370 | 0.5758 | 0.5347 | 0.9245 | 0.9277 |
| VirusGO | 0.7619 | 0.0635 | 0.8333 | 0.8611 | 0.6711 | 0.8400 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7926 | 0.9644 |
| VirusPseAAC | 0.4762 | 0.1270 | 0.5635 | 0.6069 | 0.3533 | 0.6364 | 0.2857 | 0.9048 | 0.2048 | 0.7968 | 0.7238 | 0.9173 |
| Water-quality | 0.0094 | 0.3228 | 0.4275 | 0.6042 | 0.4936 | 0.5985 | 0.3491 | 9.3302 | 0.3938 | 0.6701 | 0.7808 | 0.7857 |
| Yahoo_Arts | 0.1202 | 0.0894 | 0.2765 | 0.3734 | 0.1935 | 0.3457 | 0.5394 | 11.1469 | 0.6973 | 0.4655 | 0.9421 | 0.9819 |
| Yahoo_Business | 0.5410 | 0.0300 | 0.7145 | 0.8143 | 0.3020 | 0.7055 | 0.1025 | 3.1684 | 0.2169 | 0.8811 | 0.8539 | 0.9939 |
| Yahoo_Computers | 0.3743 | 0.0462 | 0.4764 | 0.5502 | 0.2294 | 0.4898 | 0.3936 | 6.8329 | 0.4612 | 0.5947 | 0.8937 | 0.9846 |
| Yahoo_Education | 0.0066 | 0.0836 | 0.2413 | 0.3551 | 0.1827 | 0.3354 | 0.6409 | 9.5744 | 0.7036 | 0.4654 | 0.8913 | 0.9838 |
| Yahoo_Entertainment | 0.2914 | 0.0680 | 0.3855 | 0.4487 | 0.3007 | 0.4626 | 0.4941 | 4.4352 | 0.5134 | 0.5925 | 0.9755 | 0.9774 |
| Yahoo_Health | 0.3518 | 0.0465 | 0.5232 | 0.6227 | 0.2318 | 0.5577 | 0.3322 | 6.8187 | 0.3663 | 0.6765 | 0.8273 | 0.9836 |
| Yahoo_Recreation | 0.0998 | 0.1020 | 0.2720 | 0.3643 | 0.3057 | 0.3459 | 0.5331 | 6.8441 | 0.6232 | 0.5436 | 0.9726 | 0.9739 |
| Yahoo_Reference | 0.4247 | 0.0356 | 0.5010 | 0.5546 | 0.1670 | 0.5124 | 0.4072 | 5.6526 | 0.4415 | 0.6306 | 0.8077 | 0.9894 |
| Yahoo_Science | 0.1617 | 0.0577 | 0.2774 | 0.3495 | 0.1630 | 0.3028 | 0.6563 | 14.3048 | 0.6879 | 0.3966 | 0.9601 | 0.9861 |
| Yahoo_Social | 0.4612 | 0.0292 | 0.5378 | 0.5894 | 0.2079 | 0.5403 | 0.3804 | 7.6815 | 0.4090 | 0.6387 | 0.9161 | 0.9923 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1529 | 0.2131 | 0.5562 | 0.6957 | 0.4472 | 0.6800 | 0.2686 | 6.3017 | 0.2575 | 0.7469 | 0.8349 | 0.8910 |
| Yelp | 0.3320 | 0.2136 | 0.6234 | 0.7476 | 0.6712 | 0.7236 | 0.2064 | 1.3988 | 0.2144 | 0.8565 | 0.8611 | 0.8880 |

Table 89: Detailed results for lambda = 3 for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4315 | 0.0386 | 0.5598 | 0.6286 | 0.6545 | 0.6549 | 0.3102 | 2.3999 | 0.2325 | 0.7591 | 0.9848 | 0.9851 |
| 3s-bbc1000 | 0.0833 | 0.3843 | 0.1977 | 0.2758 | 0.2288 | 0.2523 | 0.7778 | 2.9444 | 0.6907 | 0.4306 | 0.7837 | 0.7362 |
| 3s-guardian1000 | 0.1290 | 0.3333 | 0.3118 | 0.4295 | 0.2958 | 0.3800 | 0.4839 | 1.8710 | 0.4169 | 0.6392 | 0.7797 | 0.8001 |
| 3s-inter3000 | 0.0000 | 0.5686 | 0.2235 | 0.3567 | 0.2805 | 0.3556 | 0.8824 | 2.2353 | 0.6588 | 0.4324 | 0.5651 | 0.7341 |
| 3s-reuters1000 | 0.0667 | 0.3444 | 0.1111 | 0.1333 | 0.1006 | 0.1389 | 0.9000 | 2.7333 | 0.8333 | 0.3628 | 0.8190 | 0.7445 |
| amphibians | 0.0556 | 0.2460 | 0.5636 | 0.7637 | 0.5659 | 0.7350 | 0.2222 | 2.5000 | 0.1000 | 0.8570 | 0.7528 | 0.8074 |
| bibtex | 0.1689 | 0.0122 | 0.3499 | 0.4449 | 0.3115 | 0.4712 | 0.4486 | 73.1743 | 0.5819 | 0.4208 | 0.9975 | 0.9975 |
| birds | 0.1538 | 0.0958 | 0.3439 | 0.4442 | 0.3871 | 0.4741 | 0.5385 | 7.6667 | 0.5257 | 0.5035 | 0.8460 | 0.9448 |
| bookmarks10% | 0.1856 | 0.0092 | 0.2211 | 0.2480 | 0.1193 | 0.2670 | 0.7232 | 105.0011 | 0.7561 | 0.2614 | 0.9846 | 0.9990 |
| CAL500 | 0.0000 | 0.2141 | 0.3143 | 0.4759 | 0.1439 | 0.4760 | 0.3333 | 150.9412 | 0.6491 | 0.4288 | 0.8372 | 0.9542 |
| corel16k001 | 0.0000 | 0.0630 | 0.1126 | 0.1950 | 0.0411 | 0.1947 | 0.8606 | 113.8736 | 0.9346 | 0.0967 | 0.9987 | 0.9988 |
| Corel5k | 0.0000 | 0.0180 | 0.1367 | 0.2218 | 0.0249 | 0.2261 | 0.8700 | 164.5520 | 0.9462 | 0.1551 | 0.6790 | 0.9998 |
| delicious | 0.0000 | 0.1246 | 0.0792 | 0.1464 | 0.0817 | 0.1466 | 0.5426 | 909.3313 | 0.8591 | 0.1401 | 0.9934 | 0.9986 |
| emotions | 0.2667 | 0.2111 | 0.5806 | 0.7219 | 0.6852 | 0.6960 | 0.3000 | 1.7500 | 0.2338 | 0.7909 | 0.8766 | 0.8875 |
| enron | 0.1696 | 0.0504 | 0.4803 | 0.6178 | 0.1772 | 0.5938 | 0.2982 | 24.8012 | 0.3868 | 0.5960 | 0.8285 | 0.9833 |
| EukaryoteGO | 0.6418 | 0.0217 | 0.7866 | 0.8563 | 0.7355 | 0.8168 | 0.1662 | 0.8351 | 0.0462 | 0.8946 | 0.9927 | 0.9948 |
| EukaryotePseAAC | 0.1248 | 0.0748 | 0.3137 | 0.4067 | 0.1313 | 0.4141 | 0.6229 | 6.8481 | 0.5877 | 0.4633 | 0.9772 | 0.9797 |
| flags | 0.1500 | 0.2714 | 0.6027 | 0.7249 | 0.5819 | 0.7286 | 0.2000 | 3.5500 | 0.2175 | 0.8167 | 0.7048 | 0.8065 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1447 | 0.5000 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8562 | 0.9575 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9571 | 0.9714 | 0.8300 | 0.9595 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7357 | 0.0536 | 0.7952 | 0.8246 | 0.4978 | 0.8026 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8617 | 0.9892 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9962 |
| GpositivePseAAC | 0.7692 | 0.1154 | 0.7692 | 0.7692 | 0.5883 | 0.7692 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9799 | 0.9730 |
| HumanGO | 0.6077 | 0.0420 | 0.7481 | 0.8170 | 0.6917 | 0.7704 | 0.1704 | 1.1158 | 0.1091 | 0.8747 | 0.9850 | 0.9886 |
| HumanPseAAC | 0.3183 | 0.0939 | 0.4009 | 0.4434 | 0.1770 | 0.4374 | 0.5434 | 3.6495 | 0.5172 | 0.5672 | 0.9602 | 0.9606 |
| Image | 0.4200 | 0.1900 | 0.6042 | 0.6967 | 0.6512 | 0.6402 | 0.3100 | 1.0250 | 0.2800 | 0.7942 | 0.9304 | 0.9265 |
| IMDB-ECC-F10% | 0.0000 | 0.2681 | 0.1412 | 0.2431 | 0.0869 | 0.2433 | 0.7474 | 13.8407 | 0.8484 | 0.2869 | 0.9896 | 0.9873 |
| IMDB-F10% | 0.0000 | 0.2909 | 0.1529 | 0.2643 | 0.0930 | 0.2625 | 0.6023 | 13.1632 | 0.7506 | 0.3669 | 0.9920 | 0.9774 |
| LLOG-F | 0.1557 | 0.0165 | 0.1933 | 0.2150 | 0.0522 | 0.2844 | 0.7459 | 29.1803 | 0.7863 | 0.2713 | 0.5985 | 0.9983 |
| mediamill10% | 0.0736 | 0.0305 | 0.4568 | 0.6211 | 0.0774 | 0.5755 | 0.1591 | 60.4751 | 0.4720 | 0.5398 | 0.8132 | 0.9944 |
| medical | 0.6327 | 0.0116 | 0.7534 | 0.8132 | 0.2950 | 0.8031 | 0.1633 | 5.0306 | 0.1333 | 0.8376 | 0.5524 | 0.9977 |
| Music | 0.2833 | 0.1889 | 0.6056 | 0.7390 | 0.7311 | 0.7323 | 0.2833 | 2.0167 | 0.2593 | 0.7973 | 0.9124 | 0.9051 |
| NUS-WIDE-bow10% | 0.0205 | 0.0343 | 0.2624 | 0.3981 | 0.0461 | 0.3765 | 0.5471 | 36.0233 | 0.6291 | 0.4128 | 0.8816 | 0.9925 |
| NUS-WIDE-cVLADplus10% | 0.0290 | 0.0326 | 0.2809 | 0.4126 | 0.0632 | 0.4046 | 0.5661 | 34.8711 | 0.6345 | 0.4196 | 0.8830 | 0.9938 |
| OHSUMED-F | 0.1845 | 0.0648 | 0.4245 | 0.5504 | 0.4349 | 0.5585 | 0.3489 | 7.1149 | 0.3745 | 0.6337 | 0.9690 | 0.9729 |
| PlantGO | 0.6667 | 0.0417 | 0.7535 | 0.7962 | 0.6679 | 0.7818 | 0.2292 | 1.0417 | 0.1146 | 0.8441 | 0.9911 | 0.9867 |
| PlantPseAAC | 0.2755 | 0.1131 | 0.3622 | 0.4128 | 0.2143 | 0.4089 | 0.6020 | 3.1122 | 0.5180 | 0.5434 | 0.9468 | 0.9419 |
| rcv1subset1 | 0.0900 | 0.0308 | 0.3393 | 0.4649 | 0.2450 | 0.4590 | 0.4417 | 42.9233 | 0.5086 | 0.4617 | 0.9280 | 0.9885 |
| REUTERS-K500-EX2 | 0.3351 | 0.0116 | 0.4100 | 0.4542 | 0.2398 | 0.4949 | 0.5309 | 33.7715 | 0.5476 | 0.4725 | 0.7841 | 0.9975 |
| scene | 0.5809 | 0.0961 | 0.7268 | 0.7994 | 0.7745 | 0.7574 | 0.2116 | 0.8174 | 0.1614 | 0.8447 | 0.9691 | 0.9724 |
| sider_CDK_ECFP4 | 0.0141 | 0.2420 | 0.6488 | 0.7969 | 0.6271 | 0.7967 | 0.3521 | 19.5282 | 0.1992 | 0.7502 | 0.5869 | 0.7504 |
| sider_MordredDesc | 0.0070 | 0.2640 | 0.6268 | 0.7803 | 0.6135 | 0.7821 | 0.2958 | 19.9859 | 0.1870 | 0.7728 | 0.5756 | 0.7655 |
| sider_RDKit_desc | 0.0141 | 0.2718 | 0.6347 | 0.7857 | 0.6000 | 0.7814 | 0.1338 | 19.7958 | 0.1769 | 0.7940 | 0.5936 | 0.7774 |
| SLASHDOT-F | 0.3915 | 0.0412 | 0.4933 | 0.5486 | 0.3880 | 0.5882 | 0.4444 | 6.5291 | 0.4337 | 0.5928 | 0.7607 | 0.9859 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.6667 | 0.9400 |
| Stackex_chemistry | 0.0115 | 0.0203 | 0.1380 | 0.2131 | 0.0762 | 0.2144 | 0.7781 | 104.8732 | 0.8670 | 0.1634 | 0.9184 | 0.9984 |
| Stackex_chess | 0.0417 | 0.0101 | 0.1510 | 0.2089 | 0.0573 | 0.2727 | 0.7083 | 139.0774 | 0.8216 | 0.1872 | 0.5495 | 0.9986 |
| Stackex_coffee | 0.0000 | 0.0212 | 0.0595 | 0.0990 | 0.0226 | 0.1429 | 0.8696 | 78.2174 | 0.9062 | 0.1028 | 0.2542 | 0.9890 |
| Stackex_cooking | 0.0000 | 0.0080 | 0.1470 | 0.2249 | 0.1119 | 0.2556 | 0.6077 | 219.5816 | 0.7512 | 0.2524 | 0.9241 | 0.9990 |
| Stackex_philosophy | 0.0553 | 0.0119 | 0.1934 | 0.2748 | 0.0615 | 0.2676 | 0.7211 | 136.4422 | 0.8062 | 0.1964 | 0.7501 | 0.9989 |
| tmc2007-500 | 0.2441 | 0.0702 | 0.5701 | 0.7201 | 0.6013 | 0.6795 | 0.2626 | 4.2531 | 0.1591 | 0.7695 | 0.9593 | 0.9706 |
| tox21_CDK_ECFP4 | 0.1507 | 0.1838 | 0.3563 | 0.4688 | 0.3955 | 0.4651 | 0.4692 | 5.4349 | 0.5110 | 0.5614 | 0.9084 | 0.9103 |
| tox21_RDKit_desc | 0.0171 | 0.2443 | 0.2902 | 0.4409 | 0.3022 | 0.4278 | 0.5000 | 5.6027 | 0.5359 | 0.5421 | 0.9143 | 0.9175 |
| VirusGO | 0.7619 | 0.0714 | 0.8413 | 0.8686 | 0.6600 | 0.8302 | 0.0952 | 0.5238 | 0.0832 | 0.9153 | 0.8050 | 0.9739 |
| VirusPseAAC | 0.1905 | 0.1825 | 0.4921 | 0.6111 | 0.3654 | 0.6102 | 0.3333 | 0.9048 | 0.1857 | 0.7770 | 0.7107 | 0.9139 |
| Water-quality | 0.0000 | 0.3302 | 0.4224 | 0.5973 | 0.4864 | 0.5937 | 0.3019 | 9.5849 | 0.3774 | 0.6832 | 0.7754 | 0.7740 |
| Yahoo_Arts | 0.1228 | 0.0896 | 0.2762 | 0.3721 | 0.1920 | 0.3444 | 0.5340 | 10.7143 | 0.6717 | 0.4777 | 0.9387 | 0.9788 |
| Yahoo_Business | 0.5392 | 0.0300 | 0.7138 | 0.8140 | 0.3093 | 0.7051 | 0.1061 | 3.1408 | 0.2130 | 0.8816 | 0.8525 | 0.9934 |
| Yahoo_Computers | 0.3759 | 0.0470 | 0.4790 | 0.5560 | 0.2389 | 0.4917 | 0.3888 | 6.7149 | 0.4432 | 0.6030 | 0.8915 | 0.9834 |
| Yahoo_Education | 0.0066 | 0.0839 | 0.2422 | 0.3571 | 0.1891 | 0.3382 | 0.6218 | 9.4231 | 0.6858 | 0.4774 | 0.8897 | 0.9823 |
| Yahoo_Entertainment | 0.2914 | 0.0680 | 0.3855 | 0.4487 | 0.3007 | 0.4626 | 0.4941 | 4.4352 | 0.5134 | 0.5925 | 0.9755 | 0.9774 |
| Yahoo_Health | 0.3605 | 0.0452 | 0.5222 | 0.6173 | 0.2345 | 0.5588 | 0.3312 | 6.5657 | 0.3553 | 0.6805 | 0.8252 | 0.9824 |
| Yahoo_Recreation | 0.0998 | 0.1020 | 0.2720 | 0.3643 | 0.3057 | 0.3459 | 0.5331 | 6.8441 | 0.6232 | 0.5436 | 0.9726 | 0.9739 |
| Yahoo_Reference | 0.4247 | 0.0356 | 0.5010 | 0.5546 | 0.1670 | 0.5124 | 0.4072 | 5.6526 | 0.4415 | 0.6306 | 0.8077 | 0.9894 |
| Yahoo_Science | 0.1617 | 0.0577 | 0.2774 | 0.3495 | 0.1630 | 0.3028 | 0.6563 | 14.3048 | 0.6879 | 0.3966 | 0.9601 | 0.9861 |
| Yahoo_Social | 0.4612 | 0.0292 | 0.5378 | 0.5894 | 0.2079 | 0.5403 | 0.3804 | 7.6815 | 0.4090 | 0.6387 | 0.9161 | 0.9923 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1570 | 0.2193 | 0.5563 | 0.6979 | 0.4543 | 0.6779 | 0.2397 | 6.2397 | 0.2440 | 0.7548 | 0.8317 | 0.8876 |
| Yelp | 0.3350 | 0.2126 | 0.6234 | 0.7472 | 0.6710 | 0.7265 | 0.1994 | 1.3928 | 0.2182 | 0.8589 | 0.8630 | 0.8895 |

Table 90: Detailed results for lambda = 4 for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5073 | 0.0343 | 0.6156 | 0.6735 | 0.6889 | 0.6882 | 0.3013 | 2.4969 | 0.2422 | 0.7602 | 0.9904 | 0.9906 |
| 3s-bbc1000 | 0.1389 | 0.3380 | 0.2713 | 0.3648 | 0.3118 | 0.3423 | 0.6667 | 2.5833 | 0.6088 | 0.5056 | 0.8222 | 0.7771 |
| 3s-guardian1000 | 0.1935 | 0.2957 | 0.3086 | 0.3780 | 0.2560 | 0.3529 | 0.4839 | 2.0968 | 0.4790 | 0.6263 | 0.8581 | 0.8556 |
| 3s-inter3000 | 0.0000 | 0.5490 | 0.2382 | 0.3802 | 0.3281 | 0.3778 | 0.8824 | 2.1765 | 0.5662 | 0.4343 | 0.5299 | 0.7070 |
| 3s-reuters1000 | 0.0667 | 0.3667 | 0.0944 | 0.1106 | 0.1006 | 0.1081 | 0.9333 | 2.6667 | 0.7800 | 0.3594 | 0.7991 | 0.7331 |
| amphibians | 0.1111 | 0.2460 | 0.6054 | 0.7847 | 0.6087 | 0.7520 | 0.2222 | 2.5000 | 0.1111 | 0.8593 | 0.7629 | 0.8205 |
| bibtex | 0.1878 | 0.0120 | 0.3724 | 0.4665 | 0.3332 | 0.4902 | 0.4392 | 72.0892 | 0.5734 | 0.4287 | 0.9977 | 0.9977 |
| birds | 0.1282 | 0.1147 | 0.3319 | 0.4455 | 0.3492 | 0.4295 | 0.5385 | 7.3846 | 0.5038 | 0.4965 | 0.8445 | 0.9413 |
| bookmarks10% | 0.1891 | 0.0088 | 0.2195 | 0.2428 | 0.1118 | 0.2655 | 0.7369 | 105.1412 | 0.7645 | 0.2550 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.2107 | 0.3182 | 0.4805 | 0.1465 | 0.4806 | 0.3333 | 151.1176 | 0.5655 | 0.4423 | 0.8160 | 0.9335 |
| corel16k001 | 0.0000 | 0.0457 | 0.1311 | 0.2193 | 0.0336 | 0.2188 | 0.9477 | 117.8010 | 0.9764 | 0.0577 | 0.9996 | 0.9996 |
| Corel5k | 0.0000 | 0.0180 | 0.1384 | 0.2248 | 0.0274 | 0.2291 | 0.8480 | 163.0860 | 0.9351 | 0.1636 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0454 | 0.1387 | 0.2427 | 0.0890 | 0.2440 | 0.5482 | 906.3238 | 0.8450 | 0.1516 | 0.9927 | 0.9977 |
| emotions | 0.3500 | 0.1944 | 0.6083 | 0.7347 | 0.7020 | 0.7107 | 0.2667 | 1.8833 | 0.2536 | 0.7939 | 0.8879 | 0.8955 |
| enron | 0.1462 | 0.0521 | 0.4796 | 0.6192 | 0.1782 | 0.5931 | 0.3216 | 24.1345 | 0.3680 | 0.6036 | 0.8249 | 0.9804 |
| EukaryoteGO | 0.6611 | 0.0203 | 0.7960 | 0.8596 | 0.7575 | 0.8256 | 0.1688 | 0.8789 | 0.0524 | 0.8922 | 0.9933 | 0.9950 |
| EukaryotePseAAC | 0.1197 | 0.0737 | 0.3373 | 0.4379 | 0.1469 | 0.4392 | 0.5393 | 6.2780 | 0.5101 | 0.5224 | 0.9749 | 0.9775 |
| flags | 0.3000 | 0.2214 | 0.6652 | 0.7813 | 0.6339 | 0.7737 | 0.3500 | 3.7000 | 0.3083 | 0.7649 | 0.7336 | 0.8218 |
| foodtruck | 0.2927 | 0.1585 | 0.4539 | 0.5830 | 0.1349 | 0.4868 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8560 | 0.9574 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0116 | 0.9536 | 0.9696 | 0.8268 | 0.9562 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7714 | 0.0500 | 0.8131 | 0.8339 | 0.5033 | 0.8121 | 0.1857 | 0.6143 | 0.1470 | 0.8736 | 0.8635 | 0.9905 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0962 | 0.1538 | 0.0449 | 0.9471 | 0.9956 | 0.9948 |
| GpositivePseAAC | 0.7308 | 0.1202 | 0.7500 | 0.7595 | 0.5833 | 0.7619 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9841 | 0.9758 |
| HumanGO | 0.6431 | 0.0395 | 0.7618 | 0.8213 | 0.6965 | 0.7795 | 0.1576 | 1.0772 | 0.1016 | 0.8830 | 0.9848 | 0.9884 |
| HumanPseAAC | 0.2990 | 0.0994 | 0.4113 | 0.4678 | 0.1923 | 0.4470 | 0.5338 | 3.3859 | 0.4777 | 0.5839 | 0.9532 | 0.9541 |
| Image | 0.4300 | 0.1890 | 0.6025 | 0.6876 | 0.6468 | 0.6358 | 0.3100 | 1.0150 | 0.2821 | 0.7955 | 0.9331 | 0.9294 |
| IMDB-ECC-F10% | 0.0000 | 0.2672 | 0.1409 | 0.2428 | 0.0922 | 0.2429 | 0.6331 | 12.3302 | 0.7315 | 0.3754 | 0.9885 | 0.9751 |
| IMDB-F10% | 0.0000 | 0.2650 | 0.1544 | 0.2628 | 0.0951 | 0.2629 | 0.5915 | 12.6819 | 0.7184 | 0.3855 | 0.9861 | 0.9746 |
| LLOG-F | 0.1639 | 0.0168 | 0.1960 | 0.2166 | 0.0521 | 0.2870 | 0.7459 | 28.7131 | 0.7876 | 0.2742 | 0.5981 | 0.9978 |
| mediamill10% | 0.0736 | 0.0303 | 0.4723 | 0.6362 | 0.0895 | 0.5932 | 0.2518 | 58.7981 | 0.4434 | 0.5418 | 0.8127 | 0.9937 |
| medical | 0.6633 | 0.0107 | 0.7772 | 0.8345 | 0.3051 | 0.8185 | 0.1837 | 5.0204 | 0.1331 | 0.8342 | 0.5526 | 0.9976 |
| Music | 0.2833 | 0.1833 | 0.6069 | 0.7414 | 0.7343 | 0.7360 | 0.1667 | 2.0167 | 0.2562 | 0.8273 | 0.9145 | 0.9069 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0379 | 0.2690 | 0.4005 | 0.0571 | 0.3850 | 0.5595 | 35.5385 | 0.6571 | 0.4051 | 0.8836 | 0.9950 |
| OHSUMED-F | 0.2283 | 0.0584 | 0.4432 | 0.5542 | 0.4509 | 0.5682 | 0.3553 | 7.6892 | 0.4133 | 0.6154 | 0.9768 | 0.9798 |
| PlantGO | 0.6979 | 0.0399 | 0.7708 | 0.8051 | 0.6695 | 0.7909 | 0.2188 | 1.0833 | 0.1077 | 0.8501 | 0.9884 | 0.9843 |
| PlantPseAAC | 0.2449 | 0.1190 | 0.3520 | 0.4103 | 0.2173 | 0.4017 | 0.6122 | 3.1939 | 0.4989 | 0.5367 | 0.9410 | 0.9333 |
| rcv1subset1 | 0.1017 | 0.0315 | 0.3605 | 0.4876 | 0.2623 | 0.4817 | 0.4417 | 37.7800 | 0.4218 | 0.5022 | 0.9263 | 0.9868 |
| REUTERS-K500-EX2 | 0.3299 | 0.0119 | 0.4133 | 0.4631 | 0.2446 | 0.5007 | 0.5069 | 32.3299 | 0.5319 | 0.4912 | 0.7839 | 0.9972 |
| scene | 0.6017 | 0.0927 | 0.7358 | 0.8025 | 0.7777 | 0.7633 | 0.2033 | 0.8008 | 0.1622 | 0.8503 | 0.9707 | 0.9737 |
| sider_CDK_ECFP4 | 0.0070 | 0.2483 | 0.6479 | 0.7960 | 0.6241 | 0.7941 | 0.2746 | 19.3592 | 0.1585 | 0.7977 | 0.5827 | 0.7843 |
| sider_MordredDesc | 0.0141 | 0.2640 | 0.6275 | 0.7821 | 0.6158 | 0.7825 | 0.3169 | 19.7042 | 0.2028 | 0.7524 | 0.5873 | 0.7476 |
| sider_RDKit_desc | 0.0141 | 0.2799 | 0.6305 | 0.7822 | 0.6049 | 0.7774 | 0.2676 | 20.0986 | 0.2221 | 0.7267 | 0.5809 | 0.7340 |
| SLASHDOT-F | 0.4101 | 0.0417 | 0.5202 | 0.5802 | 0.3992 | 0.5988 | 0.3968 | 5.3624 | 0.3521 | 0.6489 | 0.7560 | 0.9830 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0115 | 0.0200 | 0.1366 | 0.2100 | 0.0677 | 0.2109 | 0.7896 | 105.6110 | 0.8749 | 0.1556 | 0.9188 | 0.9988 |
| Stackex_chess | 0.0357 | 0.0105 | 0.1515 | 0.2163 | 0.0532 | 0.2701 | 0.6786 | 137.8869 | 0.8103 | 0.2021 | 0.5491 | 0.9981 |
| Stackex_coffee | 0.0000 | 0.0212 | 0.0543 | 0.0915 | 0.0159 | 0.1176 | 0.7826 | 73.7826 | 0.8377 | 0.1619 | 0.2559 | 0.9893 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2029 | 0.2744 | 0.1115 | 0.3209 | 0.6357 | 222.6213 | 0.7694 | 0.2353 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0123 | 0.1935 | 0.2790 | 0.0607 | 0.2690 | 0.6809 | 134.8744 | 0.7895 | 0.2165 | 0.7497 | 0.9986 |
| tmc2007-500 | 0.2469 | 0.0692 | 0.5718 | 0.7214 | 0.6052 | 0.6811 | 0.2339 | 4.0486 | 0.1445 | 0.7875 | 0.9592 | 0.9703 |
| tox21_CDK_ECFP4 | 0.1233 | 0.1889 | 0.3505 | 0.4726 | 0.3904 | 0.4635 | 0.4658 | 5.3493 | 0.4885 | 0.5701 | 0.8999 | 0.9008 |
| tox21_RDKit_desc | 0.1164 | 0.1924 | 0.3413 | 0.4716 | 0.3280 | 0.4484 | 0.5000 | 5.5137 | 0.5053 | 0.5543 | 0.9018 | 0.9030 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7926 | 0.9632 |
| VirusPseAAC | 0.3810 | 0.1429 | 0.5635 | 0.6494 | 0.3709 | 0.6400 | 0.2857 | 0.8571 | 0.2048 | 0.8048 | 0.7459 | 0.9253 |
| Water-quality | 0.0000 | 0.4104 | 0.4111 | 0.5865 | 0.5203 | 0.5866 | 0.3113 | 9.1698 | 0.3628 | 0.6839 | 0.7621 | 0.7582 |
| Yahoo_Arts | 0.1909 | 0.0682 | 0.2891 | 0.3548 | 0.2100 | 0.3668 | 0.4993 | 10.0895 | 0.5572 | 0.5099 | 0.9341 | 0.9702 |
| Yahoo_Business | 0.5695 | 0.0271 | 0.7277 | 0.8179 | 0.3221 | 0.7253 | 0.0918 | 3.1720 | 0.2226 | 0.8869 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.4017 | 0.0416 | 0.5562 | 0.6456 | 0.2427 | 0.5888 | 0.3138 | 6.4365 | 0.3454 | 0.6951 | 0.8285 | 0.9848 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1570 | 0.2196 | 0.5548 | 0.7002 | 0.4597 | 0.6776 | 0.2521 | 6.1818 | 0.2340 | 0.7549 | 0.8234 | 0.8832 |
| Yelp | 0.4008 | 0.1898 | 0.6485 | 0.7569 | 0.6858 | 0.7387 | 0.2004 | 1.3659 | 0.2260 | 0.8633 | 0.8806 | 0.9033 |

Table 91: Detailed results for lambda = 5 for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4295 | 0.0387 | 0.5582 | 0.6274 | 0.6545 | 0.6541 | 0.2962 | 2.1530 | 0.2022 | 0.7761 | 0.9816 | 0.9820 |
| 3s-bbc1000 | 0.1111 | 0.3657 | 0.2403 | 0.3311 | 0.2941 | 0.3130 | 0.7778 | 2.8889 | 0.6595 | 0.4384 | 0.7887 | 0.7319 |
| 3s-guardian1000 | 0.1935 | 0.3226 | 0.3516 | 0.4461 | 0.2594 | 0.3750 | 0.5484 | 2.1290 | 0.4960 | 0.5944 | 0.7852 | 0.8023 |
| 3s-inter3000 | 0.0000 | 0.5686 | 0.2235 | 0.3567 | 0.2805 | 0.3556 | 0.8824 | 2.4706 | 0.6588 | 0.3980 | 0.4982 | 0.6812 |
| 3s-reuters1000 | 0.0667 | 0.3444 | 0.1500 | 0.1920 | 0.1885 | 0.2051 | 0.9000 | 2.6333 | 0.7600 | 0.3772 | 0.8161 | 0.7466 |
| amphibians | 0.0556 | 0.2540 | 0.5645 | 0.7702 | 0.5580 | 0.7288 | 0.2222 | 2.5000 | 0.1056 | 0.8570 | 0.7454 | 0.8058 |
| bibtex | 0.1784 | 0.0123 | 0.3643 | 0.4608 | 0.3265 | 0.4819 | 0.3986 | 69.4338 | 0.5422 | 0.4552 | 0.9968 | 0.9968 |
| birds | 0.1538 | 0.1107 | 0.3651 | 0.4927 | 0.3573 | 0.4605 | 0.4872 | 7.5641 | 0.4703 | 0.5149 | 0.8374 | 0.9302 |
| bookmarks10% | 0.1959 | 0.0091 | 0.2286 | 0.2524 | 0.1326 | 0.2745 | 0.7130 | 103.2392 | 0.7399 | 0.2726 | 0.9844 | 0.9988 |
| CAL500 | 0.0000 | 0.2111 | 0.3150 | 0.4762 | 0.1415 | 0.4764 | 0.3725 | 151.0980 | 0.6210 | 0.4232 | 0.8305 | 0.9446 |
| corel16k001 | 0.0000 | 0.0577 | 0.1186 | 0.2024 | 0.0447 | 0.2021 | 0.8373 | 113.5316 | 0.9228 | 0.1079 | 0.9981 | 0.9981 |
| Corel5k | 0.0000 | 0.0180 | 0.1396 | 0.2266 | 0.0281 | 0.2313 | 0.8480 | 163.2520 | 0.9332 | 0.1645 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0589 | 0.1222 | 0.2169 | 0.0876 | 0.2179 | 0.5227 | 903.7694 | 0.8439 | 0.1544 | 0.9931 | 0.9984 |
| emotions | 0.2667 | 0.2167 | 0.5708 | 0.7069 | 0.6782 | 0.6855 | 0.3000 | 1.7500 | 0.2415 | 0.7929 | 0.8804 | 0.8899 |
| enron | 0.1637 | 0.0514 | 0.4856 | 0.6258 | 0.1750 | 0.5934 | 0.2515 | 23.7368 | 0.3676 | 0.6120 | 0.8262 | 0.9812 |
| EukaryoteGO | 0.6598 | 0.0210 | 0.7946 | 0.8597 | 0.7238 | 0.8208 | 0.1714 | 0.8402 | 0.0461 | 0.8927 | 0.9926 | 0.9947 |
| EukaryotePseAAC | 0.1042 | 0.0762 | 0.3369 | 0.4455 | 0.1571 | 0.4462 | 0.5341 | 5.3604 | 0.4323 | 0.5574 | 0.9673 | 0.9708 |
| flags | 0.2000 | 0.2429 | 0.6408 | 0.7619 | 0.6150 | 0.7571 | 0.2000 | 3.6000 | 0.2258 | 0.8142 | 0.6799 | 0.7936 |
| foodtruck | 0.3171 | 0.1524 | 0.4783 | 0.6077 | 0.1460 | 0.5033 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8489 | 0.9543 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6554 | 0.9997 |
| GnegativeGO | 0.9214 | 0.0116 | 0.9536 | 0.9696 | 0.8268 | 0.9562 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7357 | 0.0527 | 0.7988 | 0.8299 | 0.5077 | 0.8066 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8624 | 0.9896 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1538 | 0.0449 | 0.9615 | 0.9963 | 0.9962 |
| GpositivePseAAC | 0.7308 | 0.1202 | 0.7500 | 0.7595 | 0.5833 | 0.7619 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9841 | 0.9760 |
| HumanGO | 0.6431 | 0.0390 | 0.7647 | 0.8247 | 0.6974 | 0.7826 | 0.1672 | 1.1061 | 0.1078 | 0.8762 | 0.9849 | 0.9883 |
| HumanPseAAC | 0.3023 | 0.0972 | 0.4137 | 0.4708 | 0.1968 | 0.4542 | 0.5370 | 3.4502 | 0.4735 | 0.5816 | 0.9536 | 0.9544 |
| Image | 0.4200 | 0.1890 | 0.6033 | 0.6946 | 0.6517 | 0.6400 | 0.3050 | 1.0200 | 0.2804 | 0.7959 | 0.9295 | 0.9262 |
| IMDB-ECC-F10% | 0.0000 | 0.2686 | 0.1413 | 0.2435 | 0.0867 | 0.2434 | 0.6405 | 12.3868 | 0.7351 | 0.3716 | 0.9878 | 0.9750 |
| IMDB-F10% | 0.0000 | 0.2659 | 0.1542 | 0.2624 | 0.0915 | 0.2623 | 0.6081 | 12.7266 | 0.7204 | 0.3792 | 0.9859 | 0.9743 |
| LLOG-F | 0.1639 | 0.0169 | 0.1974 | 0.2173 | 0.0515 | 0.2857 | 0.7377 | 28.6967 | 0.7794 | 0.2807 | 0.5982 | 0.9979 |
| mediamill10% | 0.0784 | 0.0306 | 0.4673 | 0.6340 | 0.0925 | 0.5875 | 0.1568 | 58.8409 | 0.4441 | 0.5511 | 0.8132 | 0.9936 |
| medical | 0.6429 | 0.0107 | 0.7594 | 0.8177 | 0.2869 | 0.8157 | 0.1429 | 4.9898 | 0.1322 | 0.8521 | 0.5527 | 0.9977 |
| Music | 0.2667 | 0.1861 | 0.6153 | 0.7602 | 0.7408 | 0.7413 | 0.2667 | 2.0167 | 0.2522 | 0.8015 | 0.9102 | 0.9018 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0252 | 0.0331 | 0.2858 | 0.4225 | 0.0724 | 0.4142 | 0.5100 | 33.9391 | 0.5945 | 0.4463 | 0.8818 | 0.9926 |
| OHSUMED-F | 0.1730 | 0.0674 | 0.4288 | 0.5613 | 0.4183 | 0.5592 | 0.3467 | 6.5922 | 0.3406 | 0.6475 | 0.9641 | 0.9683 |
| PlantGO | 0.7083 | 0.0382 | 0.7812 | 0.8155 | 0.6728 | 0.8000 | 0.2188 | 0.9479 | 0.0947 | 0.8562 | 0.9888 | 0.9844 |
| PlantPseAAC | 0.2347 | 0.1190 | 0.3469 | 0.4073 | 0.2202 | 0.4017 | 0.6122 | 3.1837 | 0.5072 | 0.5369 | 0.9431 | 0.9358 |
| rcv1subset1 | 0.0917 | 0.0314 | 0.3492 | 0.4766 | 0.2578 | 0.4702 | 0.4417 | 37.6650 | 0.4220 | 0.4975 | 0.9248 | 0.9858 |
| REUTERS-K500-EX2 | 0.3265 | 0.0124 | 0.4115 | 0.4639 | 0.2397 | 0.4921 | 0.5189 | 31.7955 | 0.5267 | 0.4901 | 0.7835 | 0.9969 |
| scene | 0.5809 | 0.0975 | 0.7234 | 0.7938 | 0.7680 | 0.7531 | 0.2075 | 0.8133 | 0.1606 | 0.8472 | 0.9687 | 0.9721 |
| sider_CDK_ECFP4 | 0.0211 | 0.2431 | 0.6516 | 0.7985 | 0.6262 | 0.7968 | 0.2606 | 19.2817 | 0.1618 | 0.7842 | 0.5818 | 0.7787 |
| sider_MordredDesc | 0.0141 | 0.2650 | 0.6279 | 0.7845 | 0.6176 | 0.7822 | 0.1690 | 19.5845 | 0.1711 | 0.7849 | 0.5706 | 0.7760 |
| sider_RDKit_desc | 0.0211 | 0.2833 | 0.6295 | 0.7807 | 0.6067 | 0.7765 | 0.2113 | 20.1620 | 0.2262 | 0.7375 | 0.5870 | 0.7321 |
| SLASHDOT-F | 0.4074 | 0.0414 | 0.5208 | 0.5821 | 0.3883 | 0.6019 | 0.4021 | 5.5265 | 0.3622 | 0.6418 | 0.7545 | 0.9808 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0418 | 0.0162 | 0.1492 | 0.2178 | 0.0676 | 0.2165 | 0.7824 | 104.4049 | 0.8617 | 0.1661 | 0.9182 | 0.9982 |
| Stackex_chess | 0.0417 | 0.0103 | 0.1632 | 0.2327 | 0.0625 | 0.2847 | 0.6548 | 137.2083 | 0.8000 | 0.2120 | 0.5492 | 0.9982 |
| Stackex_coffee | 0.0000 | 0.0223 | 0.0449 | 0.0851 | 0.0172 | 0.1127 | 0.8261 | 78.2174 | 0.9059 | 0.1209 | 0.2555 | 0.9887 |
| Stackex_cooking | 0.0638 | 0.0056 | 0.2087 | 0.2914 | 0.1138 | 0.3295 | 0.6184 | 219.7256 | 0.7447 | 0.2509 | 0.9240 | 0.9989 |
| Stackex_philosophy | 0.0528 | 0.0122 | 0.1940 | 0.2768 | 0.0648 | 0.2723 | 0.6884 | 132.9196 | 0.7841 | 0.2170 | 0.7497 | 0.9986 |
| tmc2007-500 | 0.2510 | 0.0691 | 0.5743 | 0.7224 | 0.6040 | 0.6823 | 0.2304 | 4.0934 | 0.1444 | 0.7873 | 0.9586 | 0.9700 |
| tox21_CDK_ECFP4 | 0.1301 | 0.1915 | 0.3497 | 0.4693 | 0.3874 | 0.4653 | 0.4692 | 5.4110 | 0.4900 | 0.5682 | 0.8979 | 0.8988 |
| tox21_RDKit_desc | 0.0342 | 0.2286 | 0.2987 | 0.4542 | 0.3107 | 0.4258 | 0.5000 | 5.4726 | 0.4968 | 0.5572 | 0.9015 | 0.9020 |
| VirusGO | 0.7619 | 0.0635 | 0.8492 | 0.8768 | 0.6767 | 0.8462 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.7988 | 0.9671 |
| VirusPseAAC | 0.2857 | 0.1667 | 0.5397 | 0.6454 | 0.3736 | 0.6316 | 0.3333 | 0.8095 | 0.1857 | 0.7873 | 0.7189 | 0.9202 |
| Water-quality | 0.0000 | 0.4050 | 0.4125 | 0.5874 | 0.5236 | 0.5892 | 0.2642 | 9.2075 | 0.3478 | 0.6922 | 0.7738 | 0.7592 |
| Yahoo_Arts | 0.2203 | 0.0754 | 0.3242 | 0.3992 | 0.2071 | 0.3682 | 0.5234 | 10.1215 | 0.5592 | 0.5021 | 0.9275 | 0.9645 |
| Yahoo_Business | 0.5481 | 0.0297 | 0.7191 | 0.8163 | 0.2945 | 0.7092 | 0.1007 | 3.1078 | 0.2078 | 0.8835 | 0.8505 | 0.9927 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0416 | 0.0741 | 0.2429 | 0.3474 | 0.2020 | 0.3386 | 0.5486 | 9.0557 | 0.5465 | 0.5292 | 0.8857 | 0.9739 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.3616 | 0.0456 | 0.5233 | 0.6180 | 0.2337 | 0.5563 | 0.3312 | 6.5266 | 0.3484 | 0.6818 | 0.8235 | 0.9811 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1694 | 0.2187 | 0.5549 | 0.6948 | 0.4647 | 0.6763 | 0.2190 | 6.1198 | 0.2279 | 0.7721 | 0.8287 | 0.8847 |
| Yelp | 0.3290 | 0.2094 | 0.6200 | 0.7474 | 0.6781 | 0.7264 | 0.2193 | 1.3769 | 0.2130 | 0.8538 | 0.8639 | 0.8900 |

Table 92: Detailed results for lambda = 6 for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4341 | 0.0375 | 0.5605 | 0.6273 | 0.6589 | 0.6594 | 0.2972 | 2.0747 | 0.1964 | 0.7770 | 0.9802 | 0.9805 |
| 3s-bbc1000 | 0.1111 | 0.3565 | 0.2787 | 0.3693 | 0.3158 | 0.3529 | 0.7500 | 2.7500 | 0.6192 | 0.4527 | 0.7907 | 0.7353 |
| 3s-guardian1000 | 0.1613 | 0.3548 | 0.2903 | 0.3755 | 0.2522 | 0.3265 | 0.5161 | 2.0968 | 0.4677 | 0.6089 | 0.7865 | 0.8012 |
| 3s-inter3000 | 0.0000 | 0.5784 | 0.2206 | 0.3529 | 0.2746 | 0.3516 | 0.8824 | 2.4706 | 0.6941 | 0.3980 | 0.4789 | 0.6673 |
| 3s-reuters1000 | 0.0667 | 0.3444 | 0.1361 | 0.1719 | 0.1885 | 0.1842 | 0.9000 | 2.6667 | 0.8133 | 0.3700 | 0.8217 | 0.7492 |
| amphibians | 0.0556 | 0.2778 | 0.5474 | 0.7590 | 0.5225 | 0.7009 | 0.2222 | 2.3889 | 0.0796 | 0.8778 | 0.7134 | 0.8009 |
| bibtex | 0.1730 | 0.0123 | 0.3570 | 0.4532 | 0.3200 | 0.4795 | 0.4095 | 68.4811 | 0.5393 | 0.4560 | 0.9966 | 0.9967 |
| birds | 0.1538 | 0.1201 | 0.3514 | 0.4702 | 0.3225 | 0.4258 | 0.5128 | 7.5641 | 0.4650 | 0.5145 | 0.8359 | 0.9254 |
| bookmarks10% | 0.1856 | 0.0089 | 0.2163 | 0.2397 | 0.1083 | 0.2626 | 0.7392 | 106.0809 | 0.7698 | 0.2507 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.2096 | 0.3142 | 0.4759 | 0.1431 | 0.4761 | 0.3333 | 151.0000 | 0.5583 | 0.4438 | 0.8144 | 0.9321 |
| corel16k001 | 0.0000 | 0.0576 | 0.1194 | 0.2040 | 0.0506 | 0.2039 | 0.8388 | 113.3188 | 0.9186 | 0.1090 | 0.9982 | 0.9982 |
| Corel5k | 0.0000 | 0.0180 | 0.1403 | 0.2277 | 0.0287 | 0.2320 | 0.8440 | 163.2120 | 0.9291 | 0.1675 | 0.6788 | 0.9997 |
| delicious | 0.0000 | 0.0316 | 0.1588 | 0.2744 | 0.0880 | 0.2765 | 0.5277 | 903.6694 | 0.8402 | 0.1570 | 0.9930 | 0.9982 |
| emotions | 0.2500 | 0.2111 | 0.5806 | 0.7208 | 0.6885 | 0.6960 | 0.3000 | 1.7333 | 0.2336 | 0.7956 | 0.8770 | 0.8895 |
| enron | 0.1579 | 0.0504 | 0.4851 | 0.6271 | 0.1899 | 0.5981 | 0.2749 | 22.6959 | 0.3438 | 0.6287 | 0.8250 | 0.9805 |
| EukaryoteGO | 0.6688 | 0.0201 | 0.8026 | 0.8666 | 0.7429 | 0.8281 | 0.1611 | 0.6985 | 0.0379 | 0.9023 | 0.9927 | 0.9948 |
| EukaryotePseAAC | 0.1042 | 0.0762 | 0.3369 | 0.4455 | 0.1571 | 0.4462 | 0.5341 | 5.3604 | 0.4323 | 0.5574 | 0.9673 | 0.9708 |
| flags | 0.2500 | 0.2429 | 0.6390 | 0.7551 | 0.6749 | 0.7536 | 0.2500 | 3.6000 | 0.2175 | 0.8058 | 0.6979 | 0.7993 |
| foodtruck | 0.3171 | 0.1545 | 0.4661 | 0.5879 | 0.1374 | 0.4933 | 0.2439 | 4.4146 | 0.4354 | 0.7212 | 0.8533 | 0.9572 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2388 | 0.0006 | 0.9950 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9214 | 0.0116 | 0.9536 | 0.9696 | 0.8268 | 0.9562 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7429 | 0.0536 | 0.8024 | 0.8318 | 0.5020 | 0.8039 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8614 | 0.9891 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9231 | 0.9326 | 0.8658 | 0.9259 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9962 |
| GpositivePseAAC | 0.7500 | 0.1154 | 0.7596 | 0.7644 | 0.5883 | 0.7692 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9841 | 0.9760 |
| HumanGO | 0.6559 | 0.0381 | 0.7725 | 0.8297 | 0.6955 | 0.7861 | 0.1608 | 1.0579 | 0.1020 | 0.8809 | 0.9847 | 0.9882 |
| HumanPseAAC | 0.2894 | 0.1001 | 0.4129 | 0.4722 | 0.1950 | 0.4550 | 0.5402 | 3.3666 | 0.4562 | 0.5850 | 0.9501 | 0.9520 |
| Image | 0.4100 | 0.1930 | 0.5975 | 0.6913 | 0.6463 | 0.6352 | 0.3100 | 1.0200 | 0.2787 | 0.7950 | 0.9297 | 0.9258 |
| IMDB-ECC-F10% | 0.0000 | 0.2688 | 0.1412 | 0.2434 | 0.0877 | 0.2433 | 0.6352 | 12.1405 | 0.6938 | 0.3886 | 0.9805 | 0.9708 |
| IMDB-F10% | 0.0000 | 0.2654 | 0.1548 | 0.2634 | 0.1089 | 0.2633 | 0.6023 | 12.3397 | 0.6908 | 0.3951 | 0.9778 | 0.9701 |
| LLOG-F | 0.1639 | 0.0170 | 0.1947 | 0.2144 | 0.0521 | 0.2778 | 0.7377 | 28.2787 | 0.7713 | 0.2868 | 0.5976 | 0.9973 |
| mediamill10% | 0.0713 | 0.0303 | 0.4720 | 0.6362 | 0.0870 | 0.5957 | 0.1686 | 59.0451 | 0.4336 | 0.5594 | 0.8121 | 0.9931 |
| medical | 0.6224 | 0.0116 | 0.7457 | 0.8081 | 0.2828 | 0.8016 | 0.1531 | 4.9184 | 0.1225 | 0.8528 | 0.5527 | 0.9977 |
| Music | 0.2667 | 0.1944 | 0.5972 | 0.7327 | 0.7290 | 0.7266 | 0.2833 | 2.0167 | 0.2530 | 0.7987 | 0.9062 | 0.9017 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0276 | 0.0328 | 0.2833 | 0.4182 | 0.0666 | 0.4086 | 0.5514 | 34.4990 | 0.6184 | 0.4285 | 0.8827 | 0.9934 |
| OHSUMED-F | 0.1823 | 0.0666 | 0.4357 | 0.5669 | 0.4237 | 0.5633 | 0.3417 | 6.3575 | 0.3211 | 0.6563 | 0.9617 | 0.9663 |
| PlantGO | 0.6667 | 0.0417 | 0.7639 | 0.8093 | 0.6718 | 0.7876 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9882 | 0.9835 |
| PlantPseAAC | 0.2653 | 0.1190 | 0.3554 | 0.4068 | 0.2100 | 0.3913 | 0.6224 | 3.1531 | 0.4939 | 0.5341 | 0.9396 | 0.9328 |
| rcv1subset1 | 0.0933 | 0.0310 | 0.3568 | 0.4797 | 0.2694 | 0.4753 | 0.3983 | 36.2750 | 0.3946 | 0.5235 | 0.9244 | 0.9855 |
| REUTERS-K500-EX2 | 0.3368 | 0.0120 | 0.4169 | 0.4650 | 0.2462 | 0.5021 | 0.5155 | 31.4124 | 0.5278 | 0.4937 | 0.7837 | 0.9971 |
| scene | 0.5726 | 0.0975 | 0.7241 | 0.7997 | 0.7741 | 0.7556 | 0.2116 | 0.8133 | 0.1614 | 0.8454 | 0.9689 | 0.9725 |
| sider_CDK_ECFP4 | 0.0070 | 0.2475 | 0.6496 | 0.7974 | 0.6262 | 0.7958 | 0.1549 | 19.2042 | 0.1429 | 0.8205 | 0.5746 | 0.7842 |
| sider_MordredDesc | 0.0141 | 0.2621 | 0.6311 | 0.7836 | 0.6132 | 0.7848 | 0.2042 | 19.5915 | 0.1699 | 0.8029 | 0.5728 | 0.7720 |
| sider_RDKit_desc | 0.0141 | 0.2846 | 0.6279 | 0.7804 | 0.5967 | 0.7750 | 0.1479 | 20.0493 | 0.2235 | 0.7407 | 0.5720 | 0.7362 |
| SLASHDOT-F | 0.4048 | 0.0433 | 0.5312 | 0.5994 | 0.3985 | 0.6000 | 0.3889 | 5.1852 | 0.3402 | 0.6580 | 0.7544 | 0.9819 |
| solar_flare-L3 | 0.2000 | 0.2667 | 0.6000 | 0.7500 | 0.4722 | 0.7143 | 0.4000 | 0.4000 | 0.4000 | 0.8000 | 0.6667 | 1.0000 |
| Stackex_chemistry | 0.0447 | 0.0163 | 0.1514 | 0.2201 | 0.0780 | 0.2140 | 0.7723 | 103.8602 | 0.8574 | 0.1709 | 0.9181 | 0.9980 |
| Stackex_chess | 0.0357 | 0.0101 | 0.1556 | 0.2220 | 0.0604 | 0.2847 | 0.6607 | 138.3452 | 0.8099 | 0.1997 | 0.5492 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0223 | 0.0642 | 0.1141 | 0.0264 | 0.1600 | 0.8261 | 75.6087 | 0.8556 | 0.1471 | 0.2546 | 0.9871 |
| Stackex_cooking | 0.0628 | 0.0056 | 0.2033 | 0.2830 | 0.1065 | 0.3208 | 0.6232 | 222.0889 | 0.7577 | 0.2428 | 0.9241 | 0.9990 |
| Stackex_philosophy | 0.0528 | 0.0121 | 0.1985 | 0.2874 | 0.0680 | 0.2809 | 0.6784 | 133.6809 | 0.7795 | 0.2214 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2479 | 0.0686 | 0.5720 | 0.7205 | 0.6051 | 0.6826 | 0.2483 | 3.9972 | 0.1373 | 0.7818 | 0.9577 | 0.9693 |
| tox21_CDK_ECFP4 | 0.1301 | 0.1855 | 0.3550 | 0.4728 | 0.3933 | 0.4655 | 0.4760 | 5.3870 | 0.4817 | 0.5680 | 0.8973 | 0.8971 |
| tox21_RDKit_desc | 0.1027 | 0.1949 | 0.3391 | 0.4737 | 0.3166 | 0.4470 | 0.5068 | 5.5103 | 0.5049 | 0.5505 | 0.8988 | 0.8993 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.1429 | 0.6190 | 0.0934 | 0.8944 | 0.8003 | 0.9687 |
| VirusPseAAC | 0.2381 | 0.1746 | 0.5159 | 0.6286 | 0.3690 | 0.6207 | 0.2857 | 0.8095 | 0.1667 | 0.8087 | 0.7155 | 0.9190 |
| Water-quality | 0.0000 | 0.4104 | 0.4118 | 0.5870 | 0.5235 | 0.5860 | 0.2736 | 9.0000 | 0.3505 | 0.6855 | 0.7589 | 0.7486 |
| Yahoo_Arts | 0.2203 | 0.0754 | 0.3242 | 0.3992 | 0.2071 | 0.3682 | 0.5234 | 10.1215 | 0.5592 | 0.5021 | 0.9275 | 0.9645 |
| Yahoo_Business | 0.5562 | 0.0293 | 0.7187 | 0.8122 | 0.2906 | 0.7092 | 0.0989 | 3.0954 | 0.2073 | 0.8847 | 0.8502 | 0.9926 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0208 | 0.0784 | 0.2558 | 0.3686 | 0.1799 | 0.3472 | 0.5428 | 8.9401 | 0.5212 | 0.5357 | 0.8851 | 0.9720 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.3659 | 0.0458 | 0.5234 | 0.6174 | 0.2311 | 0.5558 | 0.3355 | 6.4017 | 0.3391 | 0.6833 | 0.8225 | 0.9805 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1694 | 0.2187 | 0.5549 | 0.6948 | 0.4647 | 0.6763 | 0.2190 | 6.1198 | 0.2279 | 0.7721 | 0.8287 | 0.8847 |
| Yelp | 0.3320 | 0.2134 | 0.6244 | 0.7513 | 0.6802 | 0.7284 | 0.1964 | 1.3669 | 0.2073 | 0.8643 | 0.8619 | 0.8890 |

Table 93: Detailed results for lambda = 2 for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.1110 | 0.0477 | 0.1206 | 0.1256 | 0.1958 | 0.2164 | 0.3750 | 1.5960 | 0.0813 | 0.7457 | 0.8975 | 0.8970 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6944 | 2.2500 | 0.3829 | 0.5302 | 0.5727 | 0.6013 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5161 | 1.9677 | 0.3258 | 0.6180 | 0.5423 | 0.6380 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.1765 | 0.4176 | 0.4275 | 0.2765 | 0.5529 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.5000 | 0.4967 | 0.4039 | 0.5723 | 0.5137 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5000 | 0.0778 | 0.8593 | 0.6901 | 0.7855 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.1026 | 0.0837 | 0.1966 | 0.2389 | 0.0726 | 0.2791 | 0.6154 | 5.8462 | 0.2147 | 0.5188 | 0.7198 | 0.7870 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1493 | 0.1199 | 0.2131 | 0.0271 | 0.2061 | 0.3725 | 151.4706 | 0.2898 | 0.3098 | 0.5013 | 0.7105 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0148 | 0.1580 | 0.2500 | 0.0368 | 0.2580 | 0.8340 | 125.8460 | 0.1468 | 0.1771 | 0.4739 | 0.8551 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.5667 | 0.1258 | 0.8220 | 0.8467 | 0.8797 |
| enron | 0.0526 | 0.0532 | 0.4472 | 0.6167 | 0.1467 | 0.5950 | 0.4561 | 14.6491 | 0.1167 | 0.4786 | 0.6477 | 0.8784 |
| EukaryoteGO | 0.4923 | 0.0295 | 0.7123 | 0.8141 | 0.6531 | 0.7681 | 0.2925 | 0.7526 | 0.0271 | 0.8227 | 0.9697 | 0.9690 |
| EukaryotePseAAC | 0.1004 | 0.0956 | 0.1849 | 0.2384 | 0.0877 | 0.2427 | 0.7503 | 3.8842 | 0.1689 | 0.4556 | 0.6009 | 0.7559 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1500 | 3.6000 | 0.1933 | 0.8310 | 0.6218 | 0.7837 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3171 | 3.0976 | 0.1482 | 0.7344 | 0.5501 | 0.7850 |
| genbase | 0.8955 | 0.0044 | 0.9478 | 0.9714 | 0.5485 | 0.9512 | 0.0448 | 0.6418 | 0.0095 | 0.9695 | 0.6291 | 0.9866 |
| GnegativeGO | 0.9000 | 0.0196 | 0.9071 | 0.9107 | 0.6672 | 0.9209 | 0.0357 | 0.0929 | 0.0057 | 0.9810 | 0.8525 | 0.9939 |
| GnegativePseAAC | 0.5714 | 0.0607 | 0.5750 | 0.5768 | 0.2405 | 0.7043 | 0.1786 | 0.5071 | 0.0648 | 0.8836 | 0.7401 | 0.9466 |
| GpositiveGO | 0.9038 | 0.0433 | 0.9038 | 0.9038 | 0.8548 | 0.9126 | 0.0577 | 0.0962 | 0.0256 | 0.9679 | 0.9979 | 0.9806 |
| GpositivePseAAC | 0.5385 | 0.1346 | 0.5385 | 0.5385 | 0.4988 | 0.6667 | 0.2500 | 0.4038 | 0.1346 | 0.8526 | 0.9004 | 0.9063 |
| HumanGO | 0.4759 | 0.0501 | 0.6924 | 0.7927 | 0.6257 | 0.7435 | 0.2315 | 0.5981 | 0.0288 | 0.8683 | 0.9723 | 0.9744 |
| HumanPseAAC | 0.0225 | 0.0850 | 0.0225 | 0.0225 | 0.0153 | 0.0365 | 0.5627 | 2.2283 | 0.1451 | 0.6152 | 0.7032 | 0.8517 |
| Image | 0.1850 | 0.2030 | 0.1950 | 0.1999 | 0.2604 | 0.2877 | 0.3100 | 0.8400 | 0.1588 | 0.8064 | 0.8493 | 0.8393 |
| IMDB-ECC-F10% | 0.0535 | 0.1041 | 0.1536 | 0.2255 | 0.0388 | 0.2097 | 0.7652 | 12.8574 | 0.3493 | 0.5247 | 0.4120 | 0.4533 |
| IMDB-F10% | 0.0141 | 0.1003 | 0.0566 | 0.0837 | 0.0175 | 0.0926 | 0.8956 | 16.4954 | 0.4475 | 0.4407 | 0.4031 | 0.3726 |
| LLOG-F | 0.0164 | 0.0374 | 0.1887 | 0.2826 | 0.0600 | 0.2785 | 0.8033 | 18.0328 | 0.1934 | 0.2905 | 0.4315 | 0.7983 |
| mediamill10% | 0.0000 | 0.0718 | 0.3086 | 0.4778 | 0.0794 | 0.4692 | 0.2708 | 32.5202 | 0.1166 | 0.4947 | 0.7097 | 0.8759 |
| medical | 0.1837 | 0.0279 | 0.5315 | 0.6875 | 0.2658 | 0.6476 | 0.3980 | 2.2347 | 0.0319 | 0.7330 | 0.5429 | 0.9641 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 1.9667 | 0.1603 | 0.8036 | 0.8559 | 0.8651 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.1881 | 0.0792 | 0.1476 | 0.0488 | 0.1485 | 0.8606 | 34.5152 | 0.3050 | 0.1794 | 0.5586 | 0.6653 |
| OHSUMED-F | 0.0962 | 0.0812 | 0.1971 | 0.2558 | 0.1818 | 0.2769 | 0.7100 | 10.0804 | 0.3372 | 0.3939 | 0.6687 | 0.5554 |
| PlantGO | 0.6354 | 0.0434 | 0.7309 | 0.7792 | 0.6563 | 0.7727 | 0.2396 | 0.5417 | 0.0368 | 0.8567 | 0.9733 | 0.9656 |
| PlantPseAAC | 0.1939 | 0.0876 | 0.2092 | 0.2166 | 0.1404 | 0.2993 | 0.6327 | 2.3878 | 0.1988 | 0.5618 | 0.7778 | 0.8262 |
| rcv1subset1 | 0.0017 | 0.0449 | 0.3129 | 0.4745 | 0.2610 | 0.4618 | 0.6117 | 22.4767 | 0.1011 | 0.3954 | 0.8483 | 0.8877 |
| REUTERS-K500-EX2 | 0.0000 | 0.0680 | 0.1486 | 0.2576 | 0.2158 | 0.2452 | 0.7560 | 11.7869 | 0.0883 | 0.3763 | 0.6866 | 0.9044 |
| scene | 0.5145 | 0.0989 | 0.5373 | 0.5485 | 0.6578 | 0.6538 | 0.2075 | 0.4025 | 0.0593 | 0.8803 | 0.9442 | 0.9531 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2887 | 19.7958 | 0.1810 | 0.7663 | 0.5603 | 0.7574 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 19.6268 | 0.1540 | 0.7929 | 0.5225 | 0.7796 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1127 | 21.6549 | 0.2693 | 0.7324 | 0.5450 | 0.6781 |
| SLASHDOT-F | 0.3704 | 0.0449 | 0.5073 | 0.5782 | 0.3857 | 0.5851 | 0.5212 | 2.7593 | 0.1081 | 0.6181 | 0.6749 | 0.8916 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.5556 | 0.8800 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0000 | 0.0514 | 0.0984 | 0.1770 | 0.0576 | 0.1695 | 0.9643 | 110.1905 | 0.3064 | 0.0934 | 0.4261 | 0.6988 |
| Stackex_coffee | 0.0000 | 0.0428 | 0.1233 | 0.1965 | 0.0099 | 0.1987 | 1.0000 | 75.0435 | 0.4401 | 0.0714 | 0.2122 | 0.5565 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0000 | 0.0458 | 0.1045 | 0.1872 | 0.0806 | 0.1820 | 0.9146 | 108.7312 | 0.3101 | 0.1231 | 0.5575 | 0.7077 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0103 | 0.1769 | 0.0151 | 0.0185 | 0.0164 | 0.0221 | 0.4897 | 4.1884 | 0.2244 | 0.6128 | 0.6882 | 0.7572 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5308 | 4.5103 | 0.2531 | 0.5756 | 0.6823 | 0.7233 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0952 | 0.7143 | 0.0980 | 0.9050 | 0.7480 | 0.9216 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.6667 | 0.1107 | 0.8230 | 0.6412 | 0.9016 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3679 | 9.4528 | 0.3118 | 0.6359 | 0.6633 | 0.6768 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2875 | 0.0439 | 0.4007 | 0.4690 | 0.1605 | 0.4555 | 0.4932 | 7.5751 | 0.1789 | 0.5839 | 0.5866 | 0.7024 |
| Yahoo_Education | 0.0889 | 0.0544 | 0.1417 | 0.1751 | 0.0908 | 0.2214 | 0.8121 | 5.3982 | 0.1333 | 0.3844 | 0.5969 | 0.7835 |
| Yahoo_Entertainment | 0.2412 | 0.0615 | 0.3078 | 0.3480 | 0.1780 | 0.3832 | 0.5114 | 3.6261 | 0.1361 | 0.6046 | 0.6940 | 0.8075 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0273 | 0.1078 | 0.0796 | 0.1056 | 0.0975 | 0.1156 | 0.9221 | 8.7654 | 0.3556 | 0.3702 | 0.4750 | 0.4523 |
| Yahoo_Reference | 0.1943 | 0.0494 | 0.3980 | 0.5029 | 0.1277 | 0.4582 | 0.4782 | 5.1121 | 0.1338 | 0.6116 | 0.4305 | 0.7250 |
| Yahoo_Science | 0.1664 | 0.0462 | 0.3188 | 0.4032 | 0.1552 | 0.3732 | 0.7885 | 7.6983 | 0.1464 | 0.4323 | 0.6298 | 0.6944 |
| Yahoo_Social | 0.0784 | 0.0531 | 0.3460 | 0.4781 | 0.0862 | 0.4326 | 0.7599 | 6.8300 | 0.1363 | 0.4487 | 0.5538 | 0.6458 |
| Yahoo_Society | 0.1315 | 0.0619 | 0.1909 | 0.2274 | 0.0733 | 0.2530 | 0.5186 | 7.5606 | 0.1984 | 0.5359 | 0.5298 | 0.6643 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2521 | 6.3264 | 0.1697 | 0.7484 | 0.6828 | 0.8240 |
| Yelp | 0.0070 | 0.3583 | 0.0070 | 0.0070 | 0.0065 | 0.0077 | 0.2124 | 1.3480 | 0.1299 | 0.8568 | 0.7994 | 0.8541 |

Table 94: Detailed results for lambda = 3 for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0513 | 0.0516 | 0.0565 | 0.0593 | 0.1042 | 0.1100 | 0.4139 | 1.5067 | 0.0774 | 0.7633 | 0.7541 | 0.7499 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7778 | 2.4167 | 0.4145 | 0.4504 | 0.5969 | 0.6014 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4839 | 1.9355 | 0.3048 | 0.6398 | 0.5354 | 0.6515 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7647 | 2.2353 | 0.4412 | 0.4539 | 0.2730 | 0.5198 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.4667 | 0.4900 | 0.4039 | 0.5681 | 0.5065 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5000 | 0.0778 | 0.8593 | 0.6806 | 0.7842 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4615 | 5.3846 | 0.1933 | 0.5905 | 0.7173 | 0.8067 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4314 | 142.2353 | 0.2323 | 0.3804 | 0.5153 | 0.7678 |
| corel16k001 | 0.0007 | 0.0276 | 0.0321 | 0.0546 | 0.0218 | 0.0573 | 0.9078 | 85.1852 | 0.2886 | 0.1597 | 0.5696 | 0.5760 |
| Corel5k | 0.0000 | 0.0322 | 0.1208 | 0.2075 | 0.0409 | 0.2064 | 0.8160 | 147.2940 | 0.1826 | 0.1567 | 0.4722 | 0.8197 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.5833 | 0.1291 | 0.8137 | 0.8441 | 0.8791 |
| enron | 0.0760 | 0.0508 | 0.4045 | 0.5679 | 0.0880 | 0.5391 | 0.3450 | 13.1696 | 0.0920 | 0.6322 | 0.6443 | 0.8978 |
| EukaryoteGO | 0.6005 | 0.0242 | 0.7269 | 0.7905 | 0.5859 | 0.7717 | 0.1946 | 1.0451 | 0.0358 | 0.8754 | 0.9444 | 0.9275 |
| EukaryotePseAAC | 0.1583 | 0.0528 | 0.1922 | 0.2095 | 0.0745 | 0.2951 | 0.5740 | 2.8520 | 0.1204 | 0.5952 | 0.6997 | 0.8710 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1000 | 3.6000 | 0.1892 | 0.8394 | 0.6049 | 0.7823 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 2.9512 | 0.1313 | 0.7695 | 0.5471 | 0.7877 |
| genbase | 0.9403 | 0.0033 | 0.9652 | 0.9776 | 0.5172 | 0.9625 | 0.0299 | 0.6567 | 0.0095 | 0.9719 | 0.6291 | 0.9858 |
| GnegativeGO | 0.9000 | 0.0196 | 0.9071 | 0.9107 | 0.6672 | 0.9209 | 0.0357 | 0.0929 | 0.0057 | 0.9810 | 0.8525 | 0.9937 |
| GnegativePseAAC | 0.5714 | 0.0616 | 0.5750 | 0.5768 | 0.2394 | 0.7013 | 0.1857 | 0.5071 | 0.0648 | 0.8795 | 0.7401 | 0.9469 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9038 | 0.9038 | 0.8656 | 0.9216 | 0.0577 | 0.0769 | 0.0192 | 0.9712 | 0.9975 | 0.9960 |
| GpositivePseAAC | 0.5577 | 0.1298 | 0.5577 | 0.5577 | 0.5085 | 0.6824 | 0.2692 | 0.4615 | 0.1538 | 0.8365 | 0.8997 | 0.8946 |
| HumanGO | 0.6559 | 0.0388 | 0.7251 | 0.7607 | 0.5185 | 0.7575 | 0.1640 | 0.5048 | 0.0218 | 0.9054 | 0.9739 | 0.9820 |
| HumanPseAAC | 0.0225 | 0.0850 | 0.0225 | 0.0225 | 0.0153 | 0.0365 | 0.5627 | 2.2283 | 0.1451 | 0.6152 | 0.7032 | 0.8517 |
| Image | 0.1650 | 0.2060 | 0.1750 | 0.1799 | 0.2381 | 0.2643 | 0.3100 | 0.9050 | 0.1717 | 0.7988 | 0.8440 | 0.8292 |
| IMDB-ECC-F10% | 0.0409 | 0.0991 | 0.1384 | 0.2016 | 0.0296 | 0.1927 | 0.7767 | 10.5776 | 0.2579 | 0.4875 | 0.4431 | 0.5361 |
| IMDB-F10% | 0.0058 | 0.0804 | 0.0247 | 0.0350 | 0.0184 | 0.0517 | 0.6843 | 11.7846 | 0.2674 | 0.4010 | 0.5188 | 0.5906 |
| LLOG-F | 0.0738 | 0.0225 | 0.1805 | 0.2349 | 0.0423 | 0.2797 | 0.8279 | 13.4836 | 0.1454 | 0.3118 | 0.4468 | 0.8466 |
| mediamill10% | 0.0594 | 0.0327 | 0.4336 | 0.6057 | 0.0499 | 0.5542 | 0.2850 | 19.6508 | 0.0652 | 0.5514 | 0.7253 | 0.9260 |
| medical | 0.5612 | 0.0132 | 0.7347 | 0.8207 | 0.2938 | 0.7883 | 0.1735 | 1.7653 | 0.0210 | 0.8608 | 0.5445 | 0.9723 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.9500 | 0.1572 | 0.7986 | 0.8569 | 0.8621 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0048 | 0.0429 | 0.0493 | 0.0841 | 0.0243 | 0.0965 | 0.8687 | 51.9553 | 0.4916 | 0.1571 | 0.4903 | 0.4708 |
| OHSUMED-F | 0.0847 | 0.0931 | 0.2064 | 0.2828 | 0.1730 | 0.2937 | 0.6167 | 6.9691 | 0.2220 | 0.4916 | 0.6786 | 0.6760 |
| PlantGO | 0.5938 | 0.0503 | 0.6094 | 0.6171 | 0.3948 | 0.6813 | 0.1875 | 0.4375 | 0.0269 | 0.8921 | 0.9700 | 0.9734 |
| PlantPseAAC | 0.0816 | 0.0867 | 0.0918 | 0.0967 | 0.0691 | 0.1639 | 0.5816 | 2.3673 | 0.1963 | 0.5888 | 0.7796 | 0.8324 |
| rcv1subset1 | 0.0250 | 0.0320 | 0.3596 | 0.5154 | 0.2418 | 0.4995 | 0.5317 | 14.8817 | 0.0646 | 0.4964 | 0.8571 | 0.9271 |
| REUTERS-K500-EX2 | 0.0636 | 0.0238 | 0.3147 | 0.4478 | 0.2201 | 0.4208 | 0.6856 | 9.5876 | 0.0697 | 0.4233 | 0.7000 | 0.9241 |
| scene | 0.5270 | 0.0982 | 0.5498 | 0.5610 | 0.6648 | 0.6603 | 0.1909 | 0.3859 | 0.0570 | 0.8885 | 0.9430 | 0.9514 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.6268 | 0.1506 | 0.8027 | 0.5576 | 0.7776 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.3873 | 0.1324 | 0.8233 | 0.5206 | 0.7938 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3662 | 20.2394 | 0.1907 | 0.7434 | 0.5581 | 0.7508 |
| SLASHDOT-F | 0.3651 | 0.0409 | 0.4259 | 0.4569 | 0.3046 | 0.5291 | 0.4127 | 2.1402 | 0.0805 | 0.7022 | 0.6775 | 0.9194 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0000 | 0.0256 | 0.1327 | 0.2227 | 0.0507 | 0.2150 | 0.8948 | 49.2622 | 0.1706 | 0.1937 | 0.5781 | 0.7125 |
| Stackex_chess | 0.0000 | 0.0205 | 0.1675 | 0.2731 | 0.0402 | 0.2662 | 0.7560 | 66.0655 | 0.1644 | 0.2274 | 0.4299 | 0.8385 |
| Stackex_coffee | 0.0000 | 0.0240 | 0.1377 | 0.2034 | 0.0087 | 0.1905 | 0.6957 | 47.9565 | 0.2257 | 0.2661 | 0.2019 | 0.7307 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0000 | 0.0265 | 0.1488 | 0.2545 | 0.0589 | 0.2426 | 0.9447 | 62.2462 | 0.1598 | 0.1782 | 0.5720 | 0.8307 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5205 | 4.0890 | 0.2202 | 0.5993 | 0.6885 | 0.7601 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.1096 | 0.2230 | 0.6037 | 0.6799 | 0.7466 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0952 | 0.6667 | 0.0874 | 0.9127 | 0.7465 | 0.9200 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3810 | 0.7619 | 0.1298 | 0.7754 | 0.6380 | 0.8983 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2830 | 9.3113 | 0.2869 | 0.6780 | 0.6652 | 0.6940 |
| Yahoo_Arts | 0.0160 | 0.1297 | 0.1012 | 0.1660 | 0.0913 | 0.1653 | 0.7850 | 11.3138 | 0.3425 | 0.3355 | 0.5985 | 0.6045 |
| Yahoo_Business | 0.4759 | 0.0309 | 0.6641 | 0.7692 | 0.1126 | 0.6744 | 0.1266 | 3.7317 | 0.0634 | 0.8581 | 0.5562 | 0.7403 |
| Yahoo_Computers | 0.1325 | 0.0614 | 0.2421 | 0.3092 | 0.1043 | 0.3026 | 0.6000 | 10.9743 | 0.2751 | 0.4795 | 0.5953 | 0.6592 |
| Yahoo_Education | 0.0898 | 0.0581 | 0.1752 | 0.2261 | 0.0781 | 0.2522 | 0.7423 | 8.9967 | 0.2241 | 0.4761 | 0.4755 | 0.5611 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.1076 | 0.0664 | 0.1358 | 0.1528 | 0.1159 | 0.1929 | 0.6524 | 4.5425 | 0.1689 | 0.6949 | 0.4242 | 0.4404 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2921 | 0.0305 | 0.3413 | 0.3699 | 0.0516 | 0.4043 | 0.5215 | 10.9794 | 0.2296 | 0.5471 | 0.5109 | 0.6045 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2355 | 6.3347 | 0.1683 | 0.7539 | 0.7030 | 0.8330 |
| Yelp | 0.0100 | 0.3579 | 0.0100 | 0.0100 | 0.0090 | 0.0110 | 0.2273 | 1.3649 | 0.1348 | 0.8479 | 0.7986 | 0.8460 |

Table 95: Detailed results for lambda = 4 for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3549 | 0.0370 | 0.3711 | 0.3800 | 0.4846 | 0.5126 | 0.3119 | 1.3870 | 0.0707 | 0.7853 | 0.9111 | 0.9085 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4444 | 1.4722 | 0.2389 | 0.7030 | 0.7974 | 0.7834 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4516 | 1.7742 | 0.2968 | 0.6645 | 0.6684 | 0.7038 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6471 | 1.5294 | 0.2882 | 0.5941 | 0.3783 | 0.6726 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 2.0333 | 0.3950 | 0.4656 | 0.6991 | 0.5957 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1667 | 2.3889 | 0.0648 | 0.9006 | 0.6850 | 0.7904 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4615 | 4.2821 | 0.1405 | 0.6434 | 0.7556 | 0.8634 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1765 | 135.0392 | 0.1908 | 0.4868 | 0.5077 | 0.8104 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0148 | 0.1580 | 0.2500 | 0.0368 | 0.2580 | 0.8340 | 125.8460 | 0.1468 | 0.1771 | 0.4739 | 0.8551 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 1.7333 | 0.1541 | 0.7781 | 0.8428 | 0.8647 |
| enron | 0.0877 | 0.0578 | 0.2133 | 0.3012 | 0.0440 | 0.2722 | 0.2924 | 11.8889 | 0.0762 | 0.6865 | 0.6403 | 0.9120 |
| EukaryoteGO | 0.6585 | 0.0215 | 0.7601 | 0.8104 | 0.5303 | 0.7993 | 0.2281 | 0.8131 | 0.0280 | 0.8638 | 0.9516 | 0.9542 |
| EukaryotePseAAC | 0.1004 | 0.0956 | 0.1849 | 0.2384 | 0.0877 | 0.2427 | 0.7503 | 3.8842 | 0.1689 | 0.4556 | 0.6009 | 0.7559 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.7000 | 0.1958 | 0.8125 | 0.5832 | 0.7736 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.1220 | 0.1340 | 0.7721 | 0.5276 | 0.7835 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3116 | 0.8592 | 0.0000 | 0.4776 | 0.0054 | 0.9933 | 0.6291 | 0.9905 |
| GnegativeGO | 0.7857 | 0.0366 | 0.8000 | 0.8071 | 0.6161 | 0.8476 | 0.1000 | 0.1643 | 0.0163 | 0.9476 | 0.8642 | 0.9910 |
| GnegativePseAAC | 0.5571 | 0.0625 | 0.5643 | 0.5678 | 0.2284 | 0.6957 | 0.1714 | 0.5071 | 0.0638 | 0.8854 | 0.7350 | 0.9443 |
| GpositiveGO | 0.7308 | 0.1154 | 0.7404 | 0.7452 | 0.7098 | 0.7647 | 0.2308 | 0.2885 | 0.0897 | 0.8782 | 0.9439 | 0.9447 |
| GpositivePseAAC | 0.6538 | 0.1250 | 0.6538 | 0.6538 | 0.5411 | 0.7234 | 0.2692 | 0.4231 | 0.1410 | 0.8413 | 0.8838 | 0.8771 |
| HumanGO | 0.6174 | 0.0404 | 0.6688 | 0.6956 | 0.4147 | 0.7309 | 0.1704 | 0.5145 | 0.0227 | 0.9000 | 0.9750 | 0.9812 |
| HumanPseAAC | 0.0225 | 0.0850 | 0.0225 | 0.0225 | 0.0153 | 0.0365 | 0.5627 | 2.2283 | 0.1451 | 0.6152 | 0.7032 | 0.8517 |
| Image | 0.1450 | 0.2080 | 0.1525 | 0.1562 | 0.2133 | 0.2353 | 0.3300 | 0.9050 | 0.1725 | 0.7905 | 0.8343 | 0.8274 |
| IMDB-ECC-F10% | 0.0052 | 0.1173 | 0.2233 | 0.3437 | 0.0568 | 0.3305 | 0.6583 | 11.0168 | 0.2537 | 0.4412 | 0.5208 | 0.7106 |
| IMDB-F10% | 0.0149 | 0.1065 | 0.0225 | 0.0283 | 0.0040 | 0.0249 | 0.9652 | 18.6860 | 0.5753 | 0.1344 | 0.5657 | 0.4179 |
| LLOG-F | 0.1393 | 0.0162 | 0.1776 | 0.1979 | 0.0398 | 0.2673 | 0.5984 | 11.1721 | 0.1142 | 0.4659 | 0.4682 | 0.8827 |
| mediamill10% | 0.0618 | 0.0326 | 0.4003 | 0.5651 | 0.0268 | 0.5053 | 0.2090 | 17.2043 | 0.0505 | 0.6667 | 0.7214 | 0.9409 |
| medical | 0.4796 | 0.0152 | 0.6361 | 0.7096 | 0.1997 | 0.7287 | 0.2857 | 1.7143 | 0.0219 | 0.8134 | 0.5384 | 0.9736 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.9667 | 0.1631 | 0.7970 | 0.8516 | 0.8597 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0262 | 0.0374 | 0.1383 | 0.2213 | 0.0388 | 0.2217 | 0.8121 | 28.7507 | 0.2199 | 0.2794 | 0.5848 | 0.7504 |
| OHSUMED-F | 0.1278 | 0.0672 | 0.1975 | 0.2374 | 0.1400 | 0.2830 | 0.4681 | 6.6949 | 0.2024 | 0.5770 | 0.7858 | 0.7894 |
| PlantGO | 0.2449 | 0.0774 | 0.2602 | 0.2676 | 0.1444 | 0.3724 | 0.3571 | 0.8061 | 0.0579 | 0.7833 | 0.9465 | 0.9407 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.5408 | 2.1735 | 0.1792 | 0.6119 | 0.7811 | 0.8405 |
| rcv1subset1 | 0.0400 | 0.0318 | 0.3120 | 0.4591 | 0.1757 | 0.4384 | 0.6050 | 14.5567 | 0.0599 | 0.4933 | 0.8481 | 0.9304 |
| REUTERS-K500-EX2 | 0.2285 | 0.0156 | 0.4019 | 0.4996 | 0.2199 | 0.4777 | 0.5859 | 7.2818 | 0.0498 | 0.5414 | 0.7082 | 0.9418 |
| scene | 0.4523 | 0.1086 | 0.4751 | 0.4862 | 0.6068 | 0.6045 | 0.2241 | 0.4398 | 0.0668 | 0.8687 | 0.9356 | 0.9457 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1197 | 19.2394 | 0.1339 | 0.8305 | 0.5614 | 0.7910 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 19.6268 | 0.1540 | 0.7929 | 0.5225 | 0.7796 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.2817 | 0.1247 | 0.8320 | 0.5546 | 0.8027 |
| SLASHDOT-F | 0.3694 | 0.0383 | 0.4081 | 0.4275 | 0.2863 | 0.5174 | 0.3430 | 1.9393 | 0.0696 | 0.7455 | 0.6810 | 0.9325 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0179 | 0.0124 | 0.1938 | 0.3006 | 0.0385 | 0.3034 | 0.6726 | 58.6071 | 0.1355 | 0.3112 | 0.4478 | 0.8626 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7391 | 63.2609 | 0.2931 | 0.2740 | 0.1692 | 0.6545 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0402 | 0.0133 | 0.2236 | 0.3308 | 0.0461 | 0.3065 | 0.7965 | 48.7412 | 0.1147 | 0.2894 | 0.5919 | 0.8771 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.0959 | 0.2183 | 0.6120 | 0.6843 | 0.7590 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4966 | 4.1438 | 0.2239 | 0.6027 | 0.6758 | 0.7487 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.9048 | 0.1414 | 0.8233 | 0.7489 | 0.8859 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.6667 | 0.1107 | 0.8230 | 0.6286 | 0.8915 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2642 | 8.9340 | 0.2661 | 0.6925 | 0.6660 | 0.7122 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1983 | 6.1694 | 0.1573 | 0.7724 | 0.7015 | 0.8398 |
| Yelp | 0.0050 | 0.3585 | 0.0050 | 0.0050 | 0.0047 | 0.0055 | 0.2024 | 1.3200 | 0.1238 | 0.8651 | 0.8153 | 0.8612 |

Table 96: Detailed results for lambda = 5 for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0581 | 0.0532 | 0.0612 | 0.0630 | 0.1023 | 0.1095 | 0.4201 | 1.6499 | 0.0848 | 0.7452 | 0.7952 | 0.7912 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7500 | 2.6111 | 0.4541 | 0.4603 | 0.5955 | 0.5804 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5484 | 1.9355 | 0.3234 | 0.6153 | 0.5412 | 0.6524 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.2353 | 0.4338 | 0.4353 | 0.2991 | 0.5648 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.5000 | 0.4967 | 0.4022 | 0.5579 | 0.5139 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5000 | 0.0778 | 0.8593 | 0.6693 | 0.7822 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5641 | 6.0000 | 0.2164 | 0.5146 | 0.7210 | 0.7957 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3922 | 134.2941 | 0.2238 | 0.3865 | 0.5222 | 0.7777 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0148 | 0.1580 | 0.2500 | 0.0368 | 0.2580 | 0.8340 | 125.8460 | 0.1468 | 0.1771 | 0.4739 | 0.8551 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.5500 | 0.1250 | 0.8220 | 0.8477 | 0.8781 |
| enron | 0.0526 | 0.0626 | 0.0949 | 0.1273 | 0.0162 | 0.1043 | 0.2924 | 12.4327 | 0.0824 | 0.6813 | 0.6515 | 0.9090 |
| EukaryoteGO | 0.6186 | 0.0248 | 0.7002 | 0.7421 | 0.5260 | 0.7549 | 0.2410 | 0.9832 | 0.0337 | 0.8877 | 0.6960 | 0.7193 |
| EukaryotePseAAC | 0.1004 | 0.0956 | 0.1849 | 0.2384 | 0.0877 | 0.2427 | 0.7503 | 3.8842 | 0.1689 | 0.4556 | 0.6009 | 0.7559 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1500 | 3.6000 | 0.1933 | 0.8310 | 0.6193 | 0.7839 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.2683 | 0.1515 | 0.7594 | 0.5544 | 0.7719 |
| genbase | 0.8657 | 0.0077 | 0.9030 | 0.9284 | 0.3947 | 0.9054 | 0.0000 | 0.5970 | 0.0078 | 0.9906 | 0.6291 | 0.9867 |
| GnegativeGO | 0.9000 | 0.0196 | 0.9071 | 0.9107 | 0.6672 | 0.9209 | 0.0357 | 0.0929 | 0.0057 | 0.9810 | 0.8527 | 0.9939 |
| GnegativePseAAC | 0.5857 | 0.0598 | 0.5893 | 0.5911 | 0.2430 | 0.7124 | 0.1786 | 0.5143 | 0.0652 | 0.8816 | 0.7376 | 0.9460 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9038 | 0.9038 | 0.8656 | 0.9216 | 0.0577 | 0.0769 | 0.0192 | 0.9712 | 0.9975 | 0.9956 |
| GpositivePseAAC | 0.5385 | 0.1346 | 0.5385 | 0.5385 | 0.4988 | 0.6667 | 0.2500 | 0.4038 | 0.1346 | 0.8526 | 0.9005 | 0.9078 |
| HumanGO | 0.5820 | 0.0429 | 0.6211 | 0.6411 | 0.3629 | 0.6889 | 0.1768 | 0.5209 | 0.0233 | 0.8973 | 0.9745 | 0.9802 |
| HumanPseAAC | 0.0225 | 0.0850 | 0.0225 | 0.0225 | 0.0153 | 0.0365 | 0.5627 | 2.2283 | 0.1451 | 0.6152 | 0.7032 | 0.8517 |
| Image | 0.1900 | 0.2020 | 0.2000 | 0.2049 | 0.2687 | 0.2937 | 0.3050 | 0.8500 | 0.1600 | 0.8074 | 0.8487 | 0.8386 |
| IMDB-ECC-F10% | 0.0168 | 0.0821 | 0.0408 | 0.0569 | 0.0253 | 0.0719 | 0.8585 | 11.8239 | 0.3157 | 0.4183 | 0.4796 | 0.5496 |
| IMDB-F10% | 0.0033 | 0.1668 | 0.0735 | 0.1261 | 0.0490 | 0.1240 | 0.8658 | 14.0099 | 0.3844 | 0.2990 | 0.4741 | 0.5338 |
| LLOG-F | 0.0902 | 0.0166 | 0.1066 | 0.1142 | 0.0224 | 0.1648 | 0.7049 | 13.0984 | 0.1375 | 0.3972 | 0.4532 | 0.8582 |
| mediamill10% | 0.0309 | 0.0371 | 0.2320 | 0.3612 | 0.0122 | 0.3167 | 0.2850 | 18.1164 | 0.0561 | 0.6230 | 0.7258 | 0.9362 |
| medical | 0.5510 | 0.0127 | 0.6650 | 0.7202 | 0.1996 | 0.7586 | 0.1531 | 1.4490 | 0.0170 | 0.8888 | 0.5454 | 0.9774 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 2.0167 | 0.1816 | 0.7674 | 0.8600 | 0.8462 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0262 | 0.0374 | 0.1383 | 0.2213 | 0.0388 | 0.2217 | 0.8121 | 28.7507 | 0.2199 | 0.2794 | 0.5848 | 0.7504 |
| OHSUMED-F | 0.0976 | 0.0806 | 0.1770 | 0.2255 | 0.1432 | 0.2485 | 0.6088 | 8.2592 | 0.2740 | 0.5002 | 0.6233 | 0.6389 |
| PlantGO | 0.2917 | 0.0720 | 0.2969 | 0.2995 | 0.1573 | 0.4113 | 0.1979 | 0.4271 | 0.0264 | 0.8876 | 0.9720 | 0.9758 |
| PlantPseAAC | 0.0306 | 0.0910 | 0.0306 | 0.0306 | 0.0282 | 0.0531 | 0.6020 | 2.2857 | 0.1909 | 0.5821 | 0.7898 | 0.8388 |
| rcv1subset1 | 0.0633 | 0.0301 | 0.2705 | 0.3810 | 0.1559 | 0.3759 | 0.5217 | 17.3500 | 0.0720 | 0.5414 | 0.7778 | 0.8508 |
| REUTERS-K500-EX2 | 0.2646 | 0.0130 | 0.4041 | 0.4784 | 0.1842 | 0.4938 | 0.5103 | 6.7045 | 0.0465 | 0.5928 | 0.7104 | 0.9492 |
| scene | 0.5145 | 0.0982 | 0.5373 | 0.5485 | 0.6603 | 0.6553 | 0.2033 | 0.3983 | 0.0585 | 0.8824 | 0.9446 | 0.9534 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.0704 | 0.1365 | 0.8088 | 0.5613 | 0.7911 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 19.6268 | 0.1540 | 0.7929 | 0.5225 | 0.7796 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.3803 | 0.1319 | 0.8301 | 0.5688 | 0.7965 |
| SLASHDOT-F | 0.2302 | 0.0447 | 0.2460 | 0.2537 | 0.1495 | 0.3474 | 0.4074 | 2.1376 | 0.0798 | 0.7016 | 0.6830 | 0.9217 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0000 | 1.6000 | 0.8000 | 0.4000 | 0.4444 | 0.3200 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0417 | 0.0109 | 0.1689 | 0.2409 | 0.0174 | 0.2468 | 0.7440 | 58.2083 | 0.1403 | 0.2905 | 0.4217 | 0.8635 |
| Stackex_coffee | 0.0000 | 0.0180 | 0.0145 | 0.0217 | 0.0027 | 0.0377 | 0.7826 | 53.5652 | 0.2541 | 0.2425 | 0.1982 | 0.7027 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0402 | 0.0133 | 0.2236 | 0.3308 | 0.0461 | 0.3065 | 0.7965 | 48.7412 | 0.1147 | 0.2894 | 0.5919 | 0.8771 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4726 | 4.0685 | 0.2162 | 0.6189 | 0.6823 | 0.7570 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4966 | 4.1438 | 0.2239 | 0.6027 | 0.6758 | 0.7487 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2381 | 0.8095 | 0.1177 | 0.8508 | 0.7480 | 0.9057 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.6667 | 0.1107 | 0.8230 | 0.6412 | 0.9021 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2925 | 9.2264 | 0.2831 | 0.6767 | 0.6664 | 0.6943 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1983 | 6.1694 | 0.1573 | 0.7724 | 0.7015 | 0.8398 |
| Yelp | 0.0160 | 0.3563 | 0.0166 | 0.0173 | 0.0142 | 0.0197 | 0.2203 | 1.3679 | 0.1351 | 0.8509 | 0.8003 | 0.8521 |

Table 97: Detailed results for lambda = 6 for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3549 | 0.0370 | 0.3711 | 0.3800 | 0.4846 | 0.5126 | 0.3119 | 1.3870 | 0.0707 | 0.7853 | 0.9111 | 0.9085 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7500 | 2.5556 | 0.4430 | 0.4645 | 0.5983 | 0.5892 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5161 | 1.9032 | 0.3194 | 0.6237 | 0.5258 | 0.6458 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.2941 | 0.4456 | 0.4059 | 0.2790 | 0.5437 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.5333 | 0.5033 | 0.3967 | 0.5573 | 0.5051 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5000 | 0.0778 | 0.8593 | 0.6925 | 0.7852 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5128 | 5.7692 | 0.2140 | 0.5470 | 0.7175 | 0.7941 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1569 | 133.8039 | 0.2001 | 0.4516 | 0.5217 | 0.8018 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0148 | 0.1580 | 0.2500 | 0.0368 | 0.2580 | 0.8340 | 125.8460 | 0.1468 | 0.1771 | 0.4739 | 0.8551 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.5667 | 0.1258 | 0.8220 | 0.8458 | 0.8790 |
| enron | 0.0292 | 0.0653 | 0.0292 | 0.0292 | 0.0036 | 0.0166 | 0.2339 | 12.1228 | 0.0800 | 0.6810 | 0.6564 | 0.9109 |
| EukaryoteGO | 0.0760 | 0.0991 | 0.2866 | 0.4134 | 0.3945 | 0.3909 | 0.5464 | 5.0838 | 0.2021 | 0.5748 | 0.9079 | 0.7757 |
| EukaryotePseAAC | 0.1004 | 0.0956 | 0.1849 | 0.2384 | 0.0877 | 0.2427 | 0.7503 | 3.8842 | 0.1689 | 0.4556 | 0.6009 | 0.7559 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.7000 | 0.2050 | 0.8119 | 0.6040 | 0.7802 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.1707 | 0.1505 | 0.7612 | 0.5414 | 0.7751 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3116 | 0.8592 | 0.0000 | 0.4776 | 0.0054 | 0.9933 | 0.6291 | 0.9905 |
| GnegativeGO | 0.9000 | 0.0196 | 0.9071 | 0.9107 | 0.6672 | 0.9209 | 0.0357 | 0.0929 | 0.0057 | 0.9810 | 0.8526 | 0.9937 |
| GnegativePseAAC | 0.5714 | 0.0616 | 0.5750 | 0.5768 | 0.2394 | 0.7013 | 0.1786 | 0.5071 | 0.0638 | 0.8823 | 0.7382 | 0.9469 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9038 | 0.9038 | 0.8656 | 0.9216 | 0.0769 | 0.1346 | 0.0385 | 0.9567 | 0.9970 | 0.9721 |
| GpositivePseAAC | 0.5385 | 0.1346 | 0.5385 | 0.5385 | 0.4988 | 0.6667 | 0.2500 | 0.4038 | 0.1346 | 0.8526 | 0.9010 | 0.9064 |
| HumanGO | 0.5338 | 0.0464 | 0.5557 | 0.5670 | 0.3238 | 0.6406 | 0.1576 | 0.4855 | 0.0209 | 0.9074 | 0.9763 | 0.9825 |
| HumanPseAAC | 0.0225 | 0.0850 | 0.0225 | 0.0225 | 0.0153 | 0.0365 | 0.5627 | 2.2283 | 0.1451 | 0.6152 | 0.7032 | 0.8517 |
| Image | 0.1900 | 0.2030 | 0.2000 | 0.2049 | 0.2701 | 0.2927 | 0.3050 | 0.8800 | 0.1658 | 0.8043 | 0.8475 | 0.8382 |
| IMDB-ECC-F10% | 0.0052 | 0.1173 | 0.2233 | 0.3437 | 0.0568 | 0.3305 | 0.6583 | 11.0168 | 0.2537 | 0.4412 | 0.5208 | 0.7106 |
| IMDB-F10% | 0.0149 | 0.1065 | 0.0225 | 0.0283 | 0.0040 | 0.0249 | 0.9652 | 18.6860 | 0.5753 | 0.1344 | 0.5657 | 0.4179 |
| LLOG-F | 0.0902 | 0.0167 | 0.1025 | 0.1083 | 0.0171 | 0.1547 | 0.7377 | 12.7377 | 0.1357 | 0.3870 | 0.4535 | 0.8612 |
| mediamill10% | 0.0570 | 0.0336 | 0.3229 | 0.4443 | 0.0175 | 0.4262 | 0.2518 | 17.2779 | 0.0505 | 0.6813 | 0.7368 | 0.9415 |
| medical | 0.4796 | 0.0143 | 0.5629 | 0.6010 | 0.1401 | 0.6986 | 0.1531 | 1.4592 | 0.0169 | 0.8925 | 0.5455 | 0.9772 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 2.0167 | 0.1647 | 0.7995 | 0.8527 | 0.8659 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0262 | 0.0374 | 0.1383 | 0.2213 | 0.0388 | 0.2217 | 0.8121 | 28.7507 | 0.2199 | 0.2794 | 0.5848 | 0.7504 |
| OHSUMED-F | 0.1292 | 0.0711 | 0.2165 | 0.2677 | 0.1611 | 0.3011 | 0.5147 | 7.4401 | 0.2357 | 0.5518 | 0.6573 | 0.7037 |
| PlantGO | 0.1979 | 0.0790 | 0.2031 | 0.2057 | 0.0909 | 0.3053 | 0.2188 | 0.4271 | 0.0277 | 0.8776 | 0.9724 | 0.9756 |
| PlantPseAAC | 0.0204 | 0.0918 | 0.0204 | 0.0204 | 0.0179 | 0.0357 | 0.5918 | 2.2449 | 0.1867 | 0.5863 | 0.7909 | 0.8392 |
| rcv1subset1 | 0.0400 | 0.0318 | 0.3120 | 0.4591 | 0.1757 | 0.4384 | 0.6050 | 14.5567 | 0.0599 | 0.4933 | 0.8481 | 0.9304 |
| REUTERS-K500-EX2 | 0.2285 | 0.0156 | 0.4019 | 0.4996 | 0.2199 | 0.4777 | 0.5859 | 7.2818 | 0.0498 | 0.5414 | 0.7082 | 0.9418 |
| scene | 0.5104 | 0.0996 | 0.5332 | 0.5444 | 0.6542 | 0.6505 | 0.2033 | 0.4066 | 0.0602 | 0.8813 | 0.9442 | 0.9532 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1127 | 19.0634 | 0.1268 | 0.8430 | 0.5743 | 0.7970 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 19.6268 | 0.1540 | 0.7929 | 0.5225 | 0.7796 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.3169 | 0.1329 | 0.8205 | 0.5696 | 0.7975 |
| SLASHDOT-F | 0.1905 | 0.0461 | 0.1997 | 0.2043 | 0.1125 | 0.2921 | 0.3995 | 2.0423 | 0.0763 | 0.7117 | 0.6830 | 0.9244 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.5556 | 0.8000 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0238 | 0.0113 | 0.1580 | 0.2327 | 0.0177 | 0.2509 | 0.7440 | 57.4702 | 0.1373 | 0.2688 | 0.4291 | 0.8620 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0254 | 0.0393 | 0.0036 | 0.0714 | 0.7826 | 50.1739 | 0.2329 | 0.2690 | 0.1941 | 0.7252 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0402 | 0.0133 | 0.2236 | 0.3308 | 0.0461 | 0.3065 | 0.7965 | 48.7412 | 0.1147 | 0.2894 | 0.5919 | 0.8771 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.0959 | 0.2183 | 0.6120 | 0.6843 | 0.7590 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4966 | 4.1438 | 0.2239 | 0.6027 | 0.6758 | 0.7487 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2381 | 0.6667 | 0.0934 | 0.8587 | 0.7361 | 0.9188 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 0.7143 | 0.1202 | 0.7992 | 0.6410 | 0.9016 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3113 | 9.3491 | 0.2946 | 0.6650 | 0.6636 | 0.6898 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0483 | 0.0636 | 0.0589 | 0.0655 | 0.0613 | 0.0957 | 0.6391 | 7.3235 | 0.2819 | 0.5510 | 0.5006 | 0.5065 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1983 | 6.1694 | 0.1573 | 0.7724 | 0.7015 | 0.8398 |
| Yelp | 0.0110 | 0.3577 | 0.0110 | 0.0110 | 0.0182 | 0.0121 | 0.2732 | 1.4746 | 0.1682 | 0.8174 | 0.8007 | 0.8174 |

Table 98: Detailed results for lambda = 2 for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4590 | 0.0293 | 0.4763 | 0.4849 | 0.6073 | 0.6300 | 0.3164 | 2.4922 | 0.2448 | 0.7533 | 0.9870 | 0.9872 |
| 3s-bbc1000 | 0.0000 | 0.2176 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7500 | 2.9167 | 0.6824 | 0.4417 | 0.8283 | 0.7634 |
| 3s-guardian1000 | 0.0000 | 0.2097 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4839 | 2.0968 | 0.4597 | 0.6220 | 0.8026 | 0.8129 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.3529 | 0.6368 | 0.4176 | 0.5035 | 0.6931 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9000 | 2.5667 | 0.7667 | 0.3856 | 0.7897 | 0.7460 |
| amphibians | 0.1111 | 0.3095 | 0.4619 | 0.6784 | 0.2762 | 0.5618 | 0.2222 | 2.5000 | 0.1148 | 0.8593 | 0.7273 | 0.8025 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.1026 | 0.0823 | 0.1944 | 0.2421 | 0.1470 | 0.3146 | 0.5128 | 7.7692 | 0.5343 | 0.5081 | 0.8554 | 0.9552 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1384 | 0.1672 | 0.2857 | 0.0359 | 0.2810 | 0.5098 | 151.0392 | 0.6573 | 0.4251 | 0.8445 | 0.9577 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0135 | 0.1639 | 0.2610 | 0.0267 | 0.2655 | 0.7500 | 108.4880 | 0.1265 | 0.2308 | 0.4850 | 0.8744 |
| delicious | 0.0000 | 0.5119 | 0.0228 | 0.0445 | 0.0442 | 0.0445 | 0.8863 | 902.8819 | 0.5279 | 0.0728 | 0.8293 | 0.6941 |
| emotions | 0.2667 | 0.1889 | 0.4986 | 0.5987 | 0.6035 | 0.6531 | 0.3000 | 1.7333 | 0.2318 | 0.7937 | 0.8798 | 0.8912 |
| enron | 0.1287 | 0.0485 | 0.4019 | 0.5261 | 0.1058 | 0.5339 | 0.2807 | 26.1111 | 0.4222 | 0.5877 | 0.8293 | 0.9840 |
| EukaryoteGO | 0.6753 | 0.0190 | 0.7803 | 0.8320 | 0.6096 | 0.8254 | 0.1907 | 0.9304 | 0.0556 | 0.8803 | 0.9931 | 0.9947 |
| EukaryotePseAAC | 0.1622 | 0.0698 | 0.3612 | 0.4524 | 0.1274 | 0.4607 | 0.6255 | 2.9768 | 0.1231 | 0.5404 | 0.7119 | 0.8757 |
| flags | 0.2000 | 0.2429 | 0.5892 | 0.7169 | 0.5005 | 0.7167 | 0.2500 | 3.5000 | 0.2067 | 0.8150 | 0.7078 | 0.8037 |
| foodtruck | 0.3415 | 0.1443 | 0.4747 | 0.5885 | 0.0718 | 0.4662 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8544 | 0.9561 |
| genbase | 0.9104 | 0.0039 | 0.9478 | 0.9639 | 0.5144 | 0.9565 | 0.0299 | 0.2537 | 0.0015 | 0.9838 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9214 | 0.0143 | 0.9393 | 0.9481 | 0.8163 | 0.9444 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.6929 | 0.0509 | 0.7036 | 0.7089 | 0.3658 | 0.7782 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8619 | 0.9894 |
| GpositiveGO | 0.8846 | 0.0385 | 0.8942 | 0.8990 | 0.8558 | 0.9216 | 0.0962 | 0.1538 | 0.0449 | 0.9471 | 0.9961 | 0.9959 |
| GpositivePseAAC | 0.7115 | 0.1106 | 0.7115 | 0.7115 | 0.5633 | 0.7629 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6720 | 0.0345 | 0.7540 | 0.7938 | 0.6419 | 0.7887 | 0.1929 | 1.2090 | 0.1186 | 0.8590 | 0.9853 | 0.9884 |
| HumanPseAAC | 0.0096 | 0.0838 | 0.0096 | 0.0096 | 0.0064 | 0.0162 | 0.5498 | 2.1768 | 0.1415 | 0.6213 | 0.7146 | 0.8572 |
| Image | 0.4700 | 0.1620 | 0.5183 | 0.5425 | 0.5770 | 0.5846 | 0.3050 | 1.0350 | 0.2858 | 0.7944 | 0.9299 | 0.9260 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8543 | 14.9465 | 0.9258 | 0.2179 | 0.9921 | 0.9931 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8302 | 15.2941 | 0.9161 | 0.2287 | 0.9916 | 0.9931 |
| LLOG-F | 0.1393 | 0.0161 | 0.1564 | 0.1680 | 0.0424 | 0.2383 | 0.7459 | 29.1803 | 0.7903 | 0.2714 | 0.5987 | 0.9985 |
| mediamill10% | 0.0736 | 0.0321 | 0.4057 | 0.5595 | 0.0328 | 0.5040 | 0.1710 | 61.3230 | 0.4781 | 0.5344 | 0.8147 | 0.9949 |
| medical | 0.6531 | 0.0102 | 0.7526 | 0.8009 | 0.2893 | 0.8193 | 0.1837 | 5.8673 | 0.1630 | 0.8204 | 0.5535 | 0.9977 |
| Music | 0.2500 | 0.1833 | 0.5028 | 0.6139 | 0.6751 | 0.6887 | 0.3167 | 2.0500 | 0.2576 | 0.7820 | 0.9088 | 0.9009 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0363 | 0.1928 | 0.2935 | 0.0394 | 0.2841 | 0.7041 | 27.6889 | 0.2006 | 0.3803 | 0.5622 | 0.7702 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.6458 | 0.0451 | 0.6823 | 0.7003 | 0.5748 | 0.7374 | 0.2083 | 1.0833 | 0.1077 | 0.8551 | 0.9914 | 0.9881 |
| PlantPseAAC | 0.1020 | 0.0884 | 0.1071 | 0.1096 | 0.0866 | 0.1746 | 0.6224 | 3.2857 | 0.5815 | 0.5233 | 0.9595 | 0.9549 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.2801 | 0.0112 | 0.3324 | 0.3600 | 0.1803 | 0.4402 | 0.5498 | 33.2027 | 0.5590 | 0.4624 | 0.7844 | 0.9978 |
| scene | 0.5934 | 0.0878 | 0.6307 | 0.6490 | 0.7242 | 0.7171 | 0.2075 | 0.8133 | 0.1598 | 0.8472 | 0.9682 | 0.9719 |
| sider_CDK_ECFP4 | 0.0141 | 0.2381 | 0.6501 | 0.8001 | 0.6058 | 0.7963 | 0.3380 | 19.6268 | 0.1944 | 0.7542 | 0.5882 | 0.7581 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.2606 | 0.1237 | 0.8378 | 0.5363 | 0.8029 |
| sider_RDKit_desc | 0.0070 | 0.2546 | 0.6357 | 0.7911 | 0.5649 | 0.7846 | 0.2958 | 20.1197 | 0.2193 | 0.7381 | 0.5930 | 0.7572 |
| SLASHDOT-F | 0.3466 | 0.0406 | 0.3968 | 0.4226 | 0.3005 | 0.5073 | 0.4524 | 6.5952 | 0.4377 | 0.5882 | 0.7622 | 0.9890 |
| solar_flare-L3 | 0.4000 | 0.4000 | 0.4000 | 0.4000 | 0.1905 | 0.4000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.6667 | 0.8200 |
| Stackex_chemistry | 0.0000 | 0.0521 | 0.1048 | 0.1871 | 0.0789 | 0.1837 | 0.8386 | 62.5216 | 0.2331 | 0.1690 | 0.6938 | 0.7563 |
| Stackex_chess | 0.0357 | 0.0098 | 0.1342 | 0.1887 | 0.0468 | 0.2470 | 0.6845 | 139.0000 | 0.8202 | 0.1939 | 0.5496 | 0.9987 |
| Stackex_coffee | 0.0435 | 0.0180 | 0.0761 | 0.0920 | 0.0230 | 0.1356 | 0.8261 | 78.1304 | 0.9058 | 0.1249 | 0.2576 | 0.9937 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0000 | 0.0545 | 0.0928 | 0.1679 | 0.0800 | 0.1650 | 0.9372 | 96.9749 | 0.2637 | 0.0909 | 0.5659 | 0.7272 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0685 | 0.1587 | 0.1694 | 0.2212 | 0.2573 | 0.3085 | 0.4726 | 5.5308 | 0.5469 | 0.5532 | 0.9198 | 0.9226 |
| tox21_RDKit_desc | 0.0651 | 0.1632 | 0.1338 | 0.1789 | 0.1524 | 0.2270 | 0.5240 | 5.8151 | 0.6049 | 0.5148 | 0.9245 | 0.9291 |
| VirusGO | 0.6667 | 0.0794 | 0.7460 | 0.7933 | 0.6187 | 0.7826 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.7942 | 0.9648 |
| VirusPseAAC | 0.4286 | 0.1111 | 0.4524 | 0.4640 | 0.2963 | 0.5882 | 0.2857 | 0.8095 | 0.1667 | 0.8087 | 0.7353 | 0.9232 |
| Water-quality | 0.0000 | 0.3241 | 0.2160 | 0.3403 | 0.2079 | 0.3612 | 0.3113 | 9.5472 | 0.3970 | 0.6766 | 0.7885 | 0.7855 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.2145 | 0.0466 | 0.3570 | 0.4392 | 0.1295 | 0.4434 | 0.5863 | 8.3606 | 0.1981 | 0.5277 | 0.5512 | 0.6199 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.1673 | 0.0638 | 0.2186 | 0.2490 | 0.1363 | 0.3071 | 0.5656 | 5.0157 | 0.2018 | 0.5520 | 0.5936 | 0.6823 |
| Yahoo_Health | 0.1954 | 0.0532 | 0.4364 | 0.5614 | 0.2111 | 0.5123 | 0.4777 | 5.0738 | 0.0953 | 0.5880 | 0.6507 | 0.8833 |
| Yahoo_Recreation | 0.1652 | 0.0732 | 0.2454 | 0.2902 | 0.1777 | 0.3086 | 0.6656 | 5.7467 | 0.2178 | 0.5883 | 0.4858 | 0.4990 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.1350 | 0.0616 | 0.1904 | 0.2247 | 0.0690 | 0.2466 | 0.7052 | 9.0096 | 0.2644 | 0.4057 | 0.5490 | 0.6011 |
| yeast | 0.1653 | 0.1939 | 0.4975 | 0.6379 | 0.3155 | 0.6299 | 0.2355 | 6.2231 | 0.2526 | 0.7577 | 0.8402 | 0.8933 |
| Yelp | 0.3589 | 0.2046 | 0.5490 | 0.6383 | 0.5594 | 0.6614 | 0.1934 | 1.3968 | 0.2188 | 0.8604 | 0.8593 | 0.8875 |

Table 99: Detailed results for lambda = 3 for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2176 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6944 | 2.8611 | 0.6775 | 0.4685 | 0.7836 | 0.7318 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5806 | 2.0645 | 0.4790 | 0.5906 | 0.8101 | 0.8224 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.3529 | 0.6706 | 0.3931 | 0.5230 | 0.6885 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9000 | 2.4000 | 0.7467 | 0.3944 | 0.8096 | 0.7441 |
| amphibians | 0.1111 | 0.3095 | 0.4619 | 0.6784 | 0.2762 | 0.5618 | 0.2222 | 2.5000 | 0.0944 | 0.8570 | 0.7435 | 0.8061 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.1026 | 0.0823 | 0.1902 | 0.2344 | 0.1426 | 0.2989 | 0.5385 | 7.7949 | 0.5348 | 0.5005 | 0.8386 | 0.9375 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1392 | 0.1629 | 0.2797 | 0.0341 | 0.2731 | 0.4118 | 151.0392 | 0.6580 | 0.4159 | 0.8383 | 0.9528 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0135 | 0.1639 | 0.2610 | 0.0267 | 0.2655 | 0.7500 | 108.4880 | 0.1265 | 0.2308 | 0.4850 | 0.8744 |
| delicious | 0.0130 | 0.5052 | 0.0148 | 0.0538 | 0.0419 | 0.0533 | 0.8914 | 902.8774 | 0.5175 | 0.0631 | 0.8342 | 0.6862 |
| emotions | 0.2333 | 0.1972 | 0.4792 | 0.5867 | 0.5899 | 0.6396 | 0.3167 | 1.7833 | 0.2332 | 0.7851 | 0.8774 | 0.8853 |
| enron | 0.1228 | 0.0490 | 0.3905 | 0.5124 | 0.1009 | 0.5195 | 0.2632 | 24.7836 | 0.3936 | 0.5989 | 0.8284 | 0.9831 |
| EukaryoteGO | 0.6881 | 0.0186 | 0.7850 | 0.8326 | 0.6129 | 0.8280 | 0.1688 | 0.8905 | 0.0528 | 0.8918 | 0.9928 | 0.9946 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.1500 | 0.2714 | 0.5358 | 0.6691 | 0.4670 | 0.6833 | 0.2500 | 3.6000 | 0.2200 | 0.8125 | 0.6879 | 0.7928 |
| foodtruck | 0.3659 | 0.1423 | 0.4869 | 0.5923 | 0.0718 | 0.4697 | 0.2439 | 4.4390 | 0.4408 | 0.7207 | 0.8561 | 0.9576 |
| genbase | 0.9104 | 0.0033 | 0.9502 | 0.9676 | 0.5157 | 0.9625 | 0.0000 | 0.2239 | 0.0006 | 0.9975 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0143 | 0.9393 | 0.9481 | 0.8163 | 0.9444 | 0.0357 | 0.1143 | 0.0215 | 0.9774 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7000 | 0.0491 | 0.7107 | 0.7160 | 0.4015 | 0.7860 | 0.1714 | 0.6214 | 0.1454 | 0.8772 | 0.8609 | 0.9888 |
| GpositiveGO | 0.9231 | 0.0385 | 0.9231 | 0.9231 | 0.8601 | 0.9231 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9960 |
| GpositivePseAAC | 0.7115 | 0.1106 | 0.7115 | 0.7115 | 0.5633 | 0.7629 | 0.2500 | 0.5385 | 0.2500 | 0.8365 | 0.9841 | 0.9760 |
| HumanGO | 0.6977 | 0.0335 | 0.7519 | 0.7806 | 0.6227 | 0.7814 | 0.1543 | 1.1447 | 0.1127 | 0.8800 | 0.9851 | 0.9887 |
| HumanPseAAC | 0.0096 | 0.0838 | 0.0096 | 0.0096 | 0.0064 | 0.0162 | 0.5498 | 2.1768 | 0.1415 | 0.6213 | 0.7146 | 0.8572 |
| Image | 0.4850 | 0.1580 | 0.5283 | 0.5500 | 0.5883 | 0.5949 | 0.3100 | 1.0350 | 0.2833 | 0.7935 | 0.9320 | 0.9271 |
| IMDB-ECC-F10% | 0.0126 | 0.1351 | 0.1061 | 0.1735 | 0.0364 | 0.1628 | 0.8386 | 12.9822 | 0.3522 | 0.4995 | 0.4013 | 0.4147 |
| IMDB-F10% | 0.0066 | 0.0792 | 0.0223 | 0.0320 | 0.0149 | 0.0470 | 0.7523 | 9.2568 | 0.2185 | 0.4176 | 0.5699 | 0.7623 |
| LLOG-F | 0.1475 | 0.0160 | 0.1605 | 0.1698 | 0.0427 | 0.2396 | 0.7459 | 29.1967 | 0.7944 | 0.2699 | 0.5986 | 0.9983 |
| mediamill10% | 0.0713 | 0.0320 | 0.4067 | 0.5638 | 0.0319 | 0.5056 | 0.2447 | 60.3777 | 0.4557 | 0.5349 | 0.8124 | 0.9933 |
| medical | 0.6531 | 0.0098 | 0.7517 | 0.7993 | 0.2861 | 0.8245 | 0.1837 | 5.3980 | 0.1430 | 0.8294 | 0.5529 | 0.9975 |
| Music | 0.2333 | 0.1861 | 0.4972 | 0.6034 | 0.6758 | 0.6825 | 0.1667 | 2.0500 | 0.2541 | 0.8209 | 0.9151 | 0.9024 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0363 | 0.1928 | 0.2935 | 0.0394 | 0.2841 | 0.7041 | 27.6889 | 0.2006 | 0.3803 | 0.5622 | 0.7702 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.6771 | 0.0434 | 0.6910 | 0.6995 | 0.5970 | 0.7396 | 0.2292 | 1.1146 | 0.1096 | 0.8429 | 0.9903 | 0.9867 |
| PlantPseAAC | 0.1122 | 0.0867 | 0.1224 | 0.1273 | 0.0767 | 0.2031 | 0.6020 | 3.1429 | 0.4916 | 0.5469 | 0.9458 | 0.9402 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.2818 | 0.0111 | 0.3363 | 0.3641 | 0.1840 | 0.4424 | 0.5223 | 33.2749 | 0.5553 | 0.4764 | 0.7841 | 0.9975 |
| scene | 0.6100 | 0.0858 | 0.6535 | 0.6749 | 0.7387 | 0.7304 | 0.2075 | 0.8091 | 0.1598 | 0.8475 | 0.9690 | 0.9726 |
| sider_CDK_ECFP4 | 0.0211 | 0.2387 | 0.6508 | 0.8003 | 0.6051 | 0.7965 | 0.2535 | 19.0915 | 0.1497 | 0.8135 | 0.5893 | 0.7863 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.2606 | 0.1237 | 0.8378 | 0.5363 | 0.8029 |
| sider_RDKit_desc | 0.0141 | 0.2621 | 0.6367 | 0.7887 | 0.5861 | 0.7845 | 0.4366 | 20.1901 | 0.2287 | 0.7167 | 0.6071 | 0.7434 |
| SLASHDOT-F | 0.3439 | 0.0405 | 0.3915 | 0.4159 | 0.2942 | 0.5022 | 0.4392 | 6.5450 | 0.4333 | 0.5958 | 0.7605 | 0.9871 |
| solar_flare-L3 | 0.4000 | 0.2667 | 0.4000 | 0.4000 | 0.2667 | 0.5000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0115 | 0.0214 | 0.0720 | 0.1145 | 0.0185 | 0.1102 | 0.9107 | 45.0043 | 0.1577 | 0.2125 | 0.5317 | 0.6461 |
| Stackex_chess | 0.0119 | 0.0201 | 0.1768 | 0.2904 | 0.0464 | 0.2868 | 0.8333 | 64.8988 | 0.1622 | 0.1986 | 0.4316 | 0.8383 |
| Stackex_coffee | 0.0435 | 0.0184 | 0.0652 | 0.0843 | 0.0149 | 0.1034 | 0.8261 | 75.4348 | 0.8773 | 0.1361 | 0.2566 | 0.9900 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0804 | 0.0103 | 0.2140 | 0.2941 | 0.0253 | 0.2840 | 0.6181 | 49.5050 | 0.1158 | 0.3587 | 0.5784 | 0.8732 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0651 | 0.1601 | 0.1618 | 0.2124 | 0.2412 | 0.2926 | 0.4658 | 5.4452 | 0.5090 | 0.5663 | 0.9064 | 0.9086 |
| tox21_RDKit_desc | 0.0582 | 0.1644 | 0.1185 | 0.1609 | 0.1438 | 0.2066 | 0.4897 | 5.6473 | 0.5556 | 0.5428 | 0.9152 | 0.9185 |
| VirusGO | 0.6667 | 0.0794 | 0.7460 | 0.7933 | 0.6187 | 0.7826 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.8019 | 0.9699 |
| VirusPseAAC | 0.4286 | 0.1190 | 0.4524 | 0.4640 | 0.2963 | 0.5714 | 0.2857 | 0.9048 | 0.1762 | 0.7992 | 0.7217 | 0.9228 |
| Water-quality | 0.0000 | 0.3315 | 0.1801 | 0.2889 | 0.1551 | 0.3070 | 0.2925 | 9.2642 | 0.3747 | 0.6888 | 0.7768 | 0.7737 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0779 | 0.0722 | 0.1142 | 0.1374 | 0.1210 | 0.1808 | 0.6875 | 7.4988 | 0.2963 | 0.5135 | 0.4689 | 0.4950 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.2954 | 0.0308 | 0.3764 | 0.4223 | 0.0597 | 0.4423 | 0.4827 | 4.1848 | 0.0791 | 0.6455 | 0.6170 | 0.8666 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2190 | 6.2149 | 0.1590 | 0.7689 | 0.7163 | 0.8440 |
| Yelp | 0.0090 | 0.3581 | 0.0090 | 0.0090 | 0.0081 | 0.0099 | 0.2084 | 1.3410 | 0.1280 | 0.8586 | 0.7987 | 0.8541 |

Table 100: Detailed results for lambda = 4 for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5833 | 2.0833 | 0.3631 | 0.5849 | 0.6181 | 0.6157 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8065 | 2.8387 | 0.5250 | 0.4258 | 0.5726 | 0.4852 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7059 | 2.0000 | 0.3794 | 0.4961 | 0.2939 | 0.5966 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.9667 | 0.5717 | 0.3706 | 0.6111 | 0.4614 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5556 | 0.0824 | 0.8630 | 0.6766 | 0.7860 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4615 | 5.5385 | 0.1941 | 0.5943 | 0.7172 | 0.8150 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2941 | 133.6275 | 0.2022 | 0.4546 | 0.5194 | 0.7988 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0135 | 0.1639 | 0.2610 | 0.0267 | 0.2655 | 0.7500 | 108.4880 | 0.1265 | 0.2308 | 0.4850 | 0.8744 |
| delicious | 0.0130 | 0.5052 | 0.0148 | 0.0538 | 0.0419 | 0.0533 | 0.8914 | 902.8774 | 0.5175 | 0.0631 | 0.8342 | 0.6862 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.5667 | 0.1316 | 0.8104 | 0.8482 | 0.8714 |
| enron | 0.1170 | 0.0569 | 0.2569 | 0.3468 | 0.0497 | 0.3138 | 0.2573 | 12.5029 | 0.0820 | 0.6800 | 0.6480 | 0.9093 |
| EukaryoteGO | 0.6314 | 0.0233 | 0.6992 | 0.7336 | 0.3826 | 0.7608 | 0.2049 | 0.4897 | 0.0150 | 0.8861 | 0.9857 | 0.9856 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1000 | 3.6000 | 0.1900 | 0.8371 | 0.6227 | 0.7802 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2927 | 3.0000 | 0.1422 | 0.7434 | 0.5521 | 0.7901 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3206 | 0.8592 | 0.0000 | 0.5373 | 0.0066 | 0.9907 | 0.6291 | 0.9896 |
| GnegativeGO | 0.9071 | 0.0179 | 0.9179 | 0.9232 | 0.6779 | 0.9286 | 0.0357 | 0.1214 | 0.0089 | 0.9776 | 0.8521 | 0.9899 |
| GnegativePseAAC | 0.5643 | 0.0625 | 0.5679 | 0.5696 | 0.2276 | 0.6957 | 0.1786 | 0.4786 | 0.0607 | 0.8839 | 0.7386 | 0.9453 |
| GpositiveGO | 0.8654 | 0.0481 | 0.8654 | 0.8654 | 0.8406 | 0.9000 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9968 | 0.9923 |
| GpositivePseAAC | 0.5962 | 0.1154 | 0.5962 | 0.5962 | 0.5437 | 0.7209 | 0.2692 | 0.4231 | 0.1410 | 0.8413 | 0.9060 | 0.9100 |
| HumanGO | 0.5498 | 0.0459 | 0.5718 | 0.5831 | 0.3252 | 0.6491 | 0.1543 | 0.4920 | 0.0220 | 0.9083 | 0.9723 | 0.9792 |
| HumanPseAAC | 0.0096 | 0.0838 | 0.0096 | 0.0096 | 0.0064 | 0.0162 | 0.5498 | 2.1768 | 0.1415 | 0.6213 | 0.7146 | 0.8572 |
| Image | 0.1900 | 0.2020 | 0.2000 | 0.2049 | 0.2683 | 0.2937 | 0.2950 | 0.8550 | 0.1592 | 0.8105 | 0.8487 | 0.8405 |
| IMDB-ECC-F10% | 0.0168 | 0.1174 | 0.1287 | 0.1953 | 0.0338 | 0.1967 | 0.7358 | 9.1866 | 0.2391 | 0.3592 | 0.5525 | 0.7518 |
| IMDB-F10% | 0.0066 | 0.0792 | 0.0223 | 0.0320 | 0.0149 | 0.0470 | 0.7523 | 9.2568 | 0.2185 | 0.4176 | 0.5699 | 0.7623 |
| LLOG-F | 0.0492 | 0.0174 | 0.0574 | 0.0612 | 0.0126 | 0.0914 | 0.6803 | 13.2213 | 0.1425 | 0.4156 | 0.4463 | 0.8565 |
| mediamill10% | 0.0689 | 0.0326 | 0.3942 | 0.5429 | 0.0273 | 0.4921 | 0.2090 | 19.9691 | 0.0628 | 0.5811 | 0.7289 | 0.9277 |
| medical | 0.6122 | 0.0116 | 0.7160 | 0.7668 | 0.2361 | 0.7901 | 0.1429 | 1.4592 | 0.0176 | 0.8921 | 0.5447 | 0.9777 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2167 | 1.9167 | 0.1543 | 0.8142 | 0.8613 | 0.8666 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0363 | 0.1928 | 0.2935 | 0.0394 | 0.2841 | 0.7041 | 27.6889 | 0.2006 | 0.3803 | 0.5622 | 0.7702 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.3542 | 0.0668 | 0.3594 | 0.3620 | 0.1958 | 0.4762 | 0.2083 | 0.4062 | 0.0254 | 0.8860 | 0.9736 | 0.9762 |
| PlantPseAAC | 0.0306 | 0.0910 | 0.0357 | 0.0381 | 0.0354 | 0.0696 | 0.5714 | 2.1837 | 0.1808 | 0.6000 | 0.7766 | 0.8330 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.3144 | 0.0121 | 0.4145 | 0.4733 | 0.1777 | 0.4941 | 0.4725 | 6.2302 | 0.0417 | 0.6266 | 0.7165 | 0.9519 |
| scene | 0.5187 | 0.0968 | 0.5394 | 0.5496 | 0.6641 | 0.6585 | 0.2116 | 0.3900 | 0.0581 | 0.8800 | 0.9445 | 0.9526 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0845 | 19.1127 | 0.1195 | 0.8555 | 0.5679 | 0.8049 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.2606 | 0.1237 | 0.8378 | 0.5363 | 0.8029 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.2746 | 0.1226 | 0.8318 | 0.5642 | 0.8038 |
| SLASHDOT-F | 0.2937 | 0.0437 | 0.3223 | 0.3365 | 0.2095 | 0.4229 | 0.3624 | 2.0688 | 0.0765 | 0.7297 | 0.6794 | 0.9209 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0115 | 0.0214 | 0.0720 | 0.1145 | 0.0185 | 0.1102 | 0.9107 | 45.0043 | 0.1577 | 0.2125 | 0.5317 | 0.6461 |
| Stackex_chess | 0.0298 | 0.0110 | 0.1645 | 0.2424 | 0.0176 | 0.2584 | 0.6012 | 57.5060 | 0.1360 | 0.3392 | 0.4258 | 0.8628 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7391 | 48.9565 | 0.2154 | 0.3043 | 0.1987 | 0.7405 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0804 | 0.0103 | 0.2140 | 0.2941 | 0.0253 | 0.2840 | 0.6181 | 49.5050 | 0.1158 | 0.3587 | 0.5784 | 0.8732 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4726 | 4.0719 | 0.2180 | 0.6174 | 0.6850 | 0.7560 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5068 | 4.0993 | 0.2235 | 0.6028 | 0.6777 | 0.7491 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1429 | 0.6190 | 0.0815 | 0.9008 | 0.7227 | 0.9117 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3810 | 0.8571 | 0.1548 | 0.7675 | 0.6263 | 0.8898 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2358 | 9.3208 | 0.2901 | 0.6818 | 0.6625 | 0.6834 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2190 | 6.2149 | 0.1590 | 0.7689 | 0.7163 | 0.8440 |
| Yelp | 0.0080 | 0.3583 | 0.0080 | 0.0080 | 0.0074 | 0.0088 | 0.2104 | 1.3539 | 0.1303 | 0.8566 | 0.8012 | 0.8537 |

Table 101: Detailed results for lambda = 5 for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2130 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6667 | 2.8611 | 0.6692 | 0.4801 | 0.7714 | 0.7271 |
| 3s-guardian1000 | 0.0000 | 0.2097 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4516 | 1.8710 | 0.4363 | 0.6535 | 0.8439 | 0.8419 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.4706 | 0.6132 | 0.4059 | 0.4685 | 0.6574 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9000 | 2.6667 | 0.7733 | 0.3717 | 0.7996 | 0.7287 |
| amphibians | 0.1111 | 0.3095 | 0.4619 | 0.6784 | 0.2762 | 0.5618 | 0.3333 | 2.5000 | 0.1259 | 0.8293 | 0.7361 | 0.7978 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.0513 | 0.0904 | 0.1026 | 0.1231 | 0.0464 | 0.1519 | 0.4615 | 7.4872 | 0.4672 | 0.5245 | 0.8401 | 0.9304 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1377 | 0.1499 | 0.2595 | 0.0315 | 0.2567 | 0.3529 | 151.0392 | 0.5858 | 0.4312 | 0.8200 | 0.9369 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0135 | 0.1639 | 0.2610 | 0.0267 | 0.2655 | 0.7500 | 108.4880 | 0.1265 | 0.2308 | 0.4850 | 0.8744 |
| delicious | 0.0130 | 0.5052 | 0.0148 | 0.0538 | 0.0419 | 0.0533 | 0.8914 | 902.8774 | 0.5175 | 0.0631 | 0.8342 | 0.6862 |
| emotions | 0.2833 | 0.1917 | 0.4986 | 0.5944 | 0.6040 | 0.6533 | 0.3000 | 1.7333 | 0.2300 | 0.7975 | 0.8782 | 0.8899 |
| enron | 0.1287 | 0.0494 | 0.3773 | 0.4985 | 0.0930 | 0.5033 | 0.2456 | 23.7778 | 0.3558 | 0.6200 | 0.8255 | 0.9809 |
| EukaryoteGO | 0.7126 | 0.0182 | 0.7822 | 0.8173 | 0.6090 | 0.8247 | 0.1598 | 0.7655 | 0.0393 | 0.9013 | 0.9927 | 0.9948 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.1500 | 0.2643 | 0.5425 | 0.6734 | 0.4712 | 0.6891 | 0.3000 | 3.5500 | 0.2250 | 0.8014 | 0.6948 | 0.8082 |
| foodtruck | 0.3659 | 0.1423 | 0.4869 | 0.5923 | 0.0718 | 0.4697 | 0.2439 | 4.6585 | 0.4507 | 0.7164 | 0.8539 | 0.9560 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3206 | 0.8592 | 0.0000 | 0.5373 | 0.0066 | 0.9907 | 0.6291 | 0.9896 |
| GnegativeGO | 0.9214 | 0.0143 | 0.9393 | 0.9481 | 0.8163 | 0.9444 | 0.0357 | 0.1071 | 0.0215 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.6857 | 0.0518 | 0.6964 | 0.7017 | 0.3642 | 0.7734 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8620 | 0.9892 |
| GpositiveGO | 0.9231 | 0.0385 | 0.9231 | 0.9231 | 0.8601 | 0.9231 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9975 | 0.9972 |
| GpositivePseAAC | 0.6923 | 0.1154 | 0.6923 | 0.6923 | 0.5549 | 0.7500 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6945 | 0.0351 | 0.7551 | 0.7867 | 0.6328 | 0.7720 | 0.1736 | 1.1061 | 0.1058 | 0.8738 | 0.9849 | 0.9882 |
| HumanPseAAC | 0.0096 | 0.0838 | 0.0096 | 0.0096 | 0.0064 | 0.0162 | 0.5498 | 2.1768 | 0.1415 | 0.6213 | 0.7146 | 0.8572 |
| Image | 0.4950 | 0.1580 | 0.5433 | 0.5675 | 0.5959 | 0.6010 | 0.3050 | 1.0100 | 0.2800 | 0.7978 | 0.9302 | 0.9261 |
| IMDB-ECC-F10% | 0.0168 | 0.1174 | 0.1287 | 0.1953 | 0.0338 | 0.1967 | 0.7358 | 9.1866 | 0.2391 | 0.3592 | 0.5525 | 0.7518 |
| IMDB-F10% | 0.0066 | 0.0792 | 0.0223 | 0.0320 | 0.0149 | 0.0470 | 0.7523 | 9.2568 | 0.2185 | 0.4176 | 0.5699 | 0.7623 |
| LLOG-F | 0.1393 | 0.0161 | 0.1564 | 0.1675 | 0.0422 | 0.2304 | 0.7213 | 28.2869 | 0.7671 | 0.2916 | 0.5978 | 0.9976 |
| mediamill10% | 0.0665 | 0.0321 | 0.4016 | 0.5577 | 0.0295 | 0.4989 | 0.1686 | 58.8979 | 0.4426 | 0.5547 | 0.8130 | 0.9936 |
| medical | 0.6531 | 0.0095 | 0.7534 | 0.8019 | 0.2838 | 0.8264 | 0.1633 | 5.0102 | 0.1326 | 0.8444 | 0.5526 | 0.9976 |
| Music | 0.2167 | 0.1889 | 0.4833 | 0.5955 | 0.6681 | 0.6792 | 0.2000 | 1.9833 | 0.2437 | 0.8223 | 0.9084 | 0.9009 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0363 | 0.1928 | 0.2935 | 0.0394 | 0.2841 | 0.7041 | 27.6889 | 0.2006 | 0.3803 | 0.5622 | 0.7702 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.6667 | 0.0451 | 0.6823 | 0.6900 | 0.5773 | 0.7263 | 0.2188 | 1.0833 | 0.1077 | 0.8501 | 0.9889 | 0.9836 |
| PlantPseAAC | 0.1224 | 0.0867 | 0.1327 | 0.1376 | 0.0792 | 0.2154 | 0.6122 | 3.1224 | 0.4933 | 0.5405 | 0.9408 | 0.9332 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.2818 | 0.0111 | 0.3346 | 0.3615 | 0.1790 | 0.4396 | 0.5155 | 32.7698 | 0.5337 | 0.4873 | 0.7837 | 0.9970 |
| scene | 0.6058 | 0.0864 | 0.6452 | 0.6646 | 0.7337 | 0.7253 | 0.2116 | 0.8506 | 0.1705 | 0.8423 | 0.9709 | 0.9736 |
| sider_CDK_ECFP4 | 0.0211 | 0.2394 | 0.6545 | 0.8010 | 0.6100 | 0.7986 | 0.2394 | 19.2394 | 0.1601 | 0.7953 | 0.5784 | 0.7743 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.2606 | 0.1237 | 0.8378 | 0.5363 | 0.8029 |
| sider_RDKit_desc | 0.0141 | 0.2746 | 0.6304 | 0.7832 | 0.5827 | 0.7786 | 0.2887 | 20.3873 | 0.2225 | 0.7350 | 0.5778 | 0.7355 |
| SLASHDOT-F | 0.3492 | 0.0409 | 0.3854 | 0.4036 | 0.2833 | 0.4880 | 0.4074 | 5.7487 | 0.3788 | 0.6336 | 0.7571 | 0.9833 |
| solar_flare-L3 | 0.4000 | 0.4000 | 0.4000 | 0.4000 | 0.1905 | 0.4000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0115 | 0.0214 | 0.0720 | 0.1145 | 0.0185 | 0.1102 | 0.9107 | 45.0043 | 0.1577 | 0.2125 | 0.5317 | 0.6461 |
| Stackex_chess | 0.0357 | 0.0097 | 0.1195 | 0.1661 | 0.0380 | 0.2194 | 0.6667 | 138.0357 | 0.8106 | 0.2005 | 0.5492 | 0.9983 |
| Stackex_coffee | 0.0435 | 0.0184 | 0.0652 | 0.0843 | 0.0149 | 0.1034 | 0.7826 | 78.3478 | 0.8636 | 0.1440 | 0.2555 | 0.9882 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0804 | 0.0103 | 0.2140 | 0.2941 | 0.0253 | 0.2840 | 0.6181 | 49.5050 | 0.1158 | 0.3587 | 0.5784 | 0.8732 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5068 | 4.1370 | 0.2242 | 0.6016 | 0.6839 | 0.7530 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5068 | 4.0993 | 0.2235 | 0.6028 | 0.6777 | 0.7491 |
| VirusGO | 0.7143 | 0.0714 | 0.7937 | 0.8410 | 0.6273 | 0.8085 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7895 | 0.9640 |
| VirusPseAAC | 0.3333 | 0.1349 | 0.3333 | 0.3333 | 0.2556 | 0.4516 | 0.2857 | 0.7619 | 0.1667 | 0.8111 | 0.7401 | 0.9253 |
| Water-quality | 0.0000 | 0.3389 | 0.1449 | 0.2375 | 0.1283 | 0.2504 | 0.2925 | 9.1509 | 0.3497 | 0.6873 | 0.7678 | 0.7570 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2190 | 6.2149 | 0.1590 | 0.7689 | 0.7163 | 0.8440 |
| Yelp | 0.0080 | 0.3581 | 0.0080 | 0.0080 | 0.0074 | 0.0088 | 0.2592 | 1.4287 | 0.1497 | 0.8287 | 0.7931 | 0.8310 |

Table 102: Detailed results for lambda = 6 for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2176 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7778 | 2.9722 | 0.6824 | 0.4224 | 0.7693 | 0.7196 |
| 3s-guardian1000 | 0.0000 | 0.2097 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4839 | 2.1935 | 0.4911 | 0.6148 | 0.8229 | 0.8288 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.1765 | 0.6000 | 0.4304 | 0.4933 | 0.6779 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9000 | 2.5667 | 0.7533 | 0.3872 | 0.8210 | 0.7485 |
| amphibians | 0.1111 | 0.3175 | 0.4434 | 0.6442 | 0.2686 | 0.5455 | 0.1667 | 2.3333 | 0.0704 | 0.9056 | 0.7328 | 0.8117 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.0513 | 0.0904 | 0.1026 | 0.1231 | 0.0464 | 0.1519 | 0.4872 | 7.3846 | 0.4239 | 0.5389 | 0.8275 | 0.9163 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1392 | 0.1524 | 0.2631 | 0.0315 | 0.2565 | 0.2157 | 151.1176 | 0.5691 | 0.4398 | 0.8167 | 0.9312 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0135 | 0.1639 | 0.2610 | 0.0267 | 0.2655 | 0.7500 | 108.4880 | 0.1265 | 0.2308 | 0.4850 | 0.8744 |
| delicious | 0.0130 | 0.5052 | 0.0148 | 0.0538 | 0.0419 | 0.0533 | 0.8914 | 902.8774 | 0.5175 | 0.0631 | 0.8342 | 0.6862 |
| emotions | 0.3000 | 0.1889 | 0.5153 | 0.6111 | 0.6077 | 0.6600 | 0.3000 | 1.7333 | 0.2284 | 0.7937 | 0.8733 | 0.8852 |
| enron | 0.0292 | 0.0651 | 0.0348 | 0.0419 | 0.0111 | 0.0296 | 0.2924 | 12.4094 | 0.0807 | 0.6795 | 0.6635 | 0.9091 |
| EukaryoteGO | 0.6314 | 0.0235 | 0.7508 | 0.8112 | 0.6155 | 0.7910 | 0.1997 | 1.4111 | 0.0547 | 0.8661 | 0.9540 | 0.9438 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.1500 | 0.2714 | 0.5300 | 0.6603 | 0.4590 | 0.6780 | 0.1000 | 3.5000 | 0.2092 | 0.8478 | 0.6991 | 0.8102 |
| foodtruck | 0.3659 | 0.1423 | 0.4869 | 0.5923 | 0.0718 | 0.4697 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8596 | 0.9591 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3206 | 0.8592 | 0.0000 | 0.5373 | 0.0066 | 0.9907 | 0.6291 | 0.9896 |
| GnegativeGO | 0.9214 | 0.0143 | 0.9393 | 0.9481 | 0.8163 | 0.9444 | 0.0357 | 0.1071 | 0.0215 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7000 | 0.0500 | 0.7107 | 0.7160 | 0.4015 | 0.7829 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8618 | 0.9892 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9231 | 0.9231 | 0.8680 | 0.9320 | 0.0577 | 0.1154 | 0.0385 | 0.9663 | 0.9956 | 0.9967 |
| GpositivePseAAC | 0.6923 | 0.1154 | 0.6923 | 0.6923 | 0.5549 | 0.7500 | 0.2500 | 0.5385 | 0.2500 | 0.8365 | 0.9841 | 0.9760 |
| HumanGO | 0.5145 | 0.0485 | 0.5300 | 0.5382 | 0.3137 | 0.6171 | 0.1672 | 0.4984 | 0.0218 | 0.9029 | 0.9758 | 0.9823 |
| HumanPseAAC | 0.0096 | 0.0838 | 0.0096 | 0.0096 | 0.0064 | 0.0162 | 0.5498 | 2.1768 | 0.1415 | 0.6213 | 0.7146 | 0.8572 |
| Image | 0.4950 | 0.1580 | 0.5433 | 0.5675 | 0.5950 | 0.6010 | 0.3150 | 1.0250 | 0.2804 | 0.7921 | 0.9311 | 0.9272 |
| IMDB-ECC-F10% | 0.0922 | 0.0840 | 0.1723 | 0.2224 | 0.0291 | 0.2065 | 0.7023 | 17.5660 | 0.5047 | 0.3107 | 0.5480 | 0.4878 |
| IMDB-F10% | 0.0066 | 0.0792 | 0.0223 | 0.0320 | 0.0149 | 0.0470 | 0.7523 | 9.2568 | 0.2185 | 0.4176 | 0.5699 | 0.7623 |
| LLOG-F | 0.0738 | 0.0169 | 0.0861 | 0.0918 | 0.0158 | 0.1341 | 0.6803 | 13.3115 | 0.1411 | 0.4055 | 0.4479 | 0.8553 |
| mediamill10% | 0.0736 | 0.0321 | 0.4047 | 0.5602 | 0.0296 | 0.5011 | 0.2447 | 57.8765 | 0.4375 | 0.5478 | 0.8122 | 0.9931 |
| medical | 0.6531 | 0.0098 | 0.7500 | 0.7968 | 0.2785 | 0.8216 | 0.1633 | 4.5306 | 0.1225 | 0.8518 | 0.5518 | 0.9974 |
| Music | 0.2167 | 0.1889 | 0.4833 | 0.5955 | 0.6681 | 0.6792 | 0.3000 | 2.0667 | 0.2618 | 0.7834 | 0.9125 | 0.8996 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0363 | 0.1928 | 0.2935 | 0.0394 | 0.2841 | 0.7041 | 27.6889 | 0.2006 | 0.3803 | 0.5622 | 0.7702 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.6562 | 0.0477 | 0.6719 | 0.6796 | 0.5640 | 0.7120 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9884 | 0.9829 |
| PlantPseAAC | 0.0102 | 0.0927 | 0.0102 | 0.0102 | 0.0119 | 0.0180 | 0.5816 | 2.2755 | 0.1895 | 0.5891 | 0.7909 | 0.8426 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.2595 | 0.0137 | 0.3636 | 0.4205 | 0.1720 | 0.4407 | 0.5670 | 11.0155 | 0.0759 | 0.5470 | 0.6050 | 0.8023 |
| scene | 0.5934 | 0.0878 | 0.6328 | 0.6521 | 0.7252 | 0.7184 | 0.2075 | 0.8133 | 0.1606 | 0.8472 | 0.9682 | 0.9719 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.1197 | 0.1228 | 0.8472 | 0.5646 | 0.8029 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.2606 | 0.1237 | 0.8378 | 0.5363 | 0.8029 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1479 | 19.8028 | 0.1470 | 0.8033 | 0.5672 | 0.7864 |
| SLASHDOT-F | 0.3492 | 0.0411 | 0.3836 | 0.4013 | 0.2781 | 0.4849 | 0.3942 | 5.3942 | 0.3470 | 0.6506 | 0.7543 | 0.9812 |
| solar_flare-L3 | 0.4000 | 0.2667 | 0.4000 | 0.4000 | 0.2667 | 0.5000 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.5556 | 0.8600 |
| Stackex_chemistry | 0.0115 | 0.0214 | 0.0720 | 0.1145 | 0.0185 | 0.1102 | 0.9107 | 45.0043 | 0.1577 | 0.2125 | 0.5317 | 0.6461 |
| Stackex_chess | 0.0238 | 0.0110 | 0.1607 | 0.2402 | 0.0178 | 0.2615 | 0.8036 | 59.6190 | 0.1427 | 0.2484 | 0.4300 | 0.8588 |
| Stackex_coffee | 0.0435 | 0.0180 | 0.0652 | 0.0843 | 0.0163 | 0.1053 | 0.7391 | 75.4783 | 0.8240 | 0.1721 | 0.2546 | 0.9861 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0804 | 0.0103 | 0.2140 | 0.2941 | 0.0253 | 0.2840 | 0.6181 | 49.5050 | 0.1158 | 0.3587 | 0.5784 | 0.8732 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5171 | 4.0822 | 0.2217 | 0.5996 | 0.6793 | 0.7515 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5068 | 4.0993 | 0.2235 | 0.6028 | 0.6777 | 0.7491 |
| VirusGO | 0.7143 | 0.0714 | 0.7937 | 0.8410 | 0.6273 | 0.8085 | 0.1429 | 0.5714 | 0.0874 | 0.8968 | 0.7988 | 0.9703 |
| VirusPseAAC | 0.3333 | 0.1349 | 0.3333 | 0.3333 | 0.2556 | 0.4516 | 0.3333 | 0.8571 | 0.1857 | 0.7794 | 0.7073 | 0.9147 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3113 | 9.3019 | 0.2903 | 0.6685 | 0.6652 | 0.6896 |
| Yahoo_Arts | 0.0441 | 0.0812 | 0.0894 | 0.1178 | 0.0734 | 0.1383 | 0.7690 | 12.2243 | 0.3773 | 0.3471 | 0.5997 | 0.5942 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2190 | 6.2149 | 0.1590 | 0.7689 | 0.7163 | 0.8440 |
| Yelp | 0.3490 | 0.2068 | 0.5398 | 0.6304 | 0.5383 | 0.6517 | 0.1964 | 1.3739 | 0.2154 | 0.8619 | 0.8588 | 0.8861 |

### 3.0.4 Training set size

Table 103: Detailed results for MASSIVE (100) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.2474 | 0.0618 | 0.2948 | 0.3360 | 0.3439 | 0.3870 | 0.4684 | 3.8620 | 0.3676 | 0.6250 | 0.9489 | 0.9468 |
| 3s-bbc1000 | 0.0833 | 0.3009 | 0.1898 | 0.2429 | 0.1439 | 0.2697 | 0.7500 | 2.9722 | 0.6290 | 0.4403 | 0.6253 | 0.5962 |
| 3s-guardian1000 | 0.2903 | 0.2527 | 0.3656 | 0.4026 | 0.1340 | 0.3896 | 0.5806 | 2.0968 | 0.3750 | 0.5901 | 0.6100 | 0.7144 |
| 3s-inter3000 | 0.2941 | 0.2255 | 0.3235 | 0.3376 | 0.0870 | 0.3429 | 0.8235 | 2.1176 | 0.4721 | 0.4480 | 0.4424 | 0.6362 |
| 3s-reuters1000 | 0.1333 | 0.3000 | 0.1333 | 0.1333 | 0.0392 | 0.1290 | 0.9000 | 2.4000 | 0.5408 | 0.4142 | 0.7005 | 0.6332 |
| amphibians | 0.0556 | 0.3095 | 0.4421 | 0.6714 | 0.3080 | 0.5714 | 0.2222 | 2.5000 | 0.0889 | 0.8593 | 0.6885 | 0.7870 |
| bibtex | 0.1853 | 0.0120 | 0.3640 | 0.4476 | 0.3062 | 0.4726 | 0.4379 | 72.9507 | 0.5810 | 0.4338 | 0.9840 | 0.9906 |
| birds | 0.1026 | 0.1080 | 0.2304 | 0.2920 | 0.1523 | 0.3103 | 0.5128 | 7.3077 | 0.4410 | 0.5230 | 0.8203 | 0.9085 |
| bookmarks10% | 0.1843 | 0.0089 | 0.2175 | 0.2362 | 0.1134 | 0.2612 | 0.7163 | 102.9936 | 0.7750 | 0.2547 | 0.9847 | 0.9775 |
| CAL500 | 0.0000 | 0.1395 | 0.1288 | 0.2262 | 0.0261 | 0.2233 | 0.4118 | 151.0784 | 0.5011 | 0.4408 | 0.7820 | 0.9106 |
| corel16k001 | 0.0050 | 0.0191 | 0.0465 | 0.0693 | 0.0305 | 0.0913 | 0.8634 | 114.5800 | 0.9592 | 0.0877 | 0.9919 | 0.9743 |
| Corel5k | 0.0098 | 0.0091 | 0.0499 | 0.0706 | 0.0196 | 0.0977 | 0.8355 | 168.6532 | 0.9457 | 0.1630 | 0.6915 | 0.9751 |
| delicious | 0.0000 | 0.6125 | 0.0208 | 0.0407 | 0.0483 | 0.0414 | 0.7061 | 920.1696 | 0.9426 | 0.0564 | 0.9940 | 0.9915 |
| emotions | 0.3000 | 0.2083 | 0.5792 | 0.7048 | 0.6600 | 0.6914 | 0.2667 | 1.7667 | 0.1902 | 0.8079 | 0.8414 | 0.8475 |
| enron | 0.1345 | 0.0564 | 0.3841 | 0.5129 | 0.0910 | 0.4802 | 0.3275 | 23.6959 | 0.3372 | 0.5432 | 0.8038 | 0.9601 |
| EukaryoteGO | 0.6534 | 0.0219 | 0.7557 | 0.8080 | 0.4807 | 0.7972 | 0.1804 | 0.7358 | 0.0316 | 0.8871 | 0.9883 | 0.9915 |
| EukaryotePseAAC | 0.0695 | 0.0906 | 0.0781 | 0.0834 | 0.0091 | 0.0818 | 0.6409 | 4.7426 | 0.3524 | 0.5086 | 0.9213 | 0.9157 |
| flags | 0.2000 | 0.2500 | 0.5933 | 0.7175 | 0.5025 | 0.7200 | 0.1500 | 3.7000 | 0.2375 | 0.8155 | 0.6666 | 0.7847 |
| foodtruck | 0.3171 | 0.1463 | 0.4625 | 0.5847 | 0.0718 | 0.4627 | 0.2439 | 3.4634 | 0.3341 | 0.7544 | 0.7930 | 0.9084 |
| genbase | 0.9403 | 0.0028 | 0.9677 | 0.9813 | 0.5309 | 0.9689 | 0.0000 | 0.4925 | 0.0075 | 0.9932 | 0.6667 | 0.9982 |
| GnegativeGO | 0.9286 | 0.0125 | 0.9500 | 0.9607 | 0.8224 | 0.9521 | 0.0357 | 0.1214 | 0.0103 | 0.9776 | 0.8699 | 0.9948 |
| GnegativePseAAC | 0.6786 | 0.0643 | 0.7000 | 0.7106 | 0.3229 | 0.7372 | 0.2929 | 0.7714 | 0.1236 | 0.8111 | 0.8267 | 0.9548 |
| GpositiveGO | 0.8846 | 0.0481 | 0.8846 | 0.8846 | 0.6799 | 0.9020 | 0.0577 | 0.1154 | 0.0385 | 0.9663 | 0.9941 | 0.9940 |
| GpositivePseAAC | 0.7500 | 0.1106 | 0.7500 | 0.7500 | 0.5950 | 0.7723 | 0.2308 | 0.4808 | 0.1859 | 0.8510 | 0.9637 | 0.9534 |
| HumanGO | 0.6238 | 0.0393 | 0.7302 | 0.7854 | 0.6185 | 0.7641 | 0.2090 | 0.7042 | 0.0458 | 0.8688 | 0.9738 | 0.9779 |
| HumanPseAAC | 0.1254 | 0.1226 | 0.2047 | 0.2464 | 0.0582 | 0.2542 | 0.6559 | 2.8714 | 0.2863 | 0.5428 | 0.8677 | 0.8778 |
| Image | 0.3350 | 0.2230 | 0.4633 | 0.5258 | 0.5374 | 0.5285 | 0.4150 | 1.1150 | 0.2479 | 0.7362 | 0.8304 | 0.8252 |
| IMDB-ECC-F10% | 0.0021 | 0.0997 | 0.0190 | 0.0271 | 0.0032 | 0.0327 | 0.6436 | 11.2138 | 0.5467 | 0.4235 | 0.9223 | 0.9296 |
| IMDB-F10% | 0.0050 | 0.1053 | 0.0170 | 0.0233 | 0.0026 | 0.0247 | 0.6164 | 11.5377 | 0.5561 | 0.4203 | 0.9194 | 0.9300 |
| LLOG-F | 0.0574 | 0.0196 | 0.1031 | 0.1322 | 0.0288 | 0.1826 | 0.7951 | 30.1967 | 0.8372 | 0.2243 | 0.5934 | 0.9931 |
| mediamill10% | 0.0760 | 0.0334 | 0.3771 | 0.5231 | 0.0239 | 0.4699 | 0.2708 | 57.9192 | 0.4140 | 0.5231 | 0.7916 | 0.9785 |
| medical | 0.6327 | 0.0120 | 0.7236 | 0.7678 | 0.3180 | 0.7854 | 0.1837 | 3.7449 | 0.0846 | 0.8495 | 0.5488 | 0.9930 |
| Music | 0.2333 | 0.1917 | 0.5569 | 0.7068 | 0.6932 | 0.7039 | 0.2667 | 2.1500 | 0.2000 | 0.7730 | 0.8476 | 0.8428 |
| NUS-WIDE-bow10% | 0.1870 | 0.0251 | 0.3146 | 0.3791 | 0.0416 | 0.3659 | 0.5227 | 34.2201 | 0.5897 | 0.4375 | 0.8757 | 0.9808 |
| NUS-WIDE-cVLADplus10% | 0.1976 | 0.0298 | 0.3214 | 0.3879 | 0.0421 | 0.3529 | 0.6402 | 39.1350 | 0.7193 | 0.3594 | 0.8781 | 0.9755 |
| OHSUMED-F | 0.1328 | 0.0699 | 0.2256 | 0.2792 | 0.1488 | 0.3191 | 0.5398 | 8.4932 | 0.4662 | 0.5002 | 0.9346 | 0.9246 |
| PlantGO | 0.6562 | 0.0451 | 0.7066 | 0.7333 | 0.5934 | 0.7500 | 0.2604 | 0.8229 | 0.0654 | 0.8363 | 0.9672 | 0.9625 |
| PlantPseAAC | 0.2551 | 0.1276 | 0.2942 | 0.3151 | 0.0942 | 0.3056 | 0.7143 | 2.6020 | 0.3492 | 0.5180 | 0.8335 | 0.8418 |
| rcv1subset1 | 0.0933 | 0.0323 | 0.1771 | 0.2317 | 0.0712 | 0.2236 | 0.4433 | 36.8517 | 0.4119 | 0.4846 | 0.9188 | 0.9777 |
| REUTERS-K500-EX2 | 0.1426 | 0.0139 | 0.1765 | 0.1950 | 0.0463 | 0.2409 | 0.5911 | 29.1117 | 0.4894 | 0.4565 | 0.7773 | 0.9824 |
| scene | 0.5353 | 0.1024 | 0.6079 | 0.6442 | 0.7006 | 0.6917 | 0.2158 | 0.5270 | 0.0970 | 0.8658 | 0.9302 | 0.9422 |
| sider_CDK_ECFP4 | 0.0141 | 0.2856 | 0.6276 | 0.7788 | 0.5829 | 0.7748 | 0.0986 | 19.4014 | 0.1600 | 0.8039 | 0.5655 | 0.7775 |
| sider_MordredDesc | 0.0141 | 0.2932 | 0.6240 | 0.7762 | 0.5988 | 0.7708 | 0.3662 | 19.5986 | 0.1965 | 0.7364 | 0.5268 | 0.7442 |
| sider_RDKit_desc | 0.0141 | 0.2856 | 0.6266 | 0.7795 | 0.5814 | 0.7738 | 0.0986 | 19.9366 | 0.1818 | 0.7807 | 0.5323 | 0.7592 |
| SLASHDOT-F | 0.3413 | 0.0457 | 0.4233 | 0.4690 | 0.3050 | 0.5190 | 0.5159 | 4.9947 | 0.3113 | 0.5912 | 0.7208 | 0.9392 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0378 | 0.0125 | 0.0984 | 0.1308 | 0.0530 | 0.1691 | 0.7837 | 106.5922 | 0.8884 | 0.1482 | 0.9101 | 1.0000 |
| Stackex_chess | 0.0000 | 0.0148 | 0.0084 | 0.0125 | 0.0002 | 0.0140 | 0.8155 | 141.3988 | 0.8191 | 0.1425 | 0.5469 | 0.9880 |
| Stackex_coffee | 0.0435 | 0.0205 | 0.0924 | 0.1307 | 0.0178 | 0.1471 | 0.6957 | 74.0435 | 0.7913 | 0.1969 | 0.2550 | 0.9831 |
| Stackex_cooking | 0.0599 | 0.0052 | 0.1872 | 0.2642 | 0.1005 | 0.3028 | 0.6510 | 224.5913 | 0.7680 | 0.2295 | 0.9252 | 0.9922 |
| Stackex_philosophy | 0.0668 | 0.0091 | 0.1651 | 0.2307 | 0.0551 | 0.2608 | 0.6831 | 136.4991 | 0.8012 | 0.2085 | 0.7494 | 0.9780 |
| tmc2007-500 | 0.2315 | 0.0729 | 0.4919 | 0.6285 | 0.3499 | 0.6065 | 0.3399 | 4.6238 | 0.1630 | 0.7063 | 0.9330 | 0.9383 |
| tox21_CDK_ECFP4 | 0.0171 | 0.2412 | 0.0677 | 0.1008 | 0.0741 | 0.1115 | 0.5719 | 5.0959 | 0.3593 | 0.5446 | 0.8191 | 0.7971 |
| tox21_RDKit_desc | 0.0171 | 0.2412 | 0.0710 | 0.1039 | 0.0810 | 0.1262 | 0.6130 | 5.2397 | 0.3793 | 0.5220 | 0.8216 | 0.7923 |
| VirusGO | 0.7143 | 0.0714 | 0.8095 | 0.8491 | 0.6534 | 0.8163 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7811 | 0.9513 |
| VirusPseAAC | 0.3333 | 0.1349 | 0.5476 | 0.6442 | 0.3909 | 0.6667 | 0.3810 | 0.8571 | 0.1667 | 0.7635 | 0.7099 | 0.9168 |
| Water-quality | 0.0000 | 0.3592 | 0.2025 | 0.3272 | 0.1278 | 0.3158 | 0.3208 | 9.7358 | 0.3201 | 0.6537 | 0.6261 | 0.6634 |
| Yahoo_Arts | 0.1402 | 0.0849 | 0.1798 | 0.2080 | 0.0176 | 0.1821 | 0.7223 | 10.4766 | 0.6352 | 0.3977 | 0.8857 | 0.9213 |
| Yahoo_Business | 0.5107 | 0.0307 | 0.6737 | 0.7661 | 0.0850 | 0.6610 | 0.1319 | 3.5134 | 0.2311 | 0.8571 | 0.8276 | 0.9832 |
| Yahoo_Computers | 0.3221 | 0.0467 | 0.4185 | 0.4848 | 0.0798 | 0.4346 | 0.4851 | 6.8819 | 0.4066 | 0.5527 | 0.8531 | 0.9579 |
| Yahoo_Education | 0.0831 | 0.0660 | 0.1049 | 0.1183 | 0.0075 | 0.1107 | 0.6725 | 9.9792 | 0.5977 | 0.4410 | 0.8670 | 0.9559 |
| Yahoo_Entertainment | 0.1084 | 0.0976 | 0.1636 | 0.1966 | 0.0583 | 0.1875 | 0.6237 | 5.0896 | 0.5422 | 0.4998 | 0.9269 | 0.9262 |
| Yahoo_Health | 0.2953 | 0.0529 | 0.3833 | 0.4409 | 0.0654 | 0.3884 | 0.5114 | 8.5103 | 0.4635 | 0.5495 | 0.8007 | 0.9638 |
| Yahoo_Recreation | 0.1185 | 0.0948 | 0.1388 | 0.1507 | 0.0217 | 0.1379 | 0.7132 | 7.7545 | 0.6870 | 0.4145 | 0.9136 | 0.9154 |
| Yahoo_Reference | 0.3798 | 0.0394 | 0.4527 | 0.4972 | 0.0478 | 0.4588 | 0.4932 | 6.0448 | 0.4124 | 0.5809 | 0.7786 | 0.9711 |
| Yahoo_Science | 0.0249 | 0.0597 | 0.0453 | 0.0572 | 0.0092 | 0.0600 | 0.8274 | 15.8554 | 0.7984 | 0.2765 | 0.9384 | 0.9660 |
| Yahoo_Social | 0.3490 | 0.0348 | 0.4360 | 0.4853 | 0.0600 | 0.4491 | 0.4876 | 7.7302 | 0.3869 | 0.5895 | 0.8990 | 0.9778 |
| Yahoo_Society | 0.2727 | 0.0620 | 0.3683 | 0.4263 | 0.0258 | 0.3767 | 0.4959 | 8.9601 | 0.5281 | 0.5129 | 0.8981 | 0.9485 |
| yeast | 0.1364 | 0.2143 | 0.4770 | 0.6138 | 0.2886 | 0.6101 | 0.2686 | 6.4256 | 0.2053 | 0.7285 | 0.7379 | 0.8152 |
| Yelp | 0.1954 | 0.3031 | 0.3837 | 0.4820 | 0.1718 | 0.4595 | 0.3629 | 1.9232 | 0.2963 | 0.7389 | 0.7550 | 0.7742 |

Table 104: Detailed results for MASSIVE (1K) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4009 | 0.0377 | 0.4731 | 0.5145 | 0.5884 | 0.6027 | 0.3200 | 2.4793 | 0.2376 | 0.7516 | 0.9718 | 0.9730 |
| 3s-bbc1000 | 0.1667 | 0.2639 | 0.2477 | 0.2986 | 0.2553 | 0.3133 | 0.7500 | 2.9444 | 0.6741 | 0.4340 | 0.7778 | 0.7341 |
| 3s-guardian1000 | 0.1935 | 0.2581 | 0.2715 | 0.3310 | 0.2673 | 0.3514 | 0.5806 | 2.0968 | 0.4806 | 0.5927 | 0.8036 | 0.8188 |
| 3s-inter3000 | 0.2353 | 0.2451 | 0.2941 | 0.3235 | 0.0870 | 0.3243 | 0.8235 | 2.4118 | 0.6824 | 0.4363 | 0.5229 | 0.7103 |
| 3s-reuters1000 | 0.0667 | 0.3333 | 0.0833 | 0.0909 | 0.0723 | 0.0909 | 0.9000 | 2.5333 | 0.7800 | 0.3856 | 0.8374 | 0.7601 |
| amphibians | 0.1111 | 0.3016 | 0.4685 | 0.6839 | 0.3885 | 0.5870 | 0.1667 | 2.3889 | 0.0759 | 0.9006 | 0.7366 | 0.7989 |
| bibtex | 0.1676 | 0.0128 | 0.3272 | 0.4151 | 0.2704 | 0.4419 | 0.4162 | 69.4162 | 0.5487 | 0.4432 | 0.9956 | 0.9955 |
| birds | 0.1795 | 0.0918 | 0.3301 | 0.3977 | 0.2619 | 0.4035 | 0.5128 | 7.5641 | 0.4795 | 0.5121 | 0.8457 | 0.9397 |
| bookmarks10% | 0.1800 | 0.0096 | 0.2080 | 0.2283 | 0.0789 | 0.2427 | 0.7517 | 105.1913 | 0.7655 | 0.2470 | 0.9834 | 0.9979 |
| CAL500 | 0.0000 | 0.1375 | 0.1676 | 0.2858 | 0.0349 | 0.2815 | 0.4314 | 151.0980 | 0.5996 | 0.4327 | 0.8315 | 0.9441 |
| corel16k001 | 0.0131 | 0.0235 | 0.1015 | 0.1533 | 0.0274 | 0.1467 | 0.8431 | 113.4662 | 0.9220 | 0.1054 | 0.9978 | 0.9979 |
| Corel5k | 0.0080 | 0.0095 | 0.0419 | 0.0604 | 0.0171 | 0.0847 | 0.8620 | 163.9580 | 0.9407 | 0.1586 | 0.6785 | 0.9994 |
| delicious | 0.0000 | 0.5984 | 0.0213 | 0.0408 | 0.0486 | 0.0427 | 0.7157 | 928.2209 | 0.9669 | 0.0570 | 0.9790 | 0.9961 |
| emotions | 0.3333 | 0.1806 | 0.5986 | 0.7235 | 0.6809 | 0.7085 | 0.2667 | 1.6667 | 0.2125 | 0.8178 | 0.8872 | 0.8924 |
| enron | 0.1579 | 0.0501 | 0.4529 | 0.5839 | 0.1735 | 0.5609 | 0.2690 | 22.6667 | 0.3423 | 0.6228 | 0.8227 | 0.9790 |
| EukaryoteGO | 0.7062 | 0.0190 | 0.7848 | 0.8242 | 0.6441 | 0.8207 | 0.1637 | 0.6353 | 0.0282 | 0.9007 | 0.9913 | 0.9945 |
| EukaryotePseAAC | 0.1918 | 0.0598 | 0.2936 | 0.3482 | 0.1069 | 0.3936 | 0.5714 | 5.4646 | 0.4323 | 0.5386 | 0.9552 | 0.9599 |
| flags | 0.2500 | 0.2357 | 0.6050 | 0.7243 | 0.5415 | 0.7317 | 0.2500 | 3.6000 | 0.2417 | 0.8125 | 0.6891 | 0.7903 |
| foodtruck | 0.3659 | 0.1423 | 0.4877 | 0.5921 | 0.0926 | 0.4776 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8569 | 0.9577 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0000 | 0.2388 | 0.0006 | 0.9950 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9143 | 0.0152 | 0.9393 | 0.9518 | 0.8127 | 0.9416 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7643 | 0.0500 | 0.7881 | 0.8000 | 0.4549 | 0.8028 | 0.1786 | 0.6000 | 0.1236 | 0.8789 | 0.8558 | 0.9848 |
| GpositiveGO | 0.8846 | 0.0529 | 0.8942 | 0.8990 | 0.8311 | 0.8952 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9962 |
| GpositivePseAAC | 0.7500 | 0.1202 | 0.7500 | 0.7500 | 0.5751 | 0.7573 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6752 | 0.0358 | 0.7554 | 0.7975 | 0.6694 | 0.7752 | 0.1640 | 0.7170 | 0.0560 | 0.8951 | 0.9819 | 0.9868 |
| HumanPseAAC | 0.2637 | 0.0907 | 0.3339 | 0.3709 | 0.1605 | 0.4006 | 0.5531 | 2.9453 | 0.3423 | 0.6021 | 0.9209 | 0.9242 |
| Image | 0.5300 | 0.1690 | 0.6125 | 0.6544 | 0.6309 | 0.6253 | 0.3100 | 1.0400 | 0.2817 | 0.7901 | 0.9127 | 0.9069 |
| IMDB-ECC-F10% | 0.0587 | 0.0848 | 0.1451 | 0.1929 | 0.0280 | 0.1890 | 0.6394 | 12.3229 | 0.7291 | 0.3722 | 0.9868 | 0.9733 |
| IMDB-F10% | 0.0481 | 0.0909 | 0.1287 | 0.1735 | 0.0185 | 0.1725 | 0.6123 | 13.2262 | 0.7531 | 0.3614 | 0.9870 | 0.9746 |
| LLOG-F | 0.1557 | 0.0164 | 0.1892 | 0.2091 | 0.0512 | 0.2788 | 0.7049 | 27.4016 | 0.7534 | 0.3049 | 0.5978 | 0.9974 |
| mediamill10% | 0.0784 | 0.0316 | 0.4297 | 0.5920 | 0.0527 | 0.5382 | 0.2233 | 57.9026 | 0.4354 | 0.5438 | 0.8090 | 0.9919 |
| medical | 0.6531 | 0.0107 | 0.7577 | 0.8103 | 0.2985 | 0.8127 | 0.1633 | 5.0510 | 0.1334 | 0.8334 | 0.5528 | 0.9977 |
| Music | 0.2833 | 0.1639 | 0.6028 | 0.7438 | 0.7331 | 0.7446 | 0.2667 | 2.0167 | 0.2584 | 0.8015 | 0.9098 | 0.8979 |
| NUS-WIDE-bow10% | 0.1637 | 0.0266 | 0.2957 | 0.3666 | 0.0404 | 0.3619 | 0.5214 | 33.3620 | 0.5646 | 0.4402 | 0.8772 | 0.9884 |
| NUS-WIDE-cVLADplus10% | 0.1822 | 0.0251 | 0.3128 | 0.3813 | 0.0445 | 0.3888 | 0.5247 | 31.5243 | 0.5242 | 0.4670 | 0.8779 | 0.9876 |
| OHSUMED-F | 0.1981 | 0.0607 | 0.3753 | 0.4714 | 0.3469 | 0.5040 | 0.3704 | 6.3999 | 0.3307 | 0.6363 | 0.9507 | 0.9530 |
| PlantGO | 0.6979 | 0.0408 | 0.7222 | 0.7361 | 0.6461 | 0.7614 | 0.2188 | 1.0000 | 0.1052 | 0.8510 | 0.9901 | 0.9853 |
| PlantPseAAC | 0.2653 | 0.1080 | 0.3248 | 0.3560 | 0.2045 | 0.3744 | 0.5918 | 3.0918 | 0.4868 | 0.5544 | 0.9458 | 0.9396 |
| rcv1subset1 | 0.0750 | 0.0325 | 0.2954 | 0.4132 | 0.2220 | 0.4139 | 0.3900 | 30.1967 | 0.3105 | 0.5467 | 0.9197 | 0.9813 |
| REUTERS-K500-EX2 | 0.3024 | 0.0125 | 0.3718 | 0.4122 | 0.2092 | 0.4551 | 0.4794 | 26.3832 | 0.4483 | 0.5362 | 0.7804 | 0.9936 |
| scene | 0.6473 | 0.0858 | 0.7054 | 0.7343 | 0.7638 | 0.7500 | 0.2075 | 0.6846 | 0.1330 | 0.8591 | 0.9608 | 0.9660 |
| sider_CDK_ECFP4 | 0.0282 | 0.2486 | 0.6511 | 0.7973 | 0.6292 | 0.7954 | 0.2887 | 19.0282 | 0.1590 | 0.7838 | 0.5750 | 0.7776 |
| sider_MordredDesc | 0.0141 | 0.2700 | 0.6180 | 0.7769 | 0.6022 | 0.7775 | 0.2887 | 19.5986 | 0.1937 | 0.7578 | 0.5648 | 0.7594 |
| sider_RDKit_desc | 0.0141 | 0.2861 | 0.6264 | 0.7786 | 0.5852 | 0.7739 | 0.3099 | 20.2254 | 0.2058 | 0.7580 | 0.5837 | 0.7516 |
| SLASHDOT-F | 0.4048 | 0.0388 | 0.4938 | 0.5410 | 0.3656 | 0.5937 | 0.3862 | 4.5238 | 0.2901 | 0.6762 | 0.7441 | 0.9706 |
| solar_flare-L3 | 0.4000 | 0.4000 | 0.4000 | 0.4000 | 0.1905 | 0.4000 | 0.4000 | 0.4000 | 0.3000 | 0.8000 | 0.4444 | 0.8000 |
| Stackex_chemistry | 0.0231 | 0.0137 | 0.0759 | 0.1132 | 0.0448 | 0.1468 | 0.7925 | 105.5951 | 0.8676 | 0.1556 | 0.9161 | 0.9960 |
| Stackex_chess | 0.0357 | 0.0105 | 0.1293 | 0.1857 | 0.0509 | 0.2366 | 0.6310 | 131.4167 | 0.7651 | 0.2309 | 0.5484 | 0.9974 |
| Stackex_coffee | 0.0435 | 0.0198 | 0.0725 | 0.0851 | 0.0213 | 0.1250 | 0.7826 | 75.3478 | 0.8450 | 0.1550 | 0.2572 | 0.9918 |
| Stackex_cooking | 0.0232 | 0.0062 | 0.1069 | 0.1598 | 0.0461 | 0.1934 | 0.7498 | 237.1942 | 0.8518 | 0.1560 | 0.9237 | 0.9986 |
| Stackex_philosophy | 0.0477 | 0.0104 | 0.1346 | 0.1926 | 0.0603 | 0.2269 | 0.7060 | 133.2487 | 0.7849 | 0.2116 | 0.7483 | 0.9970 |
| tmc2007-500 | 0.2706 | 0.0644 | 0.5336 | 0.6655 | 0.5358 | 0.6477 | 0.2811 | 3.9832 | 0.1318 | 0.7682 | 0.9497 | 0.9631 |
| tox21_CDK_ECFP4 | 0.1301 | 0.1647 | 0.3073 | 0.3971 | 0.3432 | 0.4247 | 0.4897 | 4.9247 | 0.3875 | 0.5920 | 0.8710 | 0.8622 |
| tox21_RDKit_desc | 0.1199 | 0.1844 | 0.2603 | 0.3555 | 0.2174 | 0.3475 | 0.5034 | 5.3048 | 0.4272 | 0.5742 | 0.8676 | 0.8597 |
| VirusGO | 0.7143 | 0.0635 | 0.8254 | 0.8651 | 0.6868 | 0.8400 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.8019 | 0.9675 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.2857 | 0.8571 | 0.1762 | 0.8008 | 0.7331 | 0.9215 |
| Water-quality | 0.0000 | 0.3261 | 0.2612 | 0.4016 | 0.2663 | 0.4025 | 0.2925 | 9.1604 | 0.3598 | 0.6914 | 0.7726 | 0.7679 |
| Yahoo_Arts | 0.0921 | 0.0747 | 0.1400 | 0.1794 | 0.1287 | 0.2191 | 0.6222 | 11.6061 | 0.6416 | 0.4198 | 0.9187 | 0.9534 |
| Yahoo_Business | 0.5160 | 0.0319 | 0.6922 | 0.7937 | 0.2152 | 0.6769 | 0.1266 | 3.2273 | 0.2278 | 0.8689 | 0.8462 | 0.9903 |
| Yahoo_Computers | 0.3494 | 0.0480 | 0.4398 | 0.5081 | 0.1819 | 0.4530 | 0.4129 | 6.8908 | 0.4555 | 0.5829 | 0.8819 | 0.9758 |
| Yahoo_Education | 0.0806 | 0.0675 | 0.1260 | 0.1574 | 0.0408 | 0.1598 | 0.6218 | 10.0748 | 0.6335 | 0.4647 | 0.8838 | 0.9703 |
| Yahoo_Entertainment | 0.3087 | 0.0783 | 0.3705 | 0.4124 | 0.2040 | 0.3772 | 0.5530 | 4.7918 | 0.4956 | 0.5553 | 0.9622 | 0.9552 |
| Yahoo_Health | 0.3268 | 0.0505 | 0.4365 | 0.5099 | 0.1649 | 0.4537 | 0.4430 | 7.7416 | 0.4201 | 0.6028 | 0.8156 | 0.9741 |
| Yahoo_Recreation | 0.1403 | 0.0769 | 0.1909 | 0.2320 | 0.2094 | 0.2810 | 0.6048 | 7.3009 | 0.5872 | 0.4995 | 0.9539 | 0.9445 |
| Yahoo_Reference | 0.4122 | 0.0376 | 0.4736 | 0.5152 | 0.1033 | 0.4744 | 0.4396 | 6.0772 | 0.4364 | 0.6098 | 0.8030 | 0.9837 |
| Yahoo_Science | 0.0933 | 0.0514 | 0.1241 | 0.1585 | 0.0899 | 0.1808 | 0.7652 | 15.3546 | 0.7757 | 0.3212 | 0.9475 | 0.9733 |
| Yahoo_Social | 0.4406 | 0.0310 | 0.5065 | 0.5480 | 0.1171 | 0.5005 | 0.4249 | 8.0149 | 0.4184 | 0.6100 | 0.9093 | 0.9856 |
| Yahoo_Society | 0.2576 | 0.0685 | 0.3715 | 0.4537 | 0.1108 | 0.3880 | 0.4773 | 8.9187 | 0.5332 | 0.5256 | 0.9311 | 0.9672 |
| yeast | 0.2190 | 0.1957 | 0.5401 | 0.6683 | 0.3736 | 0.6609 | 0.2479 | 6.1901 | 0.2084 | 0.7636 | 0.8121 | 0.8722 |
| Yelp | 0.3330 | 0.2239 | 0.5651 | 0.6748 | 0.6157 | 0.6657 | 0.2493 | 1.4706 | 0.2281 | 0.8324 | 0.8324 | 0.8606 |

Table 105: Detailed results for MASSIVE (5K) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5099 | 0.0282 | 0.5649 | 0.5931 | 0.6873 | 0.6929 | 0.2951 | 2.2593 | 0.2153 | 0.7722 | 0.9837 | 0.9839 |
| 3s-bbc1000 | 0.1389 | 0.2824 | 0.1944 | 0.2315 | 0.1878 | 0.2469 | 0.7500 | 2.7778 | 0.6609 | 0.4529 | 0.7703 | 0.7211 |
| 3s-guardian1000 | 0.1613 | 0.2634 | 0.2527 | 0.3037 | 0.2053 | 0.3288 | 0.5484 | 2.3548 | 0.5000 | 0.5858 | 0.7701 | 0.7923 |
| 3s-inter3000 | 0.2353 | 0.2451 | 0.2941 | 0.3235 | 0.0870 | 0.3243 | 0.8235 | 2.2353 | 0.6353 | 0.4520 | 0.5010 | 0.6726 |
| 3s-reuters1000 | 0.0667 | 0.3278 | 0.0833 | 0.0909 | 0.0683 | 0.0923 | 0.9000 | 2.5333 | 0.7467 | 0.3817 | 0.8211 | 0.7477 |
| amphibians | 0.1111 | 0.3095 | 0.4619 | 0.6784 | 0.2762 | 0.5618 | 0.2778 | 2.5000 | 0.1056 | 0.8385 | 0.7483 | 0.8092 |
| bibtex | 0.1831 | 0.0121 | 0.3595 | 0.4498 | 0.3031 | 0.4785 | 0.4361 | 72.3313 | 0.5775 | 0.4280 | 1.0000 | 1.0000 |
| birds | 0.2051 | 0.0918 | 0.3434 | 0.4120 | 0.2718 | 0.4035 | 0.5128 | 7.6410 | 0.4771 | 0.5037 | 0.8399 | 0.9383 |
| bookmarks10% | 0.1821 | 0.0087 | 0.2180 | 0.2393 | 0.1120 | 0.2615 | 0.7260 | 103.5770 | 0.7667 | 0.2604 | 0.9789 | 1.0000 |
| CAL500 | 0.0000 | 0.1373 | 0.1712 | 0.2913 | 0.0350 | 0.2852 | 0.2745 | 151.0392 | 0.6543 | 0.4252 | 0.8374 | 0.9529 |
| corel16k001 | 0.0051 | 0.0188 | 0.0473 | 0.0710 | 0.0307 | 0.0901 | 0.8647 | 113.4315 | 0.9420 | 0.0890 | 1.0000 | 0.9861 |
| Corel5k | 0.0099 | 0.0091 | 0.0505 | 0.0703 | 0.0193 | 0.0993 | 0.8406 | 164.6697 | 0.9456 | 0.1614 | 0.6866 | 0.9998 |
| delicious | 0.0000 | 0.6071 | 0.0211 | 0.0412 | 0.0493 | 0.0424 | 0.7058 | 923.5664 | 0.9541 | 0.0573 | 0.9818 | 0.9997 |
| emotions | 0.3167 | 0.1917 | 0.5903 | 0.7151 | 0.6887 | 0.7039 | 0.2667 | 1.7167 | 0.2267 | 0.8073 | 0.8765 | 0.8876 |
| enron | 0.1696 | 0.0516 | 0.4319 | 0.5571 | 0.1373 | 0.5366 | 0.3450 | 23.5906 | 0.3652 | 0.6020 | 0.8268 | 0.9811 |
| EukaryoteGO | 0.7010 | 0.0182 | 0.7902 | 0.8338 | 0.6578 | 0.8306 | 0.1778 | 0.9188 | 0.0544 | 0.8866 | 0.9929 | 0.9947 |
| EukaryotePseAAC | 0.2674 | 0.0552 | 0.3589 | 0.4073 | 0.1451 | 0.4360 | 0.5712 | 6.3651 | 0.5301 | 0.4958 | 0.9799 | 0.9786 |
| flags | 0.2500 | 0.2286 | 0.6192 | 0.7379 | 0.5818 | 0.7460 | 0.2000 | 3.5500 | 0.2258 | 0.8150 | 0.6879 | 0.8061 |
| foodtruck | 0.3659 | 0.1443 | 0.4877 | 0.5921 | 0.0903 | 0.4741 | 0.2439 | 4.4390 | 0.4408 | 0.7207 | 0.8516 | 0.9559 |
| genbase | 0.9552 | 0.0022 | 0.9776 | 0.9888 | 0.6144 | 0.9756 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0134 | 0.9464 | 0.9553 | 0.8175 | 0.9481 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7500 | 0.0545 | 0.7810 | 0.7964 | 0.4467 | 0.7889 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8617 | 0.9892 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8699 | 0.9333 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9962 |
| GpositivePseAAC | 0.7500 | 0.1154 | 0.7500 | 0.7500 | 0.5801 | 0.7647 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6945 | 0.0342 | 0.7604 | 0.7951 | 0.6943 | 0.7818 | 0.1640 | 1.1608 | 0.1133 | 0.8750 | 0.9849 | 0.9883 |
| HumanPseAAC | 0.3590 | 0.0924 | 0.4042 | 0.4392 | 0.1870 | 0.4259 | 0.5396 | 3.6481 | 0.5103 | 0.5687 | 0.9723 | 0.9677 |
| Image | 0.5450 | 0.1650 | 0.6208 | 0.6595 | 0.6389 | 0.6341 | 0.3000 | 1.0100 | 0.2854 | 0.7980 | 0.9350 | 0.9317 |
| IMDB-ECC-F10% | 0.0597 | 0.0849 | 0.1456 | 0.1932 | 0.0255 | 0.1917 | 0.6352 | 12.3491 | 0.7371 | 0.3729 | 0.9908 | 0.9758 |
| IMDB-F10% | 0.0497 | 0.0904 | 0.1381 | 0.1887 | 0.0236 | 0.1890 | 0.5915 | 12.7399 | 0.7206 | 0.3833 | 0.9864 | 0.9746 |
| LLOG-F | 0.1721 | 0.0162 | 0.2015 | 0.2192 | 0.0529 | 0.2952 | 0.7377 | 28.6967 | 0.7794 | 0.2796 | 0.5980 | 0.9978 |
| mediamill10% | 0.1021 | 0.0310 | 0.4303 | 0.5881 | 0.0473 | 0.5351 | 0.1520 | 59.3658 | 0.4458 | 0.5607 | 0.8125 | 0.9934 |
| medical | 0.6327 | 0.0109 | 0.7457 | 0.8008 | 0.2970 | 0.8095 | 0.1837 | 4.9388 | 0.1281 | 0.8359 | 0.5530 | 0.9977 |
| Music | 0.2833 | 0.1722 | 0.5944 | 0.7310 | 0.7212 | 0.7328 | 0.2167 | 1.9333 | 0.2271 | 0.8269 | 0.9108 | 0.9032 |
| NUS-WIDE-bow10% | 0.1859 | 0.0253 | 0.3133 | 0.3768 | 0.0412 | 0.3736 | 0.5289 | 34.4281 | 0.5798 | 0.4417 | 0.8753 | 0.9974 |
| NUS-WIDE-cVLADplus10% | 0.1963 | 0.0298 | 0.3216 | 0.3842 | 0.0415 | 0.3502 | 0.6414 | 38.5027 | 0.7076 | 0.3548 | 0.8773 | 1.0000 |
| OHSUMED-F | 0.2297 | 0.0577 | 0.4243 | 0.5278 | 0.4041 | 0.5470 | 0.3482 | 6.7803 | 0.3545 | 0.6430 | 0.9656 | 0.9698 |
| PlantGO | 0.6875 | 0.0434 | 0.7170 | 0.7335 | 0.6316 | 0.7500 | 0.2292 | 1.0521 | 0.0992 | 0.8484 | 0.9905 | 0.9856 |
| PlantPseAAC | 0.2857 | 0.1037 | 0.3231 | 0.3452 | 0.2050 | 0.3711 | 0.5918 | 3.1020 | 0.4902 | 0.5513 | 0.9420 | 0.9367 |
| rcv1subset1 | 0.0967 | 0.0298 | 0.2775 | 0.3731 | 0.2128 | 0.3907 | 0.4250 | 42.6400 | 0.4716 | 0.4792 | 0.9275 | 0.9878 |
| REUTERS-K500-EX2 | 0.3282 | 0.0115 | 0.3989 | 0.4384 | 0.2331 | 0.4900 | 0.5292 | 32.4416 | 0.5352 | 0.4827 | 0.7837 | 0.9972 |
| scene | 0.6639 | 0.0844 | 0.7178 | 0.7445 | 0.7674 | 0.7540 | 0.2075 | 0.8050 | 0.1606 | 0.8482 | 0.9690 | 0.9724 |
| sider_CDK_ECFP4 | 0.0141 | 0.2684 | 0.6389 | 0.7877 | 0.6312 | 0.7852 | 0.3028 | 19.1338 | 0.1574 | 0.7968 | 0.5760 | 0.7715 |
| sider_MordredDesc | 0.0140 | 0.2695 | 0.6196 | 0.7778 | 0.6167 | 0.7674 | 0.3187 | 19.1462 | 0.1817 | 0.7579 | 0.5703 | 0.7728 |
| sider_RDKit_desc | 0.0141 | 0.2856 | 0.6260 | 0.7790 | 0.5883 | 0.7736 | 0.3099 | 20.2887 | 0.2281 | 0.7206 | 0.5958 | 0.7352 |
| SLASHDOT-F | 0.3968 | 0.0422 | 0.4863 | 0.5341 | 0.3477 | 0.5693 | 0.4233 | 6.0741 | 0.4035 | 0.6167 | 0.7598 | 0.9857 |
| solar_flare-L3 | 0.6000 | 0.2000 | 0.6000 | 0.6000 | 0.4333 | 0.6667 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.8000 |
| Stackex_chemistry | 0.0385 | 0.0122 | 0.0995 | 0.1331 | 0.0527 | 0.1697 | 0.7901 | 105.8220 | 0.8700 | 0.1515 | 0.9248 | 0.9978 |
| Stackex_chess | 0.0417 | 0.0102 | 0.1370 | 0.1916 | 0.0526 | 0.2510 | 0.6905 | 138.5000 | 0.8131 | 0.1981 | 0.5491 | 0.9983 |
| Stackex_coffee | 0.0435 | 0.0198 | 0.0616 | 0.0739 | 0.0159 | 0.0968 | 0.8261 | 75.4783 | 0.8702 | 0.1388 | 0.2554 | 0.9877 |
| Stackex_cooking | 0.0594 | 0.0052 | 0.1895 | 0.2626 | 0.1013 | 0.3050 | 0.6394 | 225.2659 | 0.7658 | 0.2318 | 0.9346 | 1.0000 |
| Stackex_philosophy | 0.0673 | 0.0092 | 0.1686 | 0.2304 | 0.0555 | 0.2657 | 0.6869 | 135.6828 | 0.7842 | 0.2116 | 0.7427 | 1.0000 |
| tmc2007-500 | 0.2972 | 0.0628 | 0.5538 | 0.6829 | 0.5660 | 0.6691 | 0.2526 | 4.1737 | 0.1473 | 0.7669 | 0.9452 | 0.9828 |
| tox21_CDK_ECFP4 | 0.1473 | 0.1635 | 0.3339 | 0.4293 | 0.3747 | 0.4431 | 0.4623 | 5.3356 | 0.4873 | 0.5720 | 0.9028 | 0.9029 |
| tox21_RDKit_desc | 0.1644 | 0.1721 | 0.3094 | 0.4058 | 0.2629 | 0.3841 | 0.5068 | 5.5171 | 0.5117 | 0.5500 | 0.9014 | 0.9031 |
| VirusGO | 0.7143 | 0.0635 | 0.8254 | 0.8651 | 0.6868 | 0.8400 | 0.1429 | 0.6190 | 0.0934 | 0.8944 | 0.7895 | 0.9552 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.2857 | 0.8571 | 0.1857 | 0.7992 | 0.7071 | 0.9160 |
| Water-quality | 0.0094 | 0.3295 | 0.2690 | 0.4155 | 0.2838 | 0.4130 | 0.2642 | 9.1321 | 0.3559 | 0.6935 | 0.7664 | 0.7605 |
| Yahoo_Arts | 0.1991 | 0.0633 | 0.2896 | 0.3428 | 0.2106 | 0.3634 | 0.5156 | 10.5312 | 0.6181 | 0.4996 | 0.9491 | 0.9807 |
| Yahoo_Business | 0.5842 | 0.0257 | 0.7233 | 0.8259 | 0.2989 | 0.7282 | 0.0885 | 3.1978 | 0.2238 | 0.8862 | 0.8599 | 1.0000 |
| Yahoo_Computers | 0.3904 | 0.0422 | 0.4854 | 0.5502 | 0.2499 | 0.5078 | 0.3791 | 6.5526 | 0.4267 | 0.6135 | 0.8899 | 0.9822 |
| Yahoo_Education | 0.1449 | 0.0458 | 0.2032 | 0.2450 | 0.1497 | 0.3092 | 0.6178 | 9.4459 | 0.6533 | 0.4914 | 0.8751 | 0.9915 |
| Yahoo_Entertainment | 0.4202 | 0.0733 | 0.5309 | 0.5817 | 0.3583 | 0.5417 | 0.3897 | 3.9587 | 0.3890 | 0.6824 | 0.9690 | 0.9794 |
| Yahoo_Health | 0.4053 | 0.0396 | 0.5478 | 0.6263 | 0.2452 | 0.5849 | 0.3138 | 6.3872 | 0.3458 | 0.7023 | 0.8304 | 0.9892 |
| Yahoo_Recreation | 0.2358 | 0.0599 | 0.2906 | 0.3323 | 0.3072 | 0.3908 | 0.5199 | 6.5281 | 0.5533 | 0.5673 | 0.9679 | 0.9657 |
| Yahoo_Reference | 0.4527 | 0.0310 | 0.5076 | 0.5553 | 0.1772 | 0.5348 | 0.3997 | 5.4084 | 0.4375 | 0.6296 | 0.8049 | 0.9842 |
| Yahoo_Science | 0.2055 | 0.0387 | 0.2611 | 0.3017 | 0.1599 | 0.3372 | 0.6318 | 13.7137 | 0.6758 | 0.4125 | 0.9605 | 0.9877 |
| Yahoo_Social | 0.4823 | 0.0275 | 0.5336 | 0.5701 | 0.1630 | 0.5455 | 0.3724 | 7.4989 | 0.3828 | 0.6456 | 0.9042 | 0.9761 |
| Yahoo_Society | 0.3225 | 0.0839 | 0.4516 | 0.5551 | 0.2298 | 0.4667 | 0.3642 | 8.3998 | 0.4778 | 0.5881 | 0.9447 | 0.9883 |
| yeast | 0.2190 | 0.1933 | 0.5489 | 0.6767 | 0.4010 | 0.6697 | 0.2521 | 6.2645 | 0.2415 | 0.7501 | 0.8291 | 0.8863 |
| Yelp | 0.3998 | 0.1922 | 0.6227 | 0.7221 | 0.6618 | 0.7166 | 0.1954 | 1.3829 | 0.2095 | 0.8617 | 0.8660 | 0.8915 |

Table 106: Detailed results for MASSIVE (10K) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5415 | 0.0270 | 0.5875 | 0.6106 | 0.6998 | 0.7052 | 0.3060 | 2.2977 | 0.2224 | 0.7645 | 0.9874 | 0.9875 |
| 3s-bbc1000 | 0.0833 | 0.2870 | 0.1644 | 0.2226 | 0.2405 | 0.2619 | 0.7778 | 2.9444 | 0.6574 | 0.4307 | 0.7785 | 0.7224 |
| 3s-guardian1000 | 0.2581 | 0.2312 | 0.3629 | 0.4166 | 0.2310 | 0.4110 | 0.5161 | 2.1613 | 0.4734 | 0.6142 | 0.7913 | 0.8129 |
| 3s-inter3000 | 0.2941 | 0.2255 | 0.3235 | 0.3376 | 0.0870 | 0.3429 | 0.8824 | 2.4706 | 0.6132 | 0.4049 | 0.4799 | 0.6640 |
| 3s-reuters1000 | 0.0667 | 0.3222 | 0.0833 | 0.0909 | 0.0923 | 0.0938 | 0.9000 | 2.6667 | 0.7867 | 0.3744 | 0.8087 | 0.7378 |
| amphibians | 0.1111 | 0.3095 | 0.4619 | 0.6784 | 0.2762 | 0.5618 | 0.2222 | 2.4444 | 0.1167 | 0.8663 | 0.7343 | 0.7999 |
| bibtex | 0.1784 | 0.0120 | 0.3545 | 0.4469 | 0.3131 | 0.4745 | 0.4432 | 73.2162 | 0.5894 | 0.4212 | 0.9979 | 0.9980 |
| birds | 0.1795 | 0.0931 | 0.3385 | 0.4137 | 0.2907 | 0.4202 | 0.5385 | 7.8974 | 0.5491 | 0.4923 | 0.8402 | 0.9379 |
| bookmarks10% | 0.1834 | 0.0088 | 0.2142 | 0.2359 | 0.1155 | 0.2618 | 0.7369 | 105.5740 | 0.7652 | 0.2537 | 0.9842 | 0.9986 |
| CAL500 | 0.0000 | 0.1393 | 0.1558 | 0.2688 | 0.0327 | 0.2608 | 0.3333 | 150.9020 | 0.6348 | 0.4301 | 0.8330 | 0.9500 |
| corel16k001 | 0.0138 | 0.0232 | 0.0892 | 0.1314 | 0.0280 | 0.1254 | 0.9005 | 116.2912 | 0.9539 | 0.0783 | 0.9990 | 0.9991 |
| Corel5k | 0.0000 | 0.3525 | 0.0108 | 0.0213 | 0.0172 | 0.0213 | 0.8940 | 166.1300 | 0.9633 | 0.1398 | 0.6790 | 0.9999 |
| delicious | 0.0000 | 0.0493 | 0.0443 | 0.0831 | 0.0611 | 0.0855 | 0.5475 | 906.1274 | 0.8496 | 0.1465 | 0.9933 | 0.9985 |
| emotions | 0.3500 | 0.1972 | 0.5861 | 0.6923 | 0.6809 | 0.6926 | 0.3000 | 1.7667 | 0.2398 | 0.7911 | 0.8740 | 0.8864 |
| enron | 0.1988 | 0.0515 | 0.4561 | 0.5704 | 0.1407 | 0.5573 | 0.2456 | 24.3275 | 0.3768 | 0.6121 | 0.8267 | 0.9817 |
| EukaryoteGO | 0.6972 | 0.0193 | 0.7809 | 0.8224 | 0.6876 | 0.8179 | 0.1727 | 0.8660 | 0.0514 | 0.8913 | 0.9934 | 0.9949 |
| EukaryotePseAAC | 0.2857 | 0.0542 | 0.3628 | 0.4031 | 0.1427 | 0.4374 | 0.5740 | 6.7568 | 0.5655 | 0.4871 | 0.9785 | 0.9808 |
| flags | 0.2500 | 0.2286 | 0.6333 | 0.7483 | 0.5880 | 0.7538 | 0.2000 | 3.5500 | 0.2333 | 0.8150 | 0.6988 | 0.7973 |
| foodtruck | 0.3659 | 0.1423 | 0.4877 | 0.5921 | 0.0926 | 0.4776 | 0.2439 | 4.6341 | 0.4507 | 0.7166 | 0.8538 | 0.9560 |
| genbase | 0.9403 | 0.0028 | 0.9627 | 0.9739 | 0.5774 | 0.9693 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9357 | 0.0125 | 0.9500 | 0.9571 | 0.8192 | 0.9517 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7571 | 0.0536 | 0.7845 | 0.7982 | 0.4481 | 0.7931 | 0.1786 | 0.6143 | 0.1464 | 0.8754 | 0.8622 | 0.9894 |
| GpositiveGO | 0.9231 | 0.0385 | 0.9231 | 0.9231 | 0.8601 | 0.9231 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9968 | 0.9962 |
| GpositivePseAAC | 0.7308 | 0.1250 | 0.7404 | 0.7452 | 0.5688 | 0.7500 | 0.2500 | 0.5385 | 0.2500 | 0.8365 | 0.9841 | 0.9760 |
| HumanGO | 0.6945 | 0.0342 | 0.7599 | 0.7953 | 0.6937 | 0.7812 | 0.1543 | 1.0900 | 0.1081 | 0.8827 | 0.9849 | 0.9884 |
| HumanPseAAC | 0.3023 | 0.0928 | 0.3708 | 0.4050 | 0.1692 | 0.4145 | 0.5402 | 3.4373 | 0.4754 | 0.5807 | 0.9527 | 0.9551 |
| Image | 0.5400 | 0.1650 | 0.6208 | 0.6620 | 0.6391 | 0.6341 | 0.3100 | 1.0200 | 0.2792 | 0.7946 | 0.9293 | 0.9258 |
| IMDB-ECC-F10% | 0.0587 | 0.0844 | 0.1433 | 0.1884 | 0.0239 | 0.1874 | 0.6300 | 12.4864 | 0.7400 | 0.3718 | 0.9903 | 0.9773 |
| IMDB-F10% | 0.0530 | 0.0902 | 0.1412 | 0.1906 | 0.0246 | 0.1919 | 0.6462 | 13.6495 | 0.7842 | 0.3393 | 0.9872 | 0.9809 |
| LLOG-F | 0.1721 | 0.0163 | 0.2001 | 0.2169 | 0.0525 | 0.2871 | 0.7377 | 29.2131 | 0.7835 | 0.2757 | 0.5984 | 0.9980 |
| mediamill10% | 0.0831 | 0.0308 | 0.4473 | 0.6145 | 0.0671 | 0.5564 | 0.2185 | 57.7838 | 0.4376 | 0.5450 | 0.8106 | 0.9932 |
| medical | 0.6327 | 0.0109 | 0.7406 | 0.7932 | 0.2822 | 0.8080 | 0.1735 | 5.0204 | 0.1328 | 0.8393 | 0.5525 | 0.9975 |
| Music | 0.2833 | 0.1667 | 0.6028 | 0.7438 | 0.7311 | 0.7414 | 0.3000 | 2.0000 | 0.2572 | 0.7959 | 0.9107 | 0.9030 |
| NUS-WIDE-bow10% | 0.1886 | 0.0255 | 0.3119 | 0.3802 | 0.0410 | 0.3715 | 0.5251 | 34.6402 | 0.5790 | 0.4437 | 0.8783 | 0.9888 |
| NUS-WIDE-cVLADplus10% | 0.1784 | 0.0241 | 0.3091 | 0.3766 | 0.0560 | 0.4012 | 0.5442 | 35.1337 | 0.6349 | 0.4161 | 0.8826 | 0.9938 |
| OHSUMED-F | 0.2333 | 0.0569 | 0.4342 | 0.5402 | 0.4396 | 0.5608 | 0.3510 | 7.5054 | 0.4023 | 0.6209 | 0.9752 | 0.9785 |
| PlantGO | 0.6667 | 0.0451 | 0.7014 | 0.7204 | 0.6047 | 0.7374 | 0.2292 | 1.0417 | 0.0954 | 0.8481 | 0.9902 | 0.9849 |
| PlantPseAAC | 0.2857 | 0.1029 | 0.3333 | 0.3605 | 0.2119 | 0.3858 | 0.6122 | 3.1837 | 0.5013 | 0.5399 | 0.9452 | 0.9377 |
| rcv1subset1 | 0.1067 | 0.0302 | 0.3151 | 0.4238 | 0.2217 | 0.4287 | 0.4417 | 42.0467 | 0.4697 | 0.4795 | 0.9266 | 0.9875 |
| REUTERS-K500-EX2 | 0.3179 | 0.0112 | 0.3869 | 0.4268 | 0.2376 | 0.4898 | 0.5361 | 33.2938 | 0.5605 | 0.4667 | 0.7843 | 0.9978 |
| scene | 0.6639 | 0.0844 | 0.7158 | 0.7414 | 0.7655 | 0.7530 | 0.2075 | 0.7884 | 0.1560 | 0.8491 | 0.9691 | 0.9724 |
| sider_CDK_ECFP4 | 0.0211 | 0.2535 | 0.6427 | 0.7902 | 0.6519 | 0.7929 | 0.2465 | 19.0423 | 0.1505 | 0.8082 | 0.5875 | 0.7881 |
| sider_MordredDesc | 0.0282 | 0.2773 | 0.6148 | 0.7672 | 0.6082 | 0.7754 | 0.2887 | 19.6549 | 0.1698 | 0.7857 | 0.5752 | 0.7718 |
| sider_RDKit_desc | 0.0141 | 0.2846 | 0.6278 | 0.7795 | 0.5893 | 0.7749 | 0.2817 | 20.2606 | 0.2125 | 0.7528 | 0.5794 | 0.7552 |
| SLASHDOT-F | 0.3915 | 0.0409 | 0.4778 | 0.5242 | 0.3449 | 0.5729 | 0.4312 | 6.1958 | 0.4114 | 0.6095 | 0.7597 | 0.9851 |
| solar_flare-L3 | 0.2000 | 0.4667 | 0.3000 | 0.3429 | 0.1905 | 0.3636 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.3333 | 0.7000 |
| Stackex_chemistry | 0.0389 | 0.0119 | 0.0973 | 0.1329 | 0.0548 | 0.1675 | 0.7939 | 106.0793 | 0.8837 | 0.1491 | 0.9188 | 0.9988 |
| Stackex_chess | 0.0417 | 0.0099 | 0.1427 | 0.1971 | 0.0542 | 0.2622 | 0.6964 | 139.0536 | 0.8227 | 0.1882 | 0.5494 | 0.9985 |
| Stackex_coffee | 0.0000 | 0.0201 | 0.0435 | 0.0684 | 0.0213 | 0.1231 | 0.8261 | 73.7826 | 0.8172 | 0.1670 | 0.2562 | 0.9889 |
| Stackex_cooking | 0.0609 | 0.0052 | 0.1916 | 0.2580 | 0.0977 | 0.3051 | 0.6493 | 224.1865 | 0.7767 | 0.2264 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0628 | 0.0092 | 0.1658 | 0.2238 | 0.0539 | 0.2617 | 0.6809 | 134.9422 | 0.7911 | 0.2138 | 0.7499 | 0.9987 |
| tmc2007-500 | 0.2867 | 0.0621 | 0.5558 | 0.6885 | 0.5718 | 0.6649 | 0.2241 | 4.3231 | 0.1642 | 0.7833 | 0.9627 | 0.9727 |
| tox21_CDK_ECFP4 | 0.1575 | 0.1618 | 0.3422 | 0.4318 | 0.3850 | 0.4522 | 0.4589 | 5.3699 | 0.4928 | 0.5716 | 0.9022 | 0.9030 |
| tox21_RDKit_desc | 0.1575 | 0.1698 | 0.3187 | 0.4191 | 0.2970 | 0.4091 | 0.4966 | 5.4795 | 0.5124 | 0.5540 | 0.9060 | 0.9076 |
| VirusGO | 0.7143 | 0.0635 | 0.8254 | 0.8651 | 0.6868 | 0.8400 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7957 | 0.9691 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.2857 | 0.8571 | 0.1762 | 0.8008 | 0.7166 | 0.9130 |
| Water-quality | 0.0094 | 0.3194 | 0.3017 | 0.4560 | 0.2973 | 0.4527 | 0.2925 | 9.3962 | 0.3643 | 0.6893 | 0.7651 | 0.7636 |
| Yahoo_Arts | 0.2029 | 0.0653 | 0.2929 | 0.3527 | 0.2088 | 0.3684 | 0.5113 | 10.3418 | 0.5900 | 0.4987 | 0.9372 | 0.9757 |
| Yahoo_Business | 0.5775 | 0.0255 | 0.7315 | 0.8181 | 0.2978 | 0.7356 | 0.0882 | 3.1961 | 0.2226 | 0.8866 | 0.8568 | 0.9952 |
| Yahoo_Computers | 0.3896 | 0.0421 | 0.4876 | 0.5582 | 0.2463 | 0.5152 | 0.3740 | 6.6208 | 0.4250 | 0.6145 | 0.8794 | 0.9795 |
| Yahoo_Education | 0.2170 | 0.0419 | 0.2855 | 0.3290 | 0.1888 | 0.3858 | 0.5453 | 9.0175 | 0.5727 | 0.5321 | 0.8925 | 0.9828 |
| Yahoo_Entertainment | 0.4206 | 0.0730 | 0.5371 | 0.5853 | 0.3564 | 0.5487 | 0.3917 | 4.0062 | 0.3899 | 0.6875 | 0.9721 | 0.9847 |
| Yahoo_Health | 0.4169 | 0.0391 | 0.5490 | 0.6270 | 0.2403 | 0.5900 | 0.3073 | 6.4528 | 0.3466 | 0.6966 | 0.8298 | 0.9858 |
| Yahoo_Recreation | 0.2344 | 0.0595 | 0.2944 | 0.3284 | 0.3054 | 0.3938 | 0.5126 | 6.4810 | 0.5527 | 0.5648 | 0.9600 | 0.9648 |
| Yahoo_Reference | 0.4508 | 0.0305 | 0.5101 | 0.5481 | 0.1718 | 0.5411 | 0.4110 | 5.5342 | 0.4466 | 0.6311 | 0.8090 | 0.9908 |
| Yahoo_Science | 0.2068 | 0.0389 | 0.2625 | 0.3059 | 0.1565 | 0.3333 | 0.6501 | 14.0280 | 0.6748 | 0.4067 | 0.9588 | 0.9852 |
| Yahoo_Social | 0.4861 | 0.0272 | 0.5275 | 0.5711 | 0.1634 | 0.5423 | 0.3678 | 7.3987 | 0.3798 | 0.6470 | 0.9127 | 0.9744 |
| Yahoo_Society | 0.3258 | 0.0847 | 0.4460 | 0.5604 | 0.2281 | 0.4726 | 0.3669 | 8.5093 | 0.4735 | 0.5903 | 0.9336 | 0.9932 |
| yeast | 0.2231 | 0.1957 | 0.5506 | 0.6760 | 0.3934 | 0.6683 | 0.2603 | 6.1942 | 0.2338 | 0.7535 | 0.8284 | 0.8856 |
| Yelp | 0.4177 | 0.1884 | 0.6334 | 0.7293 | 0.6738 | 0.7238 | 0.1974 | 1.3699 | 0.2294 | 0.8634 | 0.8778 | 0.9015 |

Table 107: Detailed results for MASSIVE (100) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.1260 | 0.0484 | 0.1388 | 0.1469 | 0.2087 | 0.2440 | 0.4922 | 4.0213 | 0.3922 | 0.6045 | 0.9533 | 0.9484 |
| 3s-bbc1000 | 0.0000 | 0.2361 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7778 | 3.0833 | 0.6398 | 0.4143 | 0.5251 | 0.5353 |
| 3s-guardian1000 | 0.0000 | 0.2204 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6452 | 1.9032 | 0.3750 | 0.5798 | 0.6478 | 0.7240 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.0000 | 0.4250 | 0.4157 | 0.4879 | 0.6819 |
| 3s-reuters1000 | 0.0333 | 0.1722 | 0.0500 | 0.0571 | 0.0741 | 0.1143 | 0.8667 | 2.4000 | 0.5967 | 0.4228 | 0.6259 | 0.5997 |
| amphibians | 0.1111 | 0.2540 | 0.5659 | 0.7656 | 0.5450 | 0.7193 | 0.2778 | 2.5000 | 0.0944 | 0.8454 | 0.7009 | 0.7896 |
| bibtex | 0.1054 | 0.0132 | 0.1949 | 0.2519 | 0.0801 | 0.2670 | 0.5716 | 81.6730 | 0.6900 | 0.3053 | 0.9942 | 0.9901 |
| birds | 0.1538 | 0.0958 | 0.2927 | 0.3502 | 0.2253 | 0.3717 | 0.5385 | 7.5128 | 0.4605 | 0.5025 | 0.8028 | 0.8849 |
| bookmarks10% | 0.1857 | 0.0089 | 0.2166 | 0.2424 | 0.1083 | 0.2577 | 0.7174 | 108.5903 | 0.7752 | 0.2579 | 0.9546 | 1.0000 |
| CAL500 | 0.0000 | 0.1412 | 0.1803 | 0.3080 | 0.0446 | 0.2980 | 0.4118 | 150.3922 | 0.5193 | 0.4318 | 0.7768 | 0.9108 |
| corel16k001 | 0.0089 | 0.0187 | 0.0426 | 0.0633 | 0.0320 | 0.0823 | 0.8751 | 115.6733 | 0.9633 | 0.0873 | 0.9800 | 0.9791 |
| Corel5k | 0.0060 | 0.0092 | 0.0550 | 0.0832 | 0.0230 | 0.1157 | 0.8691 | 164.7641 | 0.9422 | 0.1609 | 0.6705 | 0.9833 |
| delicious | 0.0000 | 0.0245 | 0.0916 | 0.1588 | 0.0826 | 0.1745 | 0.5334 | 898.0327 | 0.8583 | 0.1499 | 0.9925 | 1.0000 |
| emotions | 0.2667 | 0.2056 | 0.5111 | 0.6152 | 0.6150 | 0.6542 | 0.3167 | 1.8000 | 0.1839 | 0.7761 | 0.8254 | 0.8524 |
| enron | 0.1053 | 0.0502 | 0.3886 | 0.5152 | 0.1365 | 0.5464 | 0.3041 | 23.4971 | 0.3253 | 0.5560 | 0.7989 | 0.9582 |
| EukaryoteGO | 0.6753 | 0.0205 | 0.7708 | 0.8186 | 0.5003 | 0.8102 | 0.1843 | 0.6276 | 0.0251 | 0.8887 | 0.9889 | 0.9916 |
| EukaryotePseAAC | 0.0644 | 0.0517 | 0.0727 | 0.0767 | 0.0248 | 0.1248 | 0.5920 | 4.5431 | 0.3475 | 0.5486 | 0.9364 | 0.9387 |
| flags | 0.2500 | 0.2214 | 0.6433 | 0.7561 | 0.5932 | 0.7634 | 0.2000 | 3.6000 | 0.2225 | 0.8117 | 0.6968 | 0.7911 |
| foodtruck | 0.3171 | 0.1504 | 0.5007 | 0.6388 | 0.1662 | 0.5195 | 0.2439 | 3.3171 | 0.3114 | 0.7557 | 0.7804 | 0.8971 |
| genbase | 0.9403 | 0.0022 | 0.9652 | 0.9751 | 0.5802 | 0.9753 | 0.0000 | 0.3582 | 0.0030 | 0.9914 | 0.6661 | 0.9989 |
| GnegativeGO | 0.9214 | 0.0134 | 0.9464 | 0.9589 | 0.8210 | 0.9488 | 0.0286 | 0.1214 | 0.0205 | 0.9800 | 0.8701 | 0.9948 |
| GnegativePseAAC | 0.6571 | 0.0563 | 0.6845 | 0.6994 | 0.3613 | 0.7605 | 0.2786 | 0.7857 | 0.1196 | 0.8142 | 0.8250 | 0.9576 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9231 | 0.9422 | 0.9416 | 0.9259 | 0.1154 | 0.1731 | 0.0513 | 0.9375 | 0.9932 | 0.9929 |
| GpositivePseAAC | 0.6923 | 0.1154 | 0.7115 | 0.7210 | 0.5821 | 0.7600 | 0.2500 | 0.4615 | 0.1859 | 0.8462 | 0.9676 | 0.9524 |
| HumanGO | 0.6045 | 0.0436 | 0.7227 | 0.7833 | 0.6159 | 0.7493 | 0.1865 | 0.7010 | 0.0406 | 0.8804 | 0.9753 | 0.9776 |
| HumanPseAAC | 0.1286 | 0.0843 | 0.1455 | 0.1546 | 0.1016 | 0.2175 | 0.6431 | 3.0129 | 0.3047 | 0.5444 | 0.8776 | 0.8846 |
| Image | 0.3700 | 0.1870 | 0.4225 | 0.4493 | 0.4857 | 0.5092 | 0.4000 | 1.1950 | 0.2958 | 0.7350 | 0.8450 | 0.8281 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6436 | 11.2694 | 0.5469 | 0.4247 | 0.9209 | 0.9293 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6164 | 11.5145 | 0.5351 | 0.4285 | 0.9252 | 0.9308 |
| LLOG-F | 0.0902 | 0.0177 | 0.1305 | 0.1554 | 0.0450 | 0.2136 | 0.7787 | 29.6311 | 0.7735 | 0.2592 | 0.5939 | 0.9926 |
| mediamill10% | 0.0641 | 0.0326 | 0.4148 | 0.5696 | 0.0558 | 0.5220 | 0.2067 | 59.3112 | 0.4282 | 0.5393 | 0.8079 | 0.9910 |
| medical | 0.5714 | 0.0125 | 0.6726 | 0.7235 | 0.2543 | 0.7679 | 0.1633 | 4.1429 | 0.0939 | 0.8539 | 0.5479 | 0.9923 |
| Music | 0.2667 | 0.1778 | 0.5528 | 0.6820 | 0.7049 | 0.7117 | 0.3167 | 2.1000 | 0.1946 | 0.7643 | 0.8581 | 0.8530 |
| NUS-WIDE-bow10% | 0.1192 | 0.0250 | 0.2263 | 0.2686 | 0.0446 | 0.3320 | 0.5419 | 35.3151 | 0.6008 | 0.4288 | 0.8503 | 0.9837 |
| NUS-WIDE-cVLADplus10% | 0.1427 | 0.0235 | 0.2476 | 0.3098 | 0.0527 | 0.3766 | 0.5550 | 34.8181 | 0.6437 | 0.4071 | 0.8851 | 0.9639 |
| OHSUMED-F | 0.1141 | 0.0647 | 0.1771 | 0.2124 | 0.1243 | 0.2713 | 0.5406 | 8.6597 | 0.4538 | 0.5000 | 0.9357 | 0.9229 |
| PlantGO | 0.6250 | 0.0477 | 0.6840 | 0.7117 | 0.5344 | 0.7317 | 0.2708 | 0.6146 | 0.0489 | 0.8427 | 0.9728 | 0.9675 |
| PlantPseAAC | 0.1429 | 0.0944 | 0.1684 | 0.1811 | 0.1207 | 0.2550 | 0.7143 | 2.6633 | 0.3610 | 0.5227 | 0.8310 | 0.8465 |
| rcv1subset1 | 0.0333 | 0.0284 | 0.1772 | 0.2562 | 0.0826 | 0.2811 | 0.4817 | 35.9900 | 0.3932 | 0.4859 | 0.9203 | 0.9788 |
| REUTERS-K500-EX2 | 0.2027 | 0.0123 | 0.2456 | 0.2684 | 0.1236 | 0.3429 | 0.6254 | 28.6254 | 0.4688 | 0.4405 | 0.7756 | 0.9809 |
| scene | 0.5436 | 0.1030 | 0.5975 | 0.6244 | 0.6862 | 0.6809 | 0.2407 | 0.5851 | 0.1043 | 0.8488 | 0.9281 | 0.9416 |
| sider_CDK_ECFP4 | 0.0000 | 0.2773 | 0.6261 | 0.7810 | 0.5699 | 0.7750 | 0.2817 | 19.6338 | 0.1873 | 0.7521 | 0.5721 | 0.7591 |
| sider_MordredDesc | 0.0141 | 0.2600 | 0.6358 | 0.7883 | 0.5855 | 0.7855 | 0.3169 | 19.7535 | 0.1912 | 0.7474 | 0.5179 | 0.7502 |
| sider_RDKit_desc | 0.0070 | 0.2720 | 0.6242 | 0.7816 | 0.5592 | 0.7749 | 0.1338 | 20.0986 | 0.2023 | 0.7629 | 0.5603 | 0.7441 |
| SLASHDOT-F | 0.3254 | 0.0423 | 0.3882 | 0.4214 | 0.2778 | 0.5014 | 0.5291 | 5.0794 | 0.3078 | 0.5770 | 0.7202 | 0.9358 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.4000 | 0.4000 | 0.3000 | 0.8000 | 0.5556 | 0.9000 |
| Stackex_chemistry | 0.0000 | 0.0122 | 0.0017 | 0.0024 | 0.0027 | 0.0040 | 0.8862 | 109.5821 | 0.9166 | 0.1004 | 0.9131 | 0.9932 |
| Stackex_chess | 0.0060 | 0.0105 | 0.0505 | 0.0766 | 0.0157 | 0.1145 | 0.8869 | 142.4881 | 0.8381 | 0.1113 | 0.5412 | 0.9878 |
| Stackex_coffee | 0.0000 | 0.0233 | 0.0450 | 0.0690 | 0.0186 | 0.1081 | 0.6957 | 73.9565 | 0.7951 | 0.2017 | 0.2516 | 0.9789 |
| Stackex_cooking | 0.0652 | 0.0052 | 0.2030 | 0.2648 | 0.1096 | 0.3154 | 0.6267 | 221.4355 | 0.7821 | 0.2345 | 0.9380 | 0.9893 |
| Stackex_philosophy | 0.0000 | 0.0097 | 0.0041 | 0.0070 | 0.0014 | 0.0109 | 0.9070 | 146.7161 | 0.9163 | 0.0793 | 0.7473 | 0.9963 |
| tmc2007-500 | 0.2241 | 0.0716 | 0.4739 | 0.6074 | 0.3588 | 0.5905 | 0.3829 | 4.5584 | 0.1558 | 0.6941 | 0.9291 | 0.9402 |
| tox21_CDK_ECFP4 | 0.0445 | 0.1655 | 0.1075 | 0.1463 | 0.1908 | 0.2098 | 0.6370 | 5.0034 | 0.3486 | 0.5131 | 0.8007 | 0.7834 |
| tox21_RDKit_desc | 0.0171 | 0.1738 | 0.0509 | 0.0727 | 0.0994 | 0.1212 | 0.5753 | 5.0342 | 0.3633 | 0.5385 | 0.8102 | 0.7915 |
| VirusGO | 0.7619 | 0.0794 | 0.8254 | 0.8530 | 0.6267 | 0.8077 | 0.1429 | 0.5238 | 0.0839 | 0.9087 | 0.7880 | 0.9655 |
| VirusPseAAC | 0.4762 | 0.1111 | 0.5000 | 0.5116 | 0.3000 | 0.6111 | 0.3810 | 0.7619 | 0.1476 | 0.7754 | 0.7668 | 0.9088 |
| Water-quality | 0.0094 | 0.3127 | 0.3039 | 0.4520 | 0.3006 | 0.4502 | 0.3019 | 9.7925 | 0.3225 | 0.6516 | 0.6540 | 0.6626 |
| Yahoo_Arts | 0.0053 | 0.0647 | 0.0085 | 0.0106 | 0.0091 | 0.0156 | 0.7116 | 10.4179 | 0.5690 | 0.4008 | 0.8862 | 0.9179 |
| Yahoo_Business | 0.5187 | 0.0295 | 0.6724 | 0.7593 | 0.0429 | 0.6637 | 0.1319 | 3.5838 | 0.2344 | 0.8572 | 0.8293 | 0.9837 |
| Yahoo_Computers | 0.2538 | 0.0425 | 0.3155 | 0.3543 | 0.0498 | 0.3653 | 0.4851 | 7.1165 | 0.4412 | 0.5416 | 0.8668 | 0.9655 |
| Yahoo_Education | 0.0000 | 0.0436 | 0.0033 | 0.0047 | 0.0044 | 0.0092 | 0.9202 | 10.7963 | 0.6060 | 0.3046 | 0.8508 | 0.9274 |
| Yahoo_Entertainment | 0.0841 | 0.0647 | 0.0936 | 0.0992 | 0.0639 | 0.1419 | 0.6308 | 4.9065 | 0.5169 | 0.5028 | 0.9263 | 0.9261 |
| Yahoo_Health | 0.2378 | 0.0505 | 0.2998 | 0.3387 | 0.0918 | 0.3323 | 0.5114 | 8.9186 | 0.4860 | 0.5420 | 0.8087 | 0.9684 |
| Yahoo_Recreation | 0.0148 | 0.0631 | 0.0193 | 0.0217 | 0.0417 | 0.0440 | 0.7147 | 7.6929 | 0.5918 | 0.4176 | 0.9073 | 0.8925 |
| Yahoo_Reference | 0.0050 | 0.0358 | 0.0056 | 0.0059 | 0.0048 | 0.0104 | 0.4944 | 6.0897 | 0.4269 | 0.5786 | 0.7842 | 0.9740 |
| Yahoo_Science | 0.0000 | 0.0363 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8398 | 15.8989 | 0.7999 | 0.2688 | 0.9340 | 0.9607 |
| Yahoo_Social | 0.1733 | 0.0311 | 0.2278 | 0.2565 | 0.0262 | 0.3283 | 0.4868 | 8.3152 | 0.4220 | 0.5791 | 0.9040 | 0.9804 |
| Yahoo_Society | 0.0048 | 0.0621 | 0.0058 | 0.0066 | 0.0074 | 0.0090 | 0.4959 | 9.1529 | 0.5471 | 0.5065 | 0.9113 | 0.9561 |
| yeast | 0.1322 | 0.2063 | 0.4868 | 0.6331 | 0.3104 | 0.6244 | 0.2645 | 6.3802 | 0.2029 | 0.7293 | 0.7358 | 0.8171 |
| Yelp | 0.2213 | 0.2816 | 0.4417 | 0.5566 | 0.3459 | 0.5523 | 0.3649 | 1.9422 | 0.3043 | 0.7377 | 0.7814 | 0.7838 |

Table 108: Detailed results for MASSIVE (1K) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4015 | 0.0345 | 0.4461 | 0.4713 | 0.5816 | 0.5941 | 0.3211 | 2.5674 | 0.2408 | 0.7489 | 0.9735 | 0.9746 |
| 3s-bbc1000 | 0.1389 | 0.2454 | 0.1944 | 0.2315 | 0.2056 | 0.2740 | 0.7222 | 2.6944 | 0.6150 | 0.4666 | 0.7822 | 0.7315 |
| 3s-guardian1000 | 0.1613 | 0.2419 | 0.2457 | 0.3037 | 0.2777 | 0.3478 | 0.4516 | 2.1290 | 0.4629 | 0.6347 | 0.8175 | 0.8263 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.2941 | 0.5412 | 0.4422 | 0.5300 | 0.6812 |
| 3s-reuters1000 | 0.0333 | 0.2333 | 0.0667 | 0.0833 | 0.1161 | 0.1250 | 0.9000 | 2.6000 | 0.7475 | 0.3817 | 0.8167 | 0.7420 |
| amphibians | 0.1111 | 0.2619 | 0.5784 | 0.7800 | 0.5422 | 0.7179 | 0.2778 | 2.5556 | 0.1037 | 0.8315 | 0.7673 | 0.8128 |
| bibtex | 0.1838 | 0.0123 | 0.3364 | 0.4205 | 0.2644 | 0.4454 | 0.4243 | 68.7878 | 0.5460 | 0.4442 | 0.9952 | 0.9951 |
| birds | 0.1795 | 0.0837 | 0.3373 | 0.4155 | 0.3518 | 0.4655 | 0.5128 | 7.6667 | 0.4809 | 0.5080 | 0.8421 | 0.9366 |
| bookmarks10% | 0.1743 | 0.0092 | 0.1992 | 0.2175 | 0.0819 | 0.2363 | 0.7449 | 105.6754 | 0.7653 | 0.2490 | 0.9839 | 0.9983 |
| CAL500 | 0.0000 | 0.1389 | 0.2170 | 0.3584 | 0.0681 | 0.3514 | 0.3725 | 151.0392 | 0.6341 | 0.4350 | 0.8334 | 0.9516 |
| corel16k001 | 0.0089 | 0.0187 | 0.0438 | 0.0635 | 0.0325 | 0.0831 | 0.8782 | 116.0169 | 0.9523 | 0.0864 | 1.0000 | 0.9865 |
| Corel5k | 0.0040 | 0.0094 | 0.0562 | 0.0851 | 0.0223 | 0.1107 | 0.8280 | 162.9360 | 0.9330 | 0.1651 | 0.6785 | 0.9994 |
| delicious | 0.0000 | 0.0251 | 0.0932 | 0.1613 | 0.0817 | 0.1757 | 0.5455 | 888.8045 | 0.8552 | 0.1506 | 0.9884 | 0.9987 |
| emotions | 0.3167 | 0.1861 | 0.5597 | 0.6736 | 0.6601 | 0.6884 | 0.3000 | 1.7500 | 0.2311 | 0.7948 | 0.8753 | 0.8876 |
| enron | 0.1696 | 0.0500 | 0.4454 | 0.5757 | 0.1758 | 0.5730 | 0.2573 | 22.6316 | 0.3414 | 0.6221 | 0.8232 | 0.9789 |
| EukaryoteGO | 0.6946 | 0.0195 | 0.7753 | 0.8160 | 0.6539 | 0.8157 | 0.1675 | 0.5876 | 0.0253 | 0.9002 | 0.9911 | 0.9944 |
| EukaryotePseAAC | 0.1403 | 0.0516 | 0.1680 | 0.1821 | 0.0736 | 0.2576 | 0.5457 | 4.8893 | 0.3829 | 0.5692 | 0.9534 | 0.9583 |
| flags | 0.2500 | 0.2214 | 0.6417 | 0.7539 | 0.6186 | 0.7634 | 0.2000 | 3.5500 | 0.2258 | 0.8167 | 0.7091 | 0.8090 |
| foodtruck | 0.2927 | 0.1524 | 0.4653 | 0.6047 | 0.1262 | 0.4966 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8543 | 0.9561 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2388 | 0.0006 | 0.9950 | 0.6667 | 0.9995 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9571 | 0.9714 | 0.8298 | 0.9592 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8737 | 0.9979 |
| GnegativePseAAC | 0.7286 | 0.0545 | 0.7429 | 0.7500 | 0.4169 | 0.7766 | 0.1786 | 0.5929 | 0.1225 | 0.8801 | 0.8551 | 0.9845 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9135 | 0.9279 | 0.8639 | 0.9245 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1058 | 0.7308 | 0.7308 | 0.5806 | 0.7755 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6913 | 0.0345 | 0.7768 | 0.8207 | 0.7103 | 0.7928 | 0.1479 | 0.7299 | 0.0527 | 0.9026 | 0.9814 | 0.9865 |
| HumanPseAAC | 0.2315 | 0.0861 | 0.2524 | 0.2644 | 0.1345 | 0.3169 | 0.5531 | 2.9357 | 0.3497 | 0.6012 | 0.9234 | 0.9251 |
| Image | 0.5350 | 0.1620 | 0.5983 | 0.6305 | 0.6255 | 0.6233 | 0.3200 | 1.0450 | 0.2888 | 0.7859 | 0.9156 | 0.9120 |
| IMDB-ECC-F10% | 0.0136 | 0.0688 | 0.0258 | 0.0339 | 0.0196 | 0.0467 | 0.6394 | 12.4906 | 0.7440 | 0.3669 | 0.9872 | 0.9739 |
| IMDB-F10% | 0.0075 | 0.0721 | 0.0150 | 0.0192 | 0.0113 | 0.0256 | 0.6089 | 13.2113 | 0.7507 | 0.3629 | 0.9889 | 0.9758 |
| LLOG-F | 0.1721 | 0.0160 | 0.2015 | 0.2192 | 0.0548 | 0.2981 | 0.7213 | 28.1066 | 0.7712 | 0.2877 | 0.5975 | 0.9968 |
| mediamill10% | 0.0879 | 0.0297 | 0.4597 | 0.6210 | 0.0902 | 0.5741 | 0.2375 | 60.5819 | 0.4635 | 0.5272 | 0.8145 | 0.9944 |
| medical | 0.6429 | 0.0107 | 0.7440 | 0.7950 | 0.2856 | 0.8112 | 0.1633 | 5.0306 | 0.1331 | 0.8393 | 0.5530 | 0.9977 |
| Music | 0.2833 | 0.1722 | 0.5806 | 0.7090 | 0.7165 | 0.7257 | 0.2833 | 2.0167 | 0.2584 | 0.7959 | 0.9103 | 0.9043 |
| NUS-WIDE-bow10% | 0.1113 | 0.0253 | 0.2108 | 0.2647 | 0.0414 | 0.3211 | 0.5247 | 33.2402 | 0.5715 | 0.4396 | 0.8776 | 0.9885 |
| NUS-WIDE-cVLADplus10% | 0.1375 | 0.0236 | 0.2429 | 0.2956 | 0.0506 | 0.3552 | 0.5114 | 31.5970 | 0.5335 | 0.4637 | 0.8775 | 0.9878 |
| OHSUMED-F | 0.1989 | 0.0591 | 0.3639 | 0.4527 | 0.3455 | 0.4947 | 0.3661 | 6.7272 | 0.3409 | 0.6314 | 0.9496 | 0.9525 |
| PlantGO | 0.6979 | 0.0373 | 0.7396 | 0.7586 | 0.6471 | 0.7882 | 0.2188 | 1.0521 | 0.0992 | 0.8519 | 0.9903 | 0.9852 |
| PlantPseAAC | 0.2347 | 0.0961 | 0.2823 | 0.3094 | 0.2114 | 0.3687 | 0.5918 | 3.1837 | 0.5088 | 0.5476 | 0.9451 | 0.9383 |
| rcv1subset1 | 0.0483 | 0.0322 | 0.2866 | 0.4125 | 0.2451 | 0.4179 | 0.3800 | 29.2517 | 0.2991 | 0.5603 | 0.9197 | 0.9815 |
| REUTERS-K500-EX2 | 0.2749 | 0.0116 | 0.3303 | 0.3600 | 0.2097 | 0.4345 | 0.4914 | 27.3316 | 0.4704 | 0.5240 | 0.7809 | 0.9940 |
| scene | 0.6349 | 0.0878 | 0.6888 | 0.7155 | 0.7484 | 0.7381 | 0.2075 | 0.7054 | 0.1349 | 0.8571 | 0.9608 | 0.9666 |
| sider_CDK_ECFP4 | 0.0141 | 0.2428 | 0.6511 | 0.7981 | 0.6310 | 0.7968 | 0.0986 | 19.4930 | 0.1757 | 0.7857 | 0.5769 | 0.7671 |
| sider_MordredDesc | 0.0141 | 0.2587 | 0.6229 | 0.7769 | 0.6111 | 0.7823 | 0.0986 | 19.7746 | 0.1852 | 0.7863 | 0.5634 | 0.7645 |
| sider_RDKit_desc | 0.0141 | 0.2825 | 0.6292 | 0.7814 | 0.5999 | 0.7761 | 0.0986 | 20.6127 | 0.2526 | 0.7250 | 0.5903 | 0.7185 |
| SLASHDOT-F | 0.3862 | 0.0397 | 0.4819 | 0.5328 | 0.3765 | 0.5844 | 0.3889 | 4.4339 | 0.2859 | 0.6744 | 0.7442 | 0.9717 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.2222 | 0.6600 |
| Stackex_chemistry | 0.0202 | 0.0126 | 0.0572 | 0.0822 | 0.0383 | 0.1143 | 0.8069 | 105.5951 | 0.8652 | 0.1540 | 0.9161 | 0.9960 |
| Stackex_chess | 0.0238 | 0.0102 | 0.1310 | 0.1905 | 0.0587 | 0.2505 | 0.6369 | 133.8631 | 0.7775 | 0.2256 | 0.5483 | 0.9973 |
| Stackex_coffee | 0.0000 | 0.0201 | 0.0652 | 0.1030 | 0.0254 | 0.1493 | 0.8261 | 75.4348 | 0.8916 | 0.1281 | 0.2567 | 0.9904 |
| Stackex_cooking | 0.0000 | 0.1513 | 0.0085 | 0.0168 | 0.0258 | 0.0168 | 0.8812 | 251.6667 | 0.9309 | 0.0828 | 0.9246 | 0.9996 |
| Stackex_philosophy | 0.0452 | 0.0096 | 0.1265 | 0.1753 | 0.0509 | 0.2171 | 0.6985 | 132.0653 | 0.7741 | 0.2205 | 0.7482 | 0.9969 |
| tmc2007-500 | 0.2787 | 0.0636 | 0.5418 | 0.6729 | 0.5254 | 0.6517 | 0.2860 | 3.9462 | 0.1284 | 0.7678 | 0.9494 | 0.9627 |
| tox21_CDK_ECFP4 | 0.1233 | 0.1601 | 0.2790 | 0.3591 | 0.3715 | 0.4101 | 0.4897 | 4.7671 | 0.3640 | 0.5967 | 0.8709 | 0.8596 |
| tox21_RDKit_desc | 0.0856 | 0.1650 | 0.1879 | 0.2506 | 0.2123 | 0.2985 | 0.5103 | 5.3493 | 0.4296 | 0.5720 | 0.8668 | 0.8600 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.1429 | 0.6190 | 0.0934 | 0.8944 | 0.8019 | 0.9727 |
| VirusPseAAC | 0.5238 | 0.1111 | 0.5714 | 0.5943 | 0.3667 | 0.6500 | 0.2857 | 0.8571 | 0.1762 | 0.8008 | 0.7268 | 0.9232 |
| Water-quality | 0.0094 | 0.3080 | 0.3671 | 0.5339 | 0.4200 | 0.5379 | 0.2642 | 9.2830 | 0.3679 | 0.6932 | 0.7732 | 0.7661 |
| Yahoo_Arts | 0.0935 | 0.0697 | 0.1278 | 0.1558 | 0.1125 | 0.1994 | 0.6302 | 10.4499 | 0.6494 | 0.4470 | 0.9199 | 0.9520 |
| Yahoo_Business | 0.5205 | 0.0303 | 0.6893 | 0.7844 | 0.1697 | 0.6798 | 0.1292 | 3.3307 | 0.2335 | 0.8652 | 0.8452 | 0.9899 |
| Yahoo_Computers | 0.3406 | 0.0407 | 0.4127 | 0.4651 | 0.1646 | 0.4606 | 0.4104 | 6.8964 | 0.4554 | 0.5842 | 0.8827 | 0.9765 |
| Yahoo_Education | 0.0615 | 0.0476 | 0.0932 | 0.1192 | 0.0821 | 0.1848 | 0.6193 | 10.0856 | 0.6083 | 0.4696 | 0.8843 | 0.9676 |
| Yahoo_Entertainment | 0.1736 | 0.0641 | 0.2138 | 0.2422 | 0.1947 | 0.3231 | 0.5460 | 4.7266 | 0.5010 | 0.5590 | 0.9640 | 0.9574 |
| Yahoo_Health | 0.3094 | 0.0479 | 0.4173 | 0.4862 | 0.1820 | 0.4551 | 0.4365 | 7.6938 | 0.4154 | 0.6085 | 0.8143 | 0.9734 |
| Yahoo_Recreation | 0.1216 | 0.0663 | 0.1576 | 0.1846 | 0.1935 | 0.2577 | 0.6150 | 7.4248 | 0.6929 | 0.4806 | 0.9583 | 0.9591 |
| Yahoo_Reference | 0.3238 | 0.0325 | 0.3543 | 0.3754 | 0.1022 | 0.4267 | 0.4446 | 5.8680 | 0.4300 | 0.6124 | 0.8013 | 0.9830 |
| Yahoo_Science | 0.0793 | 0.0456 | 0.1055 | 0.1328 | 0.0831 | 0.1650 | 0.7605 | 15.5194 | 0.7699 | 0.3213 | 0.9478 | 0.9740 |
| Yahoo_Social | 0.3746 | 0.0254 | 0.4114 | 0.4321 | 0.0892 | 0.4823 | 0.4224 | 8.1576 | 0.4245 | 0.6081 | 0.9096 | 0.9858 |
| Yahoo_Society | 0.2135 | 0.0606 | 0.2856 | 0.3371 | 0.0951 | 0.3442 | 0.4773 | 8.8264 | 0.5307 | 0.5278 | 0.9331 | 0.9686 |
| yeast | 0.1736 | 0.1924 | 0.5248 | 0.6601 | 0.3777 | 0.6532 | 0.2107 | 6.2066 | 0.2148 | 0.7655 | 0.8103 | 0.8703 |
| Yelp | 0.3569 | 0.2114 | 0.5798 | 0.6864 | 0.6054 | 0.6803 | 0.2522 | 1.5115 | 0.2267 | 0.8257 | 0.8330 | 0.8578 |

Table 109: Detailed results for MASSIVE (5K) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5658 | 0.0256 | 0.5887 | 0.6113 | 0.7148 | 0.7257 | 0.2891 | 2.3953 | 0.2286 | 0.7698 | 0.9823 | 1.0000 |
| 3s-bbc1000 | 0.1389 | 0.2500 | 0.1713 | 0.1908 | 0.1695 | 0.2286 | 0.7500 | 3.1389 | 0.7005 | 0.4173 | 0.7631 | 0.7172 |
| 3s-guardian1000 | 0.0645 | 0.2527 | 0.1382 | 0.1806 | 0.2213 | 0.2540 | 0.5161 | 1.9677 | 0.4492 | 0.6261 | 0.7997 | 0.8190 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.0588 | 0.6235 | 0.4735 | 0.5204 | 0.6971 |
| 3s-reuters1000 | 0.0667 | 0.2889 | 0.0944 | 0.1106 | 0.1180 | 0.1333 | 0.9000 | 2.5000 | 0.7533 | 0.3928 | 0.8173 | 0.7462 |
| amphibians | 0.1111 | 0.2857 | 0.5321 | 0.7416 | 0.5155 | 0.6786 | 0.2222 | 2.5556 | 0.1111 | 0.8543 | 0.7360 | 0.8043 |
| bibtex | 0.1848 | 0.0120 | 0.3547 | 0.4460 | 0.3078 | 0.4808 | 0.4399 | 71.6006 | 0.5826 | 0.4235 | 0.9996 | 0.9945 |
| birds | 0.2308 | 0.0837 | 0.3678 | 0.4333 | 0.3422 | 0.4655 | 0.5128 | 7.3846 | 0.4839 | 0.5100 | 0.8461 | 0.9441 |
| bookmarks10% | 0.1894 | 0.0090 | 0.2198 | 0.2411 | 0.1093 | 0.2601 | 0.7156 | 106.7834 | 0.7592 | 0.2565 | 0.9778 | 1.0000 |
| CAL500 | 0.0000 | 0.1394 | 0.2061 | 0.3441 | 0.0615 | 0.3353 | 0.2941 | 151.1176 | 0.6351 | 0.4316 | 0.8316 | 0.9500 |
| corel16k001 | 0.0088 | 0.0187 | 0.0436 | 0.0634 | 0.0325 | 0.0820 | 0.8796 | 115.2397 | 0.9484 | 0.0875 | 1.0000 | 0.9970 |
| Corel5k | 0.0060 | 0.0090 | 0.0564 | 0.0841 | 0.0234 | 0.1145 | 0.8584 | 165.2947 | 0.9355 | 0.1633 | 0.6855 | 0.9868 |
| delicious | 0.0000 | 0.0248 | 0.0931 | 0.1628 | 0.0829 | 0.1733 | 0.5391 | 900.2567 | 0.8534 | 0.1486 | 1.0000 | 1.0000 |
| emotions | 0.3000 | 0.1833 | 0.5653 | 0.6928 | 0.6520 | 0.6916 | 0.3000 | 1.7833 | 0.2433 | 0.7893 | 0.8757 | 0.8893 |
| enron | 0.1813 | 0.0497 | 0.4637 | 0.5963 | 0.1544 | 0.5739 | 0.3216 | 24.2047 | 0.3717 | 0.6020 | 0.8255 | 0.9811 |
| EukaryoteGO | 0.6933 | 0.0184 | 0.7912 | 0.8384 | 0.7127 | 0.8303 | 0.1740 | 0.8634 | 0.0489 | 0.8903 | 0.9928 | 0.9947 |
| EukaryotePseAAC | 0.1874 | 0.0518 | 0.2169 | 0.2348 | 0.1113 | 0.3068 | 0.5382 | 6.1800 | 0.4967 | 0.5255 | 0.9698 | 0.9644 |
| flags | 0.2500 | 0.2429 | 0.6269 | 0.7390 | 0.5954 | 0.7463 | 0.2000 | 3.5500 | 0.2092 | 0.8167 | 0.6826 | 0.8035 |
| foodtruck | 0.2927 | 0.1545 | 0.4621 | 0.6003 | 0.1389 | 0.4933 | 0.2439 | 4.6098 | 0.4507 | 0.7172 | 0.8535 | 0.9559 |
| genbase | 0.9771 | 0.0011 | 0.9988 | 0.9868 | 0.6532 | 0.9835 | 0.0000 | 0.3018 | 0.0018 | 0.9850 | 0.6703 | 0.9864 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8262 | 0.9556 | 0.0357 | 0.1143 | 0.0215 | 0.9774 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7357 | 0.0500 | 0.7536 | 0.7625 | 0.4249 | 0.7941 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8625 | 0.9895 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8652 | 0.9333 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9975 | 0.9972 |
| GpositivePseAAC | 0.6923 | 0.1202 | 0.6923 | 0.6923 | 0.5495 | 0.7423 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9841 | 0.9760 |
| HumanGO | 0.6881 | 0.0354 | 0.7658 | 0.8063 | 0.6947 | 0.7849 | 0.1640 | 1.0804 | 0.1036 | 0.8796 | 0.9851 | 0.9884 |
| HumanPseAAC | 0.2698 | 0.0843 | 0.3002 | 0.3132 | 0.1603 | 0.3625 | 0.5243 | 3.4157 | 0.4643 | 0.5886 | 0.9608 | 0.9498 |
| Image | 0.5650 | 0.1530 | 0.6183 | 0.6454 | 0.6436 | 0.6417 | 0.3200 | 1.0300 | 0.2817 | 0.7896 | 0.9298 | 0.9260 |
| IMDB-ECC-F10% | 0.0302 | 0.0685 | 0.0581 | 0.0727 | 0.0326 | 0.0947 | 0.6258 | 12.3197 | 0.7354 | 0.3734 | 1.0000 | 0.9803 |
| IMDB-F10% | 0.0199 | 0.0736 | 0.0495 | 0.0658 | 0.0315 | 0.0885 | 0.5982 | 12.6547 | 0.7196 | 0.3857 | 0.9902 | 0.9662 |
| LLOG-F | 0.1639 | 0.0162 | 0.1974 | 0.2169 | 0.0533 | 0.2885 | 0.7295 | 28.5574 | 0.7740 | 0.2870 | 0.5984 | 0.9982 |
| mediamill10% | 0.0926 | 0.0295 | 0.4622 | 0.6225 | 0.0830 | 0.5764 | 0.1758 | 59.3468 | 0.4475 | 0.5499 | 0.8133 | 0.9940 |
| medical | 0.6327 | 0.0111 | 0.7389 | 0.7923 | 0.2822 | 0.8048 | 0.1633 | 4.9490 | 0.1281 | 0.8427 | 0.5529 | 0.9976 |
| Music | 0.2833 | 0.1722 | 0.5722 | 0.6969 | 0.7127 | 0.7232 | 0.1833 | 2.0333 | 0.2462 | 0.8168 | 0.9146 | 0.9035 |
| NUS-WIDE-bow10% | 0.1178 | 0.0248 | 0.2235 | 0.2750 | 0.0449 | 0.3363 | 0.5437 | 35.6362 | 0.6021 | 0.4257 | 0.8719 | 0.9927 |
| NUS-WIDE-cVLADplus10% | 0.1426 | 0.0234 | 0.2512 | 0.3093 | 0.0529 | 0.3716 | 0.5540 | 35.0278 | 0.6439 | 0.4133 | 0.8847 | 0.9867 |
| OHSUMED-F | 0.2345 | 0.0572 | 0.4351 | 0.5358 | 0.4369 | 0.5594 | 0.3520 | 7.5710 | 0.4171 | 0.6150 | 0.9797 | 0.9829 |
| PlantGO | 0.6979 | 0.0391 | 0.7344 | 0.7508 | 0.6389 | 0.7783 | 0.2292 | 0.9583 | 0.0966 | 0.8510 | 0.9903 | 0.9854 |
| PlantPseAAC | 0.2449 | 0.0927 | 0.2704 | 0.2831 | 0.1979 | 0.3473 | 0.6020 | 3.1939 | 0.5004 | 0.5432 | 0.9398 | 0.9333 |
| rcv1subset1 | 0.1231 | 0.0309 | 0.3197 | 0.4341 | 0.2562 | 0.4373 | 0.4289 | 38.5518 | 0.4206 | 0.4994 | 0.9345 | 0.9864 |
| REUTERS-K500-EX2 | 0.3007 | 0.0112 | 0.3662 | 0.4018 | 0.2348 | 0.4713 | 0.5189 | 32.4467 | 0.5338 | 0.4867 | 0.7838 | 0.9971 |
| scene | 0.6556 | 0.0871 | 0.7192 | 0.7516 | 0.7619 | 0.7510 | 0.2075 | 0.8091 | 0.1606 | 0.8475 | 0.9688 | 0.9724 |
| sider_CDK_ECFP4 | 0.0141 | 0.2413 | 0.6528 | 0.8002 | 0.6373 | 0.7977 | 0.3028 | 19.0211 | 0.1586 | 0.7903 | 0.5884 | 0.7809 |
| sider_MordredDesc | 0.0140 | 0.2586 | 0.6259 | 0.7742 | 0.6059 | 0.7917 | 0.1429 | 20.0224 | 0.1785 | 0.7900 | 0.5832 | 0.7722 |
| sider_RDKit_desc | 0.0141 | 0.2608 | 0.6361 | 0.7888 | 0.5955 | 0.7847 | 0.2676 | 19.9155 | 0.1986 | 0.7502 | 0.5800 | 0.7598 |
| SLASHDOT-F | 0.4074 | 0.0396 | 0.4954 | 0.5440 | 0.3863 | 0.5913 | 0.4233 | 6.2593 | 0.4113 | 0.6118 | 0.7590 | 0.9848 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0456 | 0.0119 | 0.1057 | 0.1404 | 0.0668 | 0.1778 | 0.7760 | 104.9277 | 0.8671 | 0.1563 | 0.9067 | 1.0000 |
| Stackex_chess | 0.0417 | 0.0101 | 0.1525 | 0.2158 | 0.0584 | 0.2739 | 0.6607 | 134.8631 | 0.7995 | 0.2131 | 0.5493 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0219 | 0.0417 | 0.0642 | 0.0156 | 0.1143 | 0.8261 | 75.4348 | 0.8916 | 0.1281 | 0.2566 | 0.9898 |
| Stackex_cooking | 0.0665 | 0.0052 | 0.2010 | 0.2680 | 0.1087 | 0.3128 | 0.6326 | 223.7663 | 0.7722 | 0.2332 | 0.9265 | 0.9883 |
| Stackex_philosophy | 0.0552 | 0.0093 | 0.1697 | 0.2364 | 0.0654 | 0.2754 | 0.6743 | 136.5958 | 0.7785 | 0.2226 | 0.7423 | 0.9983 |
| tmc2007-500 | 0.2883 | 0.0613 | 0.5499 | 0.6827 | 0.5696 | 0.6638 | 0.2523 | 4.1135 | 0.1450 | 0.7834 | 0.9551 | 0.9582 |
| tox21_CDK_ECFP4 | 0.1336 | 0.1587 | 0.2798 | 0.3538 | 0.3675 | 0.4184 | 0.4623 | 5.3219 | 0.4840 | 0.5735 | 0.9004 | 0.9017 |
| tox21_RDKit_desc | 0.0788 | 0.1630 | 0.1676 | 0.2236 | 0.2073 | 0.2781 | 0.5000 | 5.4932 | 0.5095 | 0.5532 | 0.9055 | 0.9070 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7942 | 0.9655 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.2857 | 0.9524 | 0.2048 | 0.7944 | 0.7153 | 0.9160 |
| Water-quality | 0.0094 | 0.3046 | 0.3524 | 0.5199 | 0.4242 | 0.5301 | 0.2925 | 9.1887 | 0.3539 | 0.6873 | 0.7725 | 0.7620 |
| Yahoo_Arts | 0.1810 | 0.0638 | 0.2637 | 0.3186 | 0.2148 | 0.3594 | 0.5018 | 10.3258 | 0.6149 | 0.5069 | 0.9248 | 0.9744 |
| Yahoo_Business | 0.5662 | 0.0268 | 0.7244 | 0.8253 | 0.3229 | 0.7308 | 0.0902 | 3.1587 | 0.2238 | 0.8906 | 0.8510 | 1.0000 |
| Yahoo_Computers | 0.3838 | 0.0375 | 0.4547 | 0.5087 | 0.2404 | 0.5126 | 0.3819 | 6.6083 | 0.4176 | 0.6092 | 0.8864 | 0.9734 |
| Yahoo_Education | 0.1412 | 0.0413 | 0.1850 | 0.2111 | 0.1549 | 0.2980 | 0.5569 | 9.1184 | 0.5658 | 0.5307 | 0.8983 | 0.9734 |
| Yahoo_Entertainment | 0.2781 | 0.0552 | 0.3322 | 0.3609 | 0.2398 | 0.4257 | 0.4377 | 4.1348 | 0.3850 | 0.6456 | 0.9568 | 0.9655 |
| Yahoo_Health | 0.4144 | 0.0386 | 0.5423 | 0.6118 | 0.2441 | 0.5905 | 0.3075 | 6.5609 | 0.3451 | 0.6967 | 0.8331 | 0.9782 |
| Yahoo_Recreation | 0.2798 | 0.0208 | 0.3964 | 0.4350 | 0.4115 | 0.5068 | 0.4727 | 6.2193 | 0.4827 | 0.6100 | 0.9547 | 0.9756 |
| Yahoo_Reference | 0.4115 | 0.0294 | 0.4571 | 0.4871 | 0.1728 | 0.5207 | 0.3926 | 5.4738 | 0.4264 | 0.6354 | 0.8102 | 0.9891 |
| Yahoo_Science | 0.2262 | 0.0394 | 0.2868 | 0.3260 | 0.1760 | 0.3440 | 0.6270 | 13.6277 | 0.6524 | 0.4257 | 0.9627 | 0.9944 |
| Yahoo_Social | 0.4200 | 0.0235 | 0.4667 | 0.4937 | 0.1550 | 0.5403 | 0.3688 | 7.5998 | 0.3915 | 0.6471 | 0.9141 | 0.9902 |
| Yahoo_Society | 0.3134 | 0.0795 | 0.4370 | 0.5550 | 0.2078 | 0.4559 | 0.3723 | 8.2847 | 0.4810 | 0.5935 | 0.9527 | 0.9594 |
| yeast | 0.2008 | 0.1897 | 0.5215 | 0.6633 | 0.3837 | 0.6603 | 0.2585 | 6.1956 | 0.2392 | 0.7491 | 0.8185 | 0.8875 |
| Yelp | 0.3968 | 0.1940 | 0.6184 | 0.7194 | 0.6511 | 0.7141 | 0.2173 | 1.3769 | 0.2093 | 0.8544 | 0.8629 | 0.8886 |

Table 110: Detailed results for MASSIVE (10K) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5399 | 0.0262 | 0.5828 | 0.6042 | 0.7035 | 0.7090 | 0.3008 | 2.2956 | 0.2242 | 0.7675 | 0.9873 | 0.9874 |
| 3s-bbc1000 | 0.1111 | 0.2454 | 0.1898 | 0.2407 | 0.2559 | 0.2933 | 0.7778 | 2.7222 | 0.6102 | 0.4520 | 0.7611 | 0.7248 |
| 3s-guardian1000 | 0.1935 | 0.2527 | 0.2780 | 0.3335 | 0.2826 | 0.3562 | 0.5161 | 2.0323 | 0.4806 | 0.6148 | 0.7959 | 0.8105 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.2353 | 0.6132 | 0.4520 | 0.5015 | 0.6911 |
| 3s-reuters1000 | 0.0000 | 0.2556 | 0.0167 | 0.0222 | 0.0476 | 0.0417 | 0.9333 | 2.6333 | 0.7600 | 0.3606 | 0.7906 | 0.7226 |
| amphibians | 0.0000 | 0.2540 | 0.5372 | 0.7513 | 0.5000 | 0.7037 | 0.2778 | 2.5556 | 0.1333 | 0.8404 | 0.7371 | 0.7971 |
| bibtex | 0.1811 | 0.0119 | 0.3578 | 0.4511 | 0.3207 | 0.4799 | 0.4243 | 72.7432 | 0.5845 | 0.4259 | 0.9980 | 0.9980 |
| birds | 0.2051 | 0.0837 | 0.3632 | 0.4335 | 0.3436 | 0.4655 | 0.5128 | 7.9231 | 0.5089 | 0.5052 | 0.8400 | 0.9351 |
| bookmarks10% | 0.1845 | 0.0088 | 0.2132 | 0.2340 | 0.1091 | 0.2563 | 0.7403 | 106.2016 | 0.7723 | 0.2483 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.1392 | 0.2181 | 0.3609 | 0.0667 | 0.3531 | 0.4118 | 151.0588 | 0.6151 | 0.4327 | 0.8334 | 0.9486 |
| corel16k001 | 0.0065 | 0.0188 | 0.0296 | 0.0416 | 0.0295 | 0.0568 | 0.9121 | 116.7131 | 0.9611 | 0.0723 | 0.9992 | 0.9992 |
| Corel5k | 0.0140 | 0.0091 | 0.0599 | 0.0865 | 0.0250 | 0.1177 | 0.8500 | 162.9000 | 0.9355 | 0.1638 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0425 | 0.0666 | 0.1222 | 0.0827 | 0.1268 | 0.5407 | 907.0510 | 0.8514 | 0.1473 | 0.9934 | 0.9986 |
| emotions | 0.3167 | 0.1833 | 0.5653 | 0.6842 | 0.6514 | 0.6887 | 0.3333 | 1.7167 | 0.2269 | 0.7906 | 0.8807 | 0.8879 |
| enron | 0.1579 | 0.0498 | 0.4442 | 0.5789 | 0.1703 | 0.5701 | 0.2573 | 24.1053 | 0.3795 | 0.6100 | 0.8277 | 0.9825 |
| EukaryoteGO | 0.6907 | 0.0187 | 0.7863 | 0.8328 | 0.6804 | 0.8263 | 0.1714 | 0.9304 | 0.0561 | 0.8894 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.1969 | 0.0516 | 0.2379 | 0.2585 | 0.1136 | 0.3308 | 0.5740 | 6.7722 | 0.5583 | 0.4885 | 0.9770 | 0.9797 |
| flags | 0.2500 | 0.2357 | 0.6258 | 0.7417 | 0.5798 | 0.7481 | 0.2000 | 3.6000 | 0.2250 | 0.8133 | 0.6905 | 0.7930 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1447 | 0.5000 | 0.2439 | 4.4390 | 0.4435 | 0.7172 | 0.8514 | 0.9556 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0299 | 0.2537 | 0.0015 | 0.9838 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9981 |
| GnegativePseAAC | 0.7500 | 0.0482 | 0.7643 | 0.7714 | 0.4483 | 0.8015 | 0.1714 | 0.6143 | 0.1454 | 0.8778 | 0.8618 | 0.9891 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9135 | 0.9279 | 0.8639 | 0.9245 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9956 | 0.9960 |
| GpositivePseAAC | 0.7115 | 0.1154 | 0.7115 | 0.7115 | 0.5570 | 0.7551 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9845 | 0.9762 |
| HumanGO | 0.6881 | 0.0356 | 0.7642 | 0.8044 | 0.6951 | 0.7826 | 0.1543 | 1.1061 | 0.1090 | 0.8816 | 0.9849 | 0.9885 |
| HumanPseAAC | 0.2379 | 0.0848 | 0.2658 | 0.2807 | 0.1526 | 0.3351 | 0.5402 | 3.4952 | 0.4898 | 0.5776 | 0.9565 | 0.9577 |
| Image | 0.5600 | 0.1580 | 0.6233 | 0.6556 | 0.6427 | 0.6393 | 0.3100 | 1.0200 | 0.2775 | 0.7948 | 0.9296 | 0.9255 |
| IMDB-ECC-F10% | 0.0356 | 0.0689 | 0.0629 | 0.0782 | 0.0320 | 0.0989 | 0.6384 | 12.5367 | 0.7484 | 0.3660 | 0.9888 | 0.9773 |
| IMDB-F10% | 0.0282 | 0.0726 | 0.0662 | 0.0858 | 0.0322 | 0.1089 | 0.5841 | 12.8476 | 0.7267 | 0.3844 | 0.9868 | 0.9756 |
| LLOG-F | 0.1639 | 0.0162 | 0.1919 | 0.2103 | 0.0518 | 0.2816 | 0.7295 | 28.5082 | 0.7753 | 0.2849 | 0.5985 | 0.9984 |
| mediamill10% | 0.0808 | 0.0309 | 0.4445 | 0.6146 | 0.0806 | 0.5591 | 0.1496 | 58.0451 | 0.4427 | 0.5537 | 0.8120 | 0.9937 |
| medical | 0.6633 | 0.0104 | 0.7636 | 0.8152 | 0.3060 | 0.8189 | 0.1939 | 4.9592 | 0.1283 | 0.8308 | 0.5525 | 0.9976 |
| Music | 0.2833 | 0.1722 | 0.5806 | 0.7090 | 0.7165 | 0.7257 | 0.3000 | 2.0167 | 0.2593 | 0.7931 | 0.9114 | 0.9042 |
| NUS-WIDE-bow10% | 0.1171 | 0.0250 | 0.2233 | 0.2733 | 0.0455 | 0.3375 | 0.5460 | 35.3442 | 0.6014 | 0.4206 | 0.8841 | 0.9998 |
| NUS-WIDE-cVLADplus10% | 0.1475 | 0.0235 | 0.2594 | 0.3152 | 0.0610 | 0.3771 | 0.5476 | 34.8478 | 0.6191 | 0.4237 | 0.8827 | 0.9938 |
| OHSUMED-F | 0.2333 | 0.0570 | 0.4270 | 0.5302 | 0.4331 | 0.5537 | 0.3553 | 7.4508 | 0.4003 | 0.6213 | 0.9756 | 0.9788 |
| PlantGO | 0.7083 | 0.0365 | 0.7604 | 0.7846 | 0.6747 | 0.7981 | 0.2188 | 1.0417 | 0.0982 | 0.8536 | 0.9899 | 0.9848 |
| PlantPseAAC | 0.2347 | 0.0935 | 0.2653 | 0.2806 | 0.1963 | 0.3452 | 0.6122 | 3.2653 | 0.5199 | 0.5316 | 0.9430 | 0.9355 |
| rcv1subset1 | 0.1100 | 0.0302 | 0.3310 | 0.4424 | 0.2525 | 0.4430 | 0.4250 | 41.0200 | 0.4626 | 0.4879 | 0.9270 | 0.9875 |
| REUTERS-K500-EX2 | 0.3144 | 0.0113 | 0.3836 | 0.4217 | 0.2368 | 0.4821 | 0.5223 | 32.8677 | 0.5436 | 0.4809 | 0.7841 | 0.9975 |
| scene | 0.6556 | 0.0864 | 0.7178 | 0.7488 | 0.7617 | 0.7515 | 0.2075 | 0.8091 | 0.1606 | 0.8475 | 0.9684 | 0.9721 |
| sider_CDK_ECFP4 | 0.0211 | 0.2381 | 0.6509 | 0.7976 | 0.6314 | 0.7991 | 0.2817 | 19.2887 | 0.1813 | 0.7684 | 0.5914 | 0.7652 |
| sider_MordredDesc | 0.0141 | 0.2548 | 0.6273 | 0.7845 | 0.6069 | 0.7845 | 0.3521 | 19.5775 | 0.1710 | 0.7679 | 0.5748 | 0.7751 |
| sider_RDKit_desc | 0.0141 | 0.2668 | 0.6348 | 0.7863 | 0.5933 | 0.7828 | 0.3099 | 20.1831 | 0.2178 | 0.7395 | 0.5755 | 0.7396 |
| SLASHDOT-F | 0.4074 | 0.0391 | 0.4938 | 0.5405 | 0.3921 | 0.5902 | 0.4312 | 6.1534 | 0.4039 | 0.6111 | 0.7589 | 0.9851 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.5000 | 0.7000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0389 | 0.0120 | 0.1008 | 0.1371 | 0.0576 | 0.1728 | 0.7896 | 105.6960 | 0.8780 | 0.1554 | 0.9188 | 0.9988 |
| Stackex_chess | 0.0357 | 0.0101 | 0.1392 | 0.1956 | 0.0514 | 0.2553 | 0.6845 | 139.0298 | 0.8178 | 0.1904 | 0.5493 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0198 | 0.0667 | 0.1061 | 0.0240 | 0.1515 | 0.8261 | 75.4783 | 0.8602 | 0.1427 | 0.2558 | 0.9879 |
| Stackex_cooking | 0.0010 | 0.0077 | 0.1344 | 0.2064 | 0.1061 | 0.2369 | 0.6444 | 224.2705 | 0.7785 | 0.2260 | 0.9244 | 0.9994 |
| Stackex_philosophy | 0.0603 | 0.0093 | 0.1727 | 0.2407 | 0.0627 | 0.2785 | 0.6734 | 134.6508 | 0.7875 | 0.2178 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2874 | 0.0615 | 0.5684 | 0.7039 | 0.5884 | 0.6772 | 0.2570 | 4.5577 | 0.1806 | 0.7648 | 0.9639 | 0.9734 |
| tox21_CDK_ECFP4 | 0.1370 | 0.1587 | 0.2859 | 0.3603 | 0.3700 | 0.4147 | 0.4658 | 5.4863 | 0.5037 | 0.5630 | 0.9013 | 0.9023 |
| tox21_RDKit_desc | 0.0788 | 0.1615 | 0.1701 | 0.2272 | 0.2332 | 0.2872 | 0.5034 | 5.5342 | 0.5151 | 0.5499 | 0.9025 | 0.9041 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.0952 | 0.5238 | 0.0874 | 0.9206 | 0.8003 | 0.9719 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.2857 | 9.0048 | 0.1857 | 0.7968 | 0.7139 | 0.9173 |
| Water-quality | 0.0094 | 0.3100 | 0.3639 | 0.5290 | 0.4258 | 0.5354 | 0.2830 | 9.2830 | 0.3626 | 0.6898 | 0.7745 | 0.7642 |
| Yahoo_Arts | 0.1776 | 0.0645 | 0.2608 | 0.3168 | 0.2077 | 0.3519 | 0.5100 | 10.4166 | 0.6287 | 0.4974 | 0.9390 | 0.9789 |
| Yahoo_Business | 0.5758 | 0.0261 | 0.7318 | 0.8194 | 0.3222 | 0.7317 | 0.0998 | 3.1774 | 0.2219 | 0.8818 | 0.8571 | 0.9953 |
| Yahoo_Computers | 0.3863 | 0.0372 | 0.4598 | 0.5096 | 0.2406 | 0.5177 | 0.3791 | 6.6487 | 0.4153 | 0.6096 | 0.8992 | 0.9649 |
| Yahoo_Education | 0.1401 | 0.0409 | 0.1829 | 0.2111 | 0.1552 | 0.2939 | 0.5536 | 9.0706 | 0.5654 | 0.5303 | 0.9025 | 0.9871 |
| Yahoo_Entertainment | 0.2781 | 0.0547 | 0.3290 | 0.3625 | 0.2410 | 0.4207 | 0.4348 | 4.1579 | 0.3808 | 0.6503 | 0.9638 | 0.9755 |
| Yahoo_Health | 0.4181 | 0.0383 | 0.5349 | 0.6130 | 0.2443 | 0.5910 | 0.3038 | 6.5150 | 0.3436 | 0.7023 | 0.8418 | 0.9906 |
| Yahoo_Recreation | 0.2828 | 0.0210 | 0.3945 | 0.4343 | 0.4070 | 0.5056 | 0.4767 | 6.3088 | 0.4771 | 0.6041 | 0.9643 | 0.9779 |
| Yahoo_Reference | 0.4135 | 0.0296 | 0.4574 | 0.4886 | 0.1732 | 0.5270 | 0.3951 | 5.4233 | 0.4207 | 0.6344 | 0.8114 | 0.9932 |
| Yahoo_Science | 0.2283 | 0.0392 | 0.2863 | 0.3249 | 0.1762 | 0.3442 | 0.6263 | 13.6155 | 0.6589 | 0.4221 | 0.9764 | 0.9882 |
| Yahoo_Social | 0.4140 | 0.0234 | 0.4602 | 0.4901 | 0.1552 | 0.5323 | 0.3724 | 7.5414 | 0.3961 | 0.6504 | 0.9252 | 1.0000 |
| Yahoo_Society | 0.3116 | 0.0805 | 0.4330 | 0.5543 | 0.2071 | 0.4588 | 0.3672 | 8.1969 | 0.4771 | 0.5893 | 0.9492 | 0.9532 |
| yeast | 0.2107 | 0.1871 | 0.5337 | 0.6690 | 0.3859 | 0.6613 | 0.2438 | 6.2273 | 0.2379 | 0.7569 | 0.8234 | 0.8850 |
| Yelp | 0.4177 | 0.1878 | 0.6430 | 0.7409 | 0.6863 | 0.7319 | 0.2094 | 1.3908 | 0.2328 | 0.8572 | 0.8797 | 0.9016 |

Table 111: Detailed results for MASSIVE (100) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.2391 | 0.0788 | 0.3328 | 0.4050 | 0.3810 | 0.3992 | 0.4699 | 3.7282 | 0.3635 | 0.6282 | 0.9512 | 0.9467 |
| 3s-bbc1000 | 0.0556 | 0.3750 | 0.1968 | 0.2912 | 0.1895 | 0.2703 | 0.7778 | 2.8889 | 0.5937 | 0.4189 | 0.5626 | 0.5731 |
| 3s-guardian1000 | 0.2258 | 0.3172 | 0.3613 | 0.4489 | 0.2588 | 0.4040 | 0.5161 | 2.1290 | 0.4242 | 0.5997 | 0.6397 | 0.7171 |
| 3s-inter3000 | 0.0000 | 0.4118 | 0.2794 | 0.4173 | 0.3089 | 0.4167 | 0.8824 | 2.1176 | 0.4603 | 0.4382 | 0.5265 | 0.6845 |
| 3s-reuters1000 | 0.1000 | 0.3222 | 0.1444 | 0.1650 | 0.0998 | 0.1714 | 0.8667 | 2.5333 | 0.5875 | 0.4075 | 0.6339 | 0.5952 |
| amphibians | 0.1111 | 0.2778 | 0.5460 | 0.7505 | 0.5149 | 0.7059 | 0.2778 | 2.5556 | 0.0889 | 0.8435 | 0.6974 | 0.7816 |
| bibtex | 0.1014 | 0.0145 | 0.2260 | 0.3087 | 0.1128 | 0.3236 | 0.5676 | 85.4730 | 0.7172 | 0.2953 | 0.9961 | 0.9954 |
| birds | 0.1026 | 0.1201 | 0.3163 | 0.4405 | 0.3133 | 0.4106 | 0.5641 | 7.4872 | 0.4347 | 0.4963 | 0.8087 | 0.8976 |
| bookmarks10% | 0.1900 | 0.0089 | 0.2195 | 0.2437 | 0.1166 | 0.2591 | 0.7286 | 107.4576 | 0.7617 | 0.2580 | 0.9981 | 0.9784 |
| CAL500 | 0.0000 | 0.2182 | 0.3150 | 0.4791 | 0.1550 | 0.4762 | 0.1569 | 151.0392 | 0.4893 | 0.4530 | 0.7751 | 0.9076 |
| corel16k001 | 0.0000 | 0.0645 | 0.1107 | 0.1964 | 0.0395 | 0.1977 | 0.8720 | 114.0040 | 0.9545 | 0.0893 | 0.9915 | 1.0000 |
| Corel5k | 0.0000 | 0.0140 | 0.1460 | 0.2253 | 0.0259 | 0.2328 | 0.8420 | 164.3086 | 0.9534 | 0.1604 | 0.6629 | 0.9854 |
| delicious | 0.0000 | 0.0510 | 0.1354 | 0.2329 | 0.0889 | 0.2324 | 0.5421 | 923.2936 | 0.8615 | 0.1512 | 0.9927 | 0.9807 |
| emotions | 0.3000 | 0.2333 | 0.5583 | 0.6688 | 0.6171 | 0.6613 | 0.2833 | 1.8333 | 0.1922 | 0.7904 | 0.8276 | 0.8428 |
| enron | 0.1111 | 0.0618 | 0.4285 | 0.5797 | 0.1800 | 0.5387 | 0.3743 | 22.8713 | 0.3239 | 0.5489 | 0.8033 | 0.9601 |
| EukaryoteGO | 0.6263 | 0.0238 | 0.7646 | 0.8345 | 0.5442 | 0.7962 | 0.1869 | 0.7023 | 0.0304 | 0.8846 | 0.9888 | 0.9894 |
| EukaryotePseAAC | 0.0103 | 0.1231 | 0.2439 | 0.3616 | 0.1099 | 0.3554 | 0.6178 | 4.4015 | 0.3248 | 0.5463 | 0.9345 | 0.9377 |
| flags | 0.2500 | 0.2571 | 0.6257 | 0.7359 | 0.6582 | 0.7391 | 0.3000 | 3.5500 | 0.2308 | 0.7916 | 0.6528 | 0.7847 |
| foodtruck | 0.2195 | 0.1728 | 0.4302 | 0.6049 | 0.1664 | 0.5029 | 0.2439 | 3.1707 | 0.3054 | 0.7627 | 0.7850 | 0.9047 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6661 | 0.9994 |
| GnegativeGO | 0.9143 | 0.0134 | 0.9464 | 0.9625 | 0.8215 | 0.9492 | 0.0286 | 0.1286 | 0.0211 | 0.9794 | 0.8645 | 0.9931 |
| GnegativePseAAC | 0.6500 | 0.0732 | 0.7143 | 0.7481 | 0.3932 | 0.7303 | 0.3000 | 0.7714 | 0.1237 | 0.8061 | 0.8260 | 0.9579 |
| GpositiveGO | 0.8654 | 0.0577 | 0.8846 | 0.8942 | 0.7894 | 0.8868 | 0.0769 | 0.0962 | 0.0321 | 0.9615 | 0.9939 | 0.9938 |
| GpositivePseAAC | 0.7308 | 0.1298 | 0.7500 | 0.7595 | 0.5786 | 0.7477 | 0.2500 | 0.5192 | 0.2308 | 0.8381 | 0.9716 | 0.9564 |
| HumanGO | 0.5659 | 0.0464 | 0.7286 | 0.8109 | 0.6589 | 0.7543 | 0.1994 | 0.6592 | 0.0409 | 0.8773 | 0.9758 | 0.9791 |
| HumanPseAAC | 0.0450 | 0.1566 | 0.2836 | 0.3936 | 0.1547 | 0.3900 | 0.6624 | 2.8842 | 0.2889 | 0.5355 | 0.8804 | 0.8792 |
| Image | 0.3500 | 0.2250 | 0.5000 | 0.5764 | 0.5460 | 0.5491 | 0.4350 | 1.1650 | 0.2783 | 0.7256 | 0.8353 | 0.8317 |
| IMDB-ECC-F10% | 0.0000 | 0.2753 | 0.1405 | 0.2425 | 0.0882 | 0.2423 | 0.6426 | 11.5356 | 0.6051 | 0.4082 | 0.9350 | 0.9406 |
| IMDB-F10% | 0.0000 | 0.2916 | 0.1520 | 0.2629 | 0.0872 | 0.2611 | 0.6156 | 11.7448 | 0.5548 | 0.4225 | 0.9074 | 0.9101 |
| LLOG-F | 0.0984 | 0.0215 | 0.1387 | 0.1683 | 0.0387 | 0.2088 | 0.7623 | 29.3115 | 0.8005 | 0.2576 | 0.5939 | 0.9924 |
| mediamill10% | 0.0594 | 0.0336 | 0.4514 | 0.6223 | 0.0884 | 0.5761 | 0.1995 | 58.4703 | 0.4133 | 0.5553 | 0.8074 | 0.9900 |
| medical | 0.5612 | 0.0141 | 0.6990 | 0.7698 | 0.2762 | 0.7615 | 0.1837 | 4.8571 | 0.1090 | 0.8329 | 0.5458 | 0.9918 |
| Music | 0.1833 | 0.2139 | 0.5611 | 0.7105 | 0.6852 | 0.6980 | 0.3500 | 2.2000 | 0.2157 | 0.7470 | 0.8525 | 0.8455 |
| NUS-WIDE-bow10% | 0.1379 | 0.0288 | 0.3172 | 0.4175 | 0.0472 | 0.3955 | 0.5243 | 33.8430 | 0.6018 | 0.4232 | 0.8701 | 0.9863 |
| NUS-WIDE-cVLADplus10% | 0.1723 | 0.0301 | 0.3286 | 0.4206 | 0.0543 | 0.3942 | 0.5723 | 35.8020 | 0.6584 | 0.4030 | 0.8712 | 0.9634 |
| OHSUMED-F | 0.0459 | 0.1033 | 0.2667 | 0.3964 | 0.1747 | 0.3863 | 0.5937 | 9.3223 | 0.4764 | 0.4603 | 0.9210 | 0.9020 |
| PlantGO | 0.5938 | 0.0495 | 0.7179 | 0.7810 | 0.6382 | 0.7532 | 0.2396 | 0.5729 | 0.0451 | 0.8586 | 0.9757 | 0.9700 |
| PlantPseAAC | 0.1327 | 0.1505 | 0.2639 | 0.3290 | 0.1772 | 0.3270 | 0.7245 | 2.5204 | 0.3019 | 0.5223 | 0.8300 | 0.8433 |
| rcv1subset1 | 0.0117 | 0.0399 | 0.2999 | 0.4532 | 0.1745 | 0.4278 | 0.5217 | 36.9717 | 0.4021 | 0.4534 | 0.9168 | 0.9729 |
| REUTERS-K500-EX2 | 0.2027 | 0.0157 | 0.3145 | 0.3852 | 0.1770 | 0.4083 | 0.5670 | 27.5945 | 0.4496 | 0.4852 | 0.7765 | 0.9886 |
| scene | 0.4979 | 0.1148 | 0.6646 | 0.7469 | 0.7402 | 0.7158 | 0.2365 | 0.4855 | 0.0863 | 0.8599 | 0.9321 | 0.9432 |
| sider_CDK_ECFP4 | 0.0141 | 0.2879 | 0.6265 | 0.7782 | 0.5911 | 0.7738 | 0.1338 | 19.7324 | 0.1627 | 0.8000 | 0.5561 | 0.7740 |
| sider_MordredDesc | 0.0211 | 0.2684 | 0.6364 | 0.7864 | 0.5897 | 0.7838 | 0.2817 | 19.5775 | 0.1832 | 0.7518 | 0.5315 | 0.7540 |
| sider_RDKit_desc | 0.0141 | 0.2840 | 0.6274 | 0.7799 | 0.5818 | 0.7747 | 0.3521 | 19.7958 | 0.2003 | 0.7309 | 0.5636 | 0.7458 |
| SLASHDOT-F | 0.3175 | 0.0560 | 0.4274 | 0.4886 | 0.3046 | 0.4946 | 0.5132 | 4.5317 | 0.2815 | 0.5965 | 0.7177 | 0.9361 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.5556 | 0.7800 |
| Stackex_chemistry | 0.0448 | 0.0161 | 0.1421 | 0.2107 | 0.0570 | 0.2000 | 0.7772 | 108.0750 | 0.8669 | 0.1547 | 0.9052 | 0.9914 |
| Stackex_chess | 0.0179 | 0.0161 | 0.1230 | 0.2041 | 0.0371 | 0.1987 | 0.7738 | 143.0893 | 0.8525 | 0.1462 | 0.5460 | 0.9948 |
| Stackex_coffee | 0.0000 | 0.0237 | 0.0594 | 0.1005 | 0.0261 | 0.1519 | 0.8261 | 78.3913 | 0.8813 | 0.1278 | 0.2541 | 0.9763 |
| Stackex_cooking | 0.0661 | 0.0052 | 0.2030 | 0.2768 | 0.1114 | 0.3228 | 0.6271 | 226.4747 | 0.7838 | 0.2315 | 0.9097 | 0.9899 |
| Stackex_philosophy | 0.0000 | 0.0201 | 0.1197 | 0.2011 | 0.0192 | 0.1911 | 0.8819 | 145.4296 | 0.9110 | 0.0909 | 0.7482 | 0.9971 |
| tmc2007-500 | 0.1979 | 0.0793 | 0.5008 | 0.6512 | 0.4418 | 0.6183 | 0.3815 | 4.6696 | 0.1630 | 0.6937 | 0.9307 | 0.9411 |
| tox21_CDK_ECFP4 | 0.0000 | 0.3445 | 0.2471 | 0.3971 | 0.2864 | 0.3956 | 0.5925 | 4.9007 | 0.3354 | 0.5454 | 0.7859 | 0.7828 |
| tox21_RDKit_desc | 0.0000 | 0.3827 | 0.2354 | 0.3860 | 0.2474 | 0.3783 | 0.6062 | 5.1678 | 0.3775 | 0.5225 | 0.8022 | 0.7882 |
| VirusGO | 0.7619 | 0.0556 | 0.8413 | 0.8729 | 0.6989 | 0.8571 | 0.0952 | 0.5714 | 0.0832 | 0.9130 | 0.7798 | 0.9549 |
| VirusPseAAC | 0.5238 | 0.1111 | 0.6667 | 0.7373 | 0.4137 | 0.7083 | 0.2857 | 0.7619 | 0.1381 | 0.8175 | 0.6992 | 0.9046 |
| Water-quality | 0.0000 | 0.4717 | 0.3972 | 0.5714 | 0.5316 | 0.5737 | 0.3302 | 9.7830 | 0.3304 | 0.6457 | 0.6219 | 0.6599 |
| Yahoo_Arts | 0.0107 | 0.1226 | 0.2113 | 0.3163 | 0.1155 | 0.2833 | 0.7517 | 10.1415 | 0.5279 | 0.3930 | 0.8823 | 0.9145 |
| Yahoo_Business | 0.5098 | 0.0321 | 0.6731 | 0.7693 | 0.1071 | 0.6552 | 0.1319 | 3.5134 | 0.2295 | 0.8571 | 0.8261 | 0.9827 |
| Yahoo_Computers | 0.2924 | 0.0539 | 0.4193 | 0.5130 | 0.1085 | 0.4304 | 0.4851 | 7.2297 | 0.4380 | 0.5420 | 0.8629 | 0.9629 |
| Yahoo_Education | 0.0066 | 0.0913 | 0.2033 | 0.3024 | 0.0648 | 0.2798 | 0.6791 | 10.1347 | 0.6050 | 0.4367 | 0.8688 | 0.9576 |
| Yahoo_Entertainment | 0.0086 | 0.1249 | 0.2344 | 0.3352 | 0.1318 | 0.3157 | 0.6355 | 4.8845 | 0.5145 | 0.5043 | 0.9233 | 0.9250 |
| Yahoo_Health | 0.2041 | 0.0676 | 0.3724 | 0.4916 | 0.1422 | 0.4180 | 0.5092 | 9.1335 | 0.4442 | 0.5140 | 0.7655 | 0.9237 |
| Yahoo_Recreation | 0.0055 | 0.1465 | 0.1811 | 0.2726 | 0.1438 | 0.2537 | 0.7490 | 7.9260 | 0.6011 | 0.3919 | 0.9040 | 0.8961 |
| Yahoo_Reference | 0.0037 | 0.0706 | 0.2660 | 0.3765 | 0.0630 | 0.3484 | 0.4956 | 5.9900 | 0.4224 | 0.5809 | 0.7836 | 0.9732 |
| Yahoo_Science | 0.0000 | 0.1080 | 0.1337 | 0.2168 | 0.0545 | 0.1962 | 0.8569 | 15.9829 | 0.8306 | 0.2571 | 0.9380 | 0.9653 |
| Yahoo_Social | 0.4592 | 0.0291 | 0.5338 | 0.5707 | 0.1740 | 0.5283 | 0.3711 | 7.4044 | 0.3871 | 0.6473 | 0.9375 | 0.9702 |
| Yahoo_Society | 0.2555 | 0.0677 | 0.3707 | 0.4497 | 0.0687 | 0.3817 | 0.4959 | 9.3664 | 0.5321 | 0.4882 | 0.8749 | 0.9220 |
| yeast | 0.1612 | 0.2122 | 0.5241 | 0.6576 | 0.3453 | 0.6477 | 0.2603 | 6.4050 | 0.2021 | 0.7317 | 0.7337 | 0.8153 |
| Yelp | 0.1825 | 0.3015 | 0.4486 | 0.5881 | 0.3413 | 0.5707 | 0.3659 | 1.9551 | 0.2989 | 0.7372 | 0.7487 | 0.7755 |

Table 112: Detailed results for MASSIVE (1K) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3786 | 0.0439 | 0.4913 | 0.5579 | 0.5969 | 0.6000 | 0.3164 | 2.4424 | 0.2319 | 0.7556 | 0.9743 | 0.9752 |
| 3s-bbc1000 | 0.1389 | 0.3565 | 0.2338 | 0.2899 | 0.2153 | 0.2804 | 0.7500 | 3.0000 | 0.6928 | 0.4316 | 0.7690 | 0.7189 |
| 3s-guardian1000 | 0.1935 | 0.2903 | 0.3559 | 0.4504 | 0.2758 | 0.4000 | 0.4516 | 2.1290 | 0.4790 | 0.6360 | 0.8064 | 0.8257 |
| 3s-inter3000 | 0.0000 | 0.3039 | 0.3137 | 0.4377 | 0.2183 | 0.4364 | 0.8824 | 2.1765 | 0.6603 | 0.4225 | 0.4819 | 0.6673 |
| 3s-reuters1000 | 0.1000 | 0.3389 | 0.1722 | 0.2093 | 0.1858 | 0.2078 | 0.9000 | 2.6667 | 0.7867 | 0.3744 | 0.8695 | 0.7650 |
| amphibians | 0.1111 | 0.2540 | 0.5897 | 0.7771 | 0.5947 | 0.7419 | 0.2222 | 2.4444 | 0.0944 | 0.8663 | 0.7460 | 0.8063 |
| bibtex | 0.1635 | 0.0133 | 0.3374 | 0.4385 | 0.2909 | 0.4566 | 0.4243 | 68.5405 | 0.5457 | 0.4446 | 0.9954 | 0.9952 |
| birds | 0.1538 | 0.0999 | 0.3427 | 0.4453 | 0.3586 | 0.4559 | 0.5128 | 8.0513 | 0.5472 | 0.4981 | 0.8411 | 0.9388 |
| bookmarks10% | 0.1811 | 0.0098 | 0.2147 | 0.2397 | 0.1114 | 0.2542 | 0.7392 | 104.0501 | 0.7542 | 0.2580 | 0.9840 | 0.9984 |
| CAL500 | 0.0000 | 0.2105 | 0.3162 | 0.4774 | 0.1419 | 0.4776 | 0.1961 | 151.0392 | 0.6191 | 0.4429 | 0.8312 | 0.9455 |
| corel16k001 | 0.0000 | 0.0637 | 0.1109 | 0.1970 | 0.0401 | 0.1952 | 0.8832 | 113.7257 | 0.9383 | 0.0892 | 0.9900 | 1.0000 |
| Corel5k | 0.0000 | 0.0141 | 0.1465 | 0.2346 | 0.0298 | 0.2412 | 0.8320 | 162.1080 | 0.9259 | 0.1712 | 0.6785 | 0.9993 |
| delicious | 0.0000 | 0.0510 | 0.1367 | 0.2352 | 0.0886 | 0.2321 | 0.5221 | 896.1171 | 0.8387 | 0.1536 | 0.9895 | 0.9932 |
| emotions | 0.3333 | 0.1889 | 0.5972 | 0.7188 | 0.6949 | 0.7094 | 0.3000 | 1.7667 | 0.2378 | 0.7920 | 0.8788 | 0.8897 |
| enron | 0.1404 | 0.0541 | 0.4668 | 0.6073 | 0.2184 | 0.5854 | 0.2339 | 22.0526 | 0.3261 | 0.6302 | 0.8222 | 0.9790 |
| EukaryoteGO | 0.6817 | 0.0206 | 0.7876 | 0.8402 | 0.6983 | 0.8157 | 0.1765 | 0.6005 | 0.0254 | 0.8954 | 0.9914 | 0.9944 |
| EukaryotePseAAC | 0.0965 | 0.0832 | 0.3107 | 0.4206 | 0.1238 | 0.4161 | 0.5727 | 5.4273 | 0.4392 | 0.5374 | 0.9577 | 0.9620 |
| flags | 0.2500 | 0.2429 | 0.6336 | 0.7517 | 0.5839 | 0.7500 | 0.2000 | 3.6000 | 0.2333 | 0.8208 | 0.6970 | 0.7971 |
| foodtruck | 0.2927 | 0.1565 | 0.4621 | 0.6010 | 0.1431 | 0.4967 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8549 | 0.9574 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8262 | 0.9556 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7643 | 0.0527 | 0.7988 | 0.8160 | 0.4790 | 0.8000 | 0.1857 | 0.6000 | 0.1236 | 0.8765 | 0.8556 | 0.9846 |
| GpositiveGO | 0.9038 | 0.0288 | 0.9423 | 0.9612 | 0.8836 | 0.9455 | 0.0769 | 0.1346 | 0.0385 | 0.9567 | 0.9961 | 0.9961 |
| GpositivePseAAC | 0.7500 | 0.1202 | 0.7596 | 0.7644 | 0.5823 | 0.7619 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9845 | 0.9763 |
| HumanGO | 0.6624 | 0.0361 | 0.7691 | 0.8236 | 0.7111 | 0.7876 | 0.1672 | 0.7428 | 0.0544 | 0.8938 | 0.9826 | 0.9867 |
| HumanPseAAC | 0.2283 | 0.1029 | 0.3617 | 0.4261 | 0.1791 | 0.4315 | 0.5466 | 2.9614 | 0.3476 | 0.6029 | 0.9226 | 0.9236 |
| Image | 0.4850 | 0.1840 | 0.6008 | 0.6594 | 0.6239 | 0.6183 | 0.3050 | 1.0400 | 0.2708 | 0.7927 | 0.9145 | 0.9092 |
| IMDB-ECC-F10% | 0.0000 | 0.2388 | 0.1482 | 0.2517 | 0.0788 | 0.2516 | 0.6405 | 12.3449 | 0.7341 | 0.3717 | 0.9898 | 0.9753 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1524 | 0.2590 | 0.0947 | 0.2594 | 0.6123 | 13.0050 | 0.7368 | 0.3705 | 0.9865 | 0.9748 |
| LLOG-F | 0.1230 | 0.0176 | 0.1755 | 0.2066 | 0.0495 | 0.2715 | 0.7295 | 28.3197 | 0.7712 | 0.2873 | 0.5967 | 0.9963 |
| mediamill10% | 0.0831 | 0.0303 | 0.4680 | 0.6278 | 0.0860 | 0.5836 | 0.2542 | 60.4679 | 0.4505 | 0.5349 | 0.8127 | 0.9934 |
| medical | 0.6633 | 0.0104 | 0.7696 | 0.8263 | 0.3063 | 0.8189 | 0.1837 | 5.0204 | 0.1331 | 0.8342 | 0.5525 | 0.9977 |
| Music | 0.2833 | 0.1750 | 0.5986 | 0.7385 | 0.7186 | 0.7319 | 0.2667 | 2.0000 | 0.2455 | 0.8043 | 0.9098 | 0.9001 |
| NUS-WIDE-bow10% | 0.1383 | 0.0285 | 0.3130 | 0.4225 | 0.0477 | 0.4025 | 0.5216 | 34.6447 | 0.5952 | 0.4312 | 0.8877 | 0.9770 |
| NUS-WIDE-cVLADplus10% | 0.1441 | 0.0290 | 0.3384 | 0.4457 | 0.0658 | 0.4271 | 0.5081 | 31.3021 | 0.5303 | 0.4677 | 0.8778 | 0.9877 |
| OHSUMED-F | 0.1658 | 0.0675 | 0.3895 | 0.5109 | 0.3850 | 0.5260 | 0.3647 | 6.4695 | 0.3259 | 0.6399 | 0.9506 | 0.9528 |
| PlantGO | 0.6667 | 0.0408 | 0.7396 | 0.7741 | 0.6480 | 0.7793 | 0.2292 | 1.0521 | 0.0992 | 0.8484 | 0.9894 | 0.9856 |
| PlantPseAAC | 0.2857 | 0.1131 | 0.3724 | 0.4254 | 0.2198 | 0.4141 | 0.5918 | 3.2143 | 0.5088 | 0.5449 | 0.9430 | 0.9363 |
| rcv1subset1 | 0.0433 | 0.0343 | 0.3528 | 0.5045 | 0.3039 | 0.4870 | 0.4067 | 33.5083 | 0.3541 | 0.5309 | 0.9218 | 0.9831 |
| REUTERS-K500-EX2 | 0.2955 | 0.0136 | 0.3981 | 0.4590 | 0.2586 | 0.4763 | 0.4931 | 26.6993 | 0.4575 | 0.5317 | 0.7809 | 0.9940 |
| scene | 0.6183 | 0.0927 | 0.7220 | 0.7736 | 0.7664 | 0.7509 | 0.2158 | 0.6971 | 0.1337 | 0.8543 | 0.9615 | 0.9665 |
| sider_CDK_ECFP4 | 0.0070 | 0.2465 | 0.6507 | 0.7963 | 0.6359 | 0.7964 | 0.1338 | 19.4789 | 0.1560 | 0.8173 | 0.5795 | 0.7849 |
| sider_MordredDesc | 0.0141 | 0.2663 | 0.6317 | 0.7827 | 0.6175 | 0.7833 | 0.2606 | 19.7817 | 0.1757 | 0.7776 | 0.5689 | 0.7689 |
| sider_RDKit_desc | 0.0141 | 0.2762 | 0.6325 | 0.7835 | 0.6063 | 0.7795 | 0.2746 | 20.2676 | 0.2234 | 0.7226 | 0.5889 | 0.7406 |
| SLASHDOT-F | 0.3915 | 0.0399 | 0.5060 | 0.5670 | 0.4000 | 0.6038 | 0.3915 | 4.4074 | 0.2843 | 0.6760 | 0.7443 | 0.9719 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0432 | 0.0180 | 0.1441 | 0.2177 | 0.0682 | 0.2035 | 0.7925 | 105.2219 | 0.8617 | 0.1609 | 0.9163 | 0.9962 |
| Stackex_chess | 0.0357 | 0.0109 | 0.1471 | 0.2165 | 0.0621 | 0.2723 | 0.6548 | 136.0357 | 0.7889 | 0.2163 | 0.5485 | 0.9974 |
| Stackex_coffee | 0.0000 | 0.0226 | 0.0536 | 0.0960 | 0.0224 | 0.1351 | 0.7826 | 73.7826 | 0.8378 | 0.1583 | 0.2547 | 0.9889 |
| Stackex_cooking | 0.0649 | 0.0053 | 0.2043 | 0.2800 | 0.1139 | 0.3253 | 0.6253 | 221.4423 | 0.7675 | 0.2318 | 0.9193 | 1.0000 |
| Stackex_philosophy | 0.0503 | 0.0111 | 0.1499 | 0.2185 | 0.0627 | 0.2465 | 0.7060 | 132.4849 | 0.7825 | 0.2120 | 0.7482 | 0.9968 |
| tmc2007-500 | 0.2448 | 0.0706 | 0.5580 | 0.7048 | 0.5687 | 0.6681 | 0.2748 | 3.9846 | 0.1328 | 0.7680 | 0.9498 | 0.9632 |
| tox21_CDK_ECFP4 | 0.1096 | 0.1889 | 0.3360 | 0.4571 | 0.3825 | 0.4456 | 0.4863 | 4.9110 | 0.3855 | 0.5898 | 0.8679 | 0.8587 |
| tox21_RDKit_desc | 0.0788 | 0.2069 | 0.3164 | 0.4597 | 0.2741 | 0.4241 | 0.5034 | 5.3390 | 0.4433 | 0.5690 | 0.8692 | 0.8648 |
| VirusGO | 0.7619 | 0.0635 | 0.8492 | 0.8768 | 0.6767 | 0.8462 | 0.0952 | 0.5238 | 0.0874 | 0.9206 | 0.8003 | 0.9703 |
| VirusPseAAC | 0.4762 | 0.1349 | 0.5635 | 0.6069 | 0.3487 | 0.6222 | 0.2857 | 0.8095 | 0.1762 | 0.8032 | 0.7174 | 0.9177 |
| Water-quality | 0.0094 | 0.3248 | 0.4411 | 0.6142 | 0.5079 | 0.6094 | 0.2642 | 9.3113 | 0.3648 | 0.6918 | 0.7693 | 0.7671 |
| Yahoo_Arts | 0.1135 | 0.0983 | 0.2359 | 0.3214 | 0.1386 | 0.2830 | 0.6008 | 11.5220 | 0.7369 | 0.4288 | 0.9258 | 0.9655 |
| Yahoo_Business | 0.5125 | 0.0339 | 0.6863 | 0.7884 | 0.1987 | 0.6601 | 0.1203 | 3.2790 | 0.2265 | 0.8714 | 0.8460 | 0.9902 |
| Yahoo_Computers | 0.3446 | 0.0520 | 0.4514 | 0.5305 | 0.1810 | 0.4502 | 0.4112 | 6.9526 | 0.4585 | 0.5810 | 0.8811 | 0.9753 |
| Yahoo_Education | 0.0066 | 0.0870 | 0.2183 | 0.3205 | 0.1567 | 0.2995 | 0.7207 | 10.2195 | 0.7629 | 0.4069 | 0.8807 | 0.9739 |
| Yahoo_Entertainment | 0.3040 | 0.0841 | 0.3812 | 0.4379 | 0.2187 | 0.3945 | 0.5483 | 4.7620 | 0.5075 | 0.5552 | 0.9633 | 0.9552 |
| Yahoo_Health | 0.3051 | 0.0533 | 0.4408 | 0.5291 | 0.1792 | 0.4625 | 0.4397 | 7.7231 | 0.4145 | 0.6055 | 0.8166 | 0.9746 |
| Yahoo_Recreation | 0.0733 | 0.1132 | 0.2383 | 0.3268 | 0.2372 | 0.3056 | 0.5994 | 7.1949 | 0.5776 | 0.5014 | 0.9503 | 0.9420 |
| Yahoo_Reference | 0.4134 | 0.0395 | 0.4789 | 0.5251 | 0.1045 | 0.4702 | 0.4396 | 6.0336 | 0.4354 | 0.6113 | 0.8013 | 0.9831 |
| Yahoo_Science | 0.1633 | 0.0661 | 0.2263 | 0.2800 | 0.0994 | 0.2222 | 0.7512 | 15.4168 | 0.7635 | 0.3249 | 0.9479 | 0.9739 |
| Yahoo_Social | 0.4175 | 0.0351 | 0.4988 | 0.5534 | 0.1175 | 0.4809 | 0.4257 | 7.8647 | 0.4119 | 0.6128 | 0.9087 | 0.9852 |
| Yahoo_Society | 0.2576 | 0.0708 | 0.3818 | 0.4721 | 0.1178 | 0.3919 | 0.4697 | 8.8643 | 0.5322 | 0.5290 | 0.9337 | 0.9689 |
| yeast | 0.1901 | 0.2004 | 0.5587 | 0.6886 | 0.4447 | 0.6805 | 0.2479 | 6.2190 | 0.2102 | 0.7597 | 0.8109 | 0.8713 |
| Yelp | 0.3001 | 0.2315 | 0.5800 | 0.7106 | 0.6345 | 0.6905 | 0.2512 | 1.4965 | 0.2182 | 0.8292 | 0.8324 | 0.8582 |

Table 113: Detailed results for MASSIVE (5K) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5415 | 0.0305 | 0.6178 | 0.6717 | 0.6982 | 0.7104 | 0.3059 | 2.5312 | 0.2388 | 0.7650 | 0.9923 | 0.9808 |
| 3s-bbc1000 | 0.1111 | 0.3472 | 0.2523 | 0.3225 | 0.2516 | 0.3119 | 0.7778 | 2.7778 | 0.6407 | 0.4469 | 0.7717 | 0.7292 |
| 3s-guardian1000 | 0.1935 | 0.3226 | 0.3237 | 0.4101 | 0.2511 | 0.3617 | 0.4516 | 2.0645 | 0.4605 | 0.6403 | 0.8112 | 0.8225 |
| 3s-inter3000 | 0.0000 | 0.4314 | 0.2206 | 0.3114 | 0.2079 | 0.3125 | 0.8235 | 2.1765 | 0.6368 | 0.4578 | 0.4913 | 0.6832 |
| 3s-reuters1000 | 0.0667 | 0.3389 | 0.1167 | 0.1373 | 0.1017 | 0.1408 | 0.9000 | 2.7000 | 0.7933 | 0.3689 | 0.8224 | 0.7483 |
| amphibians | 0.0000 | 0.2778 | 0.5196 | 0.7350 | 0.5023 | 0.6847 | 0.2222 | 2.5000 | 0.1167 | 0.8570 | 0.7410 | 0.7981 |
| bibtex | 0.1903 | 0.0120 | 0.3637 | 0.4549 | 0.3282 | 0.4898 | 0.4340 | 71.3405 | 0.5737 | 0.4287 | 1.0000 | 0.9852 |
| birds | 0.1795 | 0.0985 | 0.3530 | 0.4446 | 0.3517 | 0.4511 | 0.4615 | 7.5128 | 0.4776 | 0.5340 | 0.8444 | 0.9376 |
| bookmarks10% | 0.1897 | 0.0089 | 0.2202 | 0.2440 | 0.1181 | 0.2650 | 0.7360 | 105.9131 | 0.7641 | 0.2586 | 0.9850 | 0.9916 |
| CAL500 | 0.0000 | 0.2122 | 0.3151 | 0.4767 | 0.1442 | 0.4768 | 0.3333 | 151.0980 | 0.6376 | 0.4251 | 0.8341 | 0.9499 |
| corel16k001 | 0.0000 | 0.0631 | 0.1123 | 0.1945 | 0.0402 | 0.1955 | 0.8723 | 115.1285 | 0.9359 | 0.0890 | 1.0000 | 1.0000 |
| Corel5k | 0.0000 | 0.0139 | 0.1445 | 0.2304 | 0.0261 | 0.2344 | 0.8451 | 162.3274 | 0.9405 | 0.1623 | 0.6730 | 0.9860 |
| delicious | 0.0000 | 0.0514 | 0.1349 | 0.2336 | 0.0896 | 0.2353 | 0.5291 | 904.0442 | 0.8485 | 0.1525 | 0.9830 | 0.9953 |
| emotions | 0.3000 | 0.1972 | 0.5833 | 0.7093 | 0.6901 | 0.7029 | 0.3000 | 1.7833 | 0.2399 | 0.7893 | 0.8776 | 0.8880 |
| enron | 0.1813 | 0.0525 | 0.4865 | 0.6144 | 0.1590 | 0.5911 | 0.2573 | 24.3977 | 0.3722 | 0.6148 | 0.8261 | 0.9816 |
| EukaryoteGO | 0.7109 | 0.0189 | 0.8019 | 0.8238 | 0.7289 | 0.8229 | 0.1657 | 0.8580 | 0.0510 | 0.8989 | 0.9908 | 1.0000 |
| EukaryotePseAAC | 0.3018 | 0.0566 | 0.3987 | 0.4560 | 0.1468 | 0.4590 | 0.5362 | 6.1606 | 0.5051 | 0.5333 | 0.9741 | 0.9877 |
| flags | 0.2500 | 0.2357 | 0.6367 | 0.7488 | 0.6094 | 0.7556 | 0.2000 | 3.5500 | 0.2175 | 0.8167 | 0.6820 | 0.8022 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1447 | 0.5000 | 0.2439 | 4.4390 | 0.4435 | 0.7210 | 0.8519 | 0.9545 |
| genbase | 0.9419 | 0.0017 | 0.9904 | 0.9898 | 0.6139 | 0.9833 | 0.0151 | 0.2399 | 0.0009 | 1.0000 | 0.6428 | 0.9913 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9571 | 0.9714 | 0.8300 | 0.9595 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8741 | 0.9981 |
| GnegativePseAAC | 0.7500 | 0.0518 | 0.7988 | 0.8232 | 0.4893 | 0.8041 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8622 | 0.9893 |
| GpositiveGO | 0.9231 | 0.0288 | 0.9423 | 0.9519 | 0.8791 | 0.9434 | 0.0577 | 0.1538 | 0.0417 | 0.9615 | 0.9972 | 0.9972 |
| GpositivePseAAC | 0.7308 | 0.1202 | 0.7404 | 0.7452 | 0.5738 | 0.7573 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9841 | 0.9760 |
| HumanGO | 0.6881 | 0.0363 | 0.7765 | 0.8227 | 0.7019 | 0.7882 | 0.1640 | 1.0965 | 0.1032 | 0.8785 | 0.9851 | 0.9884 |
| HumanPseAAC | 0.3129 | 0.0991 | 0.4115 | 0.4591 | 0.1886 | 0.4368 | 0.5310 | 3.3542 | 0.4755 | 0.5900 | 0.9411 | 0.9501 |
| Image | 0.5200 | 0.1740 | 0.6175 | 0.6671 | 0.6357 | 0.6282 | 0.3050 | 1.0100 | 0.2767 | 0.7979 | 0.9297 | 0.9256 |
| IMDB-ECC-F10% | 0.0000 | 0.2345 | 0.1496 | 0.2501 | 0.0840 | 0.2489 | 0.6265 | 12.2604 | 0.7407 | 0.3795 | 0.9744 | 0.9847 |
| IMDB-F10% | 0.0000 | 0.2659 | 0.1558 | 0.2611 | 0.0966 | 0.2642 | 0.5866 | 12.8633 | 0.7195 | 0.3846 | 0.9859 | 0.9810 |
| LLOG-F | 0.1721 | 0.0162 | 0.2015 | 0.2192 | 0.0538 | 0.2952 | 0.7377 | 28.6639 | 0.7821 | 0.2794 | 0.5987 | 0.9985 |
| mediamill10% | 0.0831 | 0.0302 | 0.4699 | 0.6311 | 0.0857 | 0.5840 | 0.1520 | 59.8670 | 0.4578 | 0.5516 | 0.8135 | 0.9943 |
| medical | 0.6735 | 0.0104 | 0.7738 | 0.8281 | 0.2946 | 0.8189 | 0.1429 | 4.9898 | 0.1321 | 0.8546 | 0.5528 | 0.9978 |
| Music | 0.2833 | 0.1694 | 0.6111 | 0.7597 | 0.7341 | 0.7426 | 0.3000 | 2.0333 | 0.2597 | 0.7876 | 0.9092 | 0.9001 |
| NUS-WIDE-bow10% | 0.1380 | 0.0284 | 0.3156 | 0.4193 | 0.0476 | 0.4049 | 0.5274 | 34.3417 | 0.5986 | 0.4311 | 0.8781 | 0.9791 |
| NUS-WIDE-cVLADplus10% | 0.1761 | 0.0305 | 0.3368 | 0.4240 | 0.0556 | 0.3954 | 0.5711 | 35.7316 | 0.6550 | 0.4035 | 0.8918 | 0.9823 |
| OHSUMED-F | 0.2259 | 0.0590 | 0.4399 | 0.5501 | 0.4433 | 0.5655 | 0.3506 | 7.5864 | 0.4204 | 0.6109 | 0.9872 | 0.9926 |
| PlantGO | 0.6875 | 0.0391 | 0.7448 | 0.7717 | 0.6388 | 0.7847 | 0.2292 | 1.0000 | 0.1052 | 0.8475 | 0.9902 | 0.9857 |
| PlantPseAAC | 0.2653 | 0.1156 | 0.3537 | 0.4036 | 0.2111 | 0.3982 | 0.5918 | 3.0714 | 0.4961 | 0.5520 | 0.9430 | 0.9369 |
| rcv1subset1 | 0.1012 | 0.0318 | 0.3534 | 0.4773 | 0.2652 | 0.4697 | 0.3919 | 38.0622 | 0.4101 | 0.5115 | 0.9120 | 0.9878 |
| REUTERS-K500-EX2 | 0.3333 | 0.0116 | 0.4099 | 0.4558 | 0.2489 | 0.5007 | 0.5052 | 32.5670 | 0.5368 | 0.4914 | 0.7840 | 0.9974 |
| scene | 0.6515 | 0.0864 | 0.7420 | 0.7880 | 0.7760 | 0.7646 | 0.2116 | 0.8257 | 0.1639 | 0.8447 | 0.9683 | 0.9721 |
| sider_CDK_ECFP4 | 0.0211 | 0.2397 | 0.6522 | 0.7985 | 0.6349 | 0.7993 | 0.0986 | 19.2254 | 0.1643 | 0.8002 | 0.5914 | 0.7817 |
| sider_MordredDesc | 0.0141 | 0.2676 | 0.6258 | 0.7824 | 0.6116 | 0.7793 | 0.3076 | 19.9550 | 0.2222 | 0.7465 | 0.5806 | 0.7353 |
| sider_RDKit_desc | 0.0141 | 0.2762 | 0.6329 | 0.7834 | 0.6087 | 0.7799 | 0.1761 | 19.9718 | 0.1897 | 0.7681 | 0.5985 | 0.7736 |
| SLASHDOT-F | 0.3995 | 0.0410 | 0.5076 | 0.5651 | 0.3875 | 0.5965 | 0.4048 | 5.8201 | 0.3844 | 0.6297 | 0.7586 | 0.9852 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.3333 | 0.7000 |
| Stackex_chemistry | 0.0444 | 0.0158 | 0.1449 | 0.2089 | 0.0566 | 0.2037 | 0.7869 | 106.0609 | 0.8716 | 0.1525 | 0.9201 | 0.9870 |
| Stackex_chess | 0.0357 | 0.0101 | 0.1544 | 0.2190 | 0.0539 | 0.2802 | 0.6641 | 136.2320 | 0.8154 | 0.2012 | 0.5547 | 1.0000 |
| Stackex_coffee | 0.0000 | 0.0226 | 0.0471 | 0.0884 | 0.0140 | 0.1111 | 0.8261 | 78.3043 | 0.8852 | 0.1309 | 0.2554 | 0.9896 |
| Stackex_cooking | 0.0656 | 0.0052 | 0.2066 | 0.2810 | 0.1125 | 0.3221 | 0.6227 | 223.5577 | 0.7787 | 0.2333 | 0.9285 | 0.9935 |
| Stackex_philosophy | 0.0529 | 0.0092 | 0.1638 | 0.2324 | 0.0621 | 0.2732 | 0.6967 | 135.5361 | 0.7883 | 0.2145 | 0.7554 | 0.9914 |
| tmc2007-500 | 0.2547 | 0.0663 | 0.5782 | 0.7255 | 0.5900 | 0.6747 | 0.2545 | 4.1112 | 0.1465 | 0.7740 | 0.9557 | 0.9731 |
| tox21_CDK_ECFP4 | 0.1507 | 0.1781 | 0.3639 | 0.4746 | 0.3926 | 0.4658 | 0.4658 | 5.3219 | 0.4881 | 0.5719 | 0.8981 | 0.8998 |
| tox21_RDKit_desc | 0.1267 | 0.1881 | 0.3333 | 0.4522 | 0.3159 | 0.4334 | 0.5000 | 5.5685 | 0.5256 | 0.5507 | 0.9102 | 0.9125 |
| VirusGO | 0.7619 | 0.0635 | 0.8333 | 0.8611 | 0.6711 | 0.8400 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.8050 | 0.9703 |
| VirusPseAAC | 0.4762 | 0.1190 | 0.5714 | 0.6190 | 0.3583 | 0.6512 | 0.2857 | 0.9048 | 0.1952 | 0.8024 | 0.7302 | 0.9168 |
| Water-quality | 0.0000 | 0.3261 | 0.4305 | 0.6072 | 0.4993 | 0.6020 | 0.2642 | 9.2453 | 0.3536 | 0.6968 | 0.7680 | 0.7611 |
| Yahoo_Arts | 0.2056 | 0.0694 | 0.2959 | 0.3640 | 0.2150 | 0.3755 | 0.4928 | 10.3392 | 0.5716 | 0.5051 | 0.9460 | 0.9612 |
| Yahoo_Business | 0.5649 | 0.0271 | 0.7298 | 0.8229 | 0.3009 | 0.7208 | 0.0874 | 3.2126 | 0.2240 | 0.8943 | 0.8680 | 0.9881 |
| Yahoo_Computers | 0.3904 | 0.0449 | 0.4879 | 0.5663 | 0.2531 | 0.5023 | 0.3834 | 6.3788 | 0.4114 | 0.6113 | 0.8833 | 0.9727 |
| Yahoo_Education | 0.2560 | 0.0451 | 0.3339 | 0.3899 | 0.1886 | 0.4129 | 0.5103 | 8.8647 | 0.5594 | 0.5475 | 0.8993 | 0.9888 |
| Yahoo_Entertainment | 0.3458 | 0.0702 | 0.4510 | 0.5234 | 0.2846 | 0.4842 | 0.4422 | 4.2819 | 0.4046 | 0.6247 | 0.9687 | 0.9579 |
| Yahoo_Health | 0.4068 | 0.0413 | 0.5542 | 0.6515 | 0.2448 | 0.5907 | 0.3048 | 6.5022 | 0.3501 | 0.7035 | 0.8283 | 0.9988 |
| Yahoo_Recreation | 0.2247 | 0.0699 | 0.3130 | 0.3636 | 0.3116 | 0.3919 | 0.5070 | 6.5507 | 0.5451 | 0.5730 | 0.9637 | 0.9744 |
| Yahoo_Reference | 0.4554 | 0.0320 | 0.5277 | 0.5689 | 0.1793 | 0.5385 | 0.3812 | 5.4561 | 0.4212 | 0.6467 | 0.8153 | 0.9987 |
| Yahoo_Science | 0.1971 | 0.0416 | 0.2508 | 0.2932 | 0.1618 | 0.3205 | 0.6410 | 13.7030 | 0.6549 | 0.4106 | 0.9545 | 0.9794 |
| Yahoo_Social | 0.4623 | 0.0295 | 0.5440 | 0.5800 | 0.1776 | 0.5324 | 0.3746 | 7.5040 | 0.3847 | 0.6552 | 0.9254 | 0.9749 |
| Yahoo_Society | 0.3282 | 0.0795 | 0.4409 | 0.5607 | 0.2120 | 0.4623 | 0.3869 | 8.4468 | 0.4910 | 0.6018 | 0.9401 | 0.9640 |
| yeast | 0.1956 | 0.2093 | 0.5590 | 0.6942 | 0.4490 | 0.6716 | 0.2521 | 6.2913 | 0.2323 | 0.7500 | 0.8197 | 0.8959 |
| Yelp | 0.3858 | 0.1992 | 0.6365 | 0.7468 | 0.6796 | 0.7279 | 0.2024 | 1.3709 | 0.2129 | 0.8595 | 0.8620 | 0.8889 |

Table 114: Detailed results for MASSIVE (10K) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5093 | 0.0309 | 0.5980 | 0.6432 | 0.6967 | 0.6970 | 0.3065 | 2.3537 | 0.2270 | 0.7633 | 0.9874 | 0.9876 |
| 3s-bbc1000 | 0.1111 | 0.3657 | 0.1986 | 0.2709 | 0.2387 | 0.2476 | 0.7500 | 3.2222 | 0.7289 | 0.4100 | 0.7738 | 0.7228 |
| 3s-guardian1000 | 0.1613 | 0.3226 | 0.3640 | 0.4800 | 0.3143 | 0.4118 | 0.5161 | 2.0323 | 0.4444 | 0.6239 | 0.8003 | 0.8090 |
| 3s-inter3000 | 0.0000 | 0.3039 | 0.3137 | 0.4377 | 0.2183 | 0.4364 | 0.8235 | 2.2941 | 0.6485 | 0.4392 | 0.4997 | 0.6878 |
| 3s-reuters1000 | 0.1000 | 0.2778 | 0.1333 | 0.1481 | 0.1259 | 0.1667 | 0.9000 | 2.5667 | 0.7867 | 0.3828 | 0.8491 | 0.7690 |
| amphibians | 0.1667 | 0.2619 | 0.5897 | 0.7802 | 0.5862 | 0.7317 | 0.2222 | 2.5000 | 0.0944 | 0.8570 | 0.7667 | 0.8207 |
| bibtex | 0.1905 | 0.0120 | 0.3634 | 0.4552 | 0.3155 | 0.4795 | 0.4378 | 73.2189 | 0.5892 | 0.4203 | 0.9979 | 0.9980 |
| birds | 0.1282 | 0.1093 | 0.3115 | 0.4103 | 0.3032 | 0.4088 | 0.5385 | 7.8974 | 0.5261 | 0.4992 | 0.8444 | 0.9361 |
| bookmarks10% | 0.1913 | 0.0089 | 0.2200 | 0.2408 | 0.1151 | 0.2633 | 0.7403 | 105.7232 | 0.7681 | 0.2519 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.2089 | 0.3117 | 0.4720 | 0.1421 | 0.4727 | 0.3725 | 150.9608 | 0.6192 | 0.4349 | 0.8285 | 0.9425 |
| corel16k001 | 0.0000 | 0.0629 | 0.1116 | 0.1933 | 0.0351 | 0.1930 | 0.9245 | 117.0545 | 0.9667 | 0.0670 | 0.9994 | 0.9994 |
| Corel5k | 0.0000 | 0.0157 | 0.1443 | 0.2331 | 0.0257 | 0.2374 | 0.8580 | 163.8900 | 0.9402 | 0.1588 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0747 | 0.1061 | 0.1912 | 0.0861 | 0.1918 | 0.5320 | 911.6041 | 0.8603 | 0.1415 | 0.9934 | 0.9986 |
| emotions | 0.3667 | 0.1889 | 0.6000 | 0.7074 | 0.6920 | 0.7069 | 0.2667 | 1.7667 | 0.2227 | 0.7994 | 0.8752 | 0.8913 |
| enron | 0.1696 | 0.0524 | 0.4846 | 0.6193 | 0.1884 | 0.5923 | 0.2749 | 24.0526 | 0.3571 | 0.6157 | 0.8263 | 0.9816 |
| EukaryoteGO | 0.6791 | 0.0195 | 0.7945 | 0.8502 | 0.7350 | 0.8263 | 0.1649 | 0.8982 | 0.0547 | 0.8934 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.2638 | 0.0548 | 0.3345 | 0.3722 | 0.1323 | 0.4162 | 0.5856 | 6.8108 | 0.5800 | 0.4788 | 0.9792 | 0.9814 |
| flags | 0.2000 | 0.2429 | 0.6411 | 0.7609 | 0.6113 | 0.7571 | 0.2000 | 3.4500 | 0.2117 | 0.8253 | 0.6886 | 0.7971 |
| foodtruck | 0.2927 | 0.1565 | 0.4621 | 0.6010 | 0.1431 | 0.4967 | 0.2439 | 4.6341 | 0.4507 | 0.7166 | 0.8528 | 0.9559 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2388 | 0.0009 | 0.9950 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7571 | 0.0509 | 0.8024 | 0.8249 | 0.4907 | 0.8081 | 0.1786 | 0.6143 | 0.1464 | 0.8754 | 0.8624 | 0.9898 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8699 | 0.9333 | 0.0577 | 0.1538 | 0.0417 | 0.9615 | 0.9961 | 0.9962 |
| GpositivePseAAC | 0.7308 | 0.1202 | 0.7500 | 0.7595 | 0.5833 | 0.7619 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6688 | 0.0377 | 0.7688 | 0.8211 | 0.7007 | 0.7831 | 0.1511 | 1.1190 | 0.1101 | 0.8827 | 0.9850 | 0.9885 |
| HumanPseAAC | 0.3055 | 0.0978 | 0.4108 | 0.4639 | 0.1917 | 0.4482 | 0.5402 | 3.4502 | 0.4815 | 0.5801 | 0.9527 | 0.9546 |
| Image | 0.5150 | 0.1760 | 0.6175 | 0.6696 | 0.6344 | 0.6271 | 0.3050 | 1.0100 | 0.2817 | 0.7974 | 0.9306 | 0.9268 |
| IMDB-ECC-F10% | 0.0000 | 0.2367 | 0.1458 | 0.2476 | 0.0845 | 0.2475 | 0.6321 | 12.4843 | 0.7448 | 0.3688 | 0.9914 | 0.9778 |
| IMDB-F10% | 0.0000 | 0.2657 | 0.1548 | 0.2634 | 0.0944 | 0.2633 | 0.5882 | 12.8608 | 0.7306 | 0.3799 | 0.9868 | 0.9760 |
| LLOG-F | 0.1639 | 0.0165 | 0.1960 | 0.2163 | 0.0535 | 0.2844 | 0.7377 | 29.1885 | 0.7835 | 0.2759 | 0.5981 | 0.9978 |
| mediamill10% | 0.0641 | 0.0319 | 0.4551 | 0.6270 | 0.0845 | 0.5730 | 0.1615 | 57.6960 | 0.4373 | 0.5535 | 0.8111 | 0.9930 |
| medical | 0.6429 | 0.0109 | 0.7543 | 0.8101 | 0.2872 | 0.8110 | 0.1837 | 5.0612 | 0.1336 | 0.8283 | 0.5526 | 0.9976 |
| Music | 0.2833 | 0.1750 | 0.6042 | 0.7472 | 0.7316 | 0.7364 | 0.2833 | 2.0167 | 0.2605 | 0.7973 | 0.9123 | 0.9043 |
| NUS-WIDE-bow10% | 0.1398 | 0.0280 | 0.3112 | 0.4157 | 0.0475 | 0.4027 | 0.5240 | 34.4872 | 0.5959 | 0.4368 | 0.8861 | 0.9755 |
| NUS-WIDE-cVLADplus10% | 0.1679 | 0.0308 | 0.3379 | 0.4284 | 0.0595 | 0.3965 | 0.5576 | 35.1151 | 0.6338 | 0.4174 | 0.8829 | 0.9941 |
| OHSUMED-F | 0.2154 | 0.0602 | 0.4402 | 0.5571 | 0.4446 | 0.5691 | 0.3446 | 7.3187 | 0.3888 | 0.6303 | 0.9746 | 0.9781 |
| PlantGO | 0.7083 | 0.0391 | 0.7569 | 0.7830 | 0.6665 | 0.7847 | 0.2292 | 0.9583 | 0.0957 | 0.8510 | 0.9891 | 0.9851 |
| PlantPseAAC | 0.2857 | 0.1156 | 0.3435 | 0.3803 | 0.2003 | 0.3761 | 0.5918 | 3.1837 | 0.4995 | 0.5483 | 0.9448 | 0.9391 |
| rcv1subset1 | 0.1067 | 0.0311 | 0.3538 | 0.4723 | 0.2607 | 0.4656 | 0.3983 | 40.9733 | 0.4511 | 0.5012 | 0.9270 | 0.9875 |
| REUTERS-K500-EX2 | 0.3385 | 0.0114 | 0.4120 | 0.4538 | 0.2463 | 0.5040 | 0.5326 | 32.8763 | 0.5478 | 0.4751 | 0.7843 | 0.9976 |
| scene | 0.6681 | 0.0858 | 0.7379 | 0.7735 | 0.7692 | 0.7597 | 0.2116 | 0.8091 | 0.1606 | 0.8461 | 0.9702 | 0.9736 |
| sider_CDK_ECFP4 | 0.0141 | 0.2436 | 0.6506 | 0.7980 | 0.6305 | 0.7969 | 0.1479 | 19.2887 | 0.1595 | 0.8020 | 0.5823 | 0.7808 |
| sider_MordredDesc | 0.0141 | 0.2653 | 0.6284 | 0.7792 | 0.6202 | 0.7828 | 0.1127 | 19.4859 | 0.1625 | 0.8151 | 0.5665 | 0.7785 |
| sider_RDKit_desc | 0.0141 | 0.2812 | 0.6305 | 0.7820 | 0.6015 | 0.7768 | 0.3099 | 19.6549 | 0.1789 | 0.7789 | 0.5856 | 0.7688 |
| SLASHDOT-F | 0.4074 | 0.0404 | 0.5133 | 0.5710 | 0.3895 | 0.6028 | 0.4233 | 6.0503 | 0.3984 | 0.6180 | 0.7590 | 0.9860 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0476 | 0.0158 | 0.1474 | 0.2085 | 0.0638 | 0.2043 | 0.7954 | 105.6441 | 0.8799 | 0.1517 | 0.9188 | 0.9988 |
| Stackex_chess | 0.0417 | 0.0103 | 0.1552 | 0.2183 | 0.0611 | 0.2768 | 0.6726 | 138.6607 | 0.8177 | 0.1938 | 0.5492 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0209 | 0.0558 | 0.0943 | 0.0156 | 0.1194 | 0.7826 | 78.3043 | 0.8697 | 0.1490 | 0.2570 | 0.9879 |
| Stackex_cooking | 0.0000 | 0.0077 | 0.1374 | 0.2099 | 0.1108 | 0.2424 | 0.6377 | 223.9778 | 0.7734 | 0.2325 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0603 | 0.0094 | 0.1683 | 0.2349 | 0.0636 | 0.2733 | 0.6960 | 135.2663 | 0.7970 | 0.2073 | 0.7498 | 0.9987 |
| tmc2007-500 | 0.2587 | 0.0674 | 0.5765 | 0.7233 | 0.6096 | 0.6854 | 0.2420 | 4.3133 | 0.1636 | 0.7740 | 0.9627 | 0.9726 |
| tox21_CDK_ECFP4 | 0.1507 | 0.1801 | 0.3599 | 0.4687 | 0.3887 | 0.4621 | 0.4658 | 5.4007 | 0.4961 | 0.5665 | 0.9016 | 0.9026 |
| tox21_RDKit_desc | 0.1164 | 0.1881 | 0.3453 | 0.4753 | 0.3218 | 0.4485 | 0.4932 | 5.5068 | 0.5153 | 0.5518 | 0.9052 | 0.9066 |
| VirusGO | 0.7143 | 0.0635 | 0.8254 | 0.8651 | 0.6868 | 0.8400 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7957 | 0.9648 |
| VirusPseAAC | 0.4762 | 0.1190 | 0.5873 | 0.6420 | 0.3776 | 0.6667 | 0.2857 | 0.8571 | 0.1857 | 0.7992 | 0.7249 | 0.9194 |
| Water-quality | 0.0000 | 0.3255 | 0.4338 | 0.6091 | 0.4990 | 0.6038 | 0.3208 | 9.3208 | 0.3699 | 0.6778 | 0.7675 | 0.7613 |
| Yahoo_Arts | 0.1963 | 0.0656 | 0.2854 | 0.3456 | 0.2138 | 0.3667 | 0.5113 | 10.5113 | 0.6343 | 0.4959 | 0.9405 | 0.9803 |
| Yahoo_Business | 0.5749 | 0.0261 | 0.7311 | 0.8200 | 0.3288 | 0.7320 | 0.0882 | 3.1791 | 0.2221 | 0.8877 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3866 | 0.0445 | 0.4820 | 0.5607 | 0.2542 | 0.5024 | 0.3835 | 6.2879 | 0.4064 | 0.6076 | 0.8852 | 0.9750 |
| Yahoo_Education | 0.2565 | 0.0450 | 0.3380 | 0.3909 | 0.1898 | 0.4143 | 0.5121 | 8.7376 | 0.5560 | 0.5422 | 0.9035 | 0.9879 |
| Yahoo_Entertainment | 0.3460 | 0.0703 | 0.4502 | 0.5269 | 0.2869 | 0.4876 | 0.4454 | 4.2700 | 0.4013 | 0.6231 | 0.9584 | 0.9605 |
| Yahoo_Health | 0.4128 | 0.0417 | 0.5584 | 0.6585 | 0.2415 | 0.5964 | 0.3041 | 6.5843 | 0.3503 | 0.7103 | 0.8313 | 0.9876 |
| Yahoo_Recreation | 0.2219 | 0.0704 | 0.3162 | 0.3680 | 0.3077 | 0.3939 | 0.5062 | 6.4972 | 0.5475 | 0.5680 | 0.9557 | 0.9727 |
| Yahoo_Reference | 0.4581 | 0.0324 | 0.5214 | 0.5687 | 0.1804 | 0.5335 | 0.3803 | 5.4243 | 0.4208 | 0.6425 | 0.8192 | 1.0000 |
| Yahoo_Science | 0.1968 | 0.0421 | 0.2475 | 0.2901 | 0.1640 | 0.3161 | 0.6470 | 13.6405 | 0.6511 | 0.4053 | 0.9516 | 0.9877 |
| Yahoo_Social | 0.4680 | 0.0293 | 0.5362 | 0.5730 | 0.1751 | 0.5299 | 0.3759 | 7.4559 | 0.3889 | 0.6505 | 0.9193 | 0.9868 |
| Yahoo_Society | 0.3310 | 0.0801 | 0.4422 | 0.5664 | 0.2143 | 0.4636 | 0.3910 | 8.3339 | 0.4944 | 0.6099 | 0.9339 | 0.9778 |
| yeast | 0.1860 | 0.2051 | 0.5567 | 0.6889 | 0.4454 | 0.6781 | 0.2314 | 6.1818 | 0.2382 | 0.7623 | 0.8301 | 0.8863 |
| Yelp | 0.4018 | 0.1908 | 0.6443 | 0.7472 | 0.6859 | 0.7341 | 0.2243 | 1.3948 | 0.2347 | 0.8512 | 0.8785 | 0.9000 |

Table 115: Detailed results for MASSIVE (100) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.2267 | 0.0826 | 0.3192 | 0.3910 | 0.3619 | 0.3819 | 0.4907 | 3.8428 | 0.3782 | 0.6116 | 0.9508 | 0.9462 |
| 3s-bbc1000 | 0.0000 | 0.5602 | 0.2176 | 0.3414 | 0.3188 | 0.3388 | 0.7500 | 2.8333 | 0.5557 | 0.4383 | 0.6111 | 0.5722 |
| 3s-guardian1000 | 0.1935 | 0.3441 | 0.3371 | 0.4161 | 0.2423 | 0.3725 | 0.6452 | 2.1290 | 0.4661 | 0.5573 | 0.6676 | 0.7134 |
| 3s-inter3000 | 0.0000 | 0.5490 | 0.2382 | 0.3802 | 0.3281 | 0.3778 | 0.7059 | 1.7647 | 0.4088 | 0.5461 | 0.5136 | 0.7315 |
| 3s-reuters1000 | 0.0000 | 0.4611 | 0.1994 | 0.2945 | 0.2464 | 0.2906 | 0.8667 | 2.7000 | 0.7117 | 0.3850 | 0.6755 | 0.6299 |
| amphibians | 0.0000 | 0.2937 | 0.5308 | 0.7297 | 0.5389 | 0.7132 | 0.2222 | 2.6111 | 0.0981 | 0.8546 | 0.7020 | 0.7822 |
| bibtex | 0.1908 | 0.0121 | 0.3603 | 0.4581 | 0.3245 | 0.4824 | 0.4472 | 72.8537 | 0.5881 | 0.4212 | 0.9996 | 0.9984 |
| birds | 0.1026 | 0.1282 | 0.3083 | 0.4384 | 0.3408 | 0.4242 | 0.5897 | 7.2051 | 0.4478 | 0.4935 | 0.8151 | 0.8998 |
| bookmarks10% | 0.1873 | 0.0090 | 0.2169 | 0.2432 | 0.1109 | 0.2705 | 0.7348 | 104.4784 | 0.7678 | 0.2580 | 0.9872 | 0.9768 |
| CAL500 | 0.0000 | 0.2209 | 0.3124 | 0.4756 | 0.1549 | 0.4731 | 0.4118 | 150.9020 | 0.5420 | 0.4340 | 0.7912 | 0.9201 |
| corel16k001 | 0.0000 | 0.0466 | 0.1296 | 0.2152 | 0.0335 | 0.2178 | 0.9352 | 119.2318 | 0.9762 | 0.0572 | 1.0000 | 0.9828 |
| Corel5k | 0.0000 | 0.0177 | 0.1393 | 0.2261 | 0.0268 | 0.2283 | 0.8315 | 163.4610 | 0.9395 | 0.1616 | 0.6831 | 1.0000 |
| delicious | 0.0000 | 0.0448 | 0.1374 | 0.2452 | 0.0882 | 0.2420 | 0.5658 | 914.0779 | 0.8406 | 0.1535 | 0.9993 | 0.9838 |
| emotions | 0.3167 | 0.2028 | 0.6000 | 0.7071 | 0.6807 | 0.6996 | 0.2833 | 1.7167 | 0.1812 | 0.8017 | 0.8378 | 0.8484 |
| enron | 0.0351 | 0.0675 | 0.3938 | 0.5650 | 0.1491 | 0.5371 | 0.3918 | 24.5439 | 0.3442 | 0.5363 | 0.7995 | 0.9592 |
| EukaryoteGO | 0.5889 | 0.0274 | 0.7530 | 0.8363 | 0.5383 | 0.7782 | 0.1946 | 0.7229 | 0.0343 | 0.8818 | 0.9878 | 0.9901 |
| EukaryotePseAAC | 0.0000 | 0.1362 | 0.2431 | 0.3673 | 0.1157 | 0.3583 | 0.5997 | 4.4299 | 0.3336 | 0.5543 | 0.9365 | 0.9411 |
| flags | 0.2500 | 0.2643 | 0.6161 | 0.7301 | 0.5773 | 0.7299 | 0.2000 | 3.7000 | 0.2442 | 0.8043 | 0.6818 | 0.7889 |
| foodtruck | 0.2195 | 0.1646 | 0.4526 | 0.6193 | 0.1660 | 0.5091 | 0.2439 | 3.2927 | 0.3175 | 0.7560 | 0.7792 | 0.9007 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2687 | 0.0012 | 0.9913 | 0.6661 | 0.9992 |
| GnegativeGO | 0.9143 | 0.0143 | 0.9429 | 0.9571 | 0.8062 | 0.9452 | 0.0286 | 0.1429 | 0.0193 | 0.9774 | 0.8693 | 0.9928 |
| GnegativePseAAC | 0.5714 | 0.0991 | 0.7000 | 0.7734 | 0.4105 | 0.6891 | 0.2857 | 0.7500 | 0.1134 | 0.8167 | 0.8289 | 0.9608 |
| GpositiveGO | 0.8654 | 0.0385 | 0.9231 | 0.9510 | 0.8344 | 0.9286 | 0.0962 | 0.1538 | 0.0449 | 0.9471 | 0.9956 | 0.9953 |
| GpositivePseAAC | 0.6538 | 0.1490 | 0.7308 | 0.7673 | 0.6439 | 0.7304 | 0.2885 | 0.5000 | 0.2115 | 0.8285 | 0.9603 | 0.9553 |
| HumanGO | 0.5402 | 0.0494 | 0.7228 | 0.8147 | 0.6250 | 0.7520 | 0.2090 | 0.7106 | 0.0425 | 0.8693 | 0.9764 | 0.9776 |
| HumanPseAAC | 0.0322 | 0.1580 | 0.2971 | 0.4226 | 0.1751 | 0.4089 | 0.6431 | 2.9196 | 0.2933 | 0.5410 | 0.8766 | 0.8826 |
| Image | 0.2550 | 0.2550 | 0.4938 | 0.6097 | 0.5713 | 0.5596 | 0.4250 | 1.1600 | 0.2900 | 0.7298 | 0.8242 | 0.8141 |
| IMDB-ECC-F10% | 0.0000 | 0.2952 | 0.1416 | 0.2475 | 0.0909 | 0.2456 | 0.6436 | 11.4444 | 0.5715 | 0.4172 | 0.9251 | 0.9327 |
| IMDB-F10% | 0.0000 | 0.2912 | 0.1522 | 0.2631 | 0.0880 | 0.2613 | 0.6164 | 11.7771 | 0.5945 | 0.4120 | 0.9264 | 0.9358 |
| LLOG-F | 0.0984 | 0.0227 | 0.1573 | 0.1959 | 0.0531 | 0.2464 | 0.7623 | 28.8934 | 0.7777 | 0.2650 | 0.5927 | 0.9925 |
| mediamill10% | 0.0641 | 0.0341 | 0.4512 | 0.6262 | 0.1052 | 0.5762 | 0.2019 | 55.9905 | 0.3826 | 0.5692 | 0.8055 | 0.9877 |
| medical | 0.5510 | 0.0132 | 0.6939 | 0.7596 | 0.2660 | 0.7717 | 0.1735 | 4.3469 | 0.0996 | 0.8449 | 0.5504 | 0.9927 |
| Music | 0.2500 | 0.1917 | 0.5792 | 0.7175 | 0.7105 | 0.7160 | 0.3000 | 2.2000 | 0.2141 | 0.7601 | 0.8416 | 0.8372 |
| NUS-WIDE-bow10% | 0.0010 | 0.0452 | 0.2407 | 0.3837 | 0.0390 | 0.3614 | 0.5566 | 30.5628 | 0.5179 | 0.4450 | 0.8725 | 0.9822 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0373 | 0.2724 | 0.3984 | 0.0560 | 0.3722 | 0.5600 | 35.6966 | 0.6507 | 0.4085 | 0.8701 | 1.0000 |
| OHSUMED-F | 0.0438 | 0.1114 | 0.2584 | 0.3850 | 0.1685 | 0.3743 | 0.5585 | 8.9038 | 0.4558 | 0.4887 | 0.9330 | 0.9207 |
| PlantGO | 0.6146 | 0.0590 | 0.7095 | 0.7717 | 0.5693 | 0.7167 | 0.2500 | 0.5938 | 0.0471 | 0.8525 | 0.9756 | 0.9688 |
| PlantPseAAC | 0.1327 | 0.1582 | 0.2985 | 0.3892 | 0.2196 | 0.3716 | 0.7041 | 2.5714 | 0.3269 | 0.5254 | 0.8500 | 0.8449 |
| rcv1subset1 | 0.0133 | 0.0418 | 0.3071 | 0.4628 | 0.2067 | 0.4367 | 0.4933 | 37.0117 | 0.3899 | 0.4735 | 0.9158 | 0.9727 |
| REUTERS-K500-EX2 | 0.1632 | 0.0178 | 0.3093 | 0.3978 | 0.1876 | 0.4002 | 0.5550 | 27.2887 | 0.4679 | 0.4889 | 0.7770 | 0.9891 |
| scene | 0.4108 | 0.1266 | 0.6328 | 0.7390 | 0.7169 | 0.6975 | 0.2531 | 0.6266 | 0.1093 | 0.8420 | 0.9271 | 0.9390 |
| sider_CDK_ECFP4 | 0.0141 | 0.2851 | 0.6281 | 0.7797 | 0.5906 | 0.7753 | 0.3028 | 19.5141 | 0.1685 | 0.7763 | 0.5686 | 0.7693 |
| sider_MordredDesc | 0.0141 | 0.2746 | 0.6335 | 0.7843 | 0.5864 | 0.7806 | 0.2746 | 19.3099 | 0.1656 | 0.7770 | 0.5069 | 0.7697 |
| sider_RDKit_desc | 0.0141 | 0.2856 | 0.6267 | 0.7794 | 0.5815 | 0.7739 | 0.1549 | 20.1549 | 0.2091 | 0.7510 | 0.5410 | 0.7383 |
| SLASHDOT-F | 0.2884 | 0.0625 | 0.4382 | 0.5234 | 0.3221 | 0.5038 | 0.5159 | 4.6720 | 0.2844 | 0.5968 | 0.7165 | 0.9366 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.5556 | 0.8000 |
| Stackex_chemistry | 0.0112 | 0.0201 | 0.1374 | 0.2052 | 0.0683 | 0.2092 | 0.7955 | 106.1757 | 0.8775 | 0.1588 | 0.8979 | 0.9882 |
| Stackex_chess | 0.0000 | 0.0201 | 0.1182 | 0.1986 | 0.0372 | 0.1967 | 0.9048 | 143.4583 | 0.8437 | 0.1058 | 0.5422 | 0.9899 |
| Stackex_coffee | 0.0000 | 0.0255 | 0.0916 | 0.1623 | 0.0449 | 0.2174 | 0.7391 | 72.1739 | 0.7888 | 0.1948 | 0.2535 | 0.9815 |
| Stackex_cooking | 0.0637 | 0.0053 | 0.2058 | 0.2730 | 0.1137 | 0.3189 | 0.6421 | 221.7780 | 0.7694 | 0.2352 | 0.9198 | 0.9851 |
| Stackex_philosophy | 0.0523 | 0.0125 | 0.1910 | 0.2833 | 0.0594 | 0.2615 | 0.6836 | 132.5747 | 0.7898 | 0.2094 | 0.7456 | 0.9813 |
| tmc2007-500 | 0.1720 | 0.0874 | 0.4917 | 0.6498 | 0.4497 | 0.6106 | 0.3899 | 4.6867 | 0.1655 | 0.6866 | 0.9305 | 0.9385 |
| tox21_CDK_ECFP4 | 0.0000 | 0.4147 | 0.2189 | 0.3593 | 0.2640 | 0.3591 | 0.5753 | 5.0582 | 0.3505 | 0.5369 | 0.8092 | 0.7896 |
| tox21_RDKit_desc | 0.0000 | 0.5128 | 0.1962 | 0.3323 | 0.2217 | 0.3277 | 0.6164 | 5.1747 | 0.3682 | 0.5243 | 0.7901 | 0.7854 |
| VirusGO | 0.7619 | 0.0794 | 0.8254 | 0.8530 | 0.6267 | 0.8077 | 0.1429 | 0.5714 | 0.0892 | 0.9063 | 0.7808 | 0.9509 |
| VirusPseAAC | 0.2857 | 0.1825 | 0.5397 | 0.6563 | 0.3933 | 0.6102 | 0.4286 | 0.9524 | 0.1774 | 0.7397 | 0.7137 | 0.8856 |
| Water-quality | 0.0000 | 0.4670 | 0.4101 | 0.5843 | 0.5331 | 0.5833 | 0.3396 | 9.5660 | 0.3263 | 0.6462 | 0.6347 | 0.6624 |
| Yahoo_Arts | 0.0000 | 0.1684 | 0.1835 | 0.3016 | 0.1115 | 0.2895 | 0.7450 | 10.3752 | 0.6238 | 0.3924 | 0.8824 | 0.9214 |
| Yahoo_Business | 0.4822 | 0.0364 | 0.6600 | 0.7725 | 0.1270 | 0.6349 | 0.1319 | 3.5989 | 0.2202 | 0.8548 | 0.8242 | 0.9830 |
| Yahoo_Computers | 0.2827 | 0.0605 | 0.4116 | 0.5169 | 0.1187 | 0.4083 | 0.4859 | 7.2578 | 0.4429 | 0.5405 | 0.8671 | 0.9659 |
| Yahoo_Education | 0.0000 | 0.1694 | 0.1656 | 0.2817 | 0.0748 | 0.2778 | 0.9169 | 11.2278 | 0.6197 | 0.2947 | 0.8488 | 0.9246 |
| Yahoo_Entertainment | 0.0000 | 0.1628 | 0.2139 | 0.3436 | 0.1521 | 0.3333 | 0.6308 | 4.9764 | 0.5200 | 0.5005 | 0.9210 | 0.9210 |
| Yahoo_Health | 0.2541 | 0.0681 | 0.3878 | 0.4981 | 0.1418 | 0.4062 | 0.5103 | 8.2313 | 0.4445 | 0.5582 | 0.7980 | 0.9625 |
| Yahoo_Recreation | 0.0055 | 0.1510 | 0.1824 | 0.2756 | 0.1767 | 0.2546 | 0.7116 | 7.6656 | 0.7040 | 0.4145 | 0.9143 | 0.9177 |
| Yahoo_Reference | 0.0000 | 0.1265 | 0.1689 | 0.2770 | 0.0854 | 0.2665 | 0.4944 | 6.1856 | 0.4152 | 0.5614 | 0.7600 | 0.9543 |
| Yahoo_Science | 0.0000 | 0.1122 | 0.1358 | 0.2232 | 0.0775 | 0.2014 | 0.7900 | 15.7309 | 0.7737 | 0.2980 | 0.9362 | 0.9639 |
| Yahoo_Social | 0.0066 | 0.0614 | 0.2848 | 0.4109 | 0.0801 | 0.3851 | 0.4851 | 7.8135 | 0.3964 | 0.5888 | 0.8996 | 0.9780 |
| Yahoo_Society | 0.2404 | 0.0760 | 0.3579 | 0.4500 | 0.0677 | 0.3608 | 0.4952 | 9.0537 | 0.5415 | 0.5075 | 0.9059 | 0.9530 |
| yeast | 0.0620 | 0.2320 | 0.5189 | 0.6676 | 0.3566 | 0.6519 | 0.2603 | 6.3802 | 0.2054 | 0.7291 | 0.7462 | 0.8184 |
| Yelp | 0.0798 | 0.3707 | 0.4616 | 0.6237 | 0.4432 | 0.6191 | 0.3579 | 1.9432 | 0.3585 | 0.7353 | 0.7673 | 0.7870 |

Table 116: Detailed results for MASSIVE (1K) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3185 | 0.0560 | 0.4638 | 0.5524 | 0.5560 | 0.5546 | 0.3247 | 2.5083 | 0.2441 | 0.7477 | 0.9720 | 0.9736 |
| 3s-bbc1000 | 0.1667 | 0.3333 | 0.2810 | 0.3521 | 0.3269 | 0.3455 | 0.7500 | 2.7222 | 0.6477 | 0.4539 | 0.7989 | 0.7488 |
| 3s-guardian1000 | 0.1613 | 0.3387 | 0.3328 | 0.4460 | 0.2618 | 0.3762 | 0.5161 | 2.1935 | 0.4960 | 0.6051 | 0.7878 | 0.8025 |
| 3s-inter3000 | 0.0000 | 0.5686 | 0.2235 | 0.3567 | 0.2805 | 0.3556 | 0.8235 | 2.1765 | 0.5897 | 0.4618 | 0.5022 | 0.6984 |
| 3s-reuters1000 | 0.0667 | 0.3444 | 0.1111 | 0.1333 | 0.1006 | 0.1389 | 0.9000 | 2.5000 | 0.7800 | 0.3844 | 0.8358 | 0.7610 |
| amphibians | 0.0556 | 0.2619 | 0.5660 | 0.7544 | 0.5906 | 0.7360 | 0.2222 | 2.5000 | 0.1000 | 0.8570 | 0.7304 | 0.7996 |
| bibtex | 0.1541 | 0.0136 | 0.3389 | 0.4455 | 0.2947 | 0.4598 | 0.4297 | 69.2419 | 0.5534 | 0.4432 | 0.9957 | 0.9955 |
| birds | 0.1026 | 0.1161 | 0.3221 | 0.4466 | 0.3458 | 0.4342 | 0.5128 | 7.8462 | 0.4897 | 0.5098 | 0.8410 | 0.9363 |
| bookmarks10% | 0.1800 | 0.0102 | 0.2160 | 0.2413 | 0.1073 | 0.2539 | 0.7369 | 105.7210 | 0.7573 | 0.2570 | 0.9837 | 0.9981 |
| CAL500 | 0.0000 | 0.2106 | 0.3139 | 0.4754 | 0.1422 | 0.4757 | 0.1961 | 151.0784 | 0.5976 | 0.4437 | 0.8254 | 0.9400 |
| corel16k001 | 0.0000 | 0.0456 | 0.1321 | 0.2196 | 0.0334 | 0.2184 | 0.9381 | 119.5798 | 0.9705 | 0.0569 | 1.0000 | 0.9946 |
| Corel5k | 0.0000 | 0.0188 | 0.1291 | 0.2144 | 0.0310 | 0.2191 | 0.7980 | 162.5040 | 0.9149 | 0.1750 | 0.6783 | 0.9991 |
| delicious | 0.0000 | 0.0449 | 0.1398 | 0.2412 | 0.0888 | 0.2455 | 0.5580 | 890.2974 | 0.8479 | 0.1553 | 0.9968 | 1.0000 |
| emotions | 0.2500 | 0.2111 | 0.5819 | 0.7206 | 0.6901 | 0.6984 | 0.3000 | 1.7500 | 0.2365 | 0.7948 | 0.8790 | 0.8905 |
| enron | 0.1404 | 0.0541 | 0.4775 | 0.6176 | 0.2093 | 0.5917 | 0.2690 | 22.3158 | 0.3463 | 0.6206 | 0.8219 | 0.9787 |
| EukaryoteGO | 0.6237 | 0.0237 | 0.7772 | 0.8525 | 0.6938 | 0.8029 | 0.1675 | 0.7139 | 0.0350 | 0.8963 | 0.9911 | 0.9944 |
| EukaryotePseAAC | 0.0875 | 0.0855 | 0.3149 | 0.4285 | 0.1379 | 0.4209 | 0.5714 | 5.2870 | 0.4141 | 0.5473 | 0.9553 | 0.9594 |
| flags | 0.2500 | 0.2357 | 0.6569 | 0.7702 | 0.6190 | 0.7626 | 0.2500 | 3.5500 | 0.2050 | 0.8212 | 0.6850 | 0.7934 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1447 | 0.5000 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8542 | 0.9561 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0299 | 0.2537 | 0.0015 | 0.9838 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9143 | 0.0125 | 0.9500 | 0.9678 | 0.8251 | 0.9527 | 0.0357 | 0.1071 | 0.0215 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7214 | 0.0563 | 0.7881 | 0.8210 | 0.4818 | 0.7934 | 0.1786 | 0.6143 | 0.1399 | 0.8769 | 0.8556 | 0.9844 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1250 | 0.7500 | 0.7595 | 0.5774 | 0.7547 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6174 | 0.0409 | 0.7551 | 0.8231 | 0.7127 | 0.7769 | 0.1640 | 0.7717 | 0.0581 | 0.8929 | 0.9822 | 0.9866 |
| HumanPseAAC | 0.2026 | 0.1102 | 0.3844 | 0.4742 | 0.2052 | 0.4558 | 0.5498 | 2.8424 | 0.3149 | 0.6094 | 0.9212 | 0.9247 |
| Image | 0.3450 | 0.2320 | 0.5496 | 0.6544 | 0.6040 | 0.5915 | 0.3150 | 1.0450 | 0.2879 | 0.7887 | 0.9123 | 0.9077 |
| IMDB-ECC-F10% | 0.0000 | 0.2686 | 0.1406 | 0.2418 | 0.0834 | 0.2421 | 0.6405 | 12.4591 | 0.7439 | 0.3674 | 0.9919 | 0.9759 |
| IMDB-F10% | 0.0000 | 0.2910 | 0.1524 | 0.2635 | 0.0890 | 0.2616 | 0.6164 | 13.1226 | 0.7476 | 0.3644 | 0.9866 | 0.9749 |
| LLOG-F | 0.1639 | 0.0166 | 0.1988 | 0.2178 | 0.0530 | 0.2897 | 0.7459 | 28.5492 | 0.7795 | 0.2787 | 0.5968 | 0.9966 |
| mediamill10% | 0.0831 | 0.0303 | 0.4688 | 0.6321 | 0.0871 | 0.5845 | 0.2518 | 59.3159 | 0.4543 | 0.5335 | 0.8133 | 0.9940 |
| medical | 0.6531 | 0.0109 | 0.7585 | 0.8117 | 0.2834 | 0.8125 | 0.1633 | 4.9184 | 0.1276 | 0.8461 | 0.5531 | 0.9977 |
| Music | 0.2667 | 0.1750 | 0.5944 | 0.7398 | 0.7257 | 0.7319 | 0.3167 | 2.0167 | 0.2618 | 0.7848 | 0.9149 | 0.8985 |
| NUS-WIDE-bow10% | 0.1444 | 0.0280 | 0.3226 | 0.4134 | 0.0546 | 0.3993 | 0.5277 | 35.3365 | 0.6020 | 0.4184 | 0.8843 | 0.9917 |
| NUS-WIDE-cVLADplus10% | 0.0081 | 0.0388 | 0.2743 | 0.4188 | 0.0728 | 0.4004 | 0.5162 | 32.1884 | 0.5338 | 0.4609 | 0.8774 | 0.9874 |
| OHSUMED-F | 0.1407 | 0.0714 | 0.3805 | 0.5107 | 0.3815 | 0.5228 | 0.3597 | 6.6310 | 0.3338 | 0.6373 | 0.9508 | 0.9532 |
| PlantGO | 0.6875 | 0.0417 | 0.7604 | 0.7949 | 0.6646 | 0.7798 | 0.2292 | 1.0521 | 0.0992 | 0.8484 | 0.9909 | 0.9859 |
| PlantPseAAC | 0.2755 | 0.1148 | 0.3656 | 0.4193 | 0.2185 | 0.4105 | 0.5918 | 3.0918 | 0.4995 | 0.5506 | 0.9451 | 0.9381 |
| rcv1subset1 | 0.0400 | 0.0345 | 0.3452 | 0.4995 | 0.3140 | 0.4801 | 0.3983 | 29.7550 | 0.3011 | 0.5528 | 0.9197 | 0.9813 |
| REUTERS-K500-EX2 | 0.2440 | 0.0155 | 0.3770 | 0.4540 | 0.2440 | 0.4584 | 0.4931 | 28.2113 | 0.4748 | 0.5178 | 0.7806 | 0.9939 |
| scene | 0.5270 | 0.1072 | 0.6978 | 0.7811 | 0.7541 | 0.7359 | 0.2033 | 0.6390 | 0.1204 | 0.8651 | 0.9595 | 0.9651 |
| sider_CDK_ECFP4 | 0.0282 | 0.2423 | 0.6530 | 0.7994 | 0.6366 | 0.7972 | 0.1549 | 19.0493 | 0.1579 | 0.7961 | 0.5868 | 0.7775 |
| sider_MordredDesc | 0.0141 | 0.2624 | 0.6270 | 0.7804 | 0.6107 | 0.7830 | 0.3099 | 19.7113 | 0.2001 | 0.7426 | 0.5633 | 0.7474 |
| sider_RDKit_desc | 0.0141 | 0.2663 | 0.6364 | 0.7873 | 0.5966 | 0.7838 | 0.2817 | 19.8592 | 0.1831 | 0.7672 | 0.5904 | 0.7666 |
| SLASHDOT-F | 0.3915 | 0.0456 | 0.5251 | 0.5996 | 0.4184 | 0.5955 | 0.3862 | 4.4286 | 0.2827 | 0.6817 | 0.7453 | 0.9722 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.6667 | 0.8200 |
| Stackex_chemistry | 0.0101 | 0.0218 | 0.1279 | 0.2026 | 0.0566 | 0.2002 | 0.8026 | 106.0331 | 0.8718 | 0.1533 | 0.9166 | 0.9966 |
| Stackex_chess | 0.0357 | 0.0109 | 0.1529 | 0.2218 | 0.0716 | 0.2808 | 0.6964 | 135.3988 | 0.8045 | 0.1980 | 0.5486 | 0.9977 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0609 | 0.0996 | 0.0237 | 0.1408 | 0.8696 | 75.5217 | 0.8462 | 0.1242 | 0.2566 | 0.9903 |
| Stackex_cooking | 0.0654 | 0.0052 | 0.2037 | 0.2759 | 0.1117 | 0.3236 | 0.6361 | 221.7583 | 0.7850 | 0.2357 | 0.9298 | 0.9911 |
| Stackex_philosophy | 0.0427 | 0.0138 | 0.1691 | 0.2587 | 0.0519 | 0.2364 | 0.7186 | 134.4271 | 0.7917 | 0.2031 | 0.7482 | 0.9970 |
| tmc2007-500 | 0.2416 | 0.0710 | 0.5579 | 0.7063 | 0.5738 | 0.6679 | 0.2570 | 3.9951 | 0.1307 | 0.7757 | 0.9497 | 0.9629 |
| tox21_CDK_ECFP4 | 0.1096 | 0.1952 | 0.3485 | 0.4778 | 0.3928 | 0.4614 | 0.4829 | 4.8801 | 0.3775 | 0.5948 | 0.8695 | 0.8612 |
| tox21_RDKit_desc | 0.0308 | 0.2500 | 0.2855 | 0.4425 | 0.2734 | 0.4089 | 0.5034 | 5.2911 | 0.4301 | 0.5715 | 0.8692 | 0.8628 |
| VirusGO | 0.7619 | 0.0635 | 0.8492 | 0.8768 | 0.6767 | 0.8462 | 0.0952 | 0.4762 | 0.0726 | 0.9246 | 0.8111 | 0.9786 |
| VirusPseAAC | 0.2857 | 0.1746 | 0.5556 | 0.6723 | 0.3889 | 0.6333 | 0.2857 | 0.9048 | 0.2048 | 0.7968 | 0.7350 | 0.9278 |
| Water-quality | 0.0000 | 0.3524 | 0.4293 | 0.6088 | 0.4988 | 0.5974 | 0.2736 | 9.2264 | 0.3616 | 0.6947 | 0.7710 | 0.7678 |
| Yahoo_Arts | 0.1108 | 0.0992 | 0.2391 | 0.3274 | 0.1343 | 0.2877 | 0.5968 | 11.1495 | 0.6260 | 0.4391 | 0.9208 | 0.9558 |
| Yahoo_Business | 0.4884 | 0.0349 | 0.6786 | 0.7941 | 0.2063 | 0.6650 | 0.1283 | 3.2522 | 0.2346 | 0.8660 | 0.8459 | 0.9902 |
| Yahoo_Computers | 0.3373 | 0.0529 | 0.4508 | 0.5338 | 0.1805 | 0.4513 | 0.4120 | 6.9735 | 0.4529 | 0.5827 | 0.8813 | 0.9756 |
| Yahoo_Education | 0.0000 | 0.1092 | 0.1860 | 0.2937 | 0.1301 | 0.2820 | 0.7140 | 10.2968 | 0.7775 | 0.4079 | 0.8828 | 0.9759 |
| Yahoo_Entertainment | 0.0424 | 0.1097 | 0.2850 | 0.3919 | 0.1954 | 0.3715 | 0.5452 | 4.7306 | 0.5023 | 0.5583 | 0.9671 | 0.9594 |
| Yahoo_Health | 0.2823 | 0.0571 | 0.4374 | 0.5386 | 0.1770 | 0.4644 | 0.4419 | 7.6265 | 0.4183 | 0.6058 | 0.8158 | 0.9743 |
| Yahoo_Recreation | 0.0055 | 0.1389 | 0.2086 | 0.3116 | 0.2189 | 0.2918 | 0.6126 | 7.3040 | 0.6934 | 0.4838 | 0.9570 | 0.9574 |
| Yahoo_Reference | 0.4134 | 0.0392 | 0.4829 | 0.5310 | 0.1168 | 0.4768 | 0.4446 | 5.9539 | 0.4342 | 0.6096 | 0.8015 | 0.9831 |
| Yahoo_Science | 0.1586 | 0.0707 | 0.2292 | 0.2881 | 0.0902 | 0.2210 | 0.7792 | 15.5365 | 0.7860 | 0.3090 | 0.9451 | 0.9717 |
| Yahoo_Social | 0.4068 | 0.0362 | 0.4988 | 0.5615 | 0.1196 | 0.4832 | 0.4274 | 8.0198 | 0.4149 | 0.6107 | 0.9088 | 0.9854 |
| Yahoo_Society | 0.0207 | 0.0953 | 0.2869 | 0.4247 | 0.1273 | 0.3758 | 0.4752 | 8.8953 | 0.5355 | 0.5261 | 0.9319 | 0.9678 |
| yeast | 0.1240 | 0.2252 | 0.5467 | 0.6914 | 0.4466 | 0.6727 | 0.2521 | 6.2603 | 0.2176 | 0.7519 | 0.8111 | 0.8699 |
| Yelp | 0.2642 | 0.2467 | 0.5842 | 0.7284 | 0.6455 | 0.7001 | 0.2582 | 1.4995 | 0.2278 | 0.8250 | 0.8305 | 0.8564 |

Table 117: Detailed results for MASSIVE (5K) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5080 | 0.0345 | 0.6190 | 0.6756 | 0.6820 | 0.6894 | 0.3023 | 2.4962 | 0.2443 | 0.7550 | 0.9794 | 0.9786 |
| 3s-bbc1000 | 0.0833 | 0.3750 | 0.2417 | 0.3335 | 0.3019 | 0.3306 | 0.7500 | 2.8611 | 0.6380 | 0.4390 | 0.7688 | 0.7206 |
| 3s-guardian1000 | 0.2258 | 0.2903 | 0.4054 | 0.5183 | 0.3094 | 0.4375 | 0.4839 | 1.8710 | 0.4210 | 0.6411 | 0.8314 | 0.8291 |
| 3s-inter3000 | 0.0000 | 0.5588 | 0.2265 | 0.3604 | 0.2884 | 0.3596 | 0.8235 | 2.1765 | 0.5779 | 0.4618 | 0.5363 | 0.6858 |
| 3s-reuters1000 | 0.0667 | 0.3389 | 0.1500 | 0.1826 | 0.1297 | 0.1867 | 0.9000 | 2.5667 | 0.7867 | 0.3817 | 0.8075 | 0.7397 |
| amphibians | 0.1111 | 0.2698 | 0.5651 | 0.7503 | 0.5986 | 0.7344 | 0.2222 | 2.5556 | 0.1111 | 0.8543 | 0.7480 | 0.8076 |
| bibtex | 0.1898 | 0.0121 | 0.3687 | 0.4634 | 0.3311 | 0.4853 | 0.4419 | 72.1871 | 0.5794 | 0.4300 | 1.0000 | 1.0000 |
| birds | 0.1282 | 0.1107 | 0.3362 | 0.4544 | 0.3492 | 0.4459 | 0.5128 | 7.9744 | 0.5223 | 0.5013 | 0.8431 | 0.9377 |
| bookmarks10% | 0.1871 | 0.0089 | 0.2214 | 0.2421 | 0.1132 | 0.2685 | 0.7391 | 105.2202 | 0.7733 | 0.2555 | 0.9755 | 0.9897 |
| CAL500 | 0.0000 | 0.2141 | 0.3114 | 0.4731 | 0.1435 | 0.4740 | 0.1373 | 151.0588 | 0.6132 | 0.4420 | 0.8323 | 0.9461 |
| corel16k001 | 0.0000 | 0.0460 | 0.1313 | 0.2183 | 0.0333 | 0.2171 | 0.9375 | 118.3109 | 0.9735 | 0.0569 | 1.0000 | 1.0000 |
| Corel5k | 0.0000 | 0.0180 | 0.1383 | 0.2271 | 0.0271 | 0.2287 | 0.8414 | 163.5963 | 0.9324 | 0.1629 | 0.6785 | 1.0000 |
| delicious | 0.0000 | 0.0450 | 0.1397 | 0.2429 | 0.0893 | 0.2471 | 0.5563 | 895.1744 | 0.8446 | 0.1532 | 0.9928 | 1.0000 |
| emotions | 0.2333 | 0.2139 | 0.5764 | 0.7185 | 0.6848 | 0.6932 | 0.3000 | 1.7667 | 0.2433 | 0.7920 | 0.8750 | 0.8874 |
| enron | 0.1637 | 0.0512 | 0.4880 | 0.6217 | 0.1819 | 0.5965 | 0.2690 | 23.7076 | 0.3681 | 0.6113 | 0.8271 | 0.9819 |
| EukaryoteGO | 0.6456 | 0.0217 | 0.7884 | 0.8575 | 0.7194 | 0.8166 | 0.1688 | 0.8570 | 0.0476 | 0.8931 | 0.9927 | 0.9948 |
| EukaryotePseAAC | 0.1200 | 0.0734 | 0.3420 | 0.4442 | 0.1451 | 0.4438 | 0.5348 | 6.2870 | 0.5140 | 0.5242 | 0.9673 | 0.9694 |
| flags | 0.2500 | 0.2429 | 0.6350 | 0.7465 | 0.6022 | 0.7500 | 0.2500 | 3.6000 | 0.2342 | 0.7997 | 0.6895 | 0.8032 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1444 | 0.5000 | 0.2439 | 4.6098 | 0.4507 | 0.7172 | 0.8565 | 0.9575 |
| genbase | 0.9600 | 0.0011 | 0.9870 | 0.9923 | 0.6504 | 0.9992 | 0.0147 | 0.2410 | 0.0009 | 0.9915 | 0.6667 | 1.0000 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9571 | 0.9714 | 0.8300 | 0.9595 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7500 | 0.0536 | 0.8060 | 0.8335 | 0.5023 | 0.8052 | 0.1786 | 0.6143 | 0.1464 | 0.8754 | 0.8618 | 0.9892 |
| GpositiveGO | 0.9038 | 0.0337 | 0.9327 | 0.9469 | 0.8750 | 0.9358 | 0.0577 | 0.1538 | 0.0449 | 0.9615 | 0.9968 | 0.9967 |
| GpositivePseAAC | 0.7500 | 0.1202 | 0.7500 | 0.7500 | 0.5751 | 0.7573 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6206 | 0.0404 | 0.7564 | 0.8230 | 0.6937 | 0.7778 | 0.1543 | 1.1093 | 0.1098 | 0.8813 | 0.9848 | 0.9885 |
| HumanPseAAC | 0.3033 | 0.1004 | 0.4149 | 0.4686 | 0.1943 | 0.4428 | 0.5383 | 3.3484 | 0.4743 | 0.5883 | 0.9595 | 0.9624 |
| Image | 0.4150 | 0.1940 | 0.5958 | 0.6866 | 0.6422 | 0.6312 | 0.3100 | 1.0250 | 0.2817 | 0.7938 | 0.9290 | 0.9252 |
| IMDB-ECC-F10% | 0.0000 | 0.2700 | 0.1394 | 0.2456 | 0.0931 | 0.2450 | 0.6404 | 12.2317 | 0.7275 | 0.3749 | 0.9978 | 0.9742 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1523 | 0.2639 | 0.0937 | 0.2643 | 0.5964 | 12.5860 | 0.7203 | 0.3837 | 0.9797 | 0.9730 |
| LLOG-F | 0.1721 | 0.0162 | 0.2015 | 0.2192 | 0.0532 | 0.2952 | 0.7377 | 28.4918 | 0.7713 | 0.2846 | 0.5986 | 0.9983 |
| mediamill10% | 0.0808 | 0.0301 | 0.4696 | 0.6335 | 0.0878 | 0.5877 | 0.1781 | 59.1093 | 0.4557 | 0.5430 | 0.8136 | 0.9941 |
| medical | 0.6633 | 0.0109 | 0.7721 | 0.8279 | 0.3073 | 0.8140 | 0.1633 | 5.0000 | 0.1328 | 0.8444 | 0.5532 | 0.9977 |
| Music | 0.2500 | 0.1972 | 0.5986 | 0.7415 | 0.7265 | 0.7259 | 0.2000 | 2.0000 | 0.2360 | 0.8209 | 0.9080 | 0.9049 |
| NUS-WIDE-bow10% | 0.1444 | 0.0280 | 0.3189 | 0.4085 | 0.0538 | 0.3981 | 0.5311 | 34.9406 | 0.6016 | 0.4234 | 0.8868 | 0.9817 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0376 | 0.2714 | 0.3994 | 0.0573 | 0.3813 | 0.5664 | 35.8603 | 0.6507 | 0.4047 | 0.8848 | 0.9976 |
| OHSUMED-F | 0.2267 | 0.0584 | 0.4465 | 0.5523 | 0.4484 | 0.5758 | 0.3572 | 7.6078 | 0.4155 | 0.6144 | 0.9650 | 0.9840 |
| PlantGO | 0.7083 | 0.0391 | 0.7760 | 0.8078 | 0.6706 | 0.7945 | 0.2292 | 1.0521 | 0.0992 | 0.8484 | 0.9904 | 0.9856 |
| PlantPseAAC | 0.2653 | 0.1148 | 0.3639 | 0.4189 | 0.2209 | 0.4105 | 0.6020 | 3.2041 | 0.5097 | 0.5412 | 0.9438 | 0.9379 |
| rcv1subset1 | 0.1018 | 0.0311 | 0.3647 | 0.4880 | 0.2647 | 0.4826 | 0.4362 | 38.1721 | 0.4265 | 0.5063 | 0.9258 | 0.9870 |
| REUTERS-K500-EX2 | 0.3316 | 0.0117 | 0.4129 | 0.4601 | 0.2473 | 0.5028 | 0.5086 | 32.0515 | 0.5305 | 0.4935 | 0.7839 | 0.9973 |
| scene | 0.5892 | 0.0954 | 0.7275 | 0.7960 | 0.7718 | 0.7570 | 0.2075 | 0.8091 | 0.1606 | 0.8475 | 0.9686 | 0.9722 |
| sider_CDK_ECFP4 | 0.0141 | 0.2407 | 0.6540 | 0.8003 | 0.6360 | 0.7984 | 0.2113 | 19.3169 | 0.1597 | 0.7988 | 0.5793 | 0.7764 |
| sider_MordredDesc | 0.0142 | 0.2605 | 0.6276 | 0.7858 | 0.6183 | 0.7835 | 0.3194 | 19.8751 | 0.2035 | 0.7439 | 0.5814 | 0.7439 |
| sider_RDKit_desc | 0.0141 | 0.2767 | 0.6334 | 0.7845 | 0.6023 | 0.7794 | 0.2887 | 20.2676 | 0.2529 | 0.7082 | 0.5960 | 0.7142 |
| SLASHDOT-F | 0.4021 | 0.0403 | 0.5131 | 0.5728 | 0.4095 | 0.6045 | 0.4286 | 5.9418 | 0.3911 | 0.6189 | 0.7595 | 0.9861 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7600 |
| Stackex_chemistry | 0.0114 | 0.0198 | 0.1354 | 0.2072 | 0.0675 | 0.2134 | 0.7784 | 106.2674 | 0.8633 | 0.1570 | 0.9188 | 0.9894 |
| Stackex_chess | 0.0357 | 0.0100 | 0.1576 | 0.2227 | 0.0570 | 0.2841 | 0.6905 | 138.1310 | 0.8131 | 0.1967 | 0.5494 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0569 | 0.0978 | 0.0237 | 0.1408 | 0.8261 | 75.4348 | 0.8808 | 0.1343 | 0.2563 | 0.9903 |
| Stackex_cooking | 0.0652 | 0.0053 | 0.2037 | 0.2728 | 0.1122 | 0.3209 | 0.6295 | 223.8380 | 0.7734 | 0.2340 | 0.9351 | 0.9870 |
| Stackex_philosophy | 0.0527 | 0.0122 | 0.1954 | 0.2799 | 0.0603 | 0.2659 | 0.6748 | 133.3731 | 0.7960 | 0.2136 | 0.7410 | 1.0000 |
| tmc2007-500 | 0.2470 | 0.0690 | 0.5713 | 0.7236 | 0.6115 | 0.6765 | 0.2342 | 4.0499 | 0.1457 | 0.7900 | 0.9450 | 0.9748 |
| tox21_CDK_ECFP4 | 0.1336 | 0.1912 | 0.3510 | 0.4707 | 0.3877 | 0.4623 | 0.4726 | 5.4144 | 0.4916 | 0.5660 | 0.8986 | 0.9001 |
| tox21_RDKit_desc | 0.0445 | 0.2260 | 0.3038 | 0.4551 | 0.3177 | 0.4244 | 0.5034 | 5.4863 | 0.5055 | 0.5533 | 0.9041 | 0.9055 |
| VirusGO | 0.7619 | 0.0794 | 0.8254 | 0.8530 | 0.6267 | 0.8077 | 0.0952 | 0.5238 | 0.0779 | 0.9206 | 0.7972 | 0.9703 |
| VirusPseAAC | 0.2381 | 0.1905 | 0.5159 | 0.6286 | 0.3690 | 0.6000 | 0.4286 | 1.0476 | 0.2048 | 0.7317 | 0.7090 | 0.9092 |
| Water-quality | 0.0094 | 0.3288 | 0.4285 | 0.6065 | 0.5032 | 0.6000 | 0.2925 | 9.0943 | 0.3582 | 0.6823 | 0.7680 | 0.7640 |
| Yahoo_Arts | 0.1914 | 0.0687 | 0.2923 | 0.3497 | 0.2113 | 0.3717 | 0.5036 | 10.1006 | 0.5609 | 0.5029 | 0.9297 | 0.9796 |
| Yahoo_Business | 0.5709 | 0.0274 | 0.7261 | 0.8089 | 0.3210 | 0.7197 | 0.0912 | 3.1708 | 0.2222 | 0.8993 | 0.8522 | 0.9937 |
| Yahoo_Computers | 0.3863 | 0.0454 | 0.4960 | 0.5728 | 0.2433 | 0.5050 | 0.3823 | 6.5534 | 0.4231 | 0.6137 | 0.8892 | 0.9820 |
| Yahoo_Education | 0.0067 | 0.0850 | 0.2398 | 0.3544 | 0.1898 | 0.3328 | 0.5597 | 9.2128 | 0.5768 | 0.5114 | 0.8957 | 0.9775 |
| Yahoo_Entertainment | 0.3238 | 0.0780 | 0.4528 | 0.5251 | 0.2835 | 0.4732 | 0.4346 | 4.2075 | 0.4088 | 0.6297 | 0.9560 | 0.9612 |
| Yahoo_Health | 0.4038 | 0.0409 | 0.5625 | 0.6462 | 0.2424 | 0.5811 | 0.3131 | 6.3589 | 0.3476 | 0.6892 | 0.8315 | 0.9924 |
| Yahoo_Recreation | 0.2160 | 0.0741 | 0.2980 | 0.3658 | 0.3054 | 0.3831 | 0.5131 | 6.5436 | 0.5571 | 0.5567 | 0.9676 | 0.9591 |
| Yahoo_Reference | 0.4483 | 0.0336 | 0.5281 | 0.5804 | 0.1695 | 0.5382 | 0.3926 | 5.3272 | 0.4232 | 0.6548 | 0.8190 | 0.9904 |
| Yahoo_Science | 0.1574 | 0.0568 | 0.2783 | 0.3550 | 0.1639 | 0.3095 | 0.6276 | 13.6852 | 0.6670 | 0.4161 | 0.9449 | 0.9930 |
| Yahoo_Social | 0.4626 | 0.0302 | 0.5495 | 0.6047 | 0.1800 | 0.5362 | 0.3774 | 7.3930 | 0.3886 | 0.6427 | 0.9087 | 0.9839 |
| Yahoo_Society | 0.3258 | 0.0691 | 0.4420 | 0.5575 | 0.2222 | 0.4750 | 0.3845 | 8.3440 | 0.4599 | 0.5977 | 0.9416 | 0.9771 |
| yeast | 0.1694 | 0.2202 | 0.5518 | 0.6927 | 0.4521 | 0.6740 | 0.2521 | 6.2066 | 0.2350 | 0.7530 | 0.8271 | 0.8855 |
| Yelp | 0.3430 | 0.2090 | 0.6244 | 0.7473 | 0.6782 | 0.7264 | 0.2044 | 1.3619 | 0.2087 | 0.8612 | 0.8622 | 0.8884 |

Table 118: Detailed results for MASSIVE (10K) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4663 | 0.0358 | 0.5868 | 0.6502 | 0.6744 | 0.6747 | 0.3029 | 2.3371 | 0.2240 | 0.7657 | 0.9874 | 0.9876 |
| 3s-bbc1000 | 0.1389 | 0.3750 | 0.2403 | 0.3152 | 0.2754 | 0.2957 | 0.7500 | 2.9167 | 0.6706 | 0.4377 | 0.7716 | 0.7242 |
| 3s-guardian1000 | 0.2258 | 0.3065 | 0.3694 | 0.4698 | 0.2749 | 0.4000 | 0.5161 | 2.0645 | 0.4895 | 0.6185 | 0.7948 | 0.8097 |
| 3s-inter3000 | 0.0000 | 0.5784 | 0.2206 | 0.3529 | 0.2746 | 0.3516 | 0.8235 | 2.3529 | 0.6353 | 0.4422 | 0.5251 | 0.7011 |
| 3s-reuters1000 | 0.0667 | 0.3556 | 0.1056 | 0.1293 | 0.1320 | 0.1351 | 0.9000 | 2.6333 | 0.7733 | 0.3772 | 0.7746 | 0.7295 |
| amphibians | 0.1111 | 0.2698 | 0.5738 | 0.7713 | 0.5498 | 0.7213 | 0.2222 | 2.5000 | 0.1000 | 0.8635 | 0.7508 | 0.8102 |
| bibtex | 0.1824 | 0.0120 | 0.3608 | 0.4536 | 0.3208 | 0.4835 | 0.4514 | 73.0959 | 0.5903 | 0.4171 | 0.9979 | 0.9980 |
| birds | 0.1282 | 0.1093 | 0.3364 | 0.4464 | 0.3630 | 0.4490 | 0.4359 | 7.2564 | 0.4616 | 0.5409 | 0.8437 | 0.9388 |
| bookmarks10% | 0.1856 | 0.0088 | 0.2172 | 0.2388 | 0.1184 | 0.2616 | 0.7369 | 105.7244 | 0.7689 | 0.2524 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.2048 | 0.3162 | 0.4788 | 0.1428 | 0.4789 | 0.3725 | 151.0588 | 0.6022 | 0.4393 | 0.8279 | 0.9430 |
| corel16k001 | 0.0000 | 0.0803 | 0.1017 | 0.1783 | 0.0428 | 0.1784 | 0.8903 | 115.5352 | 0.9485 | 0.0842 | 0.9989 | 0.9990 |
| Corel5k | 0.0000 | 0.0180 | 0.1375 | 0.2232 | 0.0255 | 0.2273 | 0.8580 | 164.1060 | 0.9424 | 0.1578 | 0.6790 | 0.9998 |
| delicious | 0.0000 | 0.0450 | 0.1396 | 0.2457 | 0.0898 | 0.2434 | 0.5595 | 900.7962 | 0.8343 | 0.1550 | 0.9910 | 0.9973 |
| emotions | 0.2167 | 0.2167 | 0.5694 | 0.7131 | 0.6909 | 0.6953 | 0.3000 | 1.7667 | 0.2421 | 0.7920 | 0.8745 | 0.8873 |
| enron | 0.1813 | 0.0501 | 0.4906 | 0.6241 | 0.1862 | 0.6025 | 0.2690 | 24.8830 | 0.3819 | 0.5992 | 0.8268 | 0.9819 |
| EukaryoteGO | 0.6521 | 0.0204 | 0.7910 | 0.8567 | 0.7564 | 0.8244 | 0.1662 | 0.9407 | 0.0559 | 0.8922 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.1203 | 0.0739 | 0.3398 | 0.4378 | 0.1439 | 0.4496 | 0.5355 | 6.2134 | 0.5205 | 0.5193 | 0.9814 | 0.9614 |
| flags | 0.1500 | 0.2571 | 0.6277 | 0.7529 | 0.6044 | 0.7465 | 0.2000 | 3.5500 | 0.2167 | 0.8150 | 0.6923 | 0.7940 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1447 | 0.5000 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8536 | 0.9559 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9214 | 0.0116 | 0.9536 | 0.9696 | 0.8268 | 0.9562 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7500 | 0.0527 | 0.8024 | 0.8282 | 0.4990 | 0.8066 | 0.1714 | 0.6214 | 0.1454 | 0.8772 | 0.8613 | 0.9889 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9960 |
| GpositivePseAAC | 0.7500 | 0.1154 | 0.7596 | 0.7644 | 0.5896 | 0.7692 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6045 | 0.0420 | 0.7495 | 0.8196 | 0.6930 | 0.7715 | 0.1543 | 1.1093 | 0.1084 | 0.8816 | 0.9849 | 0.9884 |
| HumanPseAAC | 0.3119 | 0.0983 | 0.4132 | 0.4651 | 0.1924 | 0.4470 | 0.5402 | 3.5177 | 0.4959 | 0.5747 | 0.9557 | 0.9557 |
| Image | 0.4150 | 0.1950 | 0.5942 | 0.6835 | 0.6392 | 0.6286 | 0.3150 | 1.0300 | 0.2829 | 0.7913 | 0.9291 | 0.9251 |
| IMDB-ECC-F10% | 0.0000 | 0.2679 | 0.1397 | 0.2406 | 0.0898 | 0.2408 | 0.6373 | 12.4948 | 0.7491 | 0.3668 | 0.9932 | 0.9777 |
| IMDB-F10% | 0.0000 | 0.2908 | 0.1530 | 0.2646 | 0.0956 | 0.2628 | 0.5965 | 12.9644 | 0.7382 | 0.3759 | 0.9895 | 0.9780 |
| LLOG-F | 0.1639 | 0.0166 | 0.1960 | 0.2166 | 0.0526 | 0.2897 | 0.7459 | 28.7049 | 0.7876 | 0.2753 | 0.5982 | 0.9979 |
| mediamill10% | 0.0760 | 0.0318 | 0.4565 | 0.6288 | 0.0800 | 0.5748 | 0.2280 | 58.0570 | 0.4407 | 0.5466 | 0.8115 | 0.9932 |
| medical | 0.6327 | 0.0116 | 0.7483 | 0.8057 | 0.3011 | 0.8016 | 0.1837 | 5.0408 | 0.1335 | 0.8308 | 0.5523 | 0.9975 |
| Music | 0.2833 | 0.1833 | 0.6139 | 0.7510 | 0.7392 | 0.7402 | 0.3167 | 2.0167 | 0.2605 | 0.7876 | 0.9084 | 0.9050 |
| NUS-WIDE-bow10% | 0.1425 | 0.0284 | 0.3141 | 0.4081 | 0.0543 | 0.3925 | 0.5263 | 34.9308 | 0.6015 | 0.4282 | 0.8737 | 0.9925 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0376 | 0.2680 | 0.3996 | 0.0574 | 0.3803 | 0.5648 | 36.0366 | 0.6459 | 0.4091 | 0.8780 | 0.9950 |
| OHSUMED-F | 0.2276 | 0.0592 | 0.4485 | 0.5546 | 0.4448 | 0.5797 | 0.3522 | 7.5159 | 0.4168 | 0.6199 | 0.9533 | 0.9878 |
| PlantGO | 0.7188 | 0.0365 | 0.7812 | 0.8105 | 0.6845 | 0.8056 | 0.2292 | 1.0521 | 0.0992 | 0.8484 | 0.9902 | 0.9845 |
| PlantPseAAC | 0.2653 | 0.1139 | 0.3656 | 0.4225 | 0.2226 | 0.4174 | 0.5918 | 3.1837 | 0.5146 | 0.5452 | 0.9400 | 0.9343 |
| rcv1subset1 | 0.0950 | 0.0313 | 0.3417 | 0.4635 | 0.2646 | 0.4620 | 0.4017 | 41.1500 | 0.4679 | 0.4870 | 0.9270 | 0.9876 |
| REUTERS-K500-EX2 | 0.3247 | 0.0118 | 0.4071 | 0.4552 | 0.2366 | 0.4972 | 0.5223 | 32.5069 | 0.5386 | 0.4852 | 0.7840 | 0.9974 |
| scene | 0.5809 | 0.0961 | 0.7275 | 0.7998 | 0.7732 | 0.7574 | 0.2075 | 0.8133 | 0.1606 | 0.8472 | 0.9684 | 0.9721 |
| sider_CDK_ECFP4 | 0.0141 | 0.2350 | 0.6556 | 0.8020 | 0.6323 | 0.8013 | 0.1338 | 19.1901 | 0.1602 | 0.8020 | 0.6009 | 0.7876 |
| sider_MordredDesc | 0.0141 | 0.2626 | 0.6267 | 0.7803 | 0.6161 | 0.7826 | 0.1268 | 19.6549 | 0.1661 | 0.8034 | 0.5814 | 0.7816 |
| sider_RDKit_desc | 0.0141 | 0.2715 | 0.6361 | 0.7866 | 0.6045 | 0.7821 | 0.2958 | 19.7676 | 0.1784 | 0.7743 | 0.5730 | 0.7654 |
| SLASHDOT-F | 0.3995 | 0.0421 | 0.5058 | 0.5637 | 0.3830 | 0.5892 | 0.4206 | 5.9180 | 0.3933 | 0.6217 | 0.7589 | 0.9855 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.7600 |
| Stackex_chemistry | 0.0115 | 0.0200 | 0.1365 | 0.2089 | 0.0572 | 0.2099 | 0.7925 | 105.1758 | 0.8765 | 0.1542 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0476 | 0.0101 | 0.1703 | 0.2353 | 0.0688 | 0.2904 | 0.6548 | 137.2857 | 0.8005 | 0.2132 | 0.5492 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0219 | 0.0525 | 0.0891 | 0.0169 | 0.1143 | 0.8261 | 78.2174 | 0.8918 | 0.1260 | 0.2554 | 0.9874 |
| Stackex_cooking | 0.0010 | 0.0077 | 0.1332 | 0.2028 | 0.1081 | 0.2357 | 0.6444 | 224.1498 | 0.7809 | 0.2257 | 0.9244 | 0.9994 |
| Stackex_philosophy | 0.0528 | 0.0121 | 0.1925 | 0.2754 | 0.0620 | 0.2672 | 0.6985 | 136.0980 | 0.7998 | 0.2059 | 0.7499 | 0.9988 |
| tmc2007-500 | 0.2459 | 0.0684 | 0.5679 | 0.7137 | 0.6075 | 0.6840 | 0.2352 | 4.0865 | 0.1453 | 0.7839 | 0.9477 | 0.9826 |
| tox21_CDK_ECFP4 | 0.1301 | 0.1921 | 0.3481 | 0.4688 | 0.3849 | 0.4603 | 0.4692 | 5.3699 | 0.4947 | 0.5673 | 0.9000 | 0.9009 |
| tox21_RDKit_desc | 0.0514 | 0.2277 | 0.2974 | 0.4494 | 0.3095 | 0.4167 | 0.5000 | 5.5137 | 0.5107 | 0.5534 | 0.9022 | 0.9042 |
| VirusGO | 0.7619 | 0.0635 | 0.8413 | 0.8686 | 0.6767 | 0.8462 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7972 | 0.9683 |
| VirusPseAAC | 0.2381 | 0.1746 | 0.5159 | 0.6286 | 0.3690 | 0.6207 | 0.2857 | 0.8571 | 0.1857 | 0.8008 | 0.7265 | 0.9177 |
| Water-quality | 0.0094 | 0.3241 | 0.4305 | 0.6052 | 0.4990 | 0.6022 | 0.2736 | 9.3868 | 0.3635 | 0.6890 | 0.7726 | 0.7654 |
| Yahoo_Arts | 0.1923 | 0.0683 | 0.2929 | 0.3450 | 0.2121 | 0.3695 | 0.5008 | 10.0946 | 0.5611 | 0.4972 | 0.9182 | 0.9713 |
| Yahoo_Business | 0.5641 | 0.0273 | 0.7174 | 0.8124 | 0.3240 | 0.7131 | 0.0909 | 3.1489 | 0.2201 | 0.8948 | 0.8503 | 1.0000 |
| Yahoo_Computers | 0.3893 | 0.0453 | 0.4947 | 0.5740 | 0.2411 | 0.5086 | 0.3826 | 6.5951 | 0.4220 | 0.6189 | 0.8827 | 0.9948 |
| Yahoo_Education | 0.0068 | 0.0844 | 0.2392 | 0.3494 | 0.1898 | 0.3371 | 0.5595 | 9.2136 | 0.5811 | 0.5151 | 0.9045 | 0.9705 |
| Yahoo_Entertainment | 0.3224 | 0.0780 | 0.4515 | 0.5300 | 0.2823 | 0.4759 | 0.4371 | 4.1878 | 0.4119 | 0.6332 | 0.9442 | 0.9595 |
| Yahoo_Health | 0.4085 | 0.0408 | 0.5639 | 0.6469 | 0.2393 | 0.5866 | 0.3162 | 6.3090 | 0.3448 | 0.6917 | 0.8238 | 0.9959 |
| Yahoo_Recreation | 0.2185 | 0.0739 | 0.3018 | 0.3711 | 0.3083 | 0.3797 | 0.5097 | 6.5713 | 0.5516 | 0.5534 | 0.9639 | 0.9716 |
| Yahoo_Reference | 0.4499 | 0.0339 | 0.5230 | 0.5752 | 0.1684 | 0.5452 | 0.3916 | 5.2805 | 0.4281 | 0.6602 | 0.8074 | 0.9903 |
| Yahoo_Science | 0.1567 | 0.0568 | 0.2819 | 0.3603 | 0.1646 | 0.3060 | 0.6238 | 13.7924 | 0.6751 | 0.4190 | 0.9422 | 0.9909 |
| Yahoo_Social | 0.4676 | 0.0305 | 0.5496 | 0.5973 | 0.1800 | 0.5337 | 0.3744 | 7.3923 | 0.3869 | 0.6518 | 0.9101 | 0.9853 |
| Yahoo_Society | 0.3298 | 0.0688 | 0.4418 | 0.5622 | 0.2238 | 0.4727 | 0.3891 | 8.4117 | 0.4551 | 0.5943 | 0.9475 | 0.9632 |
| yeast | 0.1529 | 0.2217 | 0.5543 | 0.6980 | 0.4596 | 0.6773 | 0.2355 | 6.1446 | 0.2357 | 0.7729 | 0.8272 | 0.8858 |
| Yelp | 0.3430 | 0.2082 | 0.6327 | 0.7567 | 0.6866 | 0.7341 | 0.1964 | 1.3729 | 0.2297 | 0.8636 | 0.8773 | 0.9011 |

Table 119: Detailed results for MASSIVE (100) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0000 | 0.0512 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3989 | 1.4575 | 0.0766 | 0.7325 | 0.9360 | 0.9378 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7500 | 2.4167 | 0.4342 | 0.4863 | 0.5307 | 0.5492 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7419 | 2.4194 | 0.4266 | 0.4855 | 0.5212 | 0.5928 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7647 | 1.9412 | 0.3765 | 0.4912 | 0.4168 | 0.6263 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9000 | 2.7667 | 0.5375 | 0.3661 | 0.4783 | 0.4863 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 2.6111 | 0.1000 | 0.8171 | 0.6544 | 0.7894 |
| bibtex | 0.0041 | 0.0140 | 0.0561 | 0.0835 | 0.0090 | 0.1279 | 0.4527 | 42.2932 | 0.2008 | 0.4632 | 0.8682 | 0.8913 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3590 | 4.2564 | 0.1454 | 0.6447 | 0.7472 | 0.8510 |
| bookmarks10% | 0.1764 | 0.0093 | 0.1996 | 0.2048 | 0.0467 | 0.2068 | 0.6362 | 58.2651 | 0.3069 | 0.3882 | 0.8758 | 0.8883 |
| CAL500 | 0.0000 | 0.1487 | 0.0019 | 0.0036 | 0.0010 | 0.0045 | 0.3137 | 142.1373 | 0.2030 | 0.4598 | 0.5305 | 0.8000 |
| corel16k001 | 0.0000 | 0.0375 | 0.0549 | 0.0995 | 0.0180 | 0.0973 | 0.9932 | 70.3891 | 0.2405 | 0.1386 | 0.5970 | 0.6684 |
| Corel5k | 0.0000 | 0.0151 | 0.1584 | 0.2417 | 0.0364 | 0.2573 | 0.8291 | 127.8087 | 0.1477 | 0.1758 | 0.4824 | 0.8393 |
| delicious | 0.0000 | 0.0825 | 0.0429 | 0.0835 | 0.0427 | 0.0825 | 0.9529 | 947.7516 | 0.3413 | 0.0652 | 0.6416 | 0.6623 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 1.5167 | 0.1187 | 0.8368 | 0.8752 | 0.8944 |
| enron | 0.0760 | 0.0633 | 0.1098 | 0.1350 | 0.0139 | 0.0946 | 0.2222 | 13.3333 | 0.0887 | 0.6831 | 0.6261 | 0.9075 |
| EukaryoteGO | 0.5979 | 0.0241 | 0.6366 | 0.6559 | 0.2530 | 0.7315 | 0.2191 | 0.5245 | 0.0171 | 0.8766 | 0.9889 | 0.9925 |
| EukaryotePseAAC | 0.0000 | 0.0528 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6293 | 2.8005 | 0.1184 | 0.5612 | 0.7058 | 0.8887 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.4500 | 0.1908 | 0.8360 | 0.6985 | 0.8283 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2683 | 2.6585 | 0.1123 | 0.7796 | 0.6758 | 0.8221 |
| genbase | 0.7761 | 0.0105 | 0.8433 | 0.8824 | 0.3145 | 0.8671 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.8714 | 0.0205 | 0.8893 | 0.8981 | 0.5762 | 0.9170 | 0.0357 | 0.1071 | 0.0093 | 0.9792 | 0.8713 | 0.9972 |
| GnegativePseAAC | 0.2857 | 0.0946 | 0.2857 | 0.2857 | 0.1042 | 0.4301 | 0.2571 | 0.8071 | 0.1055 | 0.8226 | 0.7656 | 0.9340 |
| GpositiveGO | 0.8462 | 0.0529 | 0.8558 | 0.8606 | 0.6617 | 0.8911 | 0.0962 | 0.1731 | 0.0513 | 0.9439 | 0.9929 | 0.9918 |
| GpositivePseAAC | 0.1923 | 0.2067 | 0.1923 | 0.1923 | 0.2114 | 0.3175 | 0.3462 | 0.5385 | 0.1795 | 0.7981 | 0.8722 | 0.8794 |
| HumanGO | 0.4791 | 0.0503 | 0.4979 | 0.5076 | 0.2955 | 0.5952 | 0.2122 | 0.6109 | 0.0293 | 0.8719 | 0.9749 | 0.9784 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6334 | 2.3955 | 0.1608 | 0.5626 | 0.7013 | 0.8424 |
| Image | 0.0600 | 0.2270 | 0.0600 | 0.0600 | 0.0843 | 0.0956 | 0.3200 | 0.9400 | 0.1750 | 0.7893 | 0.8470 | 0.8475 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6792 | 7.3973 | 0.1748 | 0.4555 | 0.5764 | 0.8072 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6147 | 7.9735 | 0.1827 | 0.4731 | 0.5654 | 0.8029 |
| LLOG-F | 0.0000 | 0.0179 | 0.0041 | 0.0055 | 0.0013 | 0.0120 | 0.6803 | 13.4016 | 0.1652 | 0.4028 | 0.4500 | 0.8641 |
| mediamill10% | 0.0546 | 0.0330 | 0.2922 | 0.4102 | 0.0228 | 0.4049 | 0.1663 | 7.4869 | 0.0169 | 0.7923 | 0.8049 | 0.9818 |
| medical | 0.5000 | 0.0141 | 0.5935 | 0.6395 | 0.1709 | 0.7130 | 0.1735 | 1.7857 | 0.0336 | 0.8751 | 0.5418 | 0.9884 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 2.0500 | 0.1746 | 0.7811 | 0.8479 | 0.8562 |
| NUS-WIDE-bow10% | 0.0019 | 0.0263 | 0.0087 | 0.0124 | 0.0023 | 0.0253 | 0.5242 | 17.9015 | 0.1337 | 0.4917 | 0.6384 | 0.8792 |
| NUS-WIDE-cVLADplus10% | 0.0122 | 0.0263 | 0.0222 | 0.0289 | 0.0040 | 0.0454 | 0.5326 | 16.4057 | 0.1229 | 0.5222 | 0.6718 | 0.9022 |
| OHSUMED-F | 0.0029 | 0.0726 | 0.0035 | 0.0038 | 0.0019 | 0.0051 | 0.4688 | 4.6461 | 0.1311 | 0.6160 | 0.8085 | 0.8662 |
| PlantGO | 0.3958 | 0.0625 | 0.4201 | 0.4336 | 0.2257 | 0.5443 | 0.2083 | 0.4375 | 0.0299 | 0.8832 | 0.9714 | 0.9785 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6122 | 2.4898 | 0.2102 | 0.5591 | 0.7367 | 0.8089 |
| rcv1subset1 | 0.0000 | 0.0304 | 0.0063 | 0.0095 | 0.0026 | 0.0128 | 0.4933 | 21.7950 | 0.0998 | 0.5007 | 0.8036 | 0.9101 |
| REUTERS-K500-EX2 | 0.0309 | 0.0139 | 0.0309 | 0.0309 | 0.0076 | 0.0414 | 0.5137 | 11.7165 | 0.1282 | 0.5766 | 0.7167 | 0.9425 |
| scene | 0.0622 | 0.1701 | 0.0643 | 0.0653 | 0.1307 | 0.1151 | 0.2614 | 0.5311 | 0.0856 | 0.8457 | 0.9297 | 0.9355 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0845 | 19.1127 | 0.1240 | 0.8412 | 0.5460 | 0.7979 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.0986 | 0.1327 | 0.8260 | 0.5557 | 0.7968 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.4507 | 0.1336 | 0.8295 | 0.5636 | 0.7970 |
| SLASHDOT-F | 0.1058 | 0.0499 | 0.1085 | 0.1098 | 0.0459 | 0.1683 | 0.5212 | 2.5476 | 0.1053 | 0.6337 | 0.6669 | 0.9087 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.8000 |
| Stackex_chemistry | 0.0000 | 0.0122 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6859 | 54.6758 | 0.3023 | 0.3214 | 0.8159 | 0.9121 |
| Stackex_chess | 0.0060 | 0.0103 | 0.0368 | 0.0540 | 0.0047 | 0.0800 | 0.5298 | 78.1488 | 0.3105 | 0.3991 | 0.5010 | 0.9423 |
| Stackex_coffee | 0.0000 | 0.0187 | 0.0254 | 0.0393 | 0.0163 | 0.0702 | 0.7826 | 58.3913 | 0.3654 | 0.3136 | 0.2445 | 0.9169 |
| Stackex_cooking | 0.0258 | 0.0073 | 0.1712 | 0.2628 | 0.0722 | 0.2676 | 0.7756 | 132.3222 | 0.1906 | 0.2098 | 0.7543 | 0.7937 |
| Stackex_philosophy | 0.0126 | 0.0096 | 0.0260 | 0.0323 | 0.0015 | 0.0368 | 0.5930 | 81.4045 | 0.3298 | 0.3699 | 0.6785 | 0.9340 |
| tmc2007-500 | 0.0066 | 0.0962 | 0.0123 | 0.0152 | 0.0032 | 0.0185 | 0.4017 | 3.3514 | 0.0743 | 0.7029 | 0.8961 | 0.9268 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5445 | 4.2466 | 0.2301 | 0.5820 | 0.6520 | 0.7371 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5034 | 4.1164 | 0.2243 | 0.5981 | 0.6778 | 0.7443 |
| VirusGO | 0.7143 | 0.0873 | 0.7143 | 0.7143 | 0.5926 | 0.7317 | 0.0476 | 0.3810 | 0.0536 | 0.9563 | 0.7993 | 0.9762 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 0.8095 | 0.1321 | 0.7929 | 0.5734 | 0.8822 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2925 | 8.9528 | 0.2602 | 0.6942 | 0.6922 | 0.7244 |
| Yahoo_Arts | 0.0000 | 0.0649 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5073 | 4.8104 | 0.1231 | 0.5838 | 0.7243 | 0.8548 |
| Yahoo_Business | 0.4840 | 0.0300 | 0.6232 | 0.7011 | 0.0305 | 0.6403 | 0.1310 | 2.2701 | 0.0403 | 0.8810 | 0.6836 | 0.9535 |
| Yahoo_Computers | 0.0843 | 0.0439 | 0.0915 | 0.0957 | 0.0099 | 0.1217 | 0.4667 | 3.8386 | 0.0811 | 0.6404 | 0.6855 | 0.8963 |
| Yahoo_Education | 0.0000 | 0.0436 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5827 | 3.7099 | 0.0889 | 0.5731 | 0.6861 | 0.9124 |
| Yahoo_Entertainment | 0.0660 | 0.0646 | 0.0707 | 0.0733 | 0.0437 | 0.1010 | 0.4548 | 2.7863 | 0.0972 | 0.6607 | 0.8051 | 0.8913 |
| Yahoo_Health | 0.0206 | 0.0509 | 0.0212 | 0.0214 | 0.0027 | 0.0260 | 0.3963 | 3.0076 | 0.0575 | 0.7132 | 0.6878 | 0.9389 |
| Yahoo_Recreation | 0.0125 | 0.0630 | 0.0131 | 0.0136 | 0.0074 | 0.0198 | 0.5066 | 3.5776 | 0.1236 | 0.6168 | 0.7968 | 0.8580 |
| Yahoo_Reference | 0.1258 | 0.0314 | 0.1362 | 0.1413 | 0.0136 | 0.2208 | 0.4682 | 3.0187 | 0.0803 | 0.6565 | 0.6462 | 0.9207 |
| Yahoo_Science | 0.0000 | 0.0363 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5552 | 5.9565 | 0.1134 | 0.5549 | 0.7769 | 0.8778 |
| Yahoo_Social | 0.1477 | 0.0289 | 0.1563 | 0.1613 | 0.0219 | 0.2280 | 0.3762 | 3.4414 | 0.0725 | 0.7224 | 0.7282 | 0.9270 |
| Yahoo_Society | 0.0331 | 0.0605 | 0.0374 | 0.0402 | 0.0059 | 0.0504 | 0.4745 | 4.8299 | 0.1141 | 0.6127 | 0.6676 | 0.8539 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2603 | 6.2769 | 0.1732 | 0.7419 | 0.7012 | 0.8322 |
| Yelp | 0.0229 | 0.3523 | 0.0325 | 0.0370 | 0.0250 | 0.0464 | 0.3579 | 1.6810 | 0.2159 | 0.7626 | 0.6515 | 0.7687 |

Table 120: Detailed results for MASSIVE (1K) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.2329 | 0.0406 | 0.2342 | 0.2348 | 0.3231 | 0.3673 | 0.3128 | 1.0197 | 0.0536 | 0.7973 | 0.9582 | 0.9587 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6944 | 2.2222 | 0.4047 | 0.5203 | 0.6078 | 0.6027 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7742 | 2.5161 | 0.4516 | 0.4629 | 0.5096 | 0.5990 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7647 | 2.0000 | 0.3838 | 0.4755 | 0.4783 | 0.6336 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.5333 | 0.5058 | 0.3967 | 0.5422 | 0.5061 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.7222 | 0.1139 | 0.8288 | 0.6661 | 0.7883 |
| bibtex | 0.1014 | 0.0129 | 0.1940 | 0.2522 | 0.0865 | 0.2704 | 0.3797 | 27.6527 | 0.1438 | 0.5733 | 0.9269 | 0.9481 |
| birds | 0.1026 | 0.0891 | 0.1154 | 0.1215 | 0.0979 | 0.1316 | 0.3077 | 3.3846 | 0.1073 | 0.7200 | 0.7870 | 0.8961 |
| bookmarks10% | 0.1503 | 0.0095 | 0.1714 | 0.1845 | 0.0289 | 0.1750 | 0.6822 | 66.1993 | 0.3454 | 0.3481 | 0.8657 | 0.8980 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2549 | 138.4902 | 0.2046 | 0.4619 | 0.5120 | 0.7983 |
| corel16k001 | 0.0000 | 0.0365 | 0.0563 | 0.1026 | 0.0181 | 0.0997 | 0.9686 | 68.6117 | 0.2368 | 0.1397 | 0.5904 | 0.6683 |
| Corel5k | 0.0000 | 0.0120 | 0.0248 | 0.0406 | 0.0062 | 0.0499 | 0.6900 | 140.7100 | 0.4338 | 0.2500 | 0.6221 | 0.9505 |
| delicious | 0.0000 | 0.0819 | 0.0432 | 0.0840 | 0.0433 | 0.0841 | 0.9337 | 942.9814 | 0.3388 | 0.0645 | 0.6520 | 0.6807 |
| emotions | 0.0500 | 0.2944 | 0.0583 | 0.0622 | 0.0547 | 0.0702 | 0.2500 | 1.5667 | 0.1311 | 0.8332 | 0.8658 | 0.8783 |
| enron | 0.1170 | 0.0569 | 0.2335 | 0.3113 | 0.0691 | 0.2813 | 0.2164 | 12.7076 | 0.0842 | 0.7079 | 0.6704 | 0.9186 |
| EukaryoteGO | 0.6495 | 0.0206 | 0.6969 | 0.7209 | 0.4953 | 0.7775 | 0.1662 | 0.3969 | 0.0127 | 0.9085 | 0.9935 | 0.9950 |
| EukaryotePseAAC | 0.0064 | 0.0525 | 0.0064 | 0.0064 | 0.0024 | 0.0110 | 0.5689 | 2.4311 | 0.1014 | 0.6094 | 0.7684 | 0.9066 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1000 | 3.5500 | 0.1850 | 0.8549 | 0.7339 | 0.8289 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2195 | 2.6341 | 0.1047 | 0.8032 | 0.6702 | 0.8263 |
| genbase | 0.9254 | 0.0033 | 0.9602 | 0.9776 | 0.5802 | 0.9634 | 0.0149 | 0.2239 | 0.0006 | 0.9938 | 0.6667 | 0.9994 |
| GnegativeGO | 0.9000 | 0.0161 | 0.9143 | 0.9214 | 0.6813 | 0.9353 | 0.0143 | 0.0929 | 0.0092 | 0.9893 | 0.8733 | 0.9989 |
| GnegativePseAAC | 0.3214 | 0.0920 | 0.3214 | 0.3214 | 0.1214 | 0.4663 | 0.2429 | 0.6286 | 0.0846 | 0.8432 | 0.7831 | 0.9531 |
| GpositiveGO | 0.8654 | 0.0529 | 0.8654 | 0.8654 | 0.9120 | 0.8911 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9962 | 0.9961 |
| GpositivePseAAC | 0.4038 | 0.1587 | 0.4038 | 0.4038 | 0.3621 | 0.5600 | 0.4423 | 0.8077 | 0.2885 | 0.7244 | 0.8093 | 0.8358 |
| HumanGO | 0.5595 | 0.0439 | 0.5938 | 0.6116 | 0.4513 | 0.6735 | 0.1833 | 0.5402 | 0.0275 | 0.8904 | 0.9791 | 0.9845 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5756 | 2.1897 | 0.1433 | 0.6038 | 0.7398 | 0.8640 |
| Image | 0.1850 | 0.1990 | 0.1950 | 0.1999 | 0.2694 | 0.2918 | 0.2600 | 0.7400 | 0.1288 | 0.8379 | 0.8881 | 0.8924 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6143 | 7.1981 | 0.1667 | 0.4881 | 0.5815 | 0.8112 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5808 | 7.6214 | 0.1727 | 0.4972 | 0.6099 | 0.8152 |
| LLOG-F | 0.0246 | 0.0177 | 0.0287 | 0.0306 | 0.0104 | 0.0471 | 0.6066 | 12.0574 | 0.1608 | 0.4924 | 0.4950 | 0.8984 |
| mediamill10% | 0.5843 | 0.0088 | 0.8550 | 0.9188 | 0.3225 | 0.8886 | 0.0000 | 3.4703 | 0.0001 | 0.9981 | 0.8204 | 0.9991 |
| medical | 0.6531 | 0.0104 | 0.7500 | 0.8000 | 0.3724 | 0.8083 | 0.1429 | 1.4286 | 0.0361 | 0.8975 | 0.5508 | 0.9952 |
| Music | 0.0000 | 0.3250 | 0.0083 | 0.0111 | 0.0159 | 0.0168 | 0.2000 | 1.8500 | 0.1437 | 0.8258 | 0.8645 | 0.8714 |
| NUS-WIDE-bow10% | 0.0019 | 0.0258 | 0.0086 | 0.0129 | 0.0023 | 0.0257 | 0.5225 | 17.4139 | 0.1333 | 0.4972 | 0.6468 | 0.8818 |
| NUS-WIDE-cVLADplus10% | 0.0010 | 0.0263 | 0.0019 | 0.0027 | 0.0004 | 0.0040 | 0.5842 | 17.1675 | 0.1279 | 0.4821 | 0.6356 | 0.8794 |
| OHSUMED-F | 0.0955 | 0.0656 | 0.1396 | 0.1623 | 0.0977 | 0.2045 | 0.3561 | 3.5966 | 0.0931 | 0.7038 | 0.8550 | 0.9045 |
| PlantGO | 0.5625 | 0.0547 | 0.5938 | 0.6094 | 0.5868 | 0.6557 | 0.1979 | 0.5000 | 0.0460 | 0.8846 | 0.9768 | 0.9810 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5612 | 1.9388 | 0.1607 | 0.6160 | 0.7824 | 0.8466 |
| rcv1subset1 | 0.0000 | 0.0297 | 0.0370 | 0.0538 | 0.0147 | 0.0616 | 0.4250 | 13.2250 | 0.0613 | 0.6073 | 0.8694 | 0.9528 |
| REUTERS-K500-EX2 | 0.1735 | 0.0124 | 0.1916 | 0.2016 | 0.0766 | 0.2520 | 0.4364 | 8.6254 | 0.0954 | 0.6520 | 0.7441 | 0.9683 |
| scene | 0.2241 | 0.1404 | 0.2344 | 0.2395 | 0.3776 | 0.3676 | 0.1660 | 0.3402 | 0.0499 | 0.9044 | 0.9511 | 0.9598 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0915 | 18.7676 | 0.1272 | 0.8343 | 0.5838 | 0.7989 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0915 | 18.9437 | 0.1279 | 0.8402 | 0.5732 | 0.7985 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1127 | 18.9014 | 0.1208 | 0.8446 | 0.5707 | 0.8041 |
| SLASHDOT-F | 0.2434 | 0.0439 | 0.2716 | 0.2859 | 0.1824 | 0.3845 | 0.4206 | 2.2910 | 0.0915 | 0.6937 | 0.6749 | 0.9261 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.3889 | 0.7800 |
| Stackex_chemistry | 0.0144 | 0.0121 | 0.0266 | 0.0343 | 0.0126 | 0.0418 | 0.6427 | 48.9597 | 0.2587 | 0.3684 | 0.8370 | 0.9339 |
| Stackex_chess | 0.0119 | 0.0101 | 0.0998 | 0.1479 | 0.0370 | 0.1967 | 0.5833 | 75.1369 | 0.3346 | 0.3824 | 0.5152 | 0.9609 |
| Stackex_coffee | 0.0435 | 0.0223 | 0.1087 | 0.1637 | 0.0406 | 0.1600 | 0.7826 | 47.1304 | 0.3089 | 0.2850 | 0.2432 | 0.9296 |
| Stackex_cooking | 0.0263 | 0.0072 | 0.1691 | 0.2626 | 0.0734 | 0.2694 | 0.7720 | 132.4765 | 0.1851 | 0.2118 | 0.7615 | 0.8050 |
| Stackex_philosophy | 0.0528 | 0.0092 | 0.1224 | 0.1598 | 0.0343 | 0.1834 | 0.4698 | 69.4899 | 0.2845 | 0.4542 | 0.7010 | 0.9562 |
| tmc2007-500 | 0.0462 | 0.0915 | 0.0814 | 0.0992 | 0.0447 | 0.1166 | 0.2853 | 2.7493 | 0.0528 | 0.7747 | 0.9199 | 0.9469 |
| tox21_CDK_ECFP4 | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0060 | 0.0032 | 0.4692 | 3.9555 | 0.2029 | 0.6317 | 0.7110 | 0.7776 |
| tox21_RDKit_desc | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0020 | 0.0032 | 0.4212 | 3.7945 | 0.1884 | 0.6508 | 0.7288 | 0.7886 |
| VirusGO | 0.7619 | 0.0794 | 0.7619 | 0.7619 | 0.6029 | 0.7619 | 0.0476 | 0.3333 | 0.0476 | 0.9643 | 0.8037 | 0.9865 |
| VirusPseAAC | 0.1429 | 0.1587 | 0.1429 | 0.1429 | 0.1667 | 0.2308 | 0.3333 | 0.6667 | 0.1107 | 0.8032 | 0.6276 | 0.8911 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1887 | 8.5094 | 0.2271 | 0.7372 | 0.7165 | 0.7536 |
| Yahoo_Arts | 0.0614 | 0.0609 | 0.0822 | 0.0934 | 0.0471 | 0.1254 | 0.4085 | 3.8638 | 0.0883 | 0.6775 | 0.7920 | 0.8923 |
| Yahoo_Business | 0.4742 | 0.0294 | 0.6118 | 0.6888 | 0.0389 | 0.6413 | 0.1132 | 1.8137 | 0.0277 | 0.9025 | 0.7477 | 0.9663 |
| Yahoo_Computers | 0.1582 | 0.0412 | 0.1778 | 0.1893 | 0.0326 | 0.2300 | 0.3639 | 3.0273 | 0.0603 | 0.7229 | 0.7447 | 0.9229 |
| Yahoo_Education | 0.0549 | 0.0410 | 0.0613 | 0.0649 | 0.0400 | 0.1191 | 0.4497 | 2.8520 | 0.0645 | 0.6678 | 0.7587 | 0.9358 |
| Yahoo_Entertainment | 0.1799 | 0.0589 | 0.1908 | 0.1973 | 0.0915 | 0.2483 | 0.3331 | 2.1273 | 0.0670 | 0.7502 | 0.8540 | 0.9260 |
| Yahoo_Health | 0.2465 | 0.0392 | 0.2926 | 0.3200 | 0.1409 | 0.4004 | 0.2682 | 2.2682 | 0.0384 | 0.8009 | 0.7490 | 0.9569 |
| Yahoo_Recreation | 0.1684 | 0.0551 | 0.1817 | 0.1895 | 0.1132 | 0.2461 | 0.3437 | 2.5986 | 0.0812 | 0.7345 | 0.8648 | 0.9084 |
| Yahoo_Reference | 0.0320 | 0.0667 | 0.2445 | 0.3342 | 0.1118 | 0.3413 | 0.9452 | 5.0939 | 0.1320 | 0.3741 | 0.4315 | 0.6854 |
| Yahoo_Science | 0.1220 | 0.0368 | 0.1576 | 0.1841 | 0.0615 | 0.2284 | 0.5773 | 7.3460 | 0.1411 | 0.5335 | 0.6839 | 0.7555 |
| Yahoo_Social | 0.2413 | 0.0419 | 0.3673 | 0.4439 | 0.0622 | 0.4131 | 0.4672 | 7.5563 | 0.1572 | 0.6114 | 0.5131 | 0.7108 |
| Yahoo_Society | 0.1517 | 0.0661 | 0.2080 | 0.2497 | 0.0511 | 0.2539 | 0.5494 | 9.3226 | 0.2416 | 0.5035 | 0.5318 | 0.7036 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2025 | 6.0083 | 0.1504 | 0.7834 | 0.7574 | 0.8567 |
| Yelp | 0.0678 | 0.3414 | 0.0819 | 0.0899 | 0.0604 | 0.1046 | 0.2084 | 1.3450 | 0.1294 | 0.8579 | 0.8068 | 0.8573 |

Table 121: Detailed results for MASSIVE (5K) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3460 | 0.0346 | 0.3491 | 0.3506 | 0.4715 | 0.5041 | 0.2656 | 0.8688 | 0.0463 | 0.8285 | 0.9653 | 0.9660 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6667 | 2.1944 | 0.4092 | 0.5310 | 0.6051 | 0.5893 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7742 | 2.5806 | 0.4621 | 0.4591 | 0.5013 | 0.5989 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.1176 | 0.4074 | 0.4118 | 0.4552 | 0.5926 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.5333 | 0.4992 | 0.3978 | 0.5412 | 0.5063 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.7778 | 0.1231 | 0.8195 | 0.6595 | 0.7865 |
| bibtex | 0.1446 | 0.0122 | 0.2622 | 0.3352 | 0.1786 | 0.3540 | 0.3595 | 26.7365 | 0.1426 | 0.5953 | 0.9458 | 0.9600 |
| birds | 0.1026 | 0.0891 | 0.1154 | 0.1215 | 0.0979 | 0.1316 | 0.3333 | 3.3590 | 0.1063 | 0.7170 | 0.7807 | 0.8942 |
| bookmarks10% | 0.1777 | 0.0092 | 0.1976 | 0.2092 | 0.0478 | 0.2039 | 0.6412 | 58.7517 | 0.3026 | 0.3918 | 0.8714 | 0.9073 |
| CAL500 | 0.0000 | 0.1487 | 0.0032 | 0.0061 | 0.0012 | 0.0060 | 0.3725 | 142.8627 | 0.2121 | 0.4405 | 0.5238 | 0.7945 |
| corel16k001 | 0.0000 | 0.0370 | 0.0559 | 0.1014 | 0.0179 | 0.0984 | 0.9729 | 69.2987 | 0.2386 | 0.1402 | 0.5901 | 0.6615 |
| Corel5k | 0.0000 | 0.0147 | 0.1583 | 0.2470 | 0.0363 | 0.2597 | 0.8246 | 127.3380 | 0.1465 | 0.1792 | 0.4794 | 0.8604 |
| delicious | 0.0000 | 0.0830 | 0.0436 | 0.0853 | 0.0431 | 0.0844 | 0.9416 | 931.3728 | 0.3401 | 0.0651 | 0.6570 | 0.6735 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 1.5167 | 0.1226 | 0.8406 | 0.8693 | 0.8895 |
| enron | 0.1404 | 0.0557 | 0.2711 | 0.3540 | 0.0920 | 0.3311 | 0.2047 | 13.2982 | 0.0958 | 0.6917 | 0.6747 | 0.9167 |
| EukaryoteGO | 0.6688 | 0.0212 | 0.7120 | 0.7341 | 0.6464 | 0.7757 | 0.1817 | 0.4317 | 0.0145 | 0.8989 | 0.9930 | 0.9950 |
| EukaryotePseAAC | 0.0167 | 0.0521 | 0.0167 | 0.0167 | 0.0081 | 0.0284 | 0.5251 | 2.2780 | 0.0935 | 0.6372 | 0.7789 | 0.9137 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.5000 | 0.1892 | 0.8386 | 0.7360 | 0.8277 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2683 | 2.7561 | 0.1128 | 0.7723 | 0.6669 | 0.8288 |
| genbase | 0.9254 | 0.0028 | 0.9652 | 0.9825 | 0.6173 | 0.9697 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9996 |
| GnegativeGO | 0.8929 | 0.0179 | 0.9036 | 0.9089 | 0.6713 | 0.9275 | 0.0214 | 0.0929 | 0.0102 | 0.9863 | 0.8737 | 0.9991 |
| GnegativePseAAC | 0.3643 | 0.0866 | 0.3643 | 0.3643 | 0.1445 | 0.5126 | 0.2643 | 0.6786 | 0.0899 | 0.8325 | 0.7741 | 0.9457 |
| GpositiveGO | 0.8654 | 0.0529 | 0.8654 | 0.8654 | 0.9120 | 0.8911 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9962 | 0.9961 |
| GpositivePseAAC | 0.4231 | 0.1635 | 0.4231 | 0.4231 | 0.4073 | 0.5641 | 0.4038 | 0.7500 | 0.2756 | 0.7484 | 0.8118 | 0.8393 |
| HumanGO | 0.5884 | 0.0434 | 0.6308 | 0.6525 | 0.5342 | 0.6937 | 0.2283 | 0.6270 | 0.0350 | 0.8679 | 0.9758 | 0.9846 |
| HumanPseAAC | 0.0161 | 0.0834 | 0.0161 | 0.0161 | 0.0091 | 0.0268 | 0.5627 | 2.0997 | 0.1369 | 0.6087 | 0.7682 | 0.8687 |
| Image | 0.2200 | 0.1900 | 0.2375 | 0.2459 | 0.3262 | 0.3493 | 0.2950 | 0.8200 | 0.1483 | 0.8141 | 0.8744 | 0.8832 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0003 | 0.0005 | 0.0005 | 0.0011 | 0.6562 | 7.3826 | 0.1764 | 0.4643 | 0.6203 | 0.8066 |
| IMDB-F10% | 0.0000 | 0.0722 | 0.0002 | 0.0003 | 0.0006 | 0.0008 | 0.6205 | 7.5891 | 0.1724 | 0.4870 | 0.6256 | 0.8150 |
| LLOG-F | 0.0574 | 0.0167 | 0.0820 | 0.0927 | 0.0236 | 0.1453 | 0.6230 | 10.8934 | 0.1473 | 0.4684 | 0.4935 | 0.9048 |
| mediamill10% | 0.5416 | 0.0103 | 0.8274 | 0.9026 | 0.2947 | 0.8674 | 0.0024 | 3.5036 | 0.0002 | 0.9960 | 0.8208 | 0.9990 |
| medical | 0.6633 | 0.0104 | 0.7585 | 0.8044 | 0.3753 | 0.8130 | 0.1837 | 2.0102 | 0.0564 | 0.8742 | 0.5499 | 0.9947 |
| Music | 0.0000 | 0.3250 | 0.0083 | 0.0111 | 0.0159 | 0.0168 | 0.1833 | 1.8500 | 0.1417 | 0.8300 | 0.8645 | 0.8717 |
| NUS-WIDE-bow10% | 0.0019 | 0.0261 | 0.0086 | 0.0127 | 0.0023 | 0.0255 | 0.5233 | 17.4833 | 0.1329 | 0.4974 | 0.6513 | 0.8792 |
| NUS-WIDE-cVLADplus10% | 0.0124 | 0.0258 | 0.0225 | 0.0289 | 0.0040 | 0.0448 | 0.5285 | 16.0490 | 0.1223 | 0.5205 | 0.6737 | 0.8913 |
| OHSUMED-F | 0.1429 | 0.0620 | 0.2002 | 0.2301 | 0.1549 | 0.2773 | 0.3065 | 3.1587 | 0.0781 | 0.7387 | 0.8755 | 0.9176 |
| PlantGO | 0.6146 | 0.0469 | 0.6510 | 0.6693 | 0.6185 | 0.7188 | 0.1979 | 0.5312 | 0.0432 | 0.8803 | 0.9764 | 0.9807 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6122 | 2.0408 | 0.1700 | 0.5894 | 0.7703 | 0.8439 |
| rcv1subset1 | 0.0398 | 0.0314 | 0.3117 | 0.4628 | 0.1761 | 0.4405 | 0.5978 | 14.3668 | 0.0599 | 0.5001 | 0.8454 | 0.9367 |
| REUTERS-K500-EX2 | 0.3041 | 0.0108 | 0.3579 | 0.3858 | 0.1861 | 0.4508 | 0.4141 | 10.2491 | 0.1377 | 0.6582 | 0.7497 | 0.9724 |
| scene | 0.2863 | 0.1328 | 0.2988 | 0.3049 | 0.4431 | 0.4386 | 0.2282 | 0.4647 | 0.0720 | 0.8659 | 0.9482 | 0.9503 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1620 | 18.6056 | 0.1241 | 0.8253 | 0.5838 | 0.7967 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0704 | 18.8803 | 0.1170 | 0.8596 | 0.5681 | 0.8076 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 18.9648 | 0.1173 | 0.8481 | 0.5685 | 0.8063 |
| SLASHDOT-F | 0.3333 | 0.0418 | 0.3721 | 0.3917 | 0.2628 | 0.4759 | 0.3995 | 2.8307 | 0.1335 | 0.6857 | 0.6679 | 0.9181 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.2000 | 0.2000 | 0.1333 | 0.2857 | 0.2000 | 0.2000 | 0.2000 | 0.9000 | 0.5556 | 0.9000 |
| Stackex_chemistry | 0.0245 | 0.0119 | 0.0651 | 0.0864 | 0.0317 | 0.1127 | 0.6758 | 50.5908 | 0.2882 | 0.3466 | 0.8565 | 0.9466 |
| Stackex_chess | 0.0357 | 0.0109 | 0.1586 | 0.2387 | 0.0627 | 0.2646 | 0.5952 | 87.2024 | 0.3885 | 0.3537 | 0.5193 | 0.9651 |
| Stackex_coffee | 0.0870 | 0.0205 | 0.1703 | 0.2411 | 0.0488 | 0.2162 | 0.7391 | 47.6522 | 0.3159 | 0.3219 | 0.2428 | 0.9331 |
| Stackex_cooking | 0.0261 | 0.0072 | 0.1704 | 0.2616 | 0.0724 | 0.2661 | 0.7660 | 133.2913 | 0.1876 | 0.2093 | 0.7510 | 0.8050 |
| Stackex_philosophy | 0.0578 | 0.0096 | 0.1620 | 0.2216 | 0.0663 | 0.2498 | 0.6030 | 85.5779 | 0.3712 | 0.3702 | 0.7076 | 0.9604 |
| tmc2007-500 | 0.0762 | 0.0890 | 0.1222 | 0.1460 | 0.1057 | 0.1648 | 0.2504 | 2.5671 | 0.0462 | 0.8006 | 0.9270 | 0.9532 |
| tox21_CDK_ECFP4 | 0.0205 | 0.1769 | 0.0241 | 0.0270 | 0.0354 | 0.0282 | 0.4521 | 3.9349 | 0.2027 | 0.6433 | 0.7200 | 0.7834 |
| tox21_RDKit_desc | 0.0137 | 0.1775 | 0.0144 | 0.0156 | 0.0135 | 0.0158 | 0.4110 | 3.6301 | 0.1758 | 0.6657 | 0.7383 | 0.7969 |
| VirusGO | 0.7619 | 0.0794 | 0.7619 | 0.7619 | 0.6029 | 0.7619 | 0.0476 | 0.3333 | 0.0476 | 0.9643 | 0.8037 | 0.9865 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 0.7619 | 0.1226 | 0.7968 | 0.6086 | 0.8898 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1887 | 8.4245 | 0.2253 | 0.7373 | 0.7216 | 0.7535 |
| Yahoo_Arts | 0.1429 | 0.0561 | 0.1794 | 0.1987 | 0.1527 | 0.2531 | 0.3511 | 3.7917 | 0.0851 | 0.7044 | 0.7967 | 0.8966 |
| Yahoo_Business | 0.5071 | 0.0275 | 0.6387 | 0.7115 | 0.1361 | 0.6700 | 0.0882 | 1.6738 | 0.0274 | 0.9177 | 0.7613 | 0.9696 |
| Yahoo_Computers | 0.2747 | 0.0496 | 0.3628 | 0.4492 | 0.0939 | 0.4110 | 0.4710 | 7.6454 | 0.1687 | 0.6034 | 0.5744 | 0.6851 |
| Yahoo_Education | 0.1297 | 0.0377 | 0.1482 | 0.1588 | 0.1176 | 0.2505 | 0.3940 | 2.6467 | 0.0596 | 0.7011 | 0.7897 | 0.9406 |
| Yahoo_Entertainment | 0.2663 | 0.0542 | 0.2854 | 0.2962 | 0.1700 | 0.3536 | 0.2883 | 1.9277 | 0.0582 | 0.7830 | 0.8744 | 0.9348 |
| Yahoo_Health | 0.3420 | 0.0338 | 0.4111 | 0.4502 | 0.2188 | 0.5271 | 0.2041 | 2.3225 | 0.0373 | 0.8328 | 0.7590 | 0.9609 |
| Yahoo_Recreation | 0.2588 | 0.0495 | 0.2833 | 0.2965 | 0.2417 | 0.3761 | 0.2923 | 2.4232 | 0.0734 | 0.7672 | 0.8746 | 0.9172 |
| Yahoo_Reference | 0.0321 | 0.0660 | 0.2455 | 0.3388 | 0.1132 | 0.3370 | 0.9419 | 5.1401 | 0.1336 | 0.3797 | 0.4315 | 0.6833 |
| Yahoo_Science | 0.1238 | 0.0365 | 0.1599 | 0.1823 | 0.0613 | 0.2284 | 0.5741 | 7.2945 | 0.1395 | 0.5316 | 0.6847 | 0.7482 |
| Yahoo_Social | 0.2422 | 0.0416 | 0.3681 | 0.4379 | 0.0627 | 0.4169 | 0.4722 | 7.5261 | 0.1558 | 0.6068 | 0.5166 | 0.7059 |
| Yahoo_Society | 0.1516 | 0.0667 | 0.2075 | 0.2486 | 0.0517 | 0.2567 | 0.5481 | 9.3647 | 0.2428 | 0.5048 | 0.5384 | 0.7010 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1983 | 6.1198 | 0.1531 | 0.7805 | 0.7403 | 0.8551 |
| Yelp | 0.2173 | 0.3099 | 0.2340 | 0.2437 | 0.2318 | 0.2471 | 0.1157 | 1.1326 | 0.0779 | 0.9187 | 0.8829 | 0.9172 |

Table 122: Detailed results for MASSIVE (10K) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4590 | 0.0293 | 0.4640 | 0.4664 | 0.5966 | 0.6164 | 0.2521 | 0.8921 | 0.0487 | 0.8343 | 0.9654 | 0.9668 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6944 | 2.1944 | 0.4041 | 0.5182 | 0.5769 | 0.5848 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7742 | 2.5161 | 0.4500 | 0.4688 | 0.4900 | 0.6037 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.1176 | 0.4074 | 0.4118 | 0.4552 | 0.5926 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.5333 | 0.4992 | 0.3978 | 0.5428 | 0.5068 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.7222 | 0.1139 | 0.8288 | 0.6608 | 0.7881 |
| bibtex | 0.1541 | 0.0122 | 0.2908 | 0.3749 | 0.2338 | 0.3950 | 0.4270 | 34.0568 | 0.1902 | 0.5567 | 0.9479 | 0.9591 |
| birds | 0.1026 | 0.0891 | 0.1154 | 0.1215 | 0.0979 | 0.1316 | 0.3077 | 3.4103 | 0.1051 | 0.7105 | 0.7922 | 0.8976 |
| bookmarks10% | 0.1868 | 0.0103 | 0.2174 | 0.2392 | 0.0685 | 0.2149 | 0.6230 | 61.0399 | 0.3139 | 0.3849 | 0.8834 | 0.9149 |
| CAL500 | 0.0000 | 0.1492 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2745 | 139.8627 | 0.2066 | 0.4653 | 0.5297 | 0.7971 |
| corel16k001 | 0.0058 | 0.0191 | 0.0254 | 0.0362 | 0.0231 | 0.0483 | 0.7734 | 63.9208 | 0.3259 | 0.2531 | 0.8483 | 0.8871 |
| Corel5k | 0.0040 | 0.0104 | 0.0630 | 0.0994 | 0.0262 | 0.1207 | 0.7960 | 151.1980 | 0.5663 | 0.1959 | 0.6421 | 0.9648 |
| delicious | 0.0000 | 0.0836 | 0.0430 | 0.0856 | 0.0430 | 0.0836 | 0.9443 | 934.2527 | 0.3371 | 0.0657 | 0.6583 | 0.6796 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 1.5167 | 0.1226 | 0.8406 | 0.8691 | 0.8894 |
| enron | 0.1287 | 0.0549 | 0.2802 | 0.3726 | 0.0974 | 0.3549 | 0.2222 | 12.4620 | 0.0901 | 0.6975 | 0.6790 | 0.9188 |
| EukaryoteGO | 0.6907 | 0.0198 | 0.7436 | 0.7700 | 0.6624 | 0.7988 | 0.1817 | 0.4330 | 0.0170 | 0.8982 | 0.9921 | 0.9944 |
| EukaryotePseAAC | 0.0168 | 0.0526 | 0.0166 | 0.0167 | 0.0080 | 0.0284 | 0.5184 | 2.2527 | 0.0948 | 0.6377 | 0.7772 | 0.9201 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.5000 | 0.1892 | 0.8386 | 0.7317 | 0.8263 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 2.8049 | 0.1132 | 0.7841 | 0.6676 | 0.8246 |
| genbase | 0.9254 | 0.0028 | 0.9652 | 0.9825 | 0.6173 | 0.9697 | 0.0448 | 0.2537 | 0.0017 | 0.9776 | 0.6667 | 0.9994 |
| GnegativeGO | 0.8929 | 0.0170 | 0.9071 | 0.9142 | 0.6730 | 0.9314 | 0.0286 | 0.1000 | 0.0112 | 0.9827 | 0.8737 | 0.9991 |
| GnegativePseAAC | 0.3643 | 0.0866 | 0.3643 | 0.3643 | 0.1445 | 0.5126 | 0.2643 | 0.6786 | 0.0899 | 0.8325 | 0.7764 | 0.9466 |
| GpositiveGO | 0.8654 | 0.0529 | 0.8654 | 0.8654 | 0.9120 | 0.8911 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9962 | 0.9961 |
| GpositivePseAAC | 0.4423 | 0.1587 | 0.4423 | 0.4423 | 0.3715 | 0.5823 | 0.4423 | 0.8077 | 0.2949 | 0.7260 | 0.7983 | 0.8288 |
| HumanGO | 0.5884 | 0.0436 | 0.6308 | 0.6525 | 0.5273 | 0.6916 | 0.2154 | 0.6334 | 0.0349 | 0.8727 | 0.9760 | 0.9849 |
| HumanPseAAC | 0.0161 | 0.0834 | 0.0161 | 0.0161 | 0.0091 | 0.0268 | 0.5691 | 2.1672 | 0.1401 | 0.6096 | 0.7655 | 0.8653 |
| Image | 0.2300 | 0.1860 | 0.2500 | 0.2596 | 0.3441 | 0.3673 | 0.2950 | 0.8550 | 0.1571 | 0.8101 | 0.8687 | 0.8755 |
| IMDB-ECC-F10% | 0.0031 | 0.0675 | 0.0040 | 0.0046 | 0.0028 | 0.0055 | 0.6373 | 7.3459 | 0.1760 | 0.4676 | 0.6393 | 0.8076 |
| IMDB-F10% | 0.0017 | 0.0724 | 0.0023 | 0.0027 | 0.0016 | 0.0033 | 0.6073 | 8.0539 | 0.1856 | 0.4787 | 0.6166 | 0.8041 |
| LLOG-F | 0.0574 | 0.0170 | 0.0738 | 0.0811 | 0.0184 | 0.1236 | 0.6066 | 12.1148 | 0.1726 | 0.4738 | 0.4927 | 0.8957 |
| mediamill10% | 0.0451 | 0.0347 | 0.2739 | 0.3932 | 0.0320 | 0.3776 | 0.1900 | 20.6817 | 0.0682 | 0.7162 | 0.6796 | 0.9467 |
| medical | 0.6531 | 0.0111 | 0.7483 | 0.7976 | 0.3514 | 0.8000 | 0.1327 | 1.5816 | 0.0408 | 0.8981 | 0.5504 | 0.9950 |
| Music | 0.0000 | 0.3250 | 0.0083 | 0.0111 | 0.0159 | 0.0168 | 0.2000 | 1.8500 | 0.1437 | 0.8258 | 0.8648 | 0.8720 |
| NUS-WIDE-bow10% | 0.0019 | 0.0258 | 0.0086 | 0.0127 | 0.0023 | 0.0254 | 0.5158 | 17.6539 | 0.1336 | 0.4938 | 0.6500 | 0.8833 |
| NUS-WIDE-cVLADplus10% | 0.0123 | 0.0259 | 0.0225 | 0.0293 | 0.0040 | 0.0454 | 0.5236 | 16.2350 | 0.1206 | 0.5152 | 0.6790 | 0.8852 |
| OHSUMED-F | 0.1421 | 0.0623 | 0.2029 | 0.2321 | 0.1533 | 0.2806 | 0.3070 | 3.1650 | 0.0783 | 0.7424 | 0.8741 | 0.9107 |
| PlantGO | 0.6146 | 0.0477 | 0.6458 | 0.6611 | 0.5998 | 0.7059 | 0.1979 | 0.5312 | 0.0422 | 0.8803 | 0.9765 | 0.9806 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6122 | 2.0714 | 0.1737 | 0.5881 | 0.7756 | 0.8471 |
| rcv1subset1 | 0.0283 | 0.0286 | 0.1103 | 0.1507 | 0.0679 | 0.1791 | 0.4250 | 13.6150 | 0.0697 | 0.6126 | 0.8811 | 0.9583 |
| REUTERS-K500-EX2 | 0.3196 | 0.0111 | 0.3802 | 0.4141 | 0.2099 | 0.4634 | 0.4553 | 13.3574 | 0.1901 | 0.6129 | 0.7499 | 0.9714 |
| scene | 0.2780 | 0.1342 | 0.2905 | 0.2965 | 0.4368 | 0.4294 | 0.2241 | 0.4440 | 0.0682 | 0.8704 | 0.9478 | 0.9493 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 18.7465 | 0.1267 | 0.8293 | 0.5847 | 0.8005 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0845 | 18.9085 | 0.1260 | 0.8447 | 0.5718 | 0.8007 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1127 | 18.8310 | 0.1228 | 0.8502 | 0.5705 | 0.7966 |
| SLASHDOT-F | 0.3280 | 0.0422 | 0.3717 | 0.3939 | 0.2646 | 0.4753 | 0.3968 | 2.7434 | 0.1213 | 0.6905 | 0.6703 | 0.9198 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6000 | 0.8000 | 0.4000 | 0.6667 | 0.3889 | 0.7000 |
| Stackex_chemistry | 0.0288 | 0.0123 | 0.0910 | 0.1256 | 0.0640 | 0.1562 | 0.6988 | 56.0029 | 0.3316 | 0.3247 | 0.8552 | 0.9455 |
| Stackex_chess | 0.0298 | 0.0109 | 0.1565 | 0.2349 | 0.0677 | 0.2697 | 0.5595 | 80.4583 | 0.3624 | 0.3678 | 0.5194 | 0.9655 |
| Stackex_coffee | 0.0435 | 0.0205 | 0.1123 | 0.1702 | 0.0430 | 0.1944 | 0.7826 | 48.4783 | 0.3550 | 0.3304 | 0.2453 | 0.9312 |
| Stackex_cooking | 0.0551 | 0.0060 | 0.2103 | 0.3005 | 0.1345 | 0.3163 | 0.6116 | 160.5391 | 0.4502 | 0.3443 | 0.9019 | 0.9806 |
| Stackex_philosophy | 0.0553 | 0.0097 | 0.1556 | 0.2132 | 0.0670 | 0.2395 | 0.6332 | 80.9397 | 0.3626 | 0.3640 | 0.7083 | 0.9619 |
| tmc2007-500 | 0.0768 | 0.0901 | 0.1216 | 0.1457 | 0.1058 | 0.1640 | 0.2519 | 2.5518 | 0.0455 | 0.8090 | 0.9275 | 0.9456 |
| tox21_CDK_ECFP4 | 0.0205 | 0.1772 | 0.0234 | 0.0252 | 0.0337 | 0.0251 | 0.4555 | 3.9144 | 0.2004 | 0.6426 | 0.7185 | 0.7853 |
| tox21_RDKit_desc | 0.0171 | 0.1769 | 0.0190 | 0.0212 | 0.0240 | 0.0221 | 0.4349 | 3.7158 | 0.1810 | 0.6576 | 0.7401 | 0.7986 |
| VirusGO | 0.7619 | 0.0794 | 0.7619 | 0.7619 | 0.6029 | 0.7619 | 0.0476 | 0.3333 | 0.0476 | 0.9643 | 0.8037 | 0.9865 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 0.7619 | 0.1226 | 0.7968 | 0.6044 | 0.8915 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2170 | 8.6038 | 0.2275 | 0.7346 | 0.7210 | 0.7548 |
| Yahoo_Arts | 0.1428 | 0.0564 | 0.1794 | 0.1983 | 0.1523 | 0.2565 | 0.3553 | 3.7553 | 0.0844 | 0.7113 | 0.7902 | 0.9030 |
| Yahoo_Business | 0.5051 | 0.0279 | 0.6447 | 0.7094 | 0.1377 | 0.6635 | 0.0889 | 1.6917 | 0.0275 | 0.9221 | 0.7716 | 0.9558 |
| Yahoo_Computers | 0.2775 | 0.0494 | 0.3591 | 0.4459 | 0.0930 | 0.4113 | 0.4733 | 7.7037 | 0.1702 | 0.5944 | 0.5770 | 0.6939 |
| Yahoo_Education | 0.1284 | 0.0382 | 0.1503 | 0.1584 | 0.1173 | 0.2502 | 0.3931 | 2.6411 | 0.0600 | 0.7064 | 0.7848 | 0.9357 |
| Yahoo_Entertainment | 0.2632 | 0.0538 | 0.2860 | 0.2952 | 0.1681 | 0.3510 | 0.2854 | 1.9213 | 0.0573 | 0.7727 | 0.8685 | 0.9446 |
| Yahoo_Health | 0.3424 | 0.0333 | 0.4148 | 0.4543 | 0.2193 | 0.5301 | 0.2070 | 2.3538 | 0.0378 | 0.8340 | 0.7505 | 0.9744 |
| Yahoo_Recreation | 0.2578 | 0.0498 | 0.2863 | 0.2975 | 0.2425 | 0.3736 | 0.2934 | 2.4332 | 0.0731 | 0.7582 | 0.8619 | 0.9268 |
| Yahoo_Reference | 0.0321 | 0.0667 | 0.2445 | 0.3408 | 0.1133 | 0.3372 | 0.9503 | 5.1949 | 0.1331 | 0.3743 | 0.4263 | 0.6741 |
| Yahoo_Science | 0.1228 | 0.0363 | 0.1594 | 0.1823 | 0.0612 | 0.2295 | 0.5786 | 7.2351 | 0.1385 | 0.5387 | 0.6871 | 0.7501 |
| Yahoo_Social | 0.2399 | 0.0417 | 0.3684 | 0.4322 | 0.0626 | 0.4214 | 0.4750 | 7.6018 | 0.1548 | 0.6059 | 0.5184 | 0.7051 |
| Yahoo_Society | 0.1495 | 0.0668 | 0.2054 | 0.2461 | 0.0516 | 0.2567 | 0.5514 | 9.2511 | 0.2458 | 0.5105 | 0.5440 | 0.7083 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1942 | 6.0661 | 0.1498 | 0.7834 | 0.7444 | 0.8571 |
| Yelp | 0.2672 | 0.3001 | 0.2826 | 0.2915 | 0.2870 | 0.2864 | 0.0768 | 1.0997 | 0.0662 | 0.9356 | 0.8916 | 0.9298 |

Table 123: Detailed results for MASSIVE (100) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0083 | 0.0508 | 0.0083 | 0.0083 | 0.0148 | 0.0161 | 0.4476 | 2.1618 | 0.1112 | 0.6765 | 0.9349 | 0.9044 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7500 | 2.4167 | 0.4207 | 0.4633 | 0.5907 | 0.5801 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6452 | 1.8065 | 0.3073 | 0.5758 | 0.5991 | 0.7041 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5882 | 2.0000 | 0.3882 | 0.5725 | 0.4052 | 0.6131 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8333 | 2.2000 | 0.4325 | 0.4414 | 0.5695 | 0.5382 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.4444 | 0.0750 | 0.8820 | 0.6477 | 0.7860 |
| bibtex | 0.0027 | 0.0141 | 0.0518 | 0.0776 | 0.0069 | 0.1210 | 0.4878 | 52.3973 | 0.2894 | 0.4065 | 0.8693 | 0.8890 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3846 | 4.7692 | 0.1670 | 0.6390 | 0.7356 | 0.8440 |
| bookmarks10% | 0.1859 | 0.0096 | 0.2164 | 0.2354 | 0.0644 | 0.2198 | 0.7060 | 52.5591 | 0.1633 | 0.3437 | 0.7416 | 0.8061 |
| CAL500 | 0.0000 | 0.1486 | 0.0032 | 0.0061 | 0.0012 | 0.0060 | 0.3922 | 140.2941 | 0.2028 | 0.4443 | 0.5189 | 0.8006 |
| corel16k001 | 0.0007 | 0.0232 | 0.0270 | 0.0430 | 0.0107 | 0.0508 | 0.8490 | 82.7811 | 0.2856 | 0.1940 | 0.6937 | 0.7002 |
| Corel5k | 0.0000 | 0.0136 | 0.1616 | 0.2560 | 0.0263 | 0.2605 | 0.7536 | 110.0204 | 0.1268 | 0.2232 | 0.4779 | 0.8624 |
| delicious | 0.0130 | 0.4992 | 0.0146 | 0.0531 | 0.0410 | 0.0525 | 0.8973 | 917.7429 | 0.5129 | 0.0627 | 0.8401 | 0.6940 |
| emotions | 0.0000 | 0.3083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.7000 | 0.1544 | 0.8094 | 0.8563 | 0.8731 |
| enron | 0.0877 | 0.0618 | 0.1463 | 0.1937 | 0.0195 | 0.1515 | 0.2281 | 13.0643 | 0.0851 | 0.6815 | 0.6282 | 0.9056 |
| EukaryoteGO | 0.6005 | 0.0235 | 0.6392 | 0.6585 | 0.2545 | 0.7410 | 0.2126 | 0.5348 | 0.0171 | 0.8773 | 0.9913 | 0.9928 |
| EukaryotePseAAC | 0.0000 | 0.0528 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6075 | 2.8597 | 0.1202 | 0.5691 | 0.6557 | 0.8857 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1500 | 3.4500 | 0.1850 | 0.8451 | 0.6998 | 0.8152 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 2.8537 | 0.1177 | 0.7897 | 0.6778 | 0.8160 |
| genbase | 0.8060 | 0.0094 | 0.8582 | 0.8905 | 0.3441 | 0.8828 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.8786 | 0.0196 | 0.9000 | 0.9106 | 0.5799 | 0.9214 | 0.0357 | 0.1000 | 0.0087 | 0.9804 | 0.8699 | 0.9967 |
| GnegativePseAAC | 0.2786 | 0.0955 | 0.2786 | 0.2786 | 0.1026 | 0.4216 | 0.3071 | 0.8571 | 0.1141 | 0.7974 | 0.7846 | 0.9366 |
| GpositiveGO | 0.8462 | 0.0529 | 0.8558 | 0.8606 | 0.6673 | 0.8911 | 0.0769 | 0.1154 | 0.0304 | 0.9583 | 0.9953 | 0.9945 |
| GpositivePseAAC | 0.2308 | 0.2019 | 0.2308 | 0.2308 | 0.2312 | 0.3636 | 0.3462 | 0.5769 | 0.1987 | 0.7933 | 0.8159 | 0.8522 |
| HumanGO | 0.4695 | 0.0514 | 0.4882 | 0.4979 | 0.2966 | 0.5852 | 0.2476 | 0.6656 | 0.0335 | 0.8558 | 0.9738 | 0.9769 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6559 | 2.4502 | 0.1655 | 0.5489 | 0.6894 | 0.8388 |
| Image | 0.0450 | 0.2290 | 0.0475 | 0.0487 | 0.0734 | 0.0803 | 0.3300 | 1.0000 | 0.1917 | 0.7795 | 0.8403 | 0.8324 |
| IMDB-ECC-F10% | 0.0314 | 0.0697 | 0.0508 | 0.0625 | 0.0100 | 0.0755 | 0.6572 | 7.3103 | 0.1755 | 0.4635 | 0.5599 | 0.8070 |
| IMDB-F10% | 0.0083 | 0.0733 | 0.0150 | 0.0187 | 0.0038 | 0.0237 | 0.6172 | 7.6968 | 0.1767 | 0.4765 | 0.5653 | 0.8090 |
| LLOG-F | 0.0082 | 0.0179 | 0.0082 | 0.0082 | 0.0013 | 0.0120 | 0.6311 | 10.8689 | 0.1157 | 0.4355 | 0.4832 | 0.8871 |
| mediamill10% | 0.0451 | 0.0346 | 0.2536 | 0.3608 | 0.0210 | 0.3542 | 0.1235 | 6.8812 | 0.0142 | 0.8227 | 0.8057 | 0.9840 |
| medical | 0.5510 | 0.0136 | 0.6293 | 0.6677 | 0.1835 | 0.7297 | 0.1429 | 1.8469 | 0.0348 | 0.8913 | 0.5409 | 0.9888 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2833 | 1.8667 | 0.1534 | 0.7976 | 0.8291 | 0.8454 |
| NUS-WIDE-bow10% | 0.0000 | 0.0263 | 0.0006 | 0.0009 | 0.0002 | 0.0018 | 0.5695 | 18.9377 | 0.1391 | 0.4724 | 0.5996 | 0.8610 |
| NUS-WIDE-cVLADplus10% | 0.0392 | 0.0353 | 0.1917 | 0.2945 | 0.0394 | 0.2717 | 0.6960 | 28.3760 | 0.2051 | 0.3628 | 0.5548 | 0.7626 |
| OHSUMED-F | 0.0014 | 0.0729 | 0.0030 | 0.0038 | 0.0017 | 0.0060 | 0.6468 | 5.2699 | 0.1570 | 0.5129 | 0.7972 | 0.8406 |
| PlantGO | 0.4062 | 0.0625 | 0.4201 | 0.4286 | 0.2422 | 0.5385 | 0.2188 | 0.3958 | 0.0253 | 0.8823 | 0.9749 | 0.9806 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6531 | 2.5102 | 0.2128 | 0.5421 | 0.7372 | 0.8091 |
| rcv1subset1 | 0.0000 | 0.0305 | 0.0053 | 0.0080 | 0.0022 | 0.0107 | 0.5433 | 21.4050 | 0.0975 | 0.4834 | 0.7989 | 0.9079 |
| REUTERS-K500-EX2 | 0.0464 | 0.0137 | 0.0464 | 0.0464 | 0.0154 | 0.0618 | 0.5361 | 11.7938 | 0.1352 | 0.5604 | 0.7117 | 0.9396 |
| scene | 0.0290 | 0.1757 | 0.0332 | 0.0351 | 0.0751 | 0.0662 | 0.2739 | 0.5353 | 0.0878 | 0.8401 | 0.9171 | 0.9276 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1197 | 18.9225 | 0.1208 | 0.8440 | 0.5482 | 0.8003 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.0986 | 0.1151 | 0.8457 | 0.5785 | 0.8118 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.3380 | 0.1356 | 0.8301 | 0.5592 | 0.7942 |
| SLASHDOT-F | 0.1376 | 0.0506 | 0.1429 | 0.1455 | 0.0496 | 0.2101 | 0.6243 | 3.6085 | 0.1485 | 0.5138 | 0.6405 | 0.8539 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.2000 | 0.2000 | 0.1333 | 0.2857 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0058 | 0.0121 | 0.0105 | 0.0131 | 0.0011 | 0.0161 | 0.7896 | 51.9179 | 0.2762 | 0.2865 | 0.8164 | 0.9161 |
| Stackex_chess | 0.0060 | 0.0103 | 0.0496 | 0.0700 | 0.0064 | 0.0970 | 0.5893 | 71.0952 | 0.2893 | 0.3701 | 0.4995 | 0.9438 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0145 | 0.0217 | 0.0081 | 0.0370 | 0.6087 | 46.6957 | 0.2718 | 0.4068 | 0.2449 | 0.9258 |
| Stackex_cooking | 0.0282 | 0.0069 | 0.0954 | 0.1327 | 0.0272 | 0.1448 | 0.8357 | 124.5014 | 0.1752 | 0.2036 | 0.7286 | 0.8055 |
| Stackex_philosophy | 0.0352 | 0.0095 | 0.0608 | 0.0750 | 0.0037 | 0.0834 | 0.5754 | 73.4422 | 0.2804 | 0.3919 | 0.6818 | 0.9394 |
| tmc2007-500 | 0.0080 | 0.0960 | 0.0155 | 0.0194 | 0.0041 | 0.0239 | 0.3570 | 3.4469 | 0.0767 | 0.7090 | 0.8961 | 0.9220 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5548 | 4.2911 | 0.2394 | 0.5672 | 0.6582 | 0.7281 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4760 | 4.0171 | 0.2151 | 0.6181 | 0.6904 | 0.7539 |
| VirusGO | 0.7143 | 0.0873 | 0.7143 | 0.7143 | 0.5926 | 0.7317 | 0.0476 | 0.3810 | 0.0536 | 0.9563 | 0.8065 | 0.9770 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.7143 | 0.1167 | 0.8190 | 0.5946 | 0.8890 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2925 | 9.1038 | 0.2640 | 0.6935 | 0.6866 | 0.7258 |
| Yahoo_Arts | 0.0000 | 0.0649 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6368 | 5.4259 | 0.1459 | 0.5047 | 0.6981 | 0.8298 |
| Yahoo_Business | 0.4679 | 0.0305 | 0.6089 | 0.6883 | 0.0316 | 0.6351 | 0.1319 | 2.2603 | 0.0397 | 0.8776 | 0.6908 | 0.9523 |
| Yahoo_Computers | 0.2000 | 0.0409 | 0.2387 | 0.2628 | 0.0197 | 0.3025 | 0.4586 | 4.0651 | 0.0834 | 0.6300 | 0.6758 | 0.8905 |
| Yahoo_Education | 0.0150 | 0.0433 | 0.0158 | 0.0162 | 0.0030 | 0.0227 | 0.6475 | 3.8487 | 0.0947 | 0.5359 | 0.6726 | 0.9058 |
| Yahoo_Entertainment | 0.0746 | 0.0642 | 0.0793 | 0.0820 | 0.0465 | 0.1119 | 0.5695 | 3.1351 | 0.1141 | 0.5913 | 0.7960 | 0.8705 |
| Yahoo_Health | 0.1640 | 0.0474 | 0.1966 | 0.2170 | 0.0213 | 0.2429 | 0.4039 | 3.1965 | 0.0616 | 0.6874 | 0.6883 | 0.9340 |
| Yahoo_Recreation | 0.0000 | 0.0636 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6547 | 4.0998 | 0.1524 | 0.5129 | 0.7771 | 0.8235 |
| Yahoo_Reference | 0.2354 | 0.0308 | 0.2530 | 0.2619 | 0.0187 | 0.3485 | 0.4770 | 2.9191 | 0.0725 | 0.6376 | 0.6498 | 0.9205 |
| Yahoo_Science | 0.0000 | 0.0363 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7107 | 6.2628 | 0.1221 | 0.4622 | 0.7488 | 0.8708 |
| Yahoo_Social | 0.2698 | 0.0270 | 0.2866 | 0.2964 | 0.0310 | 0.3687 | 0.3969 | 3.3771 | 0.0701 | 0.7099 | 0.7311 | 0.9261 |
| Yahoo_Society | 0.0882 | 0.0600 | 0.1152 | 0.1309 | 0.0149 | 0.1575 | 0.4821 | 5.2066 | 0.1277 | 0.5822 | 0.6450 | 0.8415 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2603 | 6.2438 | 0.1712 | 0.7439 | 0.7114 | 0.8341 |
| Yelp | 0.0090 | 0.3571 | 0.0128 | 0.0146 | 0.0103 | 0.0186 | 0.3260 | 1.6939 | 0.2146 | 0.7715 | 0.6593 | 0.7690 |

Table 124: Detailed results for MASSIVE (1K) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.2386 | 0.0405 | 0.2404 | 0.2413 | 0.3308 | 0.3742 | 0.4352 | 2.3408 | 0.1209 | 0.6775 | 0.9280 | 0.8996 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6944 | 2.3889 | 0.4262 | 0.5093 | 0.5938 | 0.5917 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6452 | 2.1290 | 0.3685 | 0.5516 | 0.4750 | 0.6348 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.0588 | 0.3912 | 0.4431 | 0.4237 | 0.6098 |
| 3s-reuters1000 | 0.0000 | 0.1833 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.3333 | 0.4592 | 0.4186 | 0.5516 | 0.5300 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.7222 | 0.1139 | 0.8288 | 0.6665 | 0.7883 |
| bibtex | 0.1054 | 0.0129 | 0.1982 | 0.2575 | 0.0835 | 0.2709 | 0.4541 | 29.5338 | 0.1046 | 0.4649 | 0.8778 | 0.8912 |
| birds | 0.1026 | 0.0891 | 0.1154 | 0.1215 | 0.0979 | 0.1316 | 0.3077 | 3.7179 | 0.1181 | 0.6981 | 0.7806 | 0.8927 |
| bookmarks10% | 0.1617 | 0.0094 | 0.1726 | 0.1779 | 0.0264 | 0.1721 | 0.7232 | 59.0774 | 0.2027 | 0.3105 | 0.7238 | 0.7959 |
| CAL500 | 0.0000 | 0.1485 | 0.0038 | 0.0074 | 0.0015 | 0.0075 | 0.2745 | 139.5882 | 0.2084 | 0.4550 | 0.5137 | 0.7966 |
| corel16k001 | 0.0007 | 0.0226 | 0.0273 | 0.0439 | 0.0107 | 0.0505 | 0.8685 | 81.6519 | 0.2817 | 0.1937 | 0.6994 | 0.6932 |
| Corel5k | 0.0000 | 0.0231 | 0.1065 | 0.1819 | 0.0120 | 0.1799 | 0.9320 | 122.9740 | 0.1594 | 0.1431 | 0.4439 | 0.8593 |
| delicious | 0.0127 | 0.4983 | 0.0144 | 0.0530 | 0.0423 | 0.0530 | 0.8913 | 905.1017 | 0.5175 | 0.0630 | 0.8550 | 0.6842 |
| emotions | 0.0000 | 0.3028 | 0.0083 | 0.0111 | 0.0119 | 0.0180 | 0.2167 | 1.5333 | 0.1199 | 0.8420 | 0.8690 | 0.8930 |
| enron | 0.0994 | 0.0533 | 0.3369 | 0.4672 | 0.0909 | 0.4229 | 0.3099 | 12.7251 | 0.0825 | 0.6679 | 0.6084 | 0.9056 |
| EukaryoteGO | 0.6688 | 0.0198 | 0.7262 | 0.7554 | 0.5099 | 0.7974 | 0.1675 | 0.3969 | 0.0113 | 0.9072 | 0.9932 | 0.9949 |
| EukaryotePseAAC | 0.0064 | 0.0525 | 0.0064 | 0.0064 | 0.0024 | 0.0110 | 0.5689 | 2.4981 | 0.1040 | 0.6063 | 0.7340 | 0.9033 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.5000 | 0.1892 | 0.8399 | 0.7283 | 0.8271 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2927 | 2.6585 | 0.1059 | 0.7659 | 0.6812 | 0.8329 |
| genbase | 0.9403 | 0.0022 | 0.9701 | 0.9850 | 0.6173 | 0.9756 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9996 |
| GnegativeGO | 0.8929 | 0.0179 | 0.9036 | 0.9089 | 0.6713 | 0.9275 | 0.0143 | 0.0786 | 0.0032 | 0.9911 | 0.8676 | 0.9970 |
| GnegativePseAAC | 0.3500 | 0.0875 | 0.3500 | 0.3500 | 0.1369 | 0.5000 | 0.2571 | 0.6286 | 0.0819 | 0.8377 | 0.8084 | 0.9545 |
| GpositiveGO | 0.8654 | 0.0529 | 0.8654 | 0.8654 | 0.9120 | 0.8911 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9951 | 0.9959 |
| GpositivePseAAC | 0.4423 | 0.1587 | 0.4423 | 0.4423 | 0.3965 | 0.5823 | 0.4423 | 0.7500 | 0.2692 | 0.7340 | 0.8333 | 0.8569 |
| HumanGO | 0.6109 | 0.0388 | 0.6581 | 0.6827 | 0.4561 | 0.7330 | 0.1897 | 0.6238 | 0.0318 | 0.8834 | 0.9732 | 0.9807 |
| HumanPseAAC | 0.0032 | 0.0843 | 0.0032 | 0.0032 | 0.0015 | 0.0054 | 0.5659 | 2.2122 | 0.1453 | 0.6086 | 0.7153 | 0.8600 |
| Image | 0.1950 | 0.1970 | 0.2025 | 0.2062 | 0.2678 | 0.2989 | 0.2050 | 0.7350 | 0.1237 | 0.8577 | 0.8795 | 0.8833 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6405 | 7.4832 | 0.1794 | 0.4683 | 0.5781 | 0.8096 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6098 | 7.7150 | 0.1769 | 0.4854 | 0.6112 | 0.8133 |
| LLOG-F | 0.0246 | 0.0175 | 0.0410 | 0.0488 | 0.0145 | 0.0805 | 0.6885 | 10.5656 | 0.1153 | 0.4369 | 0.4830 | 0.8911 |
| mediamill10% | 0.5653 | 0.0102 | 0.8258 | 0.9007 | 0.2756 | 0.8688 | 0.0000 | 3.4703 | 0.0001 | 0.9991 | 0.8209 | 0.9989 |
| medical | 0.6429 | 0.0107 | 0.7483 | 0.7993 | 0.3511 | 0.8050 | 0.1327 | 2.2041 | 0.0323 | 0.8765 | 0.5318 | 0.9723 |
| Music | 0.0000 | 0.3250 | 0.0083 | 0.0111 | 0.0159 | 0.0168 | 0.2333 | 1.8500 | 0.1483 | 0.8242 | 0.8671 | 0.8722 |
| NUS-WIDE-bow10% | 0.0925 | 0.0340 | 0.1483 | 0.1950 | 0.0166 | 0.1632 | 0.8673 | 30.7495 | 0.2646 | 0.2055 | 0.5144 | 0.6966 |
| NUS-WIDE-cVLADplus10% | 0.0014 | 0.0261 | 0.0065 | 0.0094 | 0.0016 | 0.0177 | 0.5576 | 16.4510 | 0.1213 | 0.4956 | 0.6482 | 0.8830 |
| OHSUMED-F | 0.0955 | 0.0655 | 0.1388 | 0.1615 | 0.0892 | 0.2042 | 0.4401 | 4.7258 | 0.1338 | 0.6263 | 0.8245 | 0.8654 |
| PlantGO | 0.6146 | 0.0495 | 0.6354 | 0.6458 | 0.6125 | 0.7016 | 0.2292 | 0.4896 | 0.0360 | 0.8669 | 0.9708 | 0.9767 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6020 | 2.0816 | 0.1751 | 0.5868 | 0.7967 | 0.8459 |
| rcv1subset1 | 0.0117 | 0.0298 | 0.1065 | 0.1592 | 0.0306 | 0.1755 | 0.5633 | 21.4450 | 0.0952 | 0.4397 | 0.8006 | 0.8900 |
| REUTERS-K500-EX2 | 0.2113 | 0.0123 | 0.2523 | 0.2754 | 0.1047 | 0.3229 | 0.5704 | 9.9656 | 0.0739 | 0.5100 | 0.6898 | 0.9205 |
| scene | 0.2033 | 0.1459 | 0.2116 | 0.2157 | 0.3420 | 0.3344 | 0.1867 | 0.3776 | 0.0554 | 0.8926 | 0.9481 | 0.9575 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 18.8803 | 0.1374 | 0.8231 | 0.5761 | 0.7902 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1690 | 19.1549 | 0.1312 | 0.8188 | 0.5726 | 0.7947 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0845 | 19.1549 | 0.1303 | 0.8356 | 0.5643 | 0.7985 |
| SLASHDOT-F | 0.2249 | 0.0462 | 0.2482 | 0.2598 | 0.1533 | 0.3514 | 0.5053 | 3.1085 | 0.1231 | 0.6009 | 0.6247 | 0.8761 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.2000 | 0.2000 | 0.1333 | 0.2857 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0086 | 0.0211 | 0.1198 | 0.2003 | 0.0335 | 0.1981 | 0.8573 | 43.1369 | 0.1541 | 0.1981 | 0.6505 | 0.8387 |
| Stackex_chess | 0.0000 | 0.0165 | 0.1187 | 0.2061 | 0.0295 | 0.1928 | 0.7440 | 62.7917 | 0.1609 | 0.2693 | 0.4392 | 0.8698 |
| Stackex_coffee | 0.0000 | 0.0230 | 0.1790 | 0.2752 | 0.0600 | 0.2857 | 0.7391 | 52.4348 | 0.2849 | 0.3309 | 0.2451 | 0.9337 |
| Stackex_cooking | 0.0281 | 0.0068 | 0.0970 | 0.1314 | 0.0276 | 0.1467 | 0.8342 | 123.2339 | 0.1696 | 0.2079 | 0.7348 | 0.8165 |
| Stackex_philosophy | 0.0050 | 0.0186 | 0.1219 | 0.2127 | 0.0369 | 0.1973 | 0.8216 | 54.6533 | 0.1384 | 0.2287 | 0.5562 | 0.8678 |
| tmc2007-500 | 0.0752 | 0.0884 | 0.1399 | 0.1714 | 0.0625 | 0.1965 | 0.3542 | 3.2745 | 0.0697 | 0.7281 | 0.9070 | 0.9288 |
| tox21_CDK_ECFP4 | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0060 | 0.0032 | 0.5068 | 4.1164 | 0.2180 | 0.6037 | 0.6902 | 0.7612 |
| tox21_RDKit_desc | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0020 | 0.0032 | 0.4110 | 3.8767 | 0.1930 | 0.6523 | 0.7261 | 0.7870 |
| VirusGO | 0.7619 | 0.0794 | 0.7619 | 0.7619 | 0.6029 | 0.7619 | 0.0476 | 0.3333 | 0.0476 | 0.9643 | 0.8037 | 0.9865 |
| VirusPseAAC | 0.0476 | 0.1746 | 0.0476 | 0.0476 | 0.0303 | 0.0833 | 0.2857 | 0.7143 | 0.1131 | 0.8151 | 0.6145 | 0.8886 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2264 | 8.6226 | 0.2350 | 0.7283 | 0.7061 | 0.7451 |
| Yahoo_Arts | 0.0614 | 0.0613 | 0.0775 | 0.0874 | 0.0426 | 0.1156 | 0.5407 | 4.8852 | 0.1233 | 0.5787 | 0.7546 | 0.8573 |
| Yahoo_Business | 0.3449 | 0.0334 | 0.5746 | 0.6873 | 0.0603 | 0.6723 | 0.4617 | 2.3601 | 0.0437 | 0.7217 | 0.7046 | 0.9450 |
| Yahoo_Computers | 0.2843 | 0.0387 | 0.3311 | 0.3611 | 0.0418 | 0.3847 | 0.4104 | 3.7719 | 0.0762 | 0.6644 | 0.6995 | 0.8946 |
| Yahoo_Education | 0.0923 | 0.0396 | 0.1044 | 0.1112 | 0.0534 | 0.1785 | 0.5528 | 3.5536 | 0.0806 | 0.5826 | 0.6691 | 0.9145 |
| Yahoo_Entertainment | 0.1846 | 0.0587 | 0.1975 | 0.2049 | 0.0919 | 0.2566 | 0.3928 | 2.7903 | 0.0928 | 0.6810 | 0.7930 | 0.8968 |
| Yahoo_Health | 0.3626 | 0.0369 | 0.4469 | 0.4974 | 0.1453 | 0.5194 | 0.3094 | 2.9425 | 0.0527 | 0.7424 | 0.7213 | 0.9400 |
| Yahoo_Recreation | 0.1824 | 0.0545 | 0.1959 | 0.2036 | 0.1237 | 0.2612 | 0.5019 | 3.4645 | 0.1216 | 0.6185 | 0.8420 | 0.8628 |
| Yahoo_Reference | 0.0854 | 0.0385 | 0.1099 | 0.1236 | 0.0435 | 0.1799 | 0.4869 | 7.1600 | 0.1820 | 0.5677 | 0.5540 | 0.7857 |
| Yahoo_Science | 0.1455 | 0.0370 | 0.1841 | 0.2017 | 0.0608 | 0.2501 | 0.6348 | 7.4680 | 0.1406 | 0.4894 | 0.6950 | 0.8454 |
| Yahoo_Social | 0.0742 | 0.0512 | 0.1030 | 0.1187 | 0.0495 | 0.1256 | 0.7741 | 7.9203 | 0.1665 | 0.3966 | 0.5407 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0653 | 0.0181 | 0.0219 | 0.0147 | 0.0306 | 0.8109 | 16.0427 | 0.5072 | 0.2531 | 0.5952 | 0.5025 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2397 | 6.0702 | 0.1544 | 0.7675 | 0.7599 | 0.8541 |
| Yelp | 0.0020 | 0.3589 | 0.0020 | 0.0020 | 0.0019 | 0.0022 | 0.2582 | 1.4526 | 0.1557 | 0.8273 | 0.7627 | 0.8297 |

Table 125: Detailed results for MASSIVE (5K) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3382 | 0.0364 | 0.3423 | 0.3444 | 0.4455 | 0.4885 | 0.4466 | 2.4424 | 0.1261 | 0.6715 | 0.9278 | 0.8969 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6944 | 2.3889 | 0.4262 | 0.5093 | 0.5938 | 0.5926 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6452 | 2.1290 | 0.3685 | 0.5559 | 0.4702 | 0.6488 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.0000 | 0.3794 | 0.4402 | 0.4415 | 0.6124 |
| 3s-reuters1000 | 0.0000 | 0.1833 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.6000 | 0.5100 | 0.4067 | 0.5319 | 0.5032 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.9444 | 0.1278 | 0.8127 | 0.6613 | 0.7798 |
| bibtex | 0.1324 | 0.0143 | 0.2991 | 0.3982 | 0.2369 | 0.3913 | 0.5986 | 30.3797 | 0.1089 | 0.4187 | 0.8755 | 0.8923 |
| birds | 0.1026 | 0.0877 | 0.1282 | 0.1399 | 0.1044 | 0.1558 | 0.2821 | 3.4103 | 0.1029 | 0.7191 | 0.7943 | 0.8984 |
| bookmarks10% | 0.1856 | 0.0097 | 0.2149 | 0.2340 | 0.0641 | 0.2212 | 0.7027 | 51.4203 | 0.1651 | 0.3449 | 0.7352 | 0.8107 |
| CAL500 | 0.0000 | 0.1485 | 0.0035 | 0.0067 | 0.0012 | 0.0075 | 0.4314 | 140.3137 | 0.2135 | 0.4350 | 0.5062 | 0.7905 |
| corel16k001 | 0.0007 | 0.0228 | 0.0273 | 0.0436 | 0.0109 | 0.0506 | 0.8610 | 80.7968 | 0.2809 | 0.1920 | 0.6967 | 0.6939 |
| Corel5k | 0.0000 | 0.0138 | 0.1607 | 0.2556 | 0.0262 | 0.2595 | 0.7400 | 110.3525 | 0.1270 | 0.2261 | 0.4825 | 0.8550 |
| delicious | 0.0129 | 0.5020 | 0.0145 | 0.0536 | 0.0419 | 0.0523 | 0.8915 | 918.4882 | 0.5180 | 0.0624 | 0.8463 | 0.6843 |
| emotions | 0.0167 | 0.3056 | 0.0167 | 0.0167 | 0.0159 | 0.0179 | 0.2667 | 1.5333 | 0.1334 | 0.8283 | 0.8575 | 0.8799 |
| enron | 0.1228 | 0.0513 | 0.3769 | 0.5174 | 0.1172 | 0.4769 | 0.3099 | 12.6550 | 0.0828 | 0.6672 | 0.6071 | 0.9026 |
| EukaryoteGO | 0.6959 | 0.0185 | 0.7824 | 0.8250 | 0.7115 | 0.8271 | 0.1714 | 0.4137 | 0.0121 | 0.9031 | 0.9904 | 0.9929 |
| EukaryotePseAAC | 0.0373 | 0.0515 | 0.0393 | 0.0402 | 0.0155 | 0.0677 | 0.5534 | 2.3282 | 0.0964 | 0.6176 | 0.7932 | 0.9107 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.4500 | 0.1892 | 0.8394 | 0.7383 | 0.8269 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3659 | 2.8049 | 0.1203 | 0.7304 | 0.6622 | 0.8270 |
| genbase | 0.9254 | 0.0028 | 0.9652 | 0.9825 | 0.6173 | 0.9697 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9996 |
| GnegativeGO | 0.8929 | 0.0170 | 0.9071 | 0.9142 | 0.6730 | 0.9314 | 0.0286 | 0.0929 | 0.0077 | 0.9839 | 0.8692 | 0.9955 |
| GnegativePseAAC | 0.3857 | 0.0848 | 0.3857 | 0.3857 | 0.1528 | 0.5320 | 0.2643 | 0.6929 | 0.0915 | 0.8287 | 0.7737 | 0.9440 |
| GpositiveGO | 0.8654 | 0.0529 | 0.8654 | 0.8654 | 0.9120 | 0.8911 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9962 | 0.9961 |
| GpositivePseAAC | 0.4038 | 0.1635 | 0.4038 | 0.4038 | 0.3563 | 0.5526 | 0.4231 | 0.7885 | 0.3013 | 0.7388 | 0.8270 | 0.8416 |
| HumanGO | 0.6013 | 0.0409 | 0.6693 | 0.7049 | 0.5460 | 0.7351 | 0.2251 | 0.6270 | 0.0313 | 0.8695 | 0.9657 | 0.9790 |
| HumanPseAAC | 0.0289 | 0.0825 | 0.0289 | 0.0289 | 0.0144 | 0.0477 | 0.5691 | 2.2026 | 0.1434 | 0.6046 | 0.7483 | 0.8652 |
| Image | 0.2300 | 0.1890 | 0.2475 | 0.2560 | 0.3390 | 0.3593 | 0.2950 | 0.8400 | 0.1542 | 0.8133 | 0.8626 | 0.8688 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6363 | 7.3491 | 0.1724 | 0.4769 | 0.6046 | 0.8122 |
| IMDB-F10% | 0.0008 | 0.0722 | 0.0017 | 0.0023 | 0.0035 | 0.0041 | 0.5891 | 7.4192 | 0.1669 | 0.4954 | 0.6282 | 0.8214 |
| LLOG-F | 0.0246 | 0.0177 | 0.0451 | 0.0546 | 0.0145 | 0.0899 | 0.6803 | 12.3689 | 0.1425 | 0.3985 | 0.4349 | 0.8677 |
| mediamill10% | 0.5558 | 0.0104 | 0.8286 | 0.9034 | 0.2540 | 0.8664 | 0.0000 | 3.5273 | 0.0002 | 0.9971 | 0.8207 | 0.9988 |
| medical | 0.6633 | 0.0109 | 0.7534 | 0.7967 | 0.3752 | 0.8033 | 0.1531 | 2.1327 | 0.0341 | 0.8778 | 0.5415 | 0.9752 |
| Music | 0.0000 | 0.3250 | 0.0083 | 0.0111 | 0.0159 | 0.0168 | 0.2167 | 1.8833 | 0.1500 | 0.8194 | 0.8664 | 0.8716 |
| NUS-WIDE-bow10% | 0.0913 | 0.0336 | 0.1489 | 0.1946 | 0.0166 | 0.1642 | 0.8585 | 30.2994 | 0.2641 | 0.2043 | 0.5104 | 0.6896 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0358 | 0.1908 | 0.2909 | 0.0395 | 0.2783 | 0.7012 | 28.2085 | 0.2007 | 0.3718 | 0.5638 | 0.7754 |
| OHSUMED-F | 0.1371 | 0.0624 | 0.1948 | 0.2245 | 0.1375 | 0.2727 | 0.4494 | 4.6332 | 0.1300 | 0.6305 | 0.8317 | 0.8699 |
| PlantGO | 0.5938 | 0.0477 | 0.6545 | 0.6846 | 0.6345 | 0.7264 | 0.2292 | 0.5104 | 0.0374 | 0.8638 | 0.9718 | 0.9762 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6122 | 2.0408 | 0.1695 | 0.5904 | 0.7780 | 0.8445 |
| rcv1subset1 | 0.0480 | 0.0294 | 0.1787 | 0.2536 | 0.0821 | 0.2445 | 0.4712 | 12.0714 | 0.0466 | 0.6000 | 0.8518 | 0.9356 |
| REUTERS-K500-EX2 | 0.2491 | 0.0139 | 0.3849 | 0.4632 | 0.1898 | 0.4628 | 0.5223 | 9.5052 | 0.0685 | 0.5646 | 0.6774 | 0.9230 |
| scene | 0.2988 | 0.1314 | 0.3112 | 0.3173 | 0.4570 | 0.4509 | 0.2075 | 0.4232 | 0.0644 | 0.8786 | 0.9463 | 0.9474 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 18.6620 | 0.1190 | 0.8498 | 0.5682 | 0.8054 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1408 | 19.2465 | 0.1299 | 0.8375 | 0.5708 | 0.7921 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0915 | 19.2324 | 0.1278 | 0.8417 | 0.5630 | 0.7949 |
| SLASHDOT-F | 0.2751 | 0.0462 | 0.3073 | 0.3235 | 0.2036 | 0.4019 | 0.4947 | 3.1270 | 0.1235 | 0.6098 | 0.6098 | 0.8768 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.2000 | 0.2000 | 0.1333 | 0.2857 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.3889 | 0.8000 |
| Stackex_chemistry | 0.0274 | 0.0193 | 0.1787 | 0.2755 | 0.0868 | 0.2638 | 0.7896 | 39.4438 | 0.1314 | 0.2616 | 0.6963 | 0.8621 |
| Stackex_chess | 0.0000 | 0.0198 | 0.1687 | 0.2853 | 0.0759 | 0.2658 | 0.8274 | 73.2202 | 0.1831 | 0.2117 | 0.3983 | 0.8350 |
| Stackex_coffee | 0.0000 | 0.0233 | 0.1471 | 0.2442 | 0.0606 | 0.2500 | 0.9130 | 42.3478 | 0.2149 | 0.2969 | 0.2369 | 0.9224 |
| Stackex_cooking | 0.0281 | 0.0068 | 0.0957 | 0.1319 | 0.0278 | 0.1447 | 0.8368 | 122.0463 | 0.1720 | 0.2066 | 0.7404 | 0.8098 |
| Stackex_philosophy | 0.0025 | 0.0191 | 0.1744 | 0.2887 | 0.0774 | 0.2729 | 0.8442 | 68.7387 | 0.1698 | 0.2345 | 0.4928 | 0.8226 |
| tmc2007-500 | 0.0892 | 0.0875 | 0.1539 | 0.1860 | 0.1035 | 0.2085 | 0.3007 | 3.1346 | 0.0638 | 0.7532 | 0.9042 | 0.9331 |
| tox21_CDK_ECFP4 | 0.0068 | 0.1781 | 0.0080 | 0.0090 | 0.0202 | 0.0095 | 0.4795 | 4.0685 | 0.2151 | 0.6187 | 0.7046 | 0.7721 |
| tox21_RDKit_desc | 0.0137 | 0.1775 | 0.0144 | 0.0156 | 0.0135 | 0.0158 | 0.4452 | 3.7466 | 0.1880 | 0.6464 | 0.7344 | 0.7910 |
| VirusGO | 0.7143 | 0.0873 | 0.7143 | 0.7143 | 0.5926 | 0.7317 | 0.0476 | 0.3333 | 0.0476 | 0.9643 | 0.8037 | 0.9865 |
| VirusPseAAC | 0.0476 | 0.1746 | 0.0476 | 0.0476 | 0.0303 | 0.0833 | 0.3333 | 0.8095 | 0.1286 | 0.7889 | 0.6075 | 0.8831 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1887 | 8.6226 | 0.2300 | 0.7390 | 0.7179 | 0.7484 |
| Yahoo_Arts | 0.1081 | 0.0574 | 0.1446 | 0.1635 | 0.1265 | 0.2194 | 0.5020 | 4.6142 | 0.1143 | 0.5984 | 0.7374 | 0.8658 |
| Yahoo_Business | 0.5392 | 0.0262 | 0.6846 | 0.7655 | 0.1278 | 0.7023 | 0.0963 | 1.7807 | 0.0254 | 0.9059 | 0.7177 | 0.9596 |
| Yahoo_Computers | 0.0000 | 0.0479 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4251 | 4.0472 | 0.0825 | 0.6501 | 0.6961 | 0.8771 |
| Yahoo_Education | 0.0386 | 0.0459 | 0.0580 | 0.0680 | 0.0325 | 0.1007 | 0.7101 | 12.5727 | 0.2992 | 0.3966 | 0.6034 | 0.6918 |
| Yahoo_Entertainment | 0.2639 | 0.0547 | 0.2849 | 0.2971 | 0.1533 | 0.3518 | 0.4258 | 2.7148 | 0.0906 | 0.6610 | 0.7846 | 0.8975 |
| Yahoo_Health | 0.4311 | 0.0342 | 0.5270 | 0.5831 | 0.2208 | 0.5865 | 0.2573 | 2.7622 | 0.0477 | 0.7686 | 0.7113 | 0.9424 |
| Yahoo_Recreation | 0.2479 | 0.0507 | 0.2688 | 0.2811 | 0.2189 | 0.3529 | 0.4560 | 3.4037 | 0.1175 | 0.6462 | 0.8382 | 0.8712 |
| Yahoo_Reference | 0.0844 | 0.0388 | 0.1106 | 0.1220 | 0.0438 | 0.1777 | 0.4834 | 7.0785 | 0.1804 | 0.5664 | 0.5568 | 0.7912 |
| Yahoo_Science | 0.1441 | 0.0369 | 0.1842 | 0.2030 | 0.0604 | 0.2474 | 0.6379 | 7.5179 | 0.1400 | 0.4897 | 0.6928 | 0.8416 |
| Yahoo_Social | 0.0744 | 0.0506 | 0.1015 | 0.1177 | 0.0491 | 0.1244 | 0.7735 | 7.9870 | 0.1687 | 0.3958 | 0.5447 | 0.7536 |
| Yahoo_Society | 0.0125 | 0.0661 | 0.0183 | 0.0216 | 0.0149 | 0.0307 | 0.8029 | 15.9803 | 0.5147 | 0.2535 | 0.5994 | 0.5055 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2025 | 6.0950 | 0.1512 | 0.7764 | 0.7415 | 0.8575 |
| Yelp | 0.0279 | 0.3539 | 0.0279 | 0.0279 | 0.0313 | 0.0306 | 0.2682 | 1.5643 | 0.1854 | 0.8081 | 0.7992 | 0.7909 |

Table 126: Detailed results for MASSIVE (10K) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3942 | 0.0342 | 0.3999 | 0.4027 | 0.5061 | 0.5448 | 0.4258 | 2.4803 | 0.1285 | 0.6820 | 0.9292 | 0.8985 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6944 | 2.3889 | 0.4231 | 0.5102 | 0.5939 | 0.5931 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6129 | 2.0968 | 0.3637 | 0.5602 | 0.5025 | 0.6501 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 1.8235 | 0.3485 | 0.4725 | 0.4303 | 0.6415 |
| 3s-reuters1000 | 0.0000 | 0.1833 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8333 | 2.4333 | 0.4725 | 0.4269 | 0.5351 | 0.5055 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.7222 | 0.1139 | 0.8288 | 0.6683 | 0.7883 |
| bibtex | 0.1257 | 0.0166 | 0.3196 | 0.4317 | 0.3010 | 0.4142 | 0.4649 | 31.7378 | 0.1113 | 0.4604 | 0.8773 | 0.8875 |
| birds | 0.1026 | 0.0891 | 0.1154 | 0.1215 | 0.0979 | 0.1316 | 0.2821 | 3.4359 | 0.1071 | 0.7291 | 0.7927 | 0.8943 |
| bookmarks10% | 0.1913 | 0.0101 | 0.2402 | 0.2734 | 0.0942 | 0.2557 | 0.6629 | 49.6333 | 0.1571 | 0.3595 | 0.7472 | 0.8229 |
| CAL500 | 0.0000 | 0.1489 | 0.0012 | 0.0023 | 0.0007 | 0.0030 | 0.2353 | 141.2549 | 0.2183 | 0.4234 | 0.4997 | 0.7847 |
| corel16k001 | 0.0087 | 0.0230 | 0.1079 | 0.1684 | 0.0411 | 0.1744 | 0.7778 | 54.9942 | 0.1882 | 0.2507 | 0.6362 | 0.8102 |
| Corel5k | 0.0000 | 0.0191 | 0.1354 | 0.2257 | 0.0286 | 0.2266 | 0.8660 | 136.4940 | 0.1690 | 0.1624 | 0.3784 | 0.8324 |
| delicious | 0.0130 | 0.5031 | 0.0145 | 0.0535 | 0.0423 | 0.0531 | 0.8853 | 907.5698 | 0.5161 | 0.0626 | 0.8458 | 0.6942 |
| emotions | 0.0167 | 0.3028 | 0.0167 | 0.0167 | 0.0167 | 0.0180 | 0.2500 | 1.5500 | 0.1268 | 0.8323 | 0.8664 | 0.8849 |
| enron | 0.1345 | 0.0535 | 0.3272 | 0.4388 | 0.1067 | 0.4093 | 0.3158 | 12.4152 | 0.0832 | 0.6656 | 0.6070 | 0.9052 |
| EukaryoteGO | 0.6830 | 0.0187 | 0.7927 | 0.8460 | 0.7245 | 0.8306 | 0.1894 | 0.4652 | 0.0146 | 0.8918 | 0.9828 | 0.9899 |
| EukaryotePseAAC | 0.0381 | 0.0512 | 0.0388 | 0.0396 | 0.0156 | 0.0682 | 0.5474 | 2.2822 | 0.0947 | 0.6148 | 0.7816 | 0.9194 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1500 | 3.4500 | 0.1817 | 0.8435 | 0.7353 | 0.8269 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2195 | 2.5122 | 0.0987 | 0.8122 | 0.6612 | 0.8252 |
| genbase | 0.9254 | 0.0028 | 0.9652 | 0.9825 | 0.6173 | 0.9697 | 0.0149 | 0.2239 | 0.0006 | 0.9938 | 0.6667 | 0.9996 |
| GnegativeGO | 0.8929 | 0.0170 | 0.9071 | 0.9142 | 0.6730 | 0.9314 | 0.0286 | 0.0929 | 0.0077 | 0.9839 | 0.8692 | 0.9955 |
| GnegativePseAAC | 0.3571 | 0.0866 | 0.3571 | 0.3571 | 0.1412 | 0.5076 | 0.2857 | 0.7357 | 0.0982 | 0.8126 | 0.7799 | 0.9423 |
| GpositiveGO | 0.8654 | 0.0529 | 0.8654 | 0.8654 | 0.9120 | 0.8911 | 0.0769 | 0.1154 | 0.0321 | 0.9583 | 0.9965 | 0.9965 |
| GpositivePseAAC | 0.4038 | 0.1635 | 0.4038 | 0.4038 | 0.3774 | 0.5526 | 0.4423 | 0.7885 | 0.3013 | 0.7276 | 0.8466 | 0.8660 |
| HumanGO | 0.5981 | 0.0402 | 0.6672 | 0.7039 | 0.5534 | 0.7376 | 0.2187 | 0.6109 | 0.0298 | 0.8741 | 0.9651 | 0.9798 |
| HumanPseAAC | 0.0193 | 0.0831 | 0.0193 | 0.0193 | 0.0105 | 0.0321 | 0.5723 | 2.2379 | 0.1466 | 0.5996 | 0.7347 | 0.8652 |
| Image | 0.2250 | 0.1900 | 0.2425 | 0.2509 | 0.3292 | 0.3537 | 0.2800 | 0.7800 | 0.1392 | 0.8246 | 0.8754 | 0.8824 |
| IMDB-ECC-F10% | 0.0084 | 0.0675 | 0.0093 | 0.0098 | 0.0077 | 0.0110 | 0.6373 | 7.3229 | 0.1712 | 0.4776 | 0.5821 | 0.8127 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0007 | 0.0010 | 0.0013 | 0.0016 | 0.6321 | 7.5153 | 0.1700 | 0.4777 | 0.6376 | 0.8173 |
| LLOG-F | 0.0246 | 0.0176 | 0.0533 | 0.0661 | 0.0202 | 0.1105 | 0.7049 | 11.3115 | 0.1272 | 0.4098 | 0.4587 | 0.8755 |
| mediamill10% | 0.0665 | 0.0324 | 0.3564 | 0.5002 | 0.0363 | 0.4712 | 0.2518 | 18.5012 | 0.0568 | 0.6826 | 0.6449 | 0.9408 |
| medical | 0.6531 | 0.0104 | 0.7551 | 0.8027 | 0.3565 | 0.8115 | 0.1735 | 2.2245 | 0.0324 | 0.8615 | 0.5425 | 0.9731 |
| Music | 0.0000 | 0.3222 | 0.0167 | 0.0222 | 0.0278 | 0.0333 | 0.2667 | 1.9500 | 0.1635 | 0.7906 | 0.8591 | 0.8640 |
| NUS-WIDE-bow10% | 0.0926 | 0.0335 | 0.1477 | 0.1942 | 0.0164 | 0.1632 | 0.8451 | 30.1575 | 0.2663 | 0.2054 | 0.5054 | 0.6860 |
| NUS-WIDE-cVLADplus10% | 0.0392 | 0.0355 | 0.1880 | 0.2959 | 0.0402 | 0.2831 | 0.6977 | 28.5754 | 0.2022 | 0.3762 | 0.5729 | 0.7765 |
| OHSUMED-F | 0.1387 | 0.0623 | 0.1974 | 0.2284 | 0.1379 | 0.2761 | 0.4481 | 4.5856 | 0.1306 | 0.6234 | 0.8281 | 0.8681 |
| PlantGO | 0.5833 | 0.0521 | 0.6302 | 0.6536 | 0.6053 | 0.6907 | 0.2396 | 0.5000 | 0.0370 | 0.8643 | 0.9737 | 0.9764 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5918 | 2.0204 | 0.1676 | 0.6007 | 0.7889 | 0.8452 |
| rcv1subset1 | 0.0617 | 0.0289 | 0.2428 | 0.3435 | 0.1135 | 0.3511 | 0.5700 | 20.7983 | 0.0889 | 0.4713 | 0.8021 | 0.8978 |
| REUTERS-K500-EX2 | 0.2457 | 0.0146 | 0.3928 | 0.4735 | 0.1905 | 0.4625 | 0.6512 | 11.2612 | 0.0832 | 0.4506 | 0.6658 | 0.9123 |
| scene | 0.2946 | 0.1321 | 0.3071 | 0.3132 | 0.4526 | 0.4464 | 0.2075 | 0.4232 | 0.0644 | 0.8789 | 0.9467 | 0.9472 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 18.8592 | 0.1355 | 0.8157 | 0.5722 | 0.7875 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1127 | 18.7606 | 0.1214 | 0.8458 | 0.5739 | 0.8060 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0634 | 18.9155 | 0.1266 | 0.8456 | 0.5688 | 0.8000 |
| SLASHDOT-F | 0.2698 | 0.0464 | 0.3020 | 0.3184 | 0.2018 | 0.3969 | 0.5026 | 3.0873 | 0.1210 | 0.6053 | 0.6178 | 0.8795 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.2000 | 0.2000 | 0.1333 | 0.2857 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0043 | 0.0254 | 0.1631 | 0.2689 | 0.1192 | 0.2563 | 0.7853 | 40.3790 | 0.1342 | 0.2849 | 0.6921 | 0.8599 |
| Stackex_chess | 0.0000 | 0.0199 | 0.1534 | 0.2666 | 0.0717 | 0.2480 | 0.7976 | 71.0774 | 0.1832 | 0.2250 | 0.4162 | 0.8436 |
| Stackex_coffee | 0.0000 | 0.0240 | 0.0993 | 0.1719 | 0.0348 | 0.1707 | 0.7826 | 43.2174 | 0.2184 | 0.3484 | 0.2369 | 0.9273 |
| Stackex_cooking | 0.0010 | 0.0143 | 0.1592 | 0.2666 | 0.1462 | 0.2607 | 0.8213 | 129.7729 | 0.1809 | 0.2056 | 0.6776 | 0.8165 |
| Stackex_philosophy | 0.0201 | 0.0145 | 0.1988 | 0.3128 | 0.0949 | 0.3021 | 0.6683 | 63.2613 | 0.1536 | 0.3072 | 0.5089 | 0.8339 |
| tmc2007-500 | 0.0893 | 0.0863 | 0.1561 | 0.1886 | 0.1027 | 0.2098 | 0.2985 | 3.1420 | 0.0647 | 0.7667 | 0.8927 | 0.9221 |
| tox21_CDK_ECFP4 | 0.0068 | 0.1781 | 0.0080 | 0.0090 | 0.0202 | 0.0095 | 0.4760 | 4.0582 | 0.2114 | 0.6210 | 0.7072 | 0.7725 |
| tox21_RDKit_desc | 0.0205 | 0.1769 | 0.0212 | 0.0225 | 0.0182 | 0.0221 | 0.4075 | 3.7397 | 0.1835 | 0.6617 | 0.7309 | 0.7905 |
| VirusGO | 0.7143 | 0.0873 | 0.7143 | 0.7143 | 0.5926 | 0.7317 | 0.0476 | 0.3333 | 0.0476 | 0.9643 | 0.8081 | 0.9881 |
| VirusPseAAC | 0.0476 | 0.1746 | 0.0476 | 0.0476 | 0.0303 | 0.0833 | 0.3810 | 0.8571 | 0.1417 | 0.7651 | 0.6009 | 0.8864 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2170 | 8.6887 | 0.2357 | 0.7336 | 0.7101 | 0.7447 |
| Yahoo_Arts | 0.1562 | 0.0555 | 0.2018 | 0.2262 | 0.1703 | 0.2846 | 0.4806 | 4.6929 | 0.1168 | 0.6067 | 0.7407 | 0.8645 |
| Yahoo_Business | 0.5422 | 0.0260 | 0.6946 | 0.7644 | 0.1284 | 0.6981 | 0.0958 | 1.7592 | 0.0255 | 0.9123 | 0.7108 | 0.9566 |
| Yahoo_Computers | 0.0000 | 0.0481 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4216 | 3.9800 | 0.0820 | 0.6619 | 0.6973 | 0.8657 |
| Yahoo_Education | 0.0391 | 0.0452 | 0.0576 | 0.0673 | 0.0323 | 0.1016 | 0.7092 | 12.5579 | 0.2978 | 0.4029 | 0.6108 | 0.6853 |
| Yahoo_Entertainment | 0.2645 | 0.0554 | 0.2820 | 0.3020 | 0.1556 | 0.3540 | 0.4187 | 2.7065 | 0.0897 | 0.6711 | 0.7986 | 0.9042 |
| Yahoo_Health | 0.4286 | 0.0347 | 0.5372 | 0.5815 | 0.2234 | 0.5818 | 0.2593 | 2.7270 | 0.0470 | 0.7797 | 0.7093 | 0.9458 |
| Yahoo_Recreation | 0.2518 | 0.0512 | 0.2727 | 0.2864 | 0.2217 | 0.3512 | 0.4533 | 3.4353 | 0.1167 | 0.6460 | 0.8351 | 0.8838 |
| Yahoo_Reference | 0.0832 | 0.0394 | 0.1103 | 0.1233 | 0.0443 | 0.1784 | 0.4806 | 6.9685 | 0.1777 | 0.5602 | 0.5565 | 0.8056 |
| Yahoo_Science | 0.2551 | 0.0295 | 0.3033 | 0.3309 | 0.2301 | 0.3913 | 0.5397 | 5.4992 | 0.0983 | 0.5686 | 0.7868 | 0.8816 |
| Yahoo_Social | 0.0745 | 0.0496 | 0.1016 | 0.1197 | 0.0490 | 0.1260 | 0.7769 | 8.0382 | 0.1698 | 0.3936 | 0.5417 | 0.7616 |
| Yahoo_Society | 0.0126 | 0.0662 | 0.0181 | 0.0215 | 0.0151 | 0.0310 | 0.8071 | 15.8200 | 0.5066 | 0.2583 | 0.5927 | 0.4982 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2149 | 6.0289 | 0.1539 | 0.7756 | 0.7469 | 0.8562 |
| Yelp | 0.0319 | 0.3531 | 0.0319 | 0.0319 | 0.0498 | 0.0349 | 0.2243 | 1.4058 | 0.1456 | 0.8476 | 0.7947 | 0.8427 |

### 3.1 Comparison with state-of-the-art methods

Table 127: Detailed results for RAkEL-O

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5145 | 0.0295 | 0.5606 | 0.5840 | 0.6696 | 0.6752 | 0.3055 | 2.3112 | 0.2095 | 0.7650 | 0.9818 | 0.9824 |
| 3s-bbc1000 | 0.0833 | 0.2685 | 0.1111 | 0.1235 | 0.1233 | 0.1471 | 0.6944 | 2.5000 | 0.5139 | 0.4923 | 0.6786 | 0.6756 |
| 3s-guardian1000 | 0.1613 | 0.2473 | 0.2796 | 0.3379 | 0.2402 | 0.3784 | 0.6452 | 2.2903 | 0.4758 | 0.5371 | 0.7123 | 0.7393 |
| 3s-inter3000 | 0.0000 | 0.2451 | 0.0294 | 0.0392 | 0.0833 | 0.0741 | 0.8824 | 2.5294 | 0.8471 | 0.4049 | 0.7484 | 0.8671 |
| 3s-reuters1000 | 0.1667 | 0.2611 | 0.1833 | 0.1913 | 0.1722 | 0.2034 | 0.8333 | 2.6000 | 0.7917 | 0.4069 | 0.6764 | 0.6419 |
| amphibians | 0.1667 | 0.2937 | 0.5029 | 0.6954 | 0.5139 | 0.6667 | 0.1111 | 2.3889 | 0.1565 | 0.9042 | 0.6555 | 0.7778 |
| bibtex | 0.1541 | 0.0144 | 0.3321 | 0.4325 | 0.3329 | 0.4386 | 0.4149 | 60.8865 | 0.4190 | 0.4910 | 0.9828 | 0.9855 |
| birds | 0.1795 | 0.0864 | 0.3581 | 0.4351 | 0.3686 | 0.4754 | 0.3846 | 5.4615 | 0.2887 | 0.6458 | 0.8104 | 0.9183 |
| bookmarks10% | 0.0000 | 0.0197 | 0.0823 | 0.1291 | 0.0705 | 0.1290 | 0.7244 | 99.9533 | 0.6959 | 0.2755 | 0.9692 | 0.9850 |
| CAL500 | 0.0000 | 0.1650 | 0.2449 | 0.3929 | 0.1378 | 0.3905 | 0.4510 | 149.2941 | 0.4766 | 0.4179 | 0.6444 | 0.8222 |
| corel16k001 | 0.0036 | 0.0229 | 0.0658 | 0.1062 | 0.0475 | 0.1249 | 0.7967 | 98.4394 | 0.7032 | 0.1859 | 0.9667 | 0.9690 |
| Corel5k | 0.0020 | 0.0111 | 0.0623 | 0.0980 | 0.0279 | 0.1162 | 0.8100 | 163.5340 | 0.8805 | 0.1698 | 0.6731 | 0.9936 |
| delicious | 0.0044 | 0.0080 | 0.0702 | 0.1715 | 0.0415 | 0.1395 | 0.5853 | 909.5337 | 0.8873 | 0.1355 | 1.0000 | 1.0000 |
| emotions | 0.1667 | 0.2639 | 0.4464 | 0.5819 | 0.5677 | 0.5740 | 0.3167 | 1.9500 | 0.2361 | 0.7639 | 0.8187 | 0.8272 |
| enron | 0.0117 | 0.0562 | 0.2986 | 0.4200 | 0.1460 | 0.4884 | 0.3216 | 23.4327 | 0.4002 | 0.5634 | 0.8053 | 0.9661 |
| EukaryoteGO | 0.6959 | 0.0206 | 0.7742 | 0.8129 | 0.7537 | 0.8081 | 0.1817 | 1.1508 | 0.0786 | 0.8737 | 0.9931 | 0.9950 |
| EukaryotePseAAC | 0.1622 | 0.0640 | 0.2470 | 0.2906 | 0.1221 | 0.3337 | 0.6216 | 4.9884 | 0.3422 | 0.5065 | 0.9073 | 0.9255 |
| flags | 0.1500 | 0.3143 | 0.4886 | 0.6256 | 0.5048 | 0.6452 | 0.1500 | 3.7500 | 0.3008 | 0.7905 | 0.7020 | 0.8080 |
| foodtruck | 0.1707 | 0.1667 | 0.3885 | 0.5325 | 0.2305 | 0.4875 | 0.3902 | 3.7317 | 0.3187 | 0.6835 | 0.7135 | 0.8404 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9357 | 0.0098 | 0.9607 | 0.9732 | 0.8378 | 0.9625 | 0.0357 | 0.1429 | 0.0214 | 0.9752 | 0.8746 | 0.9996 |
| GnegativePseAAC | 0.5857 | 0.0857 | 0.6310 | 0.6543 | 0.3227 | 0.6643 | 0.3000 | 0.8143 | 0.1839 | 0.7983 | 0.8144 | 0.9488 |
| GpositiveGO | 0.8654 | 0.0625 | 0.8750 | 0.8798 | 0.8186 | 0.8762 | 0.1154 | 0.3269 | 0.1250 | 0.9183 | 0.9947 | 0.9949 |
| GpositivePseAAC | 0.5577 | 0.2356 | 0.5577 | 0.5577 | 0.4154 | 0.5421 | 0.4423 | 0.9615 | 0.3269 | 0.7099 | 0.9095 | 0.9154 |
| HumanGO | 0.6206 | 0.0425 | 0.7219 | 0.7787 | 0.6968 | 0.7517 | 0.2026 | 1.1479 | 0.0970 | 0.8558 | 0.9836 | 0.9875 |
| HumanPseAAC | 0.1897 | 0.0884 | 0.2556 | 0.2900 | 0.1639 | 0.3529 | 0.6206 | 3.2186 | 0.2837 | 0.5427 | 0.8516 | 0.8794 |
| Image | 0.3600 | 0.2100 | 0.5038 | 0.5774 | 0.5565 | 0.5588 | 0.3500 | 1.0500 | 0.1950 | 0.7692 | 0.8600 | 0.8616 |
| IMDB-ECC-F10% | 0.0031 | 0.0708 | 0.0123 | 0.0177 | 0.0158 | 0.0278 | 0.8721 | 14.9308 | 0.9022 | 0.2119 | 0.9660 | 0.9691 |
| IMDB-F10% | 0.0066 | 0.0742 | 0.0161 | 0.0213 | 0.0238 | 0.0317 | 0.9097 | 15.7606 | 0.9302 | 0.1911 | 0.9719 | 0.9733 |
| LLOG-F | 0.0656 | 0.0211 | 0.1206 | 0.1559 | 0.0503 | 0.1992 | 0.7623 | 30.2131 | 0.7818 | 0.2421 | 0.5863 | 0.9845 |
| mediamill10% | 0.0000 | 0.0549 | 0.2420 | 0.3812 | 0.0365 | 0.3608 | 0.3088 | 66.7245 | 0.5713 | 0.4406 | 0.8119 | 0.9922 |
| medical | 0.6224 | 0.0116 | 0.7401 | 0.7979 | 0.3475 | 0.7952 | 0.1735 | 5.6327 | 0.1335 | 0.8312 | 0.5523 | 0.9973 |
| Music | 0.1333 | 0.2139 | 0.4833 | 0.6434 | 0.6451 | 0.6516 | 0.2500 | 1.9500 | 0.2250 | 0.7940 | 0.8690 | 0.8711 |
| NUS-WIDE-bow10% | 0.0024 | 0.0266 | 0.0036 | 0.0046 | 0.0033 | 0.0083 | 0.9662 | 47.4805 | 0.9948 | 0.1107 | 0.8882 | 0.9993 |
| NUS-WIDE-cVLADplus10% | 0.0052 | 0.0381 | 0.0196 | 0.0278 | 0.0021 | 0.0291 | 0.9729 | 47.5147 | 0.9965 | 0.1077 | 0.8881 | 0.9993 |
| OHSUMED-F | 0.2283 | 0.0601 | 0.4072 | 0.5028 | 0.3926 | 0.5242 | 0.3632 | 6.2778 | 0.2789 | 0.6470 | 0.9322 | 0.9421 |
| PlantGO | 0.6354 | 0.0434 | 0.7049 | 0.7376 | 0.6693 | 0.7596 | 0.1979 | 1.0938 | 0.1337 | 0.8517 | 0.9891 | 0.9887 |
| PlantPseAAC | 0.1429 | 0.1114 | 0.1820 | 0.2031 | 0.1259 | 0.2514 | 0.7143 | 3.2857 | 0.3827 | 0.4793 | 0.8200 | 0.8394 |
| rcv1subset1 | 0.0750 | 0.0305 | 0.2834 | 0.3981 | 0.2513 | 0.3986 | 0.4583 | 33.6167 | 0.3174 | 0.5170 | 0.9105 | 0.9733 |
| REUTERS-K500-EX2 | 0.2801 | 0.0130 | 0.3899 | 0.4470 | 0.2308 | 0.4697 | 0.4811 | 23.3900 | 0.3899 | 0.5499 | 0.7751 | 0.9898 |
| scene | 0.5187 | 0.1134 | 0.6148 | 0.6636 | 0.6971 | 0.6797 | 0.2739 | 0.7344 | 0.1183 | 0.8256 | 0.9265 | 0.9364 |
| sider_CDK_ECFP4 | 0.0070 | 0.2595 | 0.5763 | 0.7372 | 0.6172 | 0.7597 | 0.2113 | 20.8873 | 0.2074 | 0.8009 | 0.6109 | 0.7807 |
| sider_MordredDesc | 0.0000 | 0.2679 | 0.5786 | 0.7483 | 0.5962 | 0.7527 | 0.1549 | 21.1831 | 0.1806 | 0.8039 | 0.5841 | 0.7716 |
| sider_RDKit_desc | 0.0000 | 0.2773 | 0.5829 | 0.7524 | 0.5945 | 0.7509 | 0.3310 | 20.3803 | 0.2120 | 0.7842 | 0.5973 | 0.7693 |
| SLASHDOT-F | 0.3677 | 0.0435 | 0.4475 | 0.4892 | 0.3747 | 0.5371 | 0.4259 | 5.7566 | 0.3558 | 0.6198 | 0.7465 | 0.9769 |
| solar_flare-L3 | 0.2000 | 0.4667 | 0.3000 | 0.3429 | 0.2444 | 0.3636 | 0.6000 | 0.6000 | 0.6000 | 0.7000 | 0.2222 | 0.7000 |
| Stackex_chemistry | 0.0418 | 0.0138 | 0.1408 | 0.2007 | 0.1048 | 0.2337 | 0.6700 | 87.4337 | 0.6604 | 0.2753 | 0.9048 | 0.9856 |
| Stackex_chess | 0.0179 | 0.0117 | 0.1015 | 0.1569 | 0.0674 | 0.2068 | 0.7679 | 138.7500 | 0.8371 | 0.1583 | 0.5481 | 0.9965 |
| Stackex_coffee | 0.0000 | 0.0251 | 0.1204 | 0.2189 | 0.0633 | 0.2366 | 0.7826 | 67.5217 | 0.6984 | 0.2293 | 0.2562 | 0.9867 |
| Stackex_cooking | 0.0531 | 0.0065 | 0.2184 | 0.3186 | 0.1379 | 0.3268 | 0.5874 | 190.9246 | 0.5876 | 0.3316 | 0.9187 | 0.9942 |
| Stackex_philosophy | 0.0553 | 0.0112 | 0.2049 | 0.2990 | 0.0950 | 0.3081 | 0.5905 | 111.5000 | 0.5648 | 0.3433 | 0.7397 | 0.9888 |
| tmc2007-500 | 0.2287 | 0.0706 | 0.4992 | 0.6379 | 0.5170 | 0.6126 | 0.2878 | 4.4262 | 0.1735 | 0.7449 | 0.9428 | 0.9573 |
| tox21_CDK_ECFP4 | 0.1164 | 0.1630 | 0.2743 | 0.3556 | 0.3987 | 0.4296 | 0.4658 | 5.1164 | 0.3363 | 0.5876 | 0.8185 | 0.8353 |
| tox21_RDKit_desc | 0.1438 | 0.1658 | 0.3084 | 0.4023 | 0.4083 | 0.4545 | 0.4589 | 4.6884 | 0.2883 | 0.6068 | 0.8007 | 0.8225 |
| VirusGO | 0.7619 | 0.0556 | 0.8333 | 0.8611 | 0.6949 | 0.8571 | 0.0476 | 0.4762 | 0.0635 | 0.9500 | 0.8212 | 0.9905 |
| VirusPseAAC | 0.4762 | 0.1508 | 0.5476 | 0.5831 | 0.4547 | 0.5778 | 0.3810 | 0.7619 | 0.0476 | 0.7817 | 0.6999 | 0.9122 |
| Water-quality | 0.0189 | 0.3100 | 0.4234 | 0.5975 | 0.5325 | 0.5826 | 0.2642 | 9.0660 | 0.3072 | 0.7013 | 0.6935 | 0.7297 |
| Yahoo_Arts | 0.2710 | 0.0541 | 0.3831 | 0.4451 | 0.3245 | 0.4690 | 0.4112 | 6.7730 | 0.3147 | 0.6248 | 0.8943 | 0.9367 |
| Yahoo_Business | 0.5463 | 0.0253 | 0.7253 | 0.8197 | 0.4058 | 0.7496 | 0.0945 | 2.5276 | 0.1180 | 0.8976 | 0.8375 | 0.9882 |
| Yahoo_Computers | 0.3357 | 0.0382 | 0.4691 | 0.5418 | 0.3372 | 0.5462 | 0.3526 | 4.9639 | 0.3242 | 0.6828 | 0.8666 | 0.9678 |
| Yahoo_Education | 0.0116 | 0.0435 | 0.0143 | 0.0160 | 0.0950 | 0.0249 | 0.8063 | 11.1089 | 0.9423 | 0.3370 | 0.9075 | 0.9983 |
| Yahoo_Entertainment | 0.4250 | 0.0463 | 0.5134 | 0.5606 | 0.4134 | 0.5934 | 0.3197 | 2.8861 | 0.2239 | 0.7370 | 0.9511 | 0.9569 |
| Yahoo_Health | 0.4332 | 0.0319 | 0.5887 | 0.6712 | 0.3502 | 0.6614 | 0.2367 | 4.2606 | 0.2121 | 0.7764 | 0.8186 | 0.9807 |
| Yahoo_Recreation | 0.3874 | 0.0475 | 0.4951 | 0.5516 | 0.4962 | 0.5729 | 0.3390 | 4.1606 | 0.2736 | 0.7096 | 0.9528 | 0.9560 |
| Yahoo_Reference | 0.4496 | 0.0256 | 0.5231 | 0.5625 | 0.2737 | 0.5922 | 0.3425 | 3.3761 | 0.2218 | 0.7293 | 0.7901 | 0.9795 |
| Yahoo_Science | 0.2970 | 0.0299 | 0.3976 | 0.4556 | 0.3464 | 0.4867 | 0.4215 | 8.9891 | 0.3267 | 0.6137 | 0.9396 | 0.9662 |
| Yahoo_Social | 0.5272 | 0.0196 | 0.6085 | 0.6512 | 0.3554 | 0.6623 | 0.2583 | 4.4307 | 0.2031 | 0.7664 | 0.9039 | 0.9865 |
| Yahoo_Society | 0.1849 | 0.0416 | 0.2295 | 0.2575 | 0.2323 | 0.3274 | 0.5905 | 11.8097 | 0.6896 | 0.4233 | 0.9360 | 0.9813 |
| yeast | 0.0868 | 0.2202 | 0.4730 | 0.6273 | 0.3736 | 0.6131 | 0.2603 | 6.9132 | 0.2705 | 0.7340 | 0.7062 | 0.8211 |
| Yelp | 0.5344 | 0.1406 | 0.7399 | 0.8256 | 0.7579 | 0.7995 | 0.0987 | 1.1665 | 0.0992 | 0.9209 | 0.9078 | 0.9321 |

Table 128: Detailed results for Real AdaBoost.MH

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5808 | 0.0259 | 0.6142 | 0.6310 | 0.7100 | 0.7171 | 0.2642 | 1.7010 | 0.0951 | 0.8044 | 0.9540 | 0.9218 |
| 3s-bbc1000 | 0.1944 | 0.2269 | 0.2500 | 0.2771 | 0.2965 | 0.3099 | 0.6111 | 1.9444 | 0.4421 | 0.5912 | 0.6230 | 0.6005 |
| 3s-guardian1000 | 0.1290 | 0.2097 | 0.1613 | 0.1760 | 0.1897 | 0.2642 | 0.6774 | 1.9355 | 0.4597 | 0.5613 | 0.6415 | 0.7020 |
| 3s-inter3000 | 0.0000 | 0.4706 | 0.2363 | 0.3540 | 0.2974 | 0.3514 | 0.9412 | 2.4118 | 0.5059 | 0.3706 | 0.4474 | 0.5820 |
| 3s-reuters1000 | 0.1000 | 0.2111 | 0.1000 | 0.1000 | 0.0972 | 0.1364 | 0.8333 | 2.2333 | 0.8000 | 0.4275 | 0.6640 | 0.5764 |
| amphibians | 0.0556 | 0.3016 | 0.4757 | 0.6654 | 0.5701 | 0.6780 | 0.3333 | 3.2222 | 0.2111 | 0.7402 | 0.5542 | 0.7155 |
| bibtex | 0.1838 | 0.0121 | 0.3535 | 0.4475 | 0.3196 | 0.4669 | 0.3851 | 40.1473 | 0.1491 | 0.5034 | 0.9120 | 0.8609 |
| birds | 0.2308 | 0.0688 | 0.3936 | 0.4627 | 0.3683 | 0.5405 | 0.3333 | 3.7949 | 0.0819 | 0.7042 | 0.7610 | 0.8784 |
| bookmarks10% | 0.1298 | 0.0177 | 0.1710 | 0.2041 | 0.0528 | 0.1292 | 0.7540 | 57.2802 | 0.2176 | 0.2732 | 0.7317 | 0.7918 |
| CAL500 | 0.0000 | 0.1468 | 0.2239 | 0.3699 | 0.1043 | 0.3628 | 0.2549 | 137.4118 | 0.4475 | 0.4593 | 0.5218 | 0.8028 |
| corel16k001 | 0.0000 | 0.0657 | 0.0539 | 0.0958 | 0.0224 | 0.0975 | 0.9673 | 54.9920 | 0.0681 | 0.1127 | 0.7134 | 0.7869 |
| Corel5k | 0.0040 | 0.0109 | 0.0783 | 0.1244 | 0.0339 | 0.1438 | 0.7360 | 129.3460 | 0.4567 | 0.2282 | 0.6124 | 0.9392 |
| delicious | 0.0000 | 0.1081 | 0.1152 | 0.2174 | 0.1099 | 0.1469 | 0.7321 | 652.2741 | 0.2192 | 0.1828 | 0.7104 | 0.8081 |
| emotions | 0.3000 | 0.1917 | 0.5361 | 0.6349 | 0.6447 | 0.6667 | 0.2833 | 1.6333 | 0.1431 | 0.8044 | 0.8634 | 0.8790 |
| enron | 0.1287 | 0.0595 | 0.4040 | 0.5330 | 0.1911 | 0.5166 | 0.3275 | 16.2105 | 0.1331 | 0.6200 | 0.5993 | 0.8762 |
| EukaryoteGO | 0.6641 | 0.0230 | 0.7569 | 0.8031 | 0.7351 | 0.7866 | 0.1789 | 0.6165 | 0.0019 | 0.8900 | 0.9840 | 0.9830 |
| EukaryotePseAAC | 0.1532 | 0.0501 | 0.1795 | 0.1933 | 0.0749 | 0.2770 | 0.5495 | 2.4247 | 0.0249 | 0.6189 | 0.8087 | 0.9104 |
| flags | 0.2500 | 0.2500 | 0.6025 | 0.7121 | 0.6046 | 0.7200 | 0.1500 | 3.6000 | 0.2450 | 0.8285 | 0.6096 | 0.7928 |
| foodtruck | 0.3415 | 0.1402 | 0.4948 | 0.5956 | 0.2658 | 0.5548 | 0.2927 | 2.7561 | 0.2351 | 0.7655 | 0.6821 | 0.8285 |
| genbase | 0.9403 | 0.0022 | 0.9751 | 0.9875 | 0.6416 | 0.9756 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6352 | 0.9987 |
| GnegativeGO | 0.9429 | 0.0089 | 0.9643 | 0.9750 | 0.8412 | 0.9658 | 0.0214 | 0.1143 | 0.0107 | 0.9851 | 0.8671 | 0.9920 |
| GnegativePseAAC | 0.6143 | 0.0616 | 0.6464 | 0.6625 | 0.3226 | 0.7336 | 0.2500 | 0.6786 | 0.1339 | 0.8382 | 0.8098 | 0.9436 |
| GpositiveGO | 0.8654 | 0.0433 | 0.8942 | 0.9086 | 0.8569 | 0.9143 | 0.1154 | 0.2115 | 0.0641 | 0.9327 | 0.9794 | 0.9502 |
| GpositivePseAAC | 0.6154 | 0.1346 | 0.6250 | 0.6298 | 0.5148 | 0.7021 | 0.3462 | 0.5577 | 0.1923 | 0.7965 | 0.8555 | 0.8819 |
| HumanGO | 0.6270 | 0.0402 | 0.7386 | 0.7964 | 0.6835 | 0.7626 | 0.1608 | 0.6109 | 0.0216 | 0.8965 | 0.9591 | 0.9752 |
| HumanPseAAC | 0.1608 | 0.0836 | 0.1758 | 0.1842 | 0.0830 | 0.2541 | 0.5820 | 2.2669 | 0.0692 | 0.5943 | 0.7151 | 0.8552 |
| Image | 0.5500 | 0.1230 | 0.6242 | 0.6608 | 0.6997 | 0.6993 | 0.2050 | 0.6650 | 0.0608 | 0.8662 | 0.9018 | 0.9037 |
| IMDB-ECC-F10% | 0.0000 | 0.6473 | 0.0676 | 0.1253 | 0.1083 | 0.1252 | 0.9864 | 17.1887 | 0.5899 | 0.1164 | 0.5557 | 0.4703 |
| IMDB-F10% | 0.0000 | 0.7741 | 0.0793 | 0.1471 | 0.1266 | 0.1451 | 0.9835 | 16.5021 | 0.5624 | 0.1296 | 0.5629 | 0.4850 |
| LLOG-F | 0.0738 | 0.0169 | 0.1045 | 0.1194 | 0.0520 | 0.1799 | 0.6066 | 12.7787 | 0.2162 | 0.4810 | 0.4842 | 0.8909 |
| mediamill10% | 0.0024 | 0.0485 | 0.1880 | 0.3061 | 0.0454 | 0.3025 | 0.6698 | 23.7815 | 0.1059 | 0.4203 | 0.6318 | 0.9059 |
| medical | 0.6837 | 0.0095 | 0.7730 | 0.8196 | 0.3748 | 0.8346 | 0.1429 | 1.5816 | 0.0408 | 0.8883 | 0.5464 | 0.9899 |
| Music | 0.2667 | 0.1833 | 0.5667 | 0.6967 | 0.7081 | 0.7105 | 0.2167 | 1.8500 | 0.2306 | 0.8202 | 0.8661 | 0.8772 |
| NUS-WIDE-bow10% | 0.0000 | 0.1322 | 0.0183 | 0.0361 | 0.0151 | 0.0380 | 0.9772 | 47.1660 | 0.5126 | 0.0631 | 0.5828 | 0.5435 |
| NUS-WIDE-cVLADplus10% | 0.0010 | 0.0467 | 0.0093 | 0.0161 | 0.0088 | 0.0224 | 0.9753 | 51.7226 | 0.5782 | 0.0591 | 0.5428 | 0.4650 |
| OHSUMED-F | 0.2477 | 0.0537 | 0.4230 | 0.5136 | 0.3902 | 0.5457 | 0.3037 | 3.5844 | 0.1060 | 0.7282 | 0.8613 | 0.9063 |
| PlantGO | 0.7041 | 0.0400 | 0.7517 | 0.7737 | 0.6733 | 0.7793 | 0.2143 | 0.6020 | 0.0204 | 0.8730 | 0.9634 | 0.9612 |
| PlantPseAAC | 0.0816 | 0.0944 | 0.0918 | 0.0967 | 0.0881 | 0.1527 | 0.6224 | 2.3367 | 0.1862 | 0.5709 | 0.7087 | 0.8149 |
| rcv1subset1 | 0.0700 | 0.0284 | 0.2162 | 0.2952 | 0.1604 | 0.3059 | 0.4500 | 16.0583 | 0.1087 | 0.5599 | 0.8674 | 0.9253 |
| REUTERS-K500-EX2 | 0.3233 | 0.0160 | 0.4210 | 0.4791 | 0.2357 | 0.4317 | 0.4350 | 11.2067 | 0.1949 | 0.6124 | 0.7210 | 0.9219 |
| scene | 0.6266 | 0.0747 | 0.6826 | 0.7105 | 0.7777 | 0.7692 | 0.1992 | 0.4938 | 0.0633 | 0.8732 | 0.9457 | 0.9468 |
| sider_CDK_ECFP4 | 0.0141 | 0.2556 | 0.5910 | 0.7596 | 0.6431 | 0.7661 | 0.0775 | 19.4507 | 0.1323 | 0.8390 | 0.5919 | 0.7959 |
| sider_MordredDesc | 0.0070 | 0.2567 | 0.5946 | 0.7629 | 0.6052 | 0.7655 | 0.0775 | 19.4225 | 0.1244 | 0.8372 | 0.5680 | 0.7940 |
| sider_RDKit_desc | 0.0070 | 0.2611 | 0.5920 | 0.7581 | 0.6120 | 0.7623 | 0.0845 | 19.7676 | 0.1331 | 0.8366 | 0.5820 | 0.7934 |
| SLASHDOT-F | 0.3404 | 0.0439 | 0.4400 | 0.4926 | 0.3190 | 0.5390 | 0.4222 | 2.8892 | 0.0407 | 0.6550 | 0.6809 | 0.9003 |
| solar_flare-L3 | 0.2000 | 0.4667 | 0.3000 | 0.3429 | 0.2667 | 0.3636 | 0.6000 | 0.8000 | 0.5000 | 0.6667 | 0.2222 | 0.6400 |
| Stackex_chemistry | 0.0517 | 0.0143 | 0.1521 | 0.2151 | 0.0935 | 0.2282 | 0.6724 | 46.2989 | 0.2554 | 0.3245 | 0.8374 | 0.9019 |
| Stackex_chess | 0.0298 | 0.0114 | 0.1785 | 0.2727 | 0.0696 | 0.2973 | 0.6190 | 62.5417 | 0.2468 | 0.3436 | 0.5139 | 0.9531 |
| Stackex_coffee | 0.0000 | 0.0258 | 0.0656 | 0.1086 | 0.0379 | 0.1205 | 0.8261 | 56.1304 | 0.3137 | 0.3005 | 0.2458 | 0.9491 |
| Stackex_cooking | 0.0609 | 0.0062 | 0.2314 | 0.3307 | 0.1465 | 0.3374 | 0.5604 | 116.7285 | 0.3545 | 0.3544 | 0.8773 | 0.9474 |
| Stackex_philosophy | 0.0779 | 0.0103 | 0.2323 | 0.3206 | 0.0942 | 0.3282 | 0.5377 | 54.8970 | 0.1853 | 0.4158 | 0.6976 | 0.9465 |
| tmc2007-500 | 0.2070 | 0.0738 | 0.4862 | 0.6300 | 0.5195 | 0.6029 | 0.2843 | 3.6063 | 0.0863 | 0.7561 | 0.8627 | 0.9175 |
| tox21_CDK_ECFP4 | 0.1267 | 0.1738 | 0.3268 | 0.4338 | 0.4294 | 0.4709 | 0.5274 | 4.5342 | 0.2011 | 0.5861 | 0.6919 | 0.7407 |
| tox21_RDKit_desc | 0.1164 | 0.1738 | 0.2877 | 0.3804 | 0.3854 | 0.4356 | 0.4760 | 4.5240 | 0.0914 | 0.5955 | 0.6664 | 0.7333 |
| VirusGO | 0.8571 | 0.0397 | 0.8968 | 0.9165 | 0.7154 | 0.8980 | 0.0476 | 0.4762 | 0.0476 | 0.9524 | 0.8014 | 0.9612 |
| VirusPseAAC | 0.4762 | 0.1032 | 0.5714 | 0.6181 | 0.3722 | 0.6829 | 0.3333 | 0.8095 | 0.0000 | 0.7833 | 0.6422 | 0.9000 |
| Water-quality | 0.0283 | 0.2925 | 0.4171 | 0.5884 | 0.5210 | 0.5843 | 0.2264 | 8.8208 | 0.2564 | 0.7252 | 0.6952 | 0.7328 |
| Yahoo_Arts | 0.1549 | 0.0651 | 0.2235 | 0.2631 | 0.1534 | 0.2789 | 0.5848 | 5.0067 | 0.4402 | 0.5529 | 0.7492 | 0.8490 |
| Yahoo_Business | 0.5062 | 0.0287 | 0.6899 | 0.7860 | 0.2843 | 0.7031 | 0.1185 | 1.8797 | 0.1300 | 0.8872 | 0.7311 | 0.9594 |
| Yahoo_Computers | 0.1976 | 0.0412 | 0.2400 | 0.2633 | 0.1670 | 0.3187 | 0.4827 | 3.1912 | 0.1938 | 0.6635 | 0.7406 | 0.9099 |
| Yahoo_Education | 0.1687 | 0.0498 | 0.3080 | 0.3835 | 0.2189 | 0.3875 | 0.5611 | 3.3807 | 0.4956 | 0.5849 | 0.7836 | 0.9194 |
| Yahoo_Entertainment | 0.2836 | 0.0578 | 0.3522 | 0.3912 | 0.2007 | 0.4404 | 0.4446 | 2.7581 | 0.0796 | 0.6574 | 0.8486 | 0.8870 |
| Yahoo_Health | 0.3453 | 0.0409 | 0.4753 | 0.5477 | 0.2435 | 0.5263 | 0.3648 | 2.7068 | 0.2031 | 0.7352 | 0.7398 | 0.9482 |
| Yahoo_Recreation | 0.2065 | 0.0545 | 0.2437 | 0.2639 | 0.2342 | 0.3288 | 0.5019 | 3.6337 | 0.4692 | 0.6133 | 0.8029 | 0.8583 |
| Yahoo_Reference | 0.4184 | 0.0330 | 0.4878 | 0.5237 | 0.1855 | 0.5125 | 0.4645 | 2.4334 | 0.0802 | 0.6732 | 0.7207 | 0.9399 |
| Yahoo_Science | 0.1851 | 0.0338 | 0.2303 | 0.2548 | 0.2099 | 0.3018 | 0.5863 | 5.0809 | 0.0778 | 0.5576 | 0.8299 | 0.8966 |
| Yahoo_Social | 0.4480 | 0.0245 | 0.5199 | 0.5600 | 0.2637 | 0.5643 | 0.3573 | 2.5140 | 0.0713 | 0.7440 | 0.7702 | 0.9415 |
| Yahoo_Society | 0.0200 | 0.1604 | 0.1526 | 0.2504 | 0.2085 | 0.2248 | 0.7293 | 8.0303 | 0.2677 | 0.3764 | 0.6313 | 0.7618 |
| yeast | 0.1488 | 0.1936 | 0.5130 | 0.6488 | 0.3996 | 0.6511 | 0.2190 | 6.2438 | 0.2181 | 0.7664 | 0.7183 | 0.8461 |
| Yelp | 0.5583 | 0.1332 | 0.7557 | 0.8394 | 0.7673 | 0.8120 | 0.0887 | 1.1326 | 0.0959 | 0.9277 | 0.8705 | 0.9054 |

Table 129: Detailed results for ML-FOREST

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5420 | 0.0442 | 0.6164 | 0.6594 | 0.6716 | 0.6171 | 0.3689 | 1.6927 | 0.3089 | 0.7468 | 0.9693 | 0.9622 |
| 3s-bbc1000 | 0.1667 | 0.3009 | 0.2884 | 0.3708 | 0.3586 | 0.3810 | 0.6389 | 2.0278 | 0.6667 | 0.5616 | 0.7019 | 0.6904 |
| 3s-guardian1000 | 0.3226 | 0.2366 | 0.4274 | 0.4980 | 0.3199 | 0.4634 | 0.5484 | 1.7097 | 0.4516 | 0.6215 | 0.6667 | 0.7425 |
| 3s-inter3000 | 0.0588 | 0.3824 | 0.1873 | 0.2679 | 0.2508 | 0.3158 | 0.7647 | 2.1765 | 0.4853 | 0.4667 | 0.4238 | 0.5880 |
| 3s-reuters1000 | 0.1000 | 0.3111 | 0.1583 | 0.1887 | 0.1411 | 0.2000 | 0.9000 | 2.2333 | 0.8583 | 0.4253 | 0.6309 | 0.5766 |
| amphibians | 0.0556 | 0.3254 | 0.5308 | 0.7256 | 0.5652 | 0.7007 | 0.2222 | 2.5556 | 0.1407 | 0.8565 | 0.5476 | 0.7690 |
| bibtex | 0.1622 | 0.0177 | 0.3434 | 0.4723 | 0.2362 | 0.3621 | 0.4041 | 57.2095 | 0.4085 | 0.5016 | 0.9596 | 0.9644 |
| birds | 0.1795 | 0.1039 | 0.3894 | 0.4971 | 0.2933 | 0.4539 | 0.4103 | 5.6154 | 0.3496 | 0.6077 | 0.7670 | 0.8557 |
| bookmarks10% | 0.2167 | 0.0279 | 0.2939 | 0.3954 | 0.1054 | 0.1298 | 0.5659 | 72.4451 | 0.4007 | 0.3833 | 0.9257 | 0.9280 |
| CAL500 | 0.0000 | 0.1412 | 0.1898 | 0.3245 | 0.0519 | 0.3157 | 0.4118 | 138.8824 | 0.4239 | 0.4802 | 0.5363 | 0.8169 |
| corel16k001 | 0.0094 | 0.0368 | 0.1170 | 0.2082 | 0.0528 | 0.1578 | 0.7567 | 73.5701 | 0.4647 | 0.2490 | 0.8898 | 0.9084 |
| Corel5k | 0.0020 | 0.0137 | 0.1258 | 0.2232 | 0.0262 | 0.1923 | 0.6660 | 137.3100 | 0.6250 | 0.2650 | 0.6113 | 0.9414 |
| delicious | 0.0000 | 0.0200 | 0.0995 | 0.1870 | 0.0304 | 0.1772 | 0.4319 | 753.9149 | 0.2824 | 0.2983 | 0.8641 | 0.9133 |
| emotions | 0.2500 | 0.2444 | 0.5467 | 0.6975 | 0.6309 | 0.6562 | 0.2167 | 1.7000 | 0.1583 | 0.8269 | 0.8334 | 0.8571 |
| enron | 0.0175 | 0.0557 | 0.3174 | 0.4912 | 0.0719 | 0.4633 | 0.4737 | 17.9181 | 0.2048 | 0.5605 | 0.6953 | 0.9133 |
| EukaryoteGO | 0.6628 | 0.0238 | 0.7591 | 0.8103 | 0.6567 | 0.7734 | 0.1892 | 0.6680 | 0.0483 | 0.8859 | 0.9922 | 0.9927 |
| EukaryotePseAAC | 0.1660 | 0.0917 | 0.3133 | 0.4052 | 0.1511 | 0.3664 | 0.6538 | 3.4929 | 0.5256 | 0.5245 | 0.8411 | 0.8943 |
| flags | 0.0500 | 0.3143 | 0.5936 | 0.7412 | 0.6215 | 0.7349 | 0.2000 | 3.7500 | 0.2592 | 0.8153 | 0.7069 | 0.8129 |
| foodtruck | 0.3415 | 0.1463 | 0.4885 | 0.6005 | 0.1539 | 0.4857 | 0.2439 | 2.7073 | 0.2970 | 0.8027 | 0.6650 | 0.8284 |
| genbase | 0.7463 | 0.0155 | 0.8134 | 0.8525 | 0.2827 | 0.8108 | 0.1045 | 2.9851 | 0.1343 | 0.8755 | 0.6667 | 0.9960 |
| GnegativeGO | 0.8286 | 0.0384 | 0.8500 | 0.8607 | 0.6999 | 0.8532 | 0.1357 | 0.3071 | 0.1321 | 0.9182 | 0.8721 | 0.9923 |
| GnegativePseAAC | 0.4857 | 0.1232 | 0.6024 | 0.6623 | 0.3041 | 0.6034 | 0.3214 | 1.2286 | 0.3071 | 0.7700 | 0.8225 | 0.9276 |
| GpositiveGO | 0.8654 | 0.0481 | 0.9038 | 0.9227 | 0.7965 | 0.9091 | 0.1154 | 0.2115 | 0.0769 | 0.9327 | 0.9936 | 0.9925 |
| GpositivePseAAC | 0.3846 | 0.2837 | 0.5577 | 0.6466 | 0.5265 | 0.5755 | 0.3846 | 0.7115 | 0.3846 | 0.7628 | 0.8775 | 0.8450 |
| HumanGO | 0.6527 | 0.0418 | 0.7509 | 0.8043 | 0.6959 | 0.7642 | 0.2058 | 0.7299 | 0.0621 | 0.8758 | 0.9797 | 0.9838 |
| HumanPseAAC | 0.1704 | 0.1569 | 0.3054 | 0.3963 | 0.1960 | 0.3551 | 0.6624 | 3.0322 | 0.5106 | 0.5190 | 0.7281 | 0.8222 |
| Image | 0.5100 | 0.1770 | 0.6538 | 0.7450 | 0.6644 | 0.6616 | 0.2400 | 0.7750 | 0.1717 | 0.8369 | 0.8918 | 0.8840 |
| IMDB-ECC-F10% | 0.0147 | 0.3425 | 0.1168 | 0.2268 | 0.1092 | 0.1625 | 0.8375 | 13.4235 | 0.6872 | 0.2660 | 0.8493 | 0.8661 |
| IMDB-F10% | 0.0066 | 0.3739 | 0.1123 | 0.2234 | 0.1132 | 0.1621 | 0.8616 | 14.0124 | 0.7138 | 0.2489 | 0.8510 | 0.8669 |
| LLOG-F | 0.0738 | 0.1245 | 0.1283 | 0.2220 | 0.0644 | 0.1053 | 0.7869 | 26.8279 | 0.4806 | 0.2764 | 0.5079 | 0.8907 |
| mediamill10% | 0.0713 | 0.0366 | 0.3839 | 0.5327 | 0.0343 | 0.4866 | 0.3278 | 39.9691 | 0.1937 | 0.5942 | 0.7115 | 0.9418 |
| medical | 0.5408 | 0.0329 | 0.6350 | 0.6930 | 0.1723 | 0.5183 | 0.2755 | 7.6633 | 0.1505 | 0.7412 | 0.5251 | 0.9702 |
| Music | 0.2167 | 0.2611 | 0.5200 | 0.6798 | 0.6311 | 0.6385 | 0.3167 | 2.1500 | 0.1912 | 0.7586 | 0.8459 | 0.8441 |
| NUS-WIDE-bow10% | 0.0081 | 0.5819 | 0.0640 | 0.1468 | 0.0458 | 0.0597 | 0.9049 | 43.1989 | 0.8444 | 0.1591 | 0.8521 | 0.9658 |
| NUS-WIDE-cVLADplus10% | 0.0048 | 0.6155 | 0.0648 | 0.1482 | 0.0457 | 0.0584 | 0.9030 | 42.6218 | 0.8425 | 0.1659 | 0.8566 | 0.9706 |
| OHSUMED-F | 0.2240 | 0.1015 | 0.4399 | 0.5823 | 0.3258 | 0.4430 | 0.3819 | 5.3510 | 0.1734 | 0.6503 | 0.8509 | 0.8895 |
| PlantGO | 0.6531 | 0.0476 | 0.7381 | 0.7850 | 0.6373 | 0.7544 | 0.2347 | 1.0000 | 0.0867 | 0.8381 | 0.9800 | 0.9759 |
| PlantPseAAC | 0.0612 | 0.3095 | 0.1859 | 0.2916 | 0.1783 | 0.2510 | 0.7449 | 3.4592 | 0.3265 | 0.4526 | 0.7068 | 0.7646 |
| rcv1subset1 | 0.0383 | 0.0616 | 0.2197 | 0.3759 | 0.1318 | 0.2723 | 0.5383 | 32.7533 | 0.2777 | 0.4236 | 0.8489 | 0.9216 |
| REUTERS-K500-EX2 | 0.2083 | 0.0649 | 0.2886 | 0.3877 | 0.1152 | 0.1659 | 0.6300 | 34.1700 | 0.3684 | 0.4047 | 0.7281 | 0.9322 |
| scene | 0.5477 | 0.1293 | 0.6723 | 0.7470 | 0.7141 | 0.6847 | 0.2739 | 0.5187 | 0.0747 | 0.8420 | 0.9341 | 0.9462 |
| sider_CDK_ECFP4 | 0.0000 | 0.2783 | 0.6303 | 0.7840 | 0.5937 | 0.7774 | 0.5915 | 19.9014 | 0.3973 | 0.6915 | 0.5024 | 0.7104 |
| sider_MordredDesc | 0.0070 | 0.2846 | 0.6234 | 0.7780 | 0.5982 | 0.7731 | 0.5915 | 19.9296 | 0.4007 | 0.6910 | 0.4977 | 0.7182 |
| sider_RDKit_desc | 0.0070 | 0.2851 | 0.6246 | 0.7794 | 0.5911 | 0.7724 | 0.5915 | 19.9155 | 0.3932 | 0.6928 | 0.5458 | 0.7401 |
| SLASHDOT-F | 0.3668 | 0.0976 | 0.4541 | 0.5300 | 0.2229 | 0.3777 | 0.4855 | 6.1135 | 0.2460 | 0.5874 | 0.6773 | 0.8875 |
| solar_flare-L3 | 0.1811 | 0.3923 | 0.3761 | 0.4612 | 0.3127 | 0.4776 | 0.5922 | 0.5777 | 0.2910 | 0.6871 | 0.3138 | 0.7547 |
| Stackex_chemistry | 0.0575 | 0.0590 | 0.1573 | 0.3009 | 0.0715 | 0.1313 | 0.6810 | 74.9986 | 0.4800 | 0.2865 | 0.8553 | 0.9392 |
| Stackex_chess | 0.0298 | 0.0338 | 0.1450 | 0.2849 | 0.0416 | 0.1447 | 0.6667 | 116.7738 | 0.4807 | 0.2606 | 0.5097 | 0.9515 |
| Stackex_coffee | 0.0000 | 0.0562 | 0.1101 | 0.2437 | 0.0521 | 0.1762 | 0.6957 | 61.4348 | 0.4275 | 0.2780 | 0.2432 | 0.9339 |
| Stackex_cooking | 0.0715 | 0.0212 | 0.2281 | 0.3916 | 0.0895 | 0.1658 | 0.5420 | 167.1130 | 0.4493 | 0.3556 | 0.8992 | 0.9753 |
| Stackex_philosophy | 0.0804 | 0.0366 | 0.2302 | 0.3948 | 0.0606 | 0.1613 | 0.5628 | 99.0503 | 0.4051 | 0.3627 | 0.7081 | 0.9561 |
| tmc2007-500 | 0.1808 | 0.0745 | 0.4688 | 0.6182 | 0.3964 | 0.6035 | 0.4517 | 3.7357 | 0.1298 | 0.6933 | 0.9013 | 0.9382 |
| tox21_CDK_ECFP4 | 0.1438 | 0.2711 | 0.3394 | 0.5037 | 0.3364 | 0.3980 | 0.4897 | 4.6301 | 0.2131 | 0.6009 | 0.7088 | 0.7560 |
| tox21_RDKit_desc | 0.1062 | 0.2483 | 0.3211 | 0.4827 | 0.3388 | 0.4114 | 0.5000 | 4.5103 | 0.1921 | 0.5906 | 0.7047 | 0.7621 |
| VirusGO | 0.8095 | 0.0397 | 0.8889 | 0.9206 | 0.7154 | 0.8980 | 0.0476 | 0.3810 | 0.0476 | 0.9563 | 0.8076 | 0.9747 |
| VirusPseAAC | 0.3333 | 0.2302 | 0.5325 | 0.6424 | 0.4375 | 0.5672 | 0.5238 | 0.9524 | 0.0000 | 0.6960 | 0.6332 | 0.8873 |
| Water-quality | 0.0094 | 0.3551 | 0.2998 | 0.4902 | 0.3319 | 0.4606 | 0.4245 | 9.4340 | 0.3073 | 0.6419 | 0.6081 | 0.6861 |
| Yahoo_Arts | 0.2150 | 0.1595 | 0.3606 | 0.5049 | 0.2006 | 0.3013 | 0.5020 | 6.9693 | 0.2530 | 0.5540 | 0.7697 | 0.8449 |
| Yahoo_Business | 0.5481 | 0.0253 | 0.7244 | 0.8176 | 0.2351 | 0.7458 | 0.1319 | 2.3467 | 0.1448 | 0.8845 | 0.7559 | 0.9638 |
| Yahoo_Computers | 0.3052 | 0.0433 | 0.4558 | 0.5428 | 0.2157 | 0.5064 | 0.4924 | 4.4988 | 0.4871 | 0.6246 | 0.8115 | 0.9338 |
| Yahoo_Education | 0.3026 | 0.0523 | 0.4358 | 0.5259 | 0.2816 | 0.4534 | 0.4705 | 5.5062 | 0.2853 | 0.6233 | 0.8343 | 0.9385 |
| Yahoo_Entertainment | 0.4792 | 0.0673 | 0.5876 | 0.6648 | 0.3699 | 0.5610 | 0.3229 | 2.6677 | 0.1483 | 0.7407 | 0.9207 | 0.9338 |
| Yahoo_Health | 0.2975 | 0.0411 | 0.5305 | 0.6431 | 0.2412 | 0.6067 | 0.4843 | 3.2975 | 0.2321 | 0.6953 | 0.7602 | 0.9503 |
| Yahoo_Recreation | 0.4677 | 0.0631 | 0.5761 | 0.6466 | 0.4372 | 0.5408 | 0.3383 | 3.8020 | 0.2986 | 0.7177 | 0.9177 | 0.9223 |
| Yahoo_Reference | 0.4757 | 0.0684 | 0.5747 | 0.6694 | 0.1856 | 0.4226 | 0.3412 | 3.1009 | 0.1289 | 0.7240 | 0.7207 | 0.9433 |
| Yahoo_Science | 0.3048 | 0.1075 | 0.4166 | 0.5478 | 0.1898 | 0.2801 | 0.4728 | 7.6112 | 0.1729 | 0.5841 | 0.8389 | 0.8911 |
| Yahoo_Social | 0.5578 | 0.0264 | 0.6540 | 0.7154 | 0.2999 | 0.6207 | 0.2756 | 3.9777 | 0.1517 | 0.7709 | 0.8656 | 0.9658 |
| Yahoo_Society | 0.3244 | 0.0560 | 0.4512 | 0.5288 | 0.2096 | 0.4694 | 0.3994 | 7.5427 | 0.4005 | 0.6025 | 0.8844 | 0.9394 |
| yeast | 0.0744 | 0.2223 | 0.4391 | 0.6091 | 0.3491 | 0.5954 | 0.2438 | 6.3347 | 0.2599 | 0.7443 | 0.6866 | 0.8305 |
| Yelp | 0.2393 | 0.2142 | 0.6012 | 0.7664 | 0.6602 | 0.7199 | 0.3659 | 1.4237 | 0.4038 | 0.7959 | 0.7854 | 0.8475 |

Table 130: Detailed results for IBLR-ML+

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.1098 | 0.1098 | 0.3729 | 0.5251 | 0.4600 | 0.4519 | 0.2705 | 1.0430 | 0.0492 | 0.8201 | 0.9511 | 0.9511 |
| 3s-bbc1000 | 0.1111 | 0.2593 | 0.4005 | 0.5417 | 0.5095 | 0.5172 | 0.3889 | 1.2778 | 0.2500 | 0.7384 | 0.7888 | 0.7802 |
| 3s-guardian1000 | 0.0968 | 0.3602 | 0.3414 | 0.4707 | 0.4150 | 0.4370 | 0.6129 | 1.8710 | 0.1613 | 0.5863 | 0.7133 | 0.6942 |
| 3s-inter3000 | 0.0000 | 0.4706 | 0.1912 | 0.2809 | 0.2471 | 0.2941 | 0.6471 | 2.4118 | 0.4662 | 0.4961 | 0.4696 | 0.5000 |
| 3s-reuters1000 | 0.0667 | 0.3167 | 0.3028 | 0.4173 | 0.4464 | 0.4124 | 0.6667 | 1.6000 | 0.3000 | 0.5622 | 0.7247 | 0.7069 |
| amphibians | 0.0556 | 0.2698 | 0.5247 | 0.7513 | 0.5926 | 0.7119 | 0.1667 | 2.7222 | 0.1046 | 0.8598 | 0.6354 | 0.7909 |
| bibtex | 0.0662 | 0.0260 | 0.3172 | 0.4683 | 0.3366 | 0.4174 | 0.3541 | 26.8108 | 0.0849 | 0.5989 | 0.8913 | 0.9102 |
| birds | 0.1795 | 0.1174 | 0.4085 | 0.5242 | 0.4200 | 0.5140 | 0.3590 | 4.7436 | 0.1491 | 0.6673 | 0.7536 | 0.8467 |
| bookmarks10% | 0.0934 | 0.1070 | 0.1589 | 0.2615 | 0.0838 | 0.0993 | 0.5911 | 53.7415 | 0.1673 | 0.4316 | 0.7692 | 0.8030 |
| CAL500 | 0.0000 | 0.1410 | 0.2248 | 0.3685 | 0.0881 | 0.3621 | 0.1176 | 134.6078 | 0.3842 | 0.4954 | 0.5336 | 0.8123 |
| corel16k001 | 0.0116 | 0.0236 | 0.1447 | 0.2321 | 0.0718 | 0.2401 | 0.6412 | 65.1801 | 0.2038 | 0.3237 | 0.7104 | 0.7798 |
| Corel5k | 0.0120 | 0.0103 | 0.1368 | 0.2130 | 0.0383 | 0.2471 | 0.6000 | 185.4480 | 0.3150 | 0.3013 | 0.4719 | 0.7813 |
| delicious | 0.0006 | 0.0182 | 0.1240 | 0.2172 | 0.0569 | 0.2143 | 0.3176 | 497.8931 | 0.0726 | 0.3831 | 0.7472 | 0.8963 |
| emotions | 0.3167 | 0.1944 | 0.5653 | 0.6711 | 0.6698 | 0.6903 | 0.3000 | 1.6833 | 0.2014 | 0.7948 | 0.8576 | 0.8763 |
| enron | 0.1637 | 0.0535 | 0.4784 | 0.6209 | 0.2116 | 0.5865 | 0.2281 | 18.0994 | 0.1187 | 0.6812 | 0.6256 | 0.8519 |
| EukaryoteGO | 0.4620 | 0.0476 | 0.6435 | 0.7483 | 0.4883 | 0.6565 | 0.2381 | 1.4093 | 0.0479 | 0.8390 | 0.9688 | 0.9463 |
| EukaryotePseAAC | 0.1802 | 0.0579 | 0.2859 | 0.3393 | 0.1292 | 0.4010 | 0.5611 | 3.3861 | 0.0816 | 0.5961 | 0.6941 | 0.8647 |
| flags | 0.1500 | 0.2857 | 0.5511 | 0.6892 | 0.5560 | 0.6923 | 0.2500 | 3.9500 | 0.2433 | 0.7969 | 0.5806 | 0.7763 |
| foodtruck | 0.2195 | 0.1565 | 0.4201 | 0.5741 | 0.1538 | 0.5032 | 0.3415 | 3.0244 | 0.2939 | 0.7143 | 0.6311 | 0.8094 |
| genbase | 0.9403 | 0.0022 | 0.9577 | 0.9639 | 0.6153 | 0.9753 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.8143 | 0.0250 | 0.9012 | 0.9421 | 0.7847 | 0.9108 | 0.0643 | 0.1643 | 0.0089 | 0.9635 | 0.8703 | 0.9910 |
| GnegativePseAAC | 0.5857 | 0.0777 | 0.7065 | 0.7671 | 0.4673 | 0.7290 | 0.2143 | 0.7500 | 0.0571 | 0.8504 | 0.6812 | 0.9238 |
| GpositiveGO | 0.7308 | 0.0962 | 0.8045 | 0.8427 | 0.7209 | 0.8246 | 0.1538 | 0.2308 | 0.0705 | 0.9151 | 0.9676 | 0.9572 |
| GpositivePseAAC | 0.6538 | 0.1394 | 0.7019 | 0.7252 | 0.6318 | 0.7290 | 0.2692 | 0.4038 | 0.0769 | 0.8462 | 0.9014 | 0.9144 |
| HumanGO | 0.4084 | 0.0845 | 0.6048 | 0.7234 | 0.4945 | 0.6214 | 0.2347 | 1.2444 | 0.0787 | 0.8409 | 0.9204 | 0.9203 |
| HumanPseAAC | 0.2122 | 0.0958 | 0.3266 | 0.3867 | 0.1991 | 0.4151 | 0.5659 | 2.9100 | 0.1422 | 0.6011 | 0.6700 | 0.8034 |
| Image | 0.4350 | 0.1830 | 0.6008 | 0.6804 | 0.6523 | 0.6474 | 0.2850 | 0.8150 | 0.0983 | 0.8204 | 0.8446 | 0.8442 |
| IMDB-ECC-F10% | 0.0618 | 0.0783 | 0.1435 | 0.1950 | 0.0677 | 0.2118 | 0.6845 | 10.6520 | 0.2654 | 0.4129 | 0.5972 | 0.7154 |
| IMDB-F10% | 0.0513 | 0.0771 | 0.1329 | 0.1784 | 0.0603 | 0.2029 | 0.6319 | 10.0364 | 0.2346 | 0.4518 | 0.6289 | 0.7515 |
| LLOG-F | 0.1557 | 0.0161 | 0.1960 | 0.2197 | 0.0536 | 0.2967 | 0.5738 | 12.9836 | 0.1547 | 0.4917 | 0.4747 | 0.8696 |
| mediamill10% | 0.0713 | 0.0313 | 0.4358 | 0.6035 | 0.0433 | 0.5494 | 0.1283 | 18.8314 | 0.0572 | 0.7127 | 0.5739 | 0.9296 |
| medical | 0.3163 | 0.0401 | 0.5439 | 0.6879 | 0.3015 | 0.5714 | 0.1939 | 1.3163 | 0.0383 | 0.8672 | 0.5190 | 0.9773 |
| Music | 0.2000 | 0.2028 | 0.5556 | 0.6986 | 0.6858 | 0.6920 | 0.1667 | 1.9000 | 0.1685 | 0.8284 | 0.8516 | 0.8597 |
| NUS-WIDE-bow10% | 0.1256 | 0.0252 | 0.2390 | 0.2973 | 0.0397 | 0.3547 | 0.5029 | 17.9676 | 0.1253 | 0.5226 | 0.6317 | 0.8533 |
| NUS-WIDE-cVLADplus10% | 0.1656 | 0.0253 | 0.3192 | 0.3998 | 0.0549 | 0.4225 | 0.4724 | 17.7079 | 0.1278 | 0.5446 | 0.6304 | 0.8584 |
| OHSUMED-F | 0.1701 | 0.0708 | 0.4432 | 0.5798 | 0.4577 | 0.5687 | 0.3116 | 4.5879 | 0.1104 | 0.7128 | 0.8523 | 0.8732 |
| PlantGO | 0.3571 | 0.0867 | 0.5527 | 0.6518 | 0.5806 | 0.6194 | 0.3367 | 1.0918 | 0.0757 | 0.7901 | 0.9395 | 0.9203 |
| PlantPseAAC | 0.1531 | 0.1480 | 0.3070 | 0.3910 | 0.2607 | 0.3696 | 0.5918 | 3.1122 | 0.2543 | 0.5504 | 0.6952 | 0.7454 |
| rcv1subset1 | 0.1067 | 0.0347 | 0.3164 | 0.4318 | 0.2205 | 0.4104 | 0.4417 | 20.8400 | 0.1064 | 0.5599 | 0.7680 | 0.8890 |
| REUTERS-K500-EX2 | 0.0350 | 0.0460 | 0.2449 | 0.3808 | 0.1732 | 0.3087 | 0.4633 | 10.5283 | 0.0776 | 0.6290 | 0.6728 | 0.9187 |
| scene | 0.3195 | 0.1618 | 0.5930 | 0.7206 | 0.6660 | 0.6619 | 0.2199 | 0.4896 | 0.0840 | 0.8654 | 0.9306 | 0.9343 |
| sider_CDK_ECFP4 | 0.0000 | 0.2564 | 0.5996 | 0.7693 | 0.6409 | 0.7663 | 0.1197 | 19.1761 | 0.1241 | 0.8347 | 0.5931 | 0.7926 |
| sider_MordredDesc | 0.0141 | 0.2499 | 0.6128 | 0.7700 | 0.6102 | 0.7793 | 0.0634 | 19.2042 | 0.1124 | 0.8449 | 0.5473 | 0.7936 |
| sider_RDKit_desc | 0.0141 | 0.2514 | 0.6357 | 0.7903 | 0.5954 | 0.7875 | 0.1127 | 19.1831 | 0.1028 | 0.8445 | 0.5600 | 0.8101 |
| SLASHDOT-F | 0.3905 | 0.0431 | 0.5165 | 0.5831 | 0.3667 | 0.5962 | 0.3588 | 2.8179 | 0.0786 | 0.7221 | 0.6761 | 0.9013 |
| solar_flare-L3 | 0.2000 | 0.4000 | 0.4000 | 0.4800 | 0.3238 | 0.5000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.3333 | 0.7600 |
| Stackex_chemistry | 0.0359 | 0.0220 | 0.1915 | 0.3116 | 0.1540 | 0.2895 | 0.5632 | 48.0086 | 0.1500 | 0.4345 | 0.7453 | 0.8310 |
| Stackex_chess | 0.0119 | 0.0243 | 0.1977 | 0.3402 | 0.1188 | 0.2831 | 0.4821 | 64.7202 | 0.1600 | 0.4411 | 0.4488 | 0.8321 |
| Stackex_coffee | 0.0000 | 0.1149 | 0.0996 | 0.1952 | 0.0692 | 0.1425 | 0.9130 | 35.5652 | 0.1416 | 0.2610 | 0.1926 | 0.7898 |
| Stackex_cooking | 0.0116 | 0.0216 | 0.1963 | 0.3405 | 0.1458 | 0.2471 | 0.4039 | 86.1662 | 0.1048 | 0.5155 | 0.7819 | 0.8885 |
| Stackex_philosophy | 0.0503 | 0.0190 | 0.2493 | 0.4106 | 0.1306 | 0.3228 | 0.4322 | 65.7387 | 0.1528 | 0.4993 | 0.5982 | 0.8407 |
| tmc2007-500 | 0.2804 | 0.0634 | 0.5700 | 0.7076 | 0.5704 | 0.6769 | 0.2087 | 2.9990 | 0.0553 | 0.8185 | 0.9183 | 0.9403 |
| tox21_CDK_ECFP4 | 0.0959 | 0.1941 | 0.3021 | 0.4114 | 0.4053 | 0.4543 | 0.4623 | 4.5856 | 0.1687 | 0.6063 | 0.6963 | 0.7313 |
| tox21_RDKit_desc | 0.1130 | 0.1732 | 0.2595 | 0.3499 | 0.2823 | 0.3787 | 0.4795 | 4.2979 | 0.1234 | 0.6092 | 0.6821 | 0.7572 |
| VirusGO | 0.6190 | 0.0873 | 0.7857 | 0.8592 | 0.6561 | 0.8070 | 0.1429 | 0.3810 | 0.0714 | 0.9272 | 0.7472 | 0.9461 |
| VirusPseAAC | 0.3333 | 0.2143 | 0.4881 | 0.5746 | 0.4246 | 0.5263 | 0.3810 | 1.4286 | 0.2738 | 0.7238 | 0.5978 | 0.7573 |
| Water-quality | 0.0189 | 0.3073 | 0.3661 | 0.5368 | 0.4057 | 0.5260 | 0.2264 | 8.9245 | 0.2447 | 0.7109 | 0.6895 | 0.7252 |
| Yahoo_Arts | 0.1108 | 0.1239 | 0.2751 | 0.4032 | 0.2319 | 0.3428 | 0.4232 | 8.3485 | 0.2045 | 0.5948 | 0.7054 | 0.7430 |
| Yahoo_Business | 0.4599 | 0.0411 | 0.6590 | 0.7741 | 0.2842 | 0.6514 | 0.1658 | 3.9554 | 0.0827 | 0.8407 | 0.7259 | 0.9060 |
| Yahoo_Computers | 0.2900 | 0.0693 | 0.4365 | 0.5550 | 0.2601 | 0.4411 | 0.3357 | 7.3044 | 0.2274 | 0.6902 | 0.7307 | 0.8201 |
| Yahoo_Education | 0.1239 | 0.0809 | 0.2687 | 0.3791 | 0.1760 | 0.3412 | 0.4788 | 10.7066 | 0.2082 | 0.5622 | 0.7264 | 0.7237 |
| Yahoo_Entertainment | 0.2035 | 0.1065 | 0.3720 | 0.4926 | 0.2900 | 0.4362 | 0.3519 | 5.2003 | 0.2150 | 0.6753 | 0.7814 | 0.7827 |
| Yahoo_Health | 0.2595 | 0.0670 | 0.4771 | 0.6235 | 0.2107 | 0.5018 | 0.2693 | 6.6297 | 0.1280 | 0.7448 | 0.6332 | 0.8403 |
| Yahoo_Recreation | 0.1512 | 0.1268 | 0.3301 | 0.4663 | 0.3087 | 0.3849 | 0.3539 | 4.8644 | 0.1592 | 0.6836 | 0.8341 | 0.8085 |
| Yahoo_Reference | 0.3026 | 0.0623 | 0.4527 | 0.5709 | 0.1762 | 0.4285 | 0.3512 | 5.7011 | 0.1171 | 0.7083 | 0.5971 | 0.8428 |
| Yahoo_Science | 0.0793 | 0.1229 | 0.2237 | 0.3475 | 0.1667 | 0.2475 | 0.4588 | 11.7947 | 0.2368 | 0.5640 | 0.7847 | 0.7390 |
| Yahoo_Social | 0.2962 | 0.0598 | 0.4334 | 0.5489 | 0.1698 | 0.4041 | 0.3210 | 8.2756 | 0.1623 | 0.7086 | 0.7181 | 0.8130 |
| Yahoo_Society | 0.1956 | 0.0993 | 0.3536 | 0.4835 | 0.2421 | 0.3823 | 0.3609 | 7.1074 | 0.1512 | 0.6539 | 0.7080 | 0.7787 |
| yeast | 0.1901 | 0.1865 | 0.5333 | 0.6723 | 0.3690 | 0.6606 | 0.1694 | 6.2479 | 0.1977 | 0.7832 | 0.6894 | 0.8446 |
| Yelp | 0.4217 | 0.1731 | 0.6530 | 0.7529 | 0.6890 | 0.7483 | 0.1595 | 1.3121 | 0.1145 | 0.8840 | 0.8293 | 0.8613 |

Table 131: Detailed results for ExPCT

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.1950 | 0.0641 | 0.2439 | 0.2693 | 0.3192 | 0.3239 | 0.6831 | 4.2816 | 0.1705 | 0.4692 | 0.7907 | 0.7950 |
| 3s-bbc1000 | 0.0556 | 0.3241 | 0.1644 | 0.2193 | 0.1545 | 0.2391 | 0.7778 | 2.6944 | 0.8079 | 0.4427 | 0.5153 | 0.5435 |
| 3s-guardian1000 | 0.2581 | 0.2097 | 0.3172 | 0.3451 | 0.1381 | 0.3810 | 0.6129 | 2.0645 | 0.5645 | 0.5772 | 0.5397 | 0.6591 |
| 3s-inter3000 | 0.2941 | 0.2255 | 0.3922 | 0.4457 | 0.2380 | 0.4390 | 0.6471 | 1.7647 | 0.3353 | 0.5686 | 0.4114 | 0.6601 |
| 3s-reuters1000 | 0.0667 | 0.3111 | 0.1167 | 0.1373 | 0.0673 | 0.1515 | 0.8667 | 2.4333 | 0.8667 | 0.4039 | 0.5129 | 0.5112 |
| amphibians | 0.0556 | 0.2619 | 0.5173 | 0.6936 | 0.5185 | 0.7130 | 0.2222 | 2.6111 | 0.0935 | 0.8515 | 0.6342 | 0.7809 |
| bibtex | 0.0554 | 0.0151 | 0.1306 | 0.1802 | 0.0901 | 0.2271 | 0.6703 | 47.8784 | 0.2093 | 0.3058 | 0.7614 | 0.8182 |
| birds | 0.1795 | 0.0918 | 0.4128 | 0.5193 | 0.3317 | 0.5278 | 0.4872 | 3.8462 | 0.1073 | 0.6428 | 0.7981 | 0.8838 |
| bookmarks10% | 0.1902 | 0.0130 | 0.2419 | 0.2798 | 0.1117 | 0.2451 | 0.6834 | 57.7153 | 0.2217 | 0.3464 | 0.7606 | 0.8298 |
| CAL500 | 0.0000 | 0.1679 | 0.3139 | 0.4770 | 0.1430 | 0.4776 | 0.1373 | 131.6667 | 0.3925 | 0.5108 | 0.5379 | 0.8226 |
| corel16k001 | 0.0087 | 0.0232 | 0.1236 | 0.1934 | 0.0374 | 0.2015 | 0.7008 | 49.5338 | 0.1057 | 0.3010 | 0.7044 | 0.8390 |
| Corel5k | 0.0180 | 0.0113 | 0.1255 | 0.1966 | 0.0312 | 0.2090 | 0.6900 | 111.2380 | 0.4551 | 0.2719 | 0.5232 | 0.8941 |
| delicious | 0.0044 | 0.0254 | 0.2136 | 0.3543 | 0.1526 | 0.3428 | 0.3692 | 612.3393 | 0.1603 | 0.3535 | 0.8218 | 0.9002 |
| emotions | 0.3000 | 0.1861 | 0.5611 | 0.6720 | 0.6408 | 0.6825 | 0.1833 | 1.4833 | 0.1056 | 0.8550 | 0.8630 | 0.8851 |
| enron | 0.1111 | 0.0577 | 0.4569 | 0.6032 | 0.1293 | 0.5638 | 0.1988 | 12.7368 | 0.0598 | 0.6856 | 0.6432 | 0.9157 |
| EukaryoteGO | 0.6830 | 0.0205 | 0.7858 | 0.8356 | 0.5866 | 0.8154 | 0.1804 | 0.5851 | 0.0061 | 0.8901 | 0.9787 | 0.9918 |
| EukaryotePseAAC | 0.1493 | 0.0698 | 0.3289 | 0.4065 | 0.0851 | 0.4338 | 0.6100 | 2.7503 | 0.0169 | 0.5693 | 0.7337 | 0.8935 |
| flags | 0.2000 | 0.2500 | 0.6283 | 0.7474 | 0.6125 | 0.7482 | 0.1000 | 3.5000 | 0.1858 | 0.8463 | 0.6623 | 0.8135 |
| foodtruck | 0.1951 | 0.1606 | 0.4496 | 0.6086 | 0.1724 | 0.5380 | 0.2683 | 3.0488 | 0.3187 | 0.7625 | 0.5957 | 0.7960 |
| genbase | 0.8806 | 0.0044 | 0.9428 | 0.9708 | 0.4815 | 0.9487 | 0.0000 | 0.5373 | 0.0075 | 0.9932 | 0.6588 | 0.9984 |
| GnegativeGO | 0.9500 | 0.0071 | 0.9714 | 0.9821 | 0.8442 | 0.9728 | 0.0214 | 0.0929 | 0.0107 | 0.9871 | 0.8676 | 0.9958 |
| GnegativePseAAC | 0.6000 | 0.0688 | 0.6381 | 0.6571 | 0.2344 | 0.7116 | 0.2929 | 0.8286 | 0.1661 | 0.8022 | 0.8075 | 0.9344 |
| GpositiveGO | 0.8846 | 0.0481 | 0.9038 | 0.9135 | 0.8360 | 0.9057 | 0.0962 | 0.1154 | 0.0321 | 0.9519 | 0.9945 | 0.9948 |
| GpositivePseAAC | 0.6346 | 0.1731 | 0.6827 | 0.7059 | 0.5194 | 0.6786 | 0.2885 | 0.5577 | 0.1538 | 0.8173 | 0.8683 | 0.8638 |
| HumanGO | 0.6592 | 0.0411 | 0.7283 | 0.7650 | 0.5478 | 0.7503 | 0.2187 | 0.7878 | 0.0330 | 0.8624 | 0.9347 | 0.9721 |
| HumanPseAAC | 0.1608 | 0.1162 | 0.3132 | 0.3809 | 0.1229 | 0.3933 | 0.6367 | 2.3891 | 0.0693 | 0.5610 | 0.7083 | 0.8444 |
| Image | 0.5300 | 0.1440 | 0.6704 | 0.7406 | 0.7056 | 0.7012 | 0.1900 | 0.7000 | 0.0612 | 0.8650 | 0.8949 | 0.8967 |
| IMDB-ECC-F10% | 0.0262 | 0.1026 | 0.2327 | 0.3518 | 0.0688 | 0.3271 | 0.6551 | 8.1520 | 0.2006 | 0.4483 | 0.5810 | 0.7832 |
| IMDB-F10% | 0.0232 | 0.1076 | 0.2498 | 0.3769 | 0.0731 | 0.3552 | 0.6280 | 8.5360 | 0.1975 | 0.4649 | 0.5762 | 0.7897 |
| LLOG-F | 0.0656 | 0.0234 | 0.1093 | 0.1302 | 0.0230 | 0.1641 | 0.7869 | 16.1393 | 0.1995 | 0.3196 | 0.3882 | 0.8271 |
| mediamill10% | 0.0641 | 0.0365 | 0.4520 | 0.6216 | 0.0796 | 0.5895 | 0.1330 | 17.4703 | 0.0503 | 0.7186 | 0.6534 | 0.9454 |
| medical | 0.3265 | 0.0240 | 0.5672 | 0.6852 | 0.1855 | 0.6467 | 0.2653 | 2.9898 | 0.1122 | 0.7796 | 0.5213 | 0.9669 |
| Music | 0.2500 | 0.1972 | 0.5472 | 0.6791 | 0.6748 | 0.6953 | 0.2167 | 1.9333 | 0.1630 | 0.8068 | 0.8745 | 0.8796 |
| NUS-WIDE-bow10% | 0.0580 | 0.0340 | 0.2395 | 0.3440 | 0.0269 | 0.3488 | 0.6094 | 17.1760 | 0.1188 | 0.4413 | 0.6041 | 0.8666 |
| NUS-WIDE-cVLADplus10% | 0.0775 | 0.0330 | 0.2664 | 0.3731 | 0.0270 | 0.3601 | 0.5671 | 16.2088 | 0.1115 | 0.4745 | 0.6154 | 0.8762 |
| OHSUMED-F | 0.0409 | 0.1088 | 0.2082 | 0.3029 | 0.0973 | 0.3048 | 0.6633 | 7.3747 | 0.3038 | 0.4305 | 0.6103 | 0.7565 |
| PlantGO | 0.6458 | 0.0460 | 0.7153 | 0.7513 | 0.6839 | 0.7535 | 0.2292 | 0.5104 | 0.0365 | 0.8704 | 0.9719 | 0.9748 |
| PlantPseAAC | 0.2755 | 0.1173 | 0.3248 | 0.3508 | 0.1105 | 0.3491 | 0.6531 | 2.5306 | 0.1658 | 0.5450 | 0.7341 | 0.7991 |
| rcv1subset1 | 0.0167 | 0.0364 | 0.3075 | 0.4542 | 0.1542 | 0.4360 | 0.5000 | 18.4900 | 0.1210 | 0.5172 | 0.8040 | 0.9117 |
| REUTERS-K500-EX2 | 0.2096 | 0.0162 | 0.3741 | 0.4631 | 0.1628 | 0.4375 | 0.4983 | 7.8883 | 0.0587 | 0.6029 | 0.7161 | 0.9486 |
| scene | 0.6141 | 0.0830 | 0.7199 | 0.7724 | 0.7836 | 0.7701 | 0.1826 | 0.3734 | 0.0415 | 0.8934 | 0.9492 | 0.9578 |
| sider_CDK_ECFP4 | 0.0000 | 0.2668 | 0.6250 | 0.7871 | 0.5637 | 0.7775 | 0.1268 | 19.1761 | 0.0950 | 0.8427 | 0.6023 | 0.8091 |
| sider_MordredDesc | 0.0070 | 0.2760 | 0.6298 | 0.7814 | 0.5845 | 0.7789 | 0.0634 | 19.1761 | 0.0983 | 0.8572 | 0.6329 | 0.8058 |
| sider_RDKit_desc | 0.0000 | 0.2666 | 0.6272 | 0.7832 | 0.5652 | 0.7791 | 0.0915 | 19.1197 | 0.0950 | 0.8545 | 0.6354 | 0.8086 |
| SLASHDOT-F | 0.2354 | 0.0749 | 0.3721 | 0.4470 | 0.2849 | 0.4095 | 0.5714 | 3.5661 | 0.0810 | 0.5692 | 0.6191 | 0.8782 |
| solar_flare-L3 | 0.2000 | 0.4667 | 0.3000 | 0.3429 | 0.1905 | 0.3636 | 0.8000 | 0.8000 | 0.4000 | 0.6000 | 0.1111 | 0.5800 |
| Stackex_chemistry | 0.0490 | 0.0142 | 0.1538 | 0.2157 | 0.0417 | 0.2305 | 0.6960 | 37.0793 | 0.2671 | 0.3304 | 0.7332 | 0.8820 |
| Stackex_chess | 0.0298 | 0.0122 | 0.1421 | 0.2127 | 0.0192 | 0.2211 | 0.6786 | 54.2083 | 0.1350 | 0.2998 | 0.4322 | 0.8817 |
| Stackex_coffee | 0.0000 | 0.0244 | 0.0862 | 0.1332 | 0.0085 | 0.1687 | 0.9130 | 49.6087 | 0.1996 | 0.2397 | 0.2096 | 0.7879 |
| Stackex_cooking | 0.0242 | 0.0058 | 0.0811 | 0.1101 | 0.0212 | 0.1401 | 0.7536 | 137.6367 | 0.2459 | 0.2230 | 0.7220 | 0.8457 |
| Stackex_philosophy | 0.0578 | 0.0105 | 0.1411 | 0.1907 | 0.0165 | 0.1885 | 0.7236 | 63.7513 | 0.1849 | 0.3099 | 0.5310 | 0.8540 |
| tmc2007-500 | 0.1259 | 0.0918 | 0.4397 | 0.5909 | 0.3280 | 0.5719 | 0.3577 | 3.9790 | 0.1200 | 0.6938 | 0.8398 | 0.9093 |
| tox21_CDK_ECFP4 | 0.0925 | 0.1943 | 0.3368 | 0.4635 | 0.4097 | 0.4829 | 0.4726 | 4.0685 | 0.1123 | 0.6220 | 0.6959 | 0.7659 |
| tox21_RDKit_desc | 0.0788 | 0.1961 | 0.3592 | 0.4911 | 0.4393 | 0.5131 | 0.4692 | 3.8253 | 0.0849 | 0.6366 | 0.7241 | 0.7845 |
| VirusGO | 0.7619 | 0.0635 | 0.8333 | 0.8690 | 0.6711 | 0.8400 | 0.0952 | 0.5714 | 0.0476 | 0.9206 | 0.7784 | 0.9517 |
| VirusPseAAC | 0.2857 | 0.1587 | 0.5476 | 0.6617 | 0.3758 | 0.6429 | 0.2857 | 0.6667 | 0.0000 | 0.8230 | 0.6878 | 0.9067 |
| Water-quality | 0.0189 | 0.3019 | 0.4695 | 0.6444 | 0.5678 | 0.6370 | 0.2170 | 8.5849 | 0.2029 | 0.7300 | 0.7158 | 0.7467 |
| Yahoo_Arts | 0.0441 | 0.1039 | 0.2591 | 0.3782 | 0.1278 | 0.3407 | 0.6208 | 5.5100 | 0.3456 | 0.5205 | 0.6668 | 0.8284 |
| Yahoo_Business | 0.4225 | 0.0311 | 0.6696 | 0.7905 | 0.2351 | 0.7112 | 0.1275 | 2.0535 | 0.1437 | 0.8867 | 0.7177 | 0.9580 |
| Yahoo_Computers | 0.2313 | 0.0549 | 0.4366 | 0.5568 | 0.1798 | 0.4823 | 0.4337 | 3.9526 | 0.3873 | 0.6542 | 0.6657 | 0.8948 |
| Yahoo_Education | 0.2136 | 0.0521 | 0.2864 | 0.3291 | 0.0884 | 0.3224 | 0.6434 | 3.9177 | 0.2857 | 0.5302 | 0.6686 | 0.9036 |
| Yahoo_Entertainment | 0.2883 | 0.0727 | 0.3628 | 0.4045 | 0.1873 | 0.3993 | 0.5546 | 3.2608 | 0.1038 | 0.5918 | 0.7300 | 0.8718 |
| Yahoo_Health | 0.3051 | 0.0476 | 0.4588 | 0.5381 | 0.1767 | 0.5117 | 0.4528 | 3.5114 | 0.2680 | 0.6639 | 0.6342 | 0.9293 |
| Yahoo_Recreation | 0.1231 | 0.1000 | 0.2742 | 0.3533 | 0.2468 | 0.3261 | 0.6633 | 4.4341 | 0.4926 | 0.4987 | 0.7019 | 0.8117 |
| Yahoo_Reference | 0.3848 | 0.0356 | 0.4967 | 0.5565 | 0.1232 | 0.5220 | 0.4508 | 3.0224 | 0.1183 | 0.6538 | 0.6305 | 0.9223 |
| Yahoo_Science | 0.0949 | 0.0547 | 0.2414 | 0.3173 | 0.0762 | 0.2988 | 0.7014 | 7.0762 | 0.1379 | 0.4476 | 0.6814 | 0.8438 |
| Yahoo_Social | 0.3804 | 0.0322 | 0.5064 | 0.5729 | 0.0757 | 0.5155 | 0.4109 | 3.6931 | 0.1321 | 0.6877 | 0.6894 | 0.9190 |
| Yahoo_Society | 0.1908 | 0.0705 | 0.3854 | 0.4983 | 0.1344 | 0.4305 | 0.4725 | 5.4332 | 0.1341 | 0.5918 | 0.6188 | 0.8420 |
| yeast | 0.1488 | 0.2022 | 0.5577 | 0.6959 | 0.4069 | 0.6815 | 0.2603 | 6.1488 | 0.2343 | 0.7502 | 0.6931 | 0.8420 |
| Yelp | 0.4796 | 0.1535 | 0.7165 | 0.8256 | 0.6991 | 0.7742 | 0.0708 | 1.1745 | 0.1404 | 0.9276 | 0.8424 | 0.9008 |

Table 132: Detailed results for ML-RF

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.1149 | 0.0565 | 0.1452 | 0.1601 | 0.2032 | 0.2110 | 0.6804 | 4.2978 | 0.1703 | 0.4699 | 0.7901 | 0.7945 |
| 3s-bbc1000 | 0.0000 | 0.2870 | 0.0451 | 0.0659 | 0.0588 | 0.0842 | 0.8333 | 2.6528 | 0.7859 | 0.4414 | 0.4922 | 0.5411 |
| 3s-guardian1000 | 0.0645 | 0.2366 | 0.1102 | 0.1320 | 0.0567 | 0.1528 | 0.6452 | 2.1452 | 0.5524 | 0.5546 | 0.5780 | 0.6689 |
| 3s-inter3000 | 0.1765 | 0.2157 | 0.2353 | 0.2614 | 0.1574 | 0.3125 | 0.7647 | 1.8824 | 0.3735 | 0.5005 | 0.4253 | 0.6422 |
| 3s-reuters1000 | 0.0333 | 0.2556 | 0.0583 | 0.0686 | 0.0319 | 0.0725 | 0.8833 | 2.3000 | 0.8292 | 0.4196 | 0.5141 | 0.5182 |
| amphibians | 0.0000 | 0.3016 | 0.4747 | 0.6965 | 0.4875 | 0.6724 | 0.2778 | 2.5556 | 0.0870 | 0.8315 | 0.6956 | 0.7922 |
| bibtex | 0.0318 | 0.0147 | 0.0937 | 0.1310 | 0.0502 | 0.1692 | 0.6628 | 47.6716 | 0.2053 | 0.3068 | 0.7606 | 0.8192 |
| birds | 0.1410 | 0.0918 | 0.2724 | 0.3341 | 0.2088 | 0.3835 | 0.4487 | 4.1410 | 0.1155 | 0.6171 | 0.7670 | 0.8658 |
| bookmarks10% | 0.1925 | 0.0132 | 0.2363 | 0.2682 | 0.0956 | 0.2292 | 0.6822 | 58.3098 | 0.2230 | 0.3454 | 0.7578 | 0.8282 |
| CAL500 | 0.0000 | 0.1553 | 0.2648 | 0.4131 | 0.1076 | 0.4128 | 0.1471 | 130.8039 | 0.3917 | 0.5109 | 0.5356 | 0.8236 |
| corel16k001 | 0.0054 | 0.0210 | 0.0642 | 0.0999 | 0.0195 | 0.1040 | 0.7059 | 48.8900 | 0.1075 | 0.2990 | 0.7071 | 0.8394 |
| Corel5k | 0.0100 | 0.0104 | 0.0584 | 0.0916 | 0.0132 | 0.0986 | 0.6940 | 113.1040 | 0.4545 | 0.2729 | 0.5200 | 0.8934 |
| delicious | 0.0040 | 0.0220 | 0.1677 | 0.2806 | 0.1105 | 0.2782 | 0.3741 | 606.2610 | 0.1572 | 0.3530 | 0.8191 | 0.8992 |
| emotions | 0.3083 | 0.1944 | 0.5528 | 0.6626 | 0.6369 | 0.6740 | 0.1917 | 1.5500 | 0.1292 | 0.8386 | 0.8642 | 0.8857 |
| enron | 0.1170 | 0.0527 | 0.4339 | 0.5745 | 0.1117 | 0.5404 | 0.2105 | 12.8596 | 0.0663 | 0.6808 | 0.6388 | 0.9146 |
| EukaryoteGO | 0.6825 | 0.0203 | 0.7701 | 0.8131 | 0.5681 | 0.8093 | 0.1854 | 0.6137 | 0.0087 | 0.8883 | 0.9759 | 0.9912 |
| EukaryotePseAAC | 0.1113 | 0.0593 | 0.2089 | 0.2516 | 0.0710 | 0.2700 | 0.5689 | 2.4820 | 0.0168 | 0.6051 | 0.7401 | 0.9032 |
| flags | 0.1500 | 0.2643 | 0.6033 | 0.7302 | 0.5717 | 0.7299 | 0.1500 | 3.5000 | 0.1808 | 0.8432 | 0.6953 | 0.8185 |
| foodtruck | 0.2561 | 0.1504 | 0.4621 | 0.6084 | 0.1635 | 0.5282 | 0.2439 | 2.9024 | 0.3104 | 0.7867 | 0.6168 | 0.8048 |
| genbase | 0.8806 | 0.0044 | 0.9415 | 0.9700 | 0.4630 | 0.9484 | 0.0000 | 0.5448 | 0.0075 | 0.9919 | 0.6571 | 0.9978 |
| GnegativeGO | 0.9464 | 0.0085 | 0.9661 | 0.9759 | 0.8405 | 0.9674 | 0.0214 | 0.0929 | 0.0107 | 0.9871 | 0.8678 | 0.9959 |
| GnegativePseAAC | 0.5786 | 0.0674 | 0.6048 | 0.6178 | 0.2759 | 0.6971 | 0.2714 | 0.6893 | 0.1152 | 0.8263 | 0.7808 | 0.9496 |
| GpositiveGO | 0.8846 | 0.0481 | 0.9038 | 0.9135 | 0.8360 | 0.9057 | 0.0962 | 0.1154 | 0.0321 | 0.9519 | 0.9952 | 0.9950 |
| GpositivePseAAC | 0.5865 | 0.1538 | 0.5865 | 0.5865 | 0.4868 | 0.6548 | 0.2981 | 0.5096 | 0.1731 | 0.8205 | 0.8618 | 0.8682 |
| HumanGO | 0.6383 | 0.0413 | 0.7074 | 0.7439 | 0.5292 | 0.7432 | 0.2154 | 0.7637 | 0.0282 | 0.8629 | 0.9248 | 0.9728 |
| HumanPseAAC | 0.1077 | 0.0963 | 0.1983 | 0.2378 | 0.1029 | 0.2639 | 0.5997 | 2.3248 | 0.0698 | 0.5874 | 0.7020 | 0.8545 |
| Image | 0.4900 | 0.1355 | 0.5988 | 0.6521 | 0.6697 | 0.6728 | 0.1950 | 0.7175 | 0.0650 | 0.8616 | 0.8986 | 0.8980 |
| IMDB-ECC-F10% | 0.0262 | 0.1029 | 0.2273 | 0.3443 | 0.0673 | 0.3255 | 0.6488 | 8.2117 | 0.2017 | 0.4510 | 0.5765 | 0.7817 |
| IMDB-F10% | 0.0207 | 0.1080 | 0.2427 | 0.3668 | 0.0672 | 0.3480 | 0.6263 | 8.4946 | 0.1980 | 0.4643 | 0.5823 | 0.7898 |
| LLOG-F | 0.0451 | 0.0208 | 0.0741 | 0.0902 | 0.0139 | 0.1081 | 0.7828 | 16.1598 | 0.2213 | 0.3214 | 0.3909 | 0.8271 |
| mediamill10% | 0.0641 | 0.0351 | 0.4561 | 0.6262 | 0.0868 | 0.5925 | 0.1354 | 17.5344 | 0.0510 | 0.7185 | 0.6412 | 0.9456 |
| medical | 0.3980 | 0.0193 | 0.5251 | 0.5877 | 0.1643 | 0.6347 | 0.2755 | 2.9286 | 0.1097 | 0.7789 | 0.5218 | 0.9681 |
| Music | 0.2083 | 0.2069 | 0.5204 | 0.6557 | 0.6591 | 0.6759 | 0.2167 | 1.8917 | 0.1475 | 0.8155 | 0.8609 | 0.8703 |
| NUS-WIDE-bow10% | 0.0856 | 0.0329 | 0.2725 | 0.3783 | 0.0329 | 0.3718 | 0.5628 | 16.9139 | 0.1165 | 0.4787 | 0.6066 | 0.8676 |
| NUS-WIDE-cVLADplus10% | 0.1170 | 0.0312 | 0.3232 | 0.4312 | 0.0537 | 0.4145 | 0.5214 | 14.9529 | 0.1049 | 0.5158 | 0.6517 | 0.8882 |
| OHSUMED-F | 0.0240 | 0.0904 | 0.1072 | 0.1550 | 0.0522 | 0.1595 | 0.6777 | 7.3457 | 0.3029 | 0.4253 | 0.6070 | 0.7559 |
| PlantGO | 0.6648 | 0.0404 | 0.7259 | 0.7579 | 0.7073 | 0.7752 | 0.2216 | 0.5412 | 0.0309 | 0.8724 | 0.9710 | 0.9750 |
| PlantPseAAC | 0.1071 | 0.1063 | 0.1692 | 0.1971 | 0.1014 | 0.2176 | 0.6276 | 2.1276 | 0.1390 | 0.5755 | 0.7784 | 0.8386 |
| rcv1subset1 | 0.0300 | 0.0306 | 0.1499 | 0.2163 | 0.0658 | 0.2325 | 0.5275 | 20.8317 | 0.1411 | 0.4894 | 0.7829 | 0.8988 |
| REUTERS-K500-EX2 | 0.1628 | 0.0154 | 0.2368 | 0.2777 | 0.0969 | 0.2848 | 0.5727 | 10.6520 | 0.0827 | 0.5291 | 0.6930 | 0.9339 |
| scene | 0.5809 | 0.0868 | 0.6504 | 0.6848 | 0.7385 | 0.7276 | 0.1784 | 0.4149 | 0.0482 | 0.8898 | 0.9459 | 0.9543 |
| sider_CDK_ECFP4 | 0.0000 | 0.2705 | 0.6248 | 0.7835 | 0.5634 | 0.7766 | 0.1303 | 19.1725 | 0.0964 | 0.8409 | 0.6220 | 0.8089 |
| sider_MordredDesc | 0.0141 | 0.2716 | 0.6194 | 0.7789 | 0.5817 | 0.7759 | 0.0599 | 19.1338 | 0.0973 | 0.8596 | 0.6368 | 0.8065 |
| sider_RDKit_desc | 0.0070 | 0.2730 | 0.6279 | 0.7817 | 0.5761 | 0.7785 | 0.0704 | 19.1866 | 0.0963 | 0.8501 | 0.7203 | 0.8091 |
| SLASHDOT-F | 0.2523 | 0.0605 | 0.3363 | 0.3808 | 0.2218 | 0.3978 | 0.5746 | 3.4505 | 0.0873 | 0.5706 | 0.6224 | 0.8808 |
| solar_flare-L3 | 0.2000 | 0.4000 | 0.4000 | 0.4800 | 0.3238 | 0.5000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.2778 | 0.6600 |
| Stackex_chemistry | 0.0245 | 0.0137 | 0.0856 | 0.1224 | 0.0245 | 0.1316 | 0.7129 | 44.7881 | 0.2990 | 0.3072 | 0.7497 | 0.8823 |
| Stackex_chess | 0.0208 | 0.0112 | 0.1045 | 0.1536 | 0.0148 | 0.1723 | 0.6577 | 68.1220 | 0.2170 | 0.2895 | 0.4281 | 0.8755 |
| Stackex_coffee | 0.0000 | 0.0223 | 0.0576 | 0.0884 | 0.0068 | 0.0899 | 0.8913 | 50.7174 | 0.2219 | 0.2297 | 0.2103 | 0.8020 |
| Stackex_cooking | 0.0135 | 0.0059 | 0.0481 | 0.0668 | 0.0144 | 0.0835 | 0.7845 | 162.2662 | 0.3290 | 0.1931 | 0.7556 | 0.8582 |
| Stackex_philosophy | 0.0352 | 0.0103 | 0.0869 | 0.1188 | 0.0097 | 0.1240 | 0.7236 | 71.7789 | 0.2303 | 0.2887 | 0.5616 | 0.8629 |
| tmc2007-500 | 0.1369 | 0.0862 | 0.3885 | 0.5151 | 0.2387 | 0.5151 | 0.3605 | 4.0240 | 0.1207 | 0.6925 | 0.8362 | 0.9081 |
| tox21_CDK_ECFP4 | 0.0856 | 0.1775 | 0.2525 | 0.3419 | 0.3282 | 0.3878 | 0.4880 | 4.0548 | 0.1014 | 0.6170 | 0.6977 | 0.7674 |
| tox21_RDKit_desc | 0.1113 | 0.1581 | 0.2668 | 0.3412 | 0.3427 | 0.4126 | 0.4640 | 3.8562 | 0.0972 | 0.6376 | 0.7182 | 0.7820 |
| VirusGO | 0.7857 | 0.0595 | 0.8373 | 0.8669 | 0.6624 | 0.8455 | 0.0714 | 0.5000 | 0.0516 | 0.9381 | 0.7769 | 0.9614 |
| VirusPseAAC | 0.3095 | 0.1429 | 0.4603 | 0.5219 | 0.3285 | 0.5636 | 0.2143 | 0.5714 | 0.0000 | 0.8607 | 0.6952 | 0.9263 |
| Water-quality | 0.0047 | 0.2898 | 0.4076 | 0.5796 | 0.4798 | 0.5745 | 0.2406 | 8.7264 | 0.2210 | 0.7197 | 0.7032 | 0.7416 |
| Yahoo_Arts | 0.0921 | 0.0689 | 0.1297 | 0.1538 | 0.0607 | 0.1544 | 0.6575 | 5.9733 | 0.3584 | 0.4895 | 0.6213 | 0.8136 |
| Yahoo_Business | 0.5080 | 0.0288 | 0.6800 | 0.7732 | 0.1013 | 0.6841 | 0.1243 | 2.2259 | 0.1426 | 0.8845 | 0.6740 | 0.9515 |
| Yahoo_Computers | 0.3112 | 0.0412 | 0.4104 | 0.4706 | 0.1362 | 0.4579 | 0.4277 | 4.1643 | 0.3812 | 0.6476 | 0.6482 | 0.8861 |
| Yahoo_Education | 0.1218 | 0.0483 | 0.1759 | 0.2059 | 0.0798 | 0.2278 | 0.6446 | 4.1696 | 0.3030 | 0.5209 | 0.6755 | 0.9000 |
| Yahoo_Entertainment | 0.1984 | 0.0680 | 0.2552 | 0.2863 | 0.1611 | 0.3221 | 0.5609 | 3.4737 | 0.1172 | 0.5795 | 0.7222 | 0.8648 |
| Yahoo_Health | 0.2693 | 0.0483 | 0.3882 | 0.4549 | 0.1336 | 0.4389 | 0.4435 | 3.6699 | 0.2745 | 0.6590 | 0.6456 | 0.9238 |
| Yahoo_Recreation | 0.0768 | 0.0841 | 0.1495 | 0.1892 | 0.1517 | 0.2019 | 0.6820 | 4.8465 | 0.4835 | 0.4765 | 0.6636 | 0.7932 |
| Yahoo_Reference | 0.3443 | 0.0348 | 0.4241 | 0.4664 | 0.0968 | 0.4738 | 0.4489 | 3.4271 | 0.1350 | 0.6431 | 0.6223 | 0.9138 |
| Yahoo_Science | 0.0412 | 0.0477 | 0.1147 | 0.1541 | 0.0410 | 0.1512 | 0.7100 | 8.0023 | 0.1859 | 0.4245 | 0.6510 | 0.8247 |
| Yahoo_Social | 0.3808 | 0.0287 | 0.4533 | 0.4927 | 0.0647 | 0.4884 | 0.4224 | 3.9950 | 0.1363 | 0.6829 | 0.6781 | 0.9137 |
| Yahoo_Society | 0.1571 | 0.0790 | 0.3801 | 0.5044 | 0.1353 | 0.4108 | 0.4637 | 5.9178 | 0.1632 | 0.5729 | 0.5950 | 0.8369 |
| yeast | 0.1529 | 0.1919 | 0.5042 | 0.6447 | 0.3552 | 0.6410 | 0.2376 | 6.1508 | 0.2205 | 0.7608 | 0.7204 | 0.8482 |
| Yelp | 0.4796 | 0.1572 | 0.7030 | 0.8109 | 0.6716 | 0.7561 | 0.0728 | 1.1750 | 0.1441 | 0.9261 | 0.8430 | 0.9007 |

Table 133: Detailed results for RFPCT

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.1921 | 0.0724 | 0.2345 | 0.2572 | 0.3154 | 0.3362 | 0.6918 | 4.2688 | 0.1632 | 0.4723 | 0.7799 | 0.8084 |
| 3s-bbc1000 | 0.0833 | 0.2593 | 0.0972 | 0.1037 | 0.0494 | 0.1250 | 0.7500 | 2.3056 | 0.7917 | 0.4719 | 0.5843 | 0.5995 |
| 3s-guardian1000 | 0.0323 | 0.2258 | 0.0806 | 0.0993 | 0.0513 | 0.1600 | 0.5484 | 1.8387 | 0.5484 | 0.6142 | 0.5385 | 0.6787 |
| 3s-inter3000 | 0.0588 | 0.2157 | 0.0882 | 0.1008 | 0.0476 | 0.1538 | 0.6471 | 1.8235 | 0.3441 | 0.5451 | 0.3724 | 0.6501 |
| 3s-reuters1000 | 0.1333 | 0.2444 | 0.1333 | 0.1333 | 0.0556 | 0.1538 | 0.8667 | 2.4667 | 0.8667 | 0.4036 | 0.5816 | 0.5207 |
| amphibians | 0.1111 | 0.2381 | 0.5947 | 0.7701 | 0.6170 | 0.7619 | 0.2222 | 2.4444 | 0.0741 | 0.8663 | 0.6789 | 0.7906 |
| bibtex | 0.0502 | 0.0221 | 0.1208 | 0.1587 | 0.0950 | 0.2198 | 0.6648 | 47.8694 | 0.2014 | 0.2881 | 0.7705 | 0.8107 |
| birds | 0.0513 | 0.1269 | 0.3159 | 0.4506 | 0.2973 | 0.4535 | 0.5385 | 4.5641 | 0.1601 | 0.5725 | 0.7655 | 0.8419 |
| bookmarks10% | 0.1230 | 0.0093 | 0.1367 | 0.1440 | 0.0157 | 0.1377 | 0.7620 | 60.0683 | 0.2020 | 0.2739 | 0.7467 | 0.7855 |
| CAL500 | 0.0000 | 0.1651 | 0.3079 | 0.4672 | 0.1361 | 0.4702 | 0.1373 | 131.5686 | 0.4051 | 0.5014 | 0.5178 | 0.8183 |
| corel16k001 | 0.0145 | 0.0195 | 0.0806 | 0.1190 | 0.0278 | 0.1416 | 0.6536 | 43.1924 | 0.0808 | 0.3426 | 0.7475 | 0.8646 |
| Corel5k | 0.0120 | 0.0116 | 0.1776 | 0.2762 | 0.0361 | 0.2843 | 0.6260 | 95.1140 | 0.4009 | 0.3213 | 0.5276 | 0.9072 |
| delicious | 0.0062 | 0.0189 | 0.2288 | 0.3638 | 0.1596 | 0.3691 | 0.3313 | 514.2573 | 0.0952 | 0.3911 | 0.7965 | 0.9008 |
| emotions | 0.3000 | 0.2028 | 0.5875 | 0.7242 | 0.6570 | 0.6946 | 0.2667 | 1.5333 | 0.1264 | 0.8245 | 0.8532 | 0.8749 |
| enron | 0.1111 | 0.0544 | 0.4794 | 0.6196 | 0.1484 | 0.5982 | 0.1813 | 12.8772 | 0.0597 | 0.6973 | 0.6321 | 0.9127 |
| EukaryoteGO | 0.6868 | 0.0027 | 0.7792 | 0.8358 | 0.5996 | 0.7916 | 0.1649 | 0.5857 | 0.0089 | 0.8824 | 0.9818 | 0.9945 |
| EukaryotePseAAC | 0.1493 | 0.0599 | 0.2484 | 0.2969 | 0.0605 | 0.3624 | 0.6577 | 2.9382 | 0.0158 | 0.5358 | 0.7333 | 0.8886 |
| flags | 0.2500 | 0.2000 | 0.6792 | 0.7836 | 0.6628 | 0.7941 | 0.1500 | 3.4500 | 0.1692 | 0.8411 | 0.6405 | 0.8076 |
| foodtruck | 0.1707 | 0.1646 | 0.4150 | 0.5793 | 0.1620 | 0.5150 | 0.2439 | 2.8049 | 0.3130 | 0.7842 | 0.6402 | 0.8107 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2239 | 0.0000 | 0.9975 | 0.6667 | 1.0000 |
| GnegativeGO | 0.9357 | 0.0098 | 0.9607 | 0.9732 | 0.8412 | 0.9630 | 0.0286 | 0.0929 | 0.0071 | 0.9833 | 0.8722 | 0.9978 |
| GnegativePseAAC | 0.4143 | 0.1321 | 0.5786 | 0.6547 | 0.2682 | 0.5956 | 0.3500 | 1.0357 | 0.2375 | 0.7625 | 0.7214 | 0.9101 |
| GpositiveGO | 0.9038 | 0.0433 | 0.9135 | 0.9182 | 0.9243 | 0.9143 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9932 | 0.9914 |
| GpositivePseAAC | 0.5192 | 0.2212 | 0.5929 | 0.6305 | 0.4488 | 0.6034 | 0.4231 | 0.6923 | 0.1346 | 0.7500 | 0.8809 | 0.8512 |
| HumanGO | 0.6660 | 0.0505 | 0.7424 | 0.7682 | 0.5293 | 0.7340 | 0.1993 | 0.7731 | 0.0100 | 0.8398 | 0.9386 | 0.9757 |
| HumanPseAAC | 0.0900 | 0.1364 | 0.2931 | 0.3789 | 0.1196 | 0.3800 | 0.6495 | 2.4341 | 0.0560 | 0.5469 | 0.7243 | 0.8400 |
| Image | 0.3500 | 0.1980 | 0.5892 | 0.6980 | 0.6611 | 0.6514 | 0.2650 | 0.8500 | 0.0517 | 0.8215 | 0.8703 | 0.8655 |
| IMDB-ECC-F10% | 0.0304 | 0.0716 | 0.0563 | 0.0737 | 0.0225 | 0.0972 | 0.6415 | 7.2233 | 0.1725 | 0.4734 | 0.5595 | 0.8122 |
| IMDB-F10% | 0.0207 | 0.0736 | 0.0504 | 0.0683 | 0.0290 | 0.0967 | 0.6114 | 7.5228 | 0.1729 | 0.4831 | 0.6115 | 0.8165 |
| LLOG-F | 0.0984 | 0.0193 | 0.1407 | 0.1632 | 0.0218 | 0.2063 | 0.6721 | 12.2377 | 0.1261 | 0.3891 | 0.4542 | 0.8659 |
| mediamill10% | 0.0143 | 0.0523 | 0.3925 | 0.5685 | 0.1146 | 0.5341 | 0.1734 | 17.9596 | 0.0514 | 0.6845 | 0.6112 | 0.9407 |
| medical | 0.6429 | 0.0109 | 0.7483 | 0.8001 | 0.2605 | 0.8065 | 0.1735 | 1.8061 | 0.0893 | 0.8643 | 0.5420 | 0.9800 |
| Music | 0.2833 | 0.1972 | 0.5694 | 0.6999 | 0.6762 | 0.7004 | 0.2833 | 2.1000 | 0.1560 | 0.7645 | 0.8539 | 0.8567 |
| NUS-WIDE-bow10% | 0.0823 | 0.0321 | 0.2423 | 0.3384 | 0.0236 | 0.3435 | 0.5861 | 17.4063 | 0.1192 | 0.4630 | 0.5898 | 0.8624 |
| NUS-WIDE-cVLADplus10% | 0.0809 | 0.0336 | 0.2566 | 0.3567 | 0.0234 | 0.3458 | 0.5723 | 17.1332 | 0.1177 | 0.4656 | 0.5827 | 0.8656 |
| OHSUMED-F | 0.1292 | 0.0678 | 0.2612 | 0.3351 | 0.1162 | 0.3791 | 0.5327 | 4.9835 | 0.1695 | 0.5640 | 0.8231 | 0.8555 |
| PlantGO | 0.5625 | 0.0538 | 0.6615 | 0.7072 | 0.5936 | 0.7182 | 0.2500 | 0.6667 | 0.0260 | 0.8518 | 0.9595 | 0.9640 |
| PlantPseAAC | 0.1531 | 0.1522 | 0.2942 | 0.3633 | 0.1223 | 0.3538 | 0.6531 | 2.7449 | 0.1854 | 0.5286 | 0.6967 | 0.7887 |
| rcv1subset1 | 0.0064 | 0.0446 | 0.3031 | 0.4535 | 0.1549 | 0.4340 | 0.4855 | 18.4901 | 0.1002 | 0.5100 | 0.7928 | 0.9103 |
| REUTERS-K500-EX2 | 0.1932 | 0.0089 | 0.3817 | 0.4548 | 0.1686 | 0.4509 | 0.4876 | 7.8782 | 0.0582 | 0.5910 | 0.7167 | 0.9487 |
| scene | 0.4647 | 0.1148 | 0.6252 | 0.7019 | 0.7094 | 0.6971 | 0.2365 | 0.4772 | 0.0622 | 0.8621 | 0.9322 | 0.9301 |
| sider_CDK_ECFP4 | 0.0000 | 0.2423 | 0.5991 | 0.7640 | 0.5410 | 0.7698 | 0.0704 | 18.6479 | 0.0893 | 0.8643 | 0.5924 | 0.8143 |
| sider_MordredDesc | 0.0000 | 0.2480 | 0.5868 | 0.7560 | 0.5392 | 0.7644 | 0.0704 | 19.1690 | 0.0943 | 0.8586 | 0.5582 | 0.8082 |
| sider_RDKit_desc | 0.0070 | 0.2447 | 0.5891 | 0.7584 | 0.5437 | 0.7653 | 0.0915 | 19.0423 | 0.0915 | 0.8581 | 0.5657 | 0.8096 |
| SLASHDOT-F | 0.3651 | 0.0414 | 0.4162 | 0.4426 | 0.2544 | 0.5141 | 0.3915 | 2.2460 | 0.0112 | 0.7077 | 0.6909 | 0.9244 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.8000 | 0.8000 | 0.4000 | 0.6000 | 0.2222 | 0.6400 |
| Stackex_chemistry | 0.0461 | 0.0126 | 0.1195 | 0.1610 | 0.0370 | 0.1855 | 0.6542 | 31.7248 | 0.2074 | 0.3698 | 0.7725 | 0.9006 |
| Stackex_chess | 0.0476 | 0.0099 | 0.1688 | 0.2343 | 0.0300 | 0.2651 | 0.5417 | 45.5000 | 0.1133 | 0.4030 | 0.4702 | 0.9105 |
| Stackex_coffee | 0.0000 | 0.0180 | 0.0254 | 0.0393 | 0.0105 | 0.0727 | 0.6522 | 40.3913 | 0.1437 | 0.3855 | 0.2424 | 0.8229 |
| Stackex_cooking | 0.0002 | 0.0017 | 0.0774 | 0.1230 | 0.0085 | 0.1252 | 0.7454 | 137.6457 | 0.2307 | 0.2222 | 0.7113 | 0.8398 |
| Stackex_philosophy | 0.0905 | 0.0093 | 0.1799 | 0.2341 | 0.0292 | 0.2388 | 0.5729 | 44.1231 | 0.1179 | 0.4331 | 0.6257 | 0.9109 |
| tmc2007-500 | 0.1710 | 0.0756 | 0.5129 | 0.6652 | 0.4416 | 0.6389 | 0.3070 | 3.0129 | 0.0821 | 0.7580 | 0.9169 | 0.9395 |
| tox21_CDK_ECFP4 | 0.0651 | 0.1926 | 0.3277 | 0.4606 | 0.3950 | 0.4890 | 0.4795 | 3.9829 | 0.0967 | 0.6149 | 0.7105 | 0.7740 |
| tox21_RDKit_desc | 0.0925 | 0.1889 | 0.3529 | 0.4754 | 0.3831 | 0.4977 | 0.4589 | 3.8938 | 0.0713 | 0.6337 | 0.7188 | 0.7770 |
| VirusGO | 0.8095 | 0.0476 | 0.8810 | 0.9087 | 0.6600 | 0.8800 | 0.0476 | 0.4762 | 0.0556 | 0.9500 | 0.7656 | 0.9465 |
| VirusPseAAC | 0.1905 | 0.1667 | 0.4286 | 0.5311 | 0.2213 | 0.5882 | 0.1429 | 0.5714 | 0.0000 | 0.8921 | 0.6974 | 0.9029 |
| Water-quality | 0.0283 | 0.3019 | 0.4631 | 0.6354 | 0.5484 | 0.6279 | 0.2358 | 8.7925 | 0.2124 | 0.7229 | 0.7008 | 0.7375 |
| Yahoo_Arts | 0.0422 | 0.0803 | 0.2504 | 0.3830 | 0.1044 | 0.3400 | 0.6180 | 5.5061 | 0.3416 | 0.5129 | 0.6617 | 0.8353 |
| Yahoo_Business | 0.4275 | 0.0325 | 0.6577 | 0.7970 | 0.2441 | 0.7064 | 0.1082 | 2.0590 | 0.1341 | 0.8647 | 0.7057 | 0.9592 |
| Yahoo_Computers | 0.2076 | 0.0307 | 0.4483 | 0.5380 | 0.1754 | 0.4777 | 0.4418 | 3.9589 | 0.3696 | 0.6325 | 0.6513 | 0.8863 |
| Yahoo_Education | 0.2143 | 0.0314 | 0.2628 | 0.3245 | 0.0860 | 0.3284 | 0.6541 | 3.9061 | 0.2676 | 0.5433 | 0.6815 | 0.8883 |
| Yahoo_Entertainment | 0.2983 | 0.0623 | 0.3556 | 0.3923 | 0.1794 | 0.3864 | 0.5596 | 3.2498 | 0.1125 | 0.6020 | 0.7271 | 0.8603 |
| Yahoo_Health | 0.2821 | 0.0232 | 0.4489 | 0.5414 | 0.1868 | 0.5198 | 0.4473 | 3.5174 | 0.2739 | 0.6638 | 0.6281 | 0.9166 |
| Yahoo_Recreation | 0.1240 | 0.0764 | 0.2781 | 0.3327 | 0.2414 | 0.3104 | 0.6398 | 4.4385 | 0.4923 | 0.4737 | 0.6770 | 0.8051 |
| Yahoo_Reference | 0.3859 | 0.0412 | 0.5007 | 0.5393 | 0.1352 | 0.5241 | 0.4550 | 3.0141 | 0.1125 | 0.6495 | 0.6343 | 0.9229 |
| Yahoo_Science | 0.0940 | 0.0329 | 0.2408 | 0.3220 | 0.0608 | 0.2818 | 0.6981 | 7.0617 | 0.1420 | 0.4523 | 0.6732 | 0.8430 |
| Yahoo_Social | 0.3800 | 0.0098 | 0.4981 | 0.5679 | 0.0575 | 0.5082 | 0.3902 | 3.6928 | 0.1325 | 0.6710 | 0.6646 | 0.9279 |
| Yahoo_Society | 0.1571 | 0.0790 | 0.3801 | 0.5044 | 0.1353 | 0.4108 | 0.4637 | 5.9178 | 0.1632 | 0.5729 | 0.5950 | 0.8369 |
| yeast | 0.1612 | 0.2051 | 0.5190 | 0.6599 | 0.3303 | 0.6485 | 0.2603 | 6.1736 | 0.2476 | 0.7451 | 0.6983 | 0.8344 |
| Yelp | 0.4865 | 0.1503 | 0.7157 | 0.8226 | 0.6821 | 0.7721 | 0.0678 | 1.1436 | 0.1441 | 0.9320 | 0.8911 | 0.9082 |

Table 134: Detailed results for BR(RF)

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4549 | 0.0314 | 0.4872 | 0.5039 | 0.6054 | 0.6264 | 0.3580 | 3.0212 | 0.2870 | 0.7149 | 0.9784 | 0.9789 |
| 3s-bbc1000 | 0.0278 | 0.2037 | 0.0278 | 0.0278 | 0.0476 | 0.0435 | 0.5278 | 1.4722 | 0.4514 | 0.6662 | 0.7830 | 0.7845 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0269 | 0.0387 | 0.0778 | 0.0952 | 0.6774 | 2.0645 | 0.3306 | 0.5384 | 0.6479 | 0.6847 |
| 3s-inter3000 | 0.0000 | 0.2059 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.4706 | 0.5456 | 0.3961 | 0.4345 | 0.5985 |
| 3s-reuters1000 | 0.0667 | 0.1722 | 0.0667 | 0.0667 | 0.1032 | 0.1143 | 0.6667 | 1.9000 | 0.5417 | 0.5369 | 0.7090 | 0.7124 |
| amphibians | 0.0556 | 0.2302 | 0.5549 | 0.7485 | 0.6082 | 0.7339 | 0.2778 | 3.0000 | 0.1546 | 0.7981 | 0.6343 | 0.7827 |
| bibtex | 0.1392 | 0.0124 | 0.2641 | 0.3396 | 0.1930 | 0.3601 | 0.3838 | 45.8703 | 0.2848 | 0.5304 | 0.9604 | 0.9683 |
| birds | 0.1538 | 0.0810 | 0.2534 | 0.3010 | 0.2591 | 0.3878 | 0.4615 | 5.4615 | 0.1799 | 0.5992 | 0.7670 | 0.8691 |
| bookmarks10% | 0.1788 | 0.0090 | 0.1917 | 0.2007 | 0.0633 | 0.2098 | 0.6549 | 76.3462 | 0.4617 | 0.3660 | 0.9167 | 0.9411 |
| CAL500 | 0.0000 | 0.1562 | 0.1725 | 0.3074 | 0.0592 | 0.2826 | 0.4314 | 149.7843 | 0.5739 | 0.3559 | 0.6063 | 0.7566 |
| corel16k001 | 0.0029 | 0.0189 | 0.0193 | 0.0277 | 0.0141 | 0.0382 | 0.8134 | 103.1271 | 0.7420 | 0.1682 | 0.9566 | 0.9583 |
| Corel5k | 0.0040 | 0.0093 | 0.0325 | 0.0494 | 0.0117 | 0.0665 | 0.7380 | 143.2660 | 0.6874 | 0.2128 | 0.6526 | 0.9726 |
| delicious | 0.0012 | 0.0185 | 0.0938 | 0.1649 | 0.0646 | 0.1578 | 0.4916 | 878.9969 | 0.7611 | 0.1875 | 0.9725 | 0.9780 |
| emotions | 0.1500 | 0.2361 | 0.3500 | 0.4360 | 0.4272 | 0.5143 | 0.3667 | 2.1667 | 0.2222 | 0.7317 | 0.8536 | 0.8333 |
| enron | 0.0175 | 0.0529 | 0.2956 | 0.4142 | 0.1364 | 0.4910 | 0.3450 | 19.8889 | 0.3460 | 0.5404 | 0.7448 | 0.9239 |
| EukaryoteGO | 0.6203 | 0.0246 | 0.7661 | 0.8398 | 0.5404 | 0.7951 | 0.2098 | 0.8430 | 0.0367 | 0.8704 | 0.9933 | 0.9936 |
| EukaryotePseAAC | 0.0142 | 0.0524 | 0.0142 | 0.0142 | 0.0063 | 0.0240 | 0.9498 | 10.6332 | 0.9217 | 0.1848 | 0.9560 | 0.9547 |
| flags | 0.3500 | 0.2286 | 0.6200 | 0.7247 | 0.5992 | 0.7377 | 0.1000 | 3.4000 | 0.1800 | 0.8549 | 0.7746 | 0.8460 |
| foodtruck | 0.3171 | 0.1402 | 0.4734 | 0.5899 | 0.1268 | 0.4889 | 0.2439 | 3.0244 | 0.3501 | 0.7587 | 0.7156 | 0.8334 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 1.0000 |
| GnegativeGO | 0.9286 | 0.0089 | 0.9571 | 0.9714 | 0.8370 | 0.9662 | 0.0214 | 0.0929 | 0.0143 | 0.9863 | 0.8737 | 0.9989 |
| GnegativePseAAC | 0.5071 | 0.0750 | 0.5143 | 0.5178 | 0.2225 | 0.6348 | 0.3071 | 1.3643 | 0.2625 | 0.7637 | 0.8025 | 0.9412 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9038 | 0.9134 | 0.8619 | 0.9245 | 0.0577 | 0.0769 | 0.0192 | 0.9712 | 0.9965 | 0.9956 |
| GpositivePseAAC | 0.4423 | 0.1971 | 0.4423 | 0.4423 | 0.3476 | 0.5287 | 0.4423 | 0.7308 | 0.1346 | 0.7388 | 0.8059 | 0.8296 |
| HumanGO | 0.5016 | 0.0544 | 0.6705 | 0.7574 | 0.5378 | 0.7168 | 0.2347 | 0.7942 | 0.0506 | 0.8550 | 0.9786 | 0.9795 |
| HumanPseAAC | 0.0161 | 0.0838 | 0.0161 | 0.0161 | 0.0071 | 0.0267 | 0.9100 | 6.9711 | 0.8794 | 0.2617 | 0.9178 | 0.9098 |
| Image | 0.0800 | 0.2170 | 0.0983 | 0.1062 | 0.1561 | 0.1811 | 0.6550 | 1.8650 | 0.5783 | 0.5666 | 0.8894 | 0.8880 |
| IMDB-ECC-F10% | 0.0031 | 0.0674 | 0.0046 | 0.0056 | 0.0069 | 0.0077 | 0.7883 | 12.8784 | 0.6521 | 0.2977 | 0.8444 | 0.8639 |
| IMDB-F10% | 0.0050 | 0.0723 | 0.0090 | 0.0114 | 0.0161 | 0.0177 | 0.7899 | 13.3176 | 0.6672 | 0.2913 | 0.8539 | 0.8660 |
| LLOG-F | 0.0574 | 0.0174 | 0.0820 | 0.0927 | 0.0196 | 0.1405 | 0.6721 | 22.2623 | 0.4795 | 0.3655 | 0.5354 | 0.9232 |
| mediamill10% | 0.0618 | 0.0335 | 0.3962 | 0.5358 | 0.0517 | 0.5014 | 0.2779 | 59.1116 | 0.4321 | 0.5060 | 0.7601 | 0.9524 |
| medical | 0.6837 | 0.0102 | 0.7577 | 0.7916 | 0.2959 | 0.8193 | 0.1531 | 1.9490 | 0.0587 | 0.8883 | 0.5502 | 0.9959 |
| Music | 0.1333 | 0.2389 | 0.3639 | 0.4756 | 0.4578 | 0.5426 | 0.3167 | 2.5833 | 0.2148 | 0.7236 | 0.8384 | 0.8018 |
| NUS-WIDE-bow10% | 0.0014 | 0.0266 | 0.0025 | 0.0034 | 0.0017 | 0.0057 | 0.9481 | 46.6108 | 0.9400 | 0.1174 | 0.8693 | 0.9792 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0267 | 0.0012 | 0.0016 | 0.0014 | 0.0039 | 0.9629 | 47.0590 | 0.9577 | 0.1059 | 0.8683 | 0.9770 |
| OHSUMED-F | 0.2161 | 0.0559 | 0.3657 | 0.4448 | 0.3334 | 0.4921 | 0.3833 | 7.5061 | 0.3698 | 0.6110 | 0.9503 | 0.9569 |
| PlantGO | 0.4694 | 0.0561 | 0.5663 | 0.6158 | 0.3505 | 0.6827 | 0.2551 | 1.0612 | 0.0986 | 0.8291 | 0.9636 | 0.9719 |
| PlantPseAAC | 0.0102 | 0.0944 | 0.0102 | 0.0102 | 0.0060 | 0.0177 | 0.8367 | 4.2041 | 0.6582 | 0.3594 | 0.8171 | 0.8246 |
| rcv1subset1 | 0.0050 | 0.0290 | 0.0766 | 0.1111 | 0.0692 | 0.1256 | 0.5800 | 46.9050 | 0.5629 | 0.3473 | 0.9079 | 0.9680 |
| REUTERS-K500-EX2 | 0.1633 | 0.0127 | 0.1852 | 0.1989 | 0.1182 | 0.2533 | 0.6267 | 34.9233 | 0.5781 | 0.4028 | 0.7753 | 0.9880 |
| scene | 0.1909 | 0.1494 | 0.2178 | 0.2313 | 0.3366 | 0.3571 | 0.4481 | 1.7012 | 0.3672 | 0.6658 | 0.8992 | 0.8877 |
| sider_CDK_ECFP4 | 0.0000 | 0.2767 | 0.6242 | 0.7790 | 0.5794 | 0.7752 | 0.3239 | 19.9648 | 0.2128 | 0.7511 | 0.5164 | 0.7326 |
| sider_MordredDesc | 0.0000 | 0.2715 | 0.6215 | 0.7754 | 0.5951 | 0.7754 | 0.4155 | 20.0211 | 0.3046 | 0.7369 | 0.5525 | 0.7383 |
| sider_RDKit_desc | 0.0000 | 0.2700 | 0.6160 | 0.7739 | 0.5656 | 0.7734 | 0.5070 | 21.6831 | 0.3658 | 0.7027 | 0.5719 | 0.7322 |
| SLASHDOT-F | 0.2269 | 0.0449 | 0.2731 | 0.2969 | 0.2514 | 0.4006 | 0.4011 | 5.2401 | 0.3188 | 0.6458 | 0.7412 | 0.9703 |
| solar_flare-L3 | 0.2000 | 0.4000 | 0.4000 | 0.4800 | 0.3238 | 0.5000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.3333 | 0.7400 |
| Stackex_chemistry | 0.0129 | 0.0120 | 0.0274 | 0.0353 | 0.0293 | 0.0468 | 0.8032 | 105.3391 | 0.8253 | 0.1507 | 0.9038 | 0.9822 |
| Stackex_chess | 0.0179 | 0.0104 | 0.0778 | 0.1138 | 0.0288 | 0.1469 | 0.6429 | 112.3095 | 0.5889 | 0.2803 | 0.5349 | 0.9782 |
| Stackex_coffee | 0.0000 | 0.0191 | 0.0145 | 0.0217 | 0.0081 | 0.0357 | 0.5652 | 59.2174 | 0.4161 | 0.3339 | 0.2453 | 0.9471 |
| Stackex_cooking | 0.0531 | 0.0053 | 0.1686 | 0.2289 | 0.0843 | 0.2684 | 0.5527 | 192.2754 | 0.6185 | 0.3136 | 0.9135 | 0.9888 |
| Stackex_philosophy | 0.0251 | 0.0094 | 0.0799 | 0.1126 | 0.0525 | 0.1484 | 0.6658 | 122.0201 | 0.6656 | 0.2554 | 0.7339 | 0.9806 |
| tmc2007-500 | 0.1937 | 0.0741 | 0.4638 | 0.6044 | 0.4420 | 0.5819 | 0.3899 | 6.2797 | 0.3239 | 0.6547 | 0.9699 | 0.9669 |
| tox21_CDK_ECFP4 | 0.0205 | 0.1658 | 0.0630 | 0.0848 | 0.1818 | 0.1735 | 0.5719 | 6.1301 | 0.5348 | 0.4890 | 0.8403 | 0.8472 |
| tox21_RDKit_desc | 0.0171 | 0.1761 | 0.0384 | 0.0501 | 0.1166 | 0.0940 | 0.8219 | 7.1096 | 0.8254 | 0.3381 | 0.9022 | 0.8981 |
| VirusGO | 0.8095 | 0.0397 | 0.8889 | 0.9195 | 0.7433 | 0.9057 | 0.0476 | 0.3810 | 0.0476 | 0.9563 | 0.8111 | 0.9810 |
| VirusPseAAC | 0.2857 | 0.1429 | 0.3095 | 0.3210 | 0.2619 | 0.4375 | 0.4286 | 0.8571 | 0.0952 | 0.7516 | 0.6543 | 0.8653 |
| Water-quality | 0.0094 | 0.3356 | 0.2220 | 0.3576 | 0.1536 | 0.3395 | 0.3113 | 10.0755 | 0.3914 | 0.6575 | 0.8028 | 0.7400 |
| Yahoo_Arts | 0.0748 | 0.0603 | 0.1012 | 0.1163 | 0.1038 | 0.1504 | 0.5140 | 11.1455 | 0.5733 | 0.4780 | 0.9317 | 0.9707 |
| Yahoo_Business | 0.5285 | 0.0274 | 0.6940 | 0.7852 | 0.2322 | 0.6947 | 0.1194 | 3.0918 | 0.1795 | 0.8708 | 0.8532 | 0.9910 |
| Yahoo_Computers | 0.3245 | 0.0419 | 0.4368 | 0.5022 | 0.2104 | 0.4843 | 0.4586 | 6.6538 | 0.5304 | 0.5734 | 0.8936 | 0.9801 |
| Yahoo_Education | 0.0740 | 0.0398 | 0.0866 | 0.0945 | 0.1579 | 0.1676 | 0.6367 | 9.4988 | 0.6701 | 0.4566 | 0.8969 | 0.9871 |
| Yahoo_Entertainment | 0.1901 | 0.0563 | 0.2065 | 0.2156 | 0.1809 | 0.3068 | 0.5090 | 4.2090 | 0.5497 | 0.5867 | 0.9891 | 0.9901 |
| Yahoo_Health | 0.3062 | 0.0448 | 0.4649 | 0.5476 | 0.2098 | 0.5115 | 0.3974 | 6.8024 | 0.3536 | 0.6491 | 0.8300 | 0.9824 |
| Yahoo_Recreation | 0.2089 | 0.0514 | 0.2312 | 0.2436 | 0.2609 | 0.3379 | 0.4295 | 6.1738 | 0.4510 | 0.6157 | 0.9875 | 0.9883 |
| Yahoo_Reference | 0.1980 | 0.0292 | 0.2136 | 0.2218 | 0.1326 | 0.3243 | 0.5106 | 4.9751 | 0.5109 | 0.5833 | 0.8042 | 0.9870 |
| Yahoo_Science | 0.1400 | 0.0321 | 0.1660 | 0.1797 | 0.1200 | 0.2380 | 0.5505 | 12.9300 | 0.5634 | 0.4740 | 0.9510 | 0.9776 |
| Yahoo_Social | 0.0545 | 0.0829 | 0.2218 | 0.3227 | 0.1782 | 0.2771 | 0.5891 | 9.2599 | 0.3605 | 0.4794 | 0.8234 | 0.8547 |
| Yahoo_Society | 0.1760 | 0.0743 | 0.4045 | 0.4885 | 0.1166 | 0.4075 | 0.4557 | 5.9121 | 0.1533 | 0.5501 | 0.5860 | 0.8306 |
| yeast | 0.0455 | 0.2305 | 0.3515 | 0.4802 | 0.1695 | 0.4965 | 0.2562 | 6.7851 | 0.4001 | 0.7108 | 0.8802 | 0.8949 |
| Yelp | 0.3091 | 0.2167 | 0.5204 | 0.6200 | 0.5711 | 0.6568 | 0.2473 | 1.5593 | 0.2883 | 0.8220 | 0.9018 | 0.9078 |

Table 135: Detailed results for ECC

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4093 | 0.0405 | 0.5224 | 0.5816 | 0.6246 | 0.6206 | 0.3637 | 2.3373 | 0.1484 | 0.7335 | 0.9494 | 0.9399 |
| 3s-bbc1000 | 0.0833 | 0.3333 | 0.2060 | 0.2604 | 0.2567 | 0.2800 | 0.6667 | 2.0278 | 0.5417 | 0.5541 | 0.6594 | 0.6378 |
| 3s-guardian1000 | 0.0323 | 0.3656 | 0.1720 | 0.2440 | 0.2694 | 0.2766 | 0.7742 | 2.7097 | 0.3065 | 0.4478 | 0.6714 | 0.5441 |
| 3s-inter3000 | 0.0000 | 0.2843 | 0.1765 | 0.2353 | 0.2545 | 0.2927 | 0.8824 | 2.2941 | 0.7176 | 0.4324 | 0.7009 | 0.8532 |
| 3s-reuters1000 | 0.1000 | 0.3000 | 0.2139 | 0.2780 | 0.2541 | 0.2895 | 0.7333 | 2.1000 | 0.4750 | 0.5011 | 0.5110 | 0.5669 |
| amphibians | 0.0556 | 0.3413 | 0.4041 | 0.6369 | 0.4484 | 0.5743 | 0.3333 | 3.1111 | 0.2537 | 0.7667 | 0.5570 | 0.6821 |
| bibtex | 0.1027 | 0.0151 | 0.2779 | 0.3813 | 0.2420 | 0.3775 | 0.5068 | 64.6108 | 0.4851 | 0.4405 | 0.9882 | 0.9889 |
| birds | 0.1538 | 0.1026 | 0.3697 | 0.4758 | 0.3650 | 0.4795 | 0.5385 | 6.9744 | 0.5359 | 0.5244 | 0.8556 | 0.9587 |
| bookmarks10% | 0.1938 | 0.0097 | 0.2507 | 0.2887 | 0.1325 | 0.2624 | 0.6074 | 83.7231 | 0.5410 | 0.3821 | 0.9810 | 0.9826 |
| CAL500 | 0.0000 | 0.1508 | 0.1963 | 0.3283 | 0.1095 | 0.3276 | 0.3725 | 147.4314 | 0.4656 | 0.4274 | 0.6150 | 0.8128 |
| corel16k001 | 0.0080 | 0.0205 | 0.0615 | 0.0937 | 0.0208 | 0.1108 | 0.7553 | 86.2237 | 0.5927 | 0.2374 | 0.9630 | 0.9637 |
| Corel5k | 0.0000 | 0.0100 | 0.0480 | 0.0789 | 0.0097 | 0.0932 | 0.7120 | 161.2780 | 0.7106 | 0.2138 | 0.6660 | 0.9860 |
| delicious | 0.0000 | 0.0193 | 0.0197 | 0.0366 | 0.0135 | 0.0259 | 0.4636 | 892.3412 | 0.7146 | 0.2000 | 0.9835 | 0.9894 |
| emotions | 0.3000 | 0.2278 | 0.5097 | 0.6165 | 0.6027 | 0.6204 | 0.3167 | 1.7667 | 0.2236 | 0.7785 | 0.8238 | 0.8422 |
| enron | 0.1287 | 0.0574 | 0.4005 | 0.5437 | 0.1704 | 0.5140 | 0.3567 | 21.3743 | 0.2257 | 0.5902 | 0.7731 | 0.9323 |
| EukaryoteGO | 0.6628 | 0.0223 | 0.7716 | 0.8238 | 0.7548 | 0.8008 | 0.1956 | 0.8121 | 0.0376 | 0.8804 | 0.9925 | 0.9945 |
| EukaryotePseAAC | 0.1532 | 0.0694 | 0.2695 | 0.3295 | 0.1411 | 0.3587 | 0.6332 | 3.3115 | 0.1063 | 0.5527 | 0.8649 | 0.9012 |
| flags | 0.1000 | 0.3286 | 0.4850 | 0.6280 | 0.5211 | 0.6290 | 0.1000 | 3.9500 | 0.3508 | 0.8060 | 0.5954 | 0.7142 |
| foodtruck | 0.0976 | 0.1707 | 0.3778 | 0.5545 | 0.1839 | 0.4815 | 0.2927 | 3.9268 | 0.3579 | 0.7241 | 0.7119 | 0.8594 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9357 | 0.0089 | 0.9643 | 0.9786 | 0.8433 | 0.9662 | 0.0357 | 0.1071 | 0.0143 | 0.9792 | 0.8747 | 0.9996 |
| GnegativePseAAC | 0.3500 | 0.1330 | 0.5351 | 0.6274 | 0.3408 | 0.5940 | 0.4000 | 0.9571 | 0.3250 | 0.7465 | 0.7744 | 0.9148 |
| GpositiveGO | 0.8654 | 0.0337 | 0.9038 | 0.9227 | 0.8779 | 0.9346 | 0.0962 | 0.1538 | 0.0641 | 0.9455 | 0.9970 | 0.9963 |
| GpositivePseAAC | 0.1346 | 0.3413 | 0.3942 | 0.5024 | 0.4624 | 0.5035 | 0.4038 | 0.7115 | 0.1923 | 0.7516 | 0.8053 | 0.7917 |
| HumanGO | 0.5884 | 0.0469 | 0.7111 | 0.7765 | 0.6714 | 0.7411 | 0.2412 | 1.0997 | 0.0997 | 0.8425 | 0.9802 | 0.9854 |
| HumanPseAAC | 0.1736 | 0.1201 | 0.2899 | 0.3550 | 0.2045 | 0.3519 | 0.6559 | 2.8714 | 0.1166 | 0.5272 | 0.8235 | 0.8390 |
| Image | 0.4100 | 0.1890 | 0.5146 | 0.5671 | 0.5782 | 0.5791 | 0.3500 | 1.0150 | 0.1283 | 0.7686 | 0.8647 | 0.8661 |
| IMDB-ECC-F10% | 0.0094 | 0.0723 | 0.0178 | 0.0239 | 0.0144 | 0.0331 | 0.7348 | 11.2579 | 0.5381 | 0.3753 | 0.9353 | 0.9199 |
| IMDB-F10% | 0.0903 | 0.0838 | 0.2078 | 0.2743 | 0.0418 | 0.2520 | 0.6280 | 12.2394 | 0.5497 | 0.4020 | 0.9385 | 0.9234 |
| LLOG-F | 0.0984 | 0.0257 | 0.1717 | 0.2192 | 0.0825 | 0.2295 | 0.7787 | 32.2049 | 0.7623 | 0.2566 | 0.5847 | 0.9838 |
| mediamill10% | 0.0071 | 0.0409 | 0.2148 | 0.3439 | 0.0461 | 0.3141 | 0.3112 | 66.0166 | 0.5466 | 0.4532 | 0.8000 | 0.9848 |
| medical | 0.5816 | 0.0138 | 0.7104 | 0.7735 | 0.3183 | 0.7645 | 0.2143 | 5.1122 | 0.1233 | 0.8214 | 0.5523 | 0.9960 |
| Music | 0.1333 | 0.2444 | 0.4414 | 0.5837 | 0.5801 | 0.5849 | 0.3833 | 2.1000 | 0.2648 | 0.7480 | 0.8378 | 0.8486 |
| NUS-WIDE-bow10% | 0.0019 | 0.0271 | 0.0041 | 0.0057 | 0.0034 | 0.0086 | 0.9672 | 47.4301 | 0.9934 | 0.1114 | 0.8879 | 0.9990 |
| NUS-WIDE-cVLADplus10% | 0.0019 | 0.0271 | 0.0048 | 0.0068 | 0.0038 | 0.0124 | 0.9672 | 47.3934 | 0.9905 | 0.1112 | 0.8876 | 0.9987 |
| OHSUMED-F | 0.1565 | 0.0699 | 0.3499 | 0.4563 | 0.3591 | 0.4726 | 0.4257 | 7.0517 | 0.3373 | 0.6000 | 0.9280 | 0.9349 |
| PlantGO | 0.5306 | 0.0476 | 0.7075 | 0.7882 | 0.6994 | 0.7705 | 0.1939 | 0.6224 | 0.0646 | 0.8774 | 0.9893 | 0.9868 |
| PlantPseAAC | 0.1224 | 0.1497 | 0.1815 | 0.2175 | 0.1518 | 0.2281 | 0.7449 | 3.0816 | 0.3333 | 0.4770 | 0.8364 | 0.8407 |
| rcv1subset1 | 0.0217 | 0.0301 | 0.1675 | 0.2539 | 0.0833 | 0.2348 | 0.4750 | 35.4100 | 0.3470 | 0.5014 | 0.9186 | 0.9787 |
| REUTERS-K500-EX2 | 0.2067 | 0.0145 | 0.3439 | 0.4189 | 0.1873 | 0.4217 | 0.5300 | 25.4100 | 0.4099 | 0.5229 | 0.7760 | 0.9895 |
| scene | 0.5270 | 0.1314 | 0.5882 | 0.6185 | 0.6444 | 0.6275 | 0.3402 | 0.8797 | 0.1691 | 0.7858 | 0.9241 | 0.9314 |
| sider_CDK_ECFP4 | 0.0000 | 0.4497 | 0.1712 | 0.2892 | 0.1759 | 0.2980 | 0.1831 | 23.1268 | 0.3458 | 0.7610 | 0.6931 | 0.8157 |
| sider_MordredDesc | 0.0000 | 0.4280 | 0.2277 | 0.3840 | 0.2425 | 0.3749 | 0.1690 | 22.2465 | 0.2802 | 0.7693 | 0.6513 | 0.7740 |
| sider_RDKit_desc | 0.0070 | 0.4515 | 0.1933 | 0.3375 | 0.1791 | 0.3084 | 0.1831 | 23.0352 | 0.3110 | 0.7609 | 0.6477 | 0.7724 |
| SLASHDOT-F | 0.3536 | 0.0461 | 0.4446 | 0.4917 | 0.3434 | 0.5294 | 0.4380 | 4.0026 | 0.1649 | 0.6480 | 0.6940 | 0.9149 |
| solar_flare-L3 | 0.2000 | 0.4000 | 0.4000 | 0.4800 | 0.3238 | 0.5000 | 0.8000 | 0.8000 | 0.4000 | 0.6000 | 0.2222 | 0.7000 |
| Stackex_chemistry | 0.0359 | 0.0141 | 0.1226 | 0.1767 | 0.0827 | 0.1997 | 0.6983 | 90.4181 | 0.6859 | 0.2606 | 0.9085 | 0.9886 |
| Stackex_chess | 0.0119 | 0.0125 | 0.1404 | 0.2229 | 0.0649 | 0.2520 | 0.7083 | 133.7738 | 0.7291 | 0.2215 | 0.5449 | 0.9939 |
| Stackex_coffee | 0.0000 | 0.0262 | 0.1406 | 0.2507 | 0.0711 | 0.2449 | 0.7391 | 67.6087 | 0.7518 | 0.2040 | 0.2569 | 0.9898 |
| Stackex_cooking | 0.0541 | 0.0067 | 0.2095 | 0.3070 | 0.1309 | 0.3118 | 0.6048 | 200.9217 | 0.6423 | 0.3022 | 0.9212 | 0.9964 |
| Stackex_philosophy | 0.0477 | 0.0118 | 0.1796 | 0.2658 | 0.0868 | 0.2805 | 0.6734 | 125.4899 | 0.6642 | 0.2764 | 0.7438 | 0.9927 |
| tmc2007-500 | 0.1748 | 0.0782 | 0.4391 | 0.5822 | 0.4533 | 0.5527 | 0.3098 | 4.5070 | 0.1812 | 0.7298 | 0.9381 | 0.9506 |
| tox21_CDK_ECFP4 | 0.1130 | 0.1812 | 0.2864 | 0.3838 | 0.3202 | 0.4038 | 0.5000 | 5.0616 | 0.4304 | 0.5607 | 0.7830 | 0.7587 |
| tox21_RDKit_desc | 0.0856 | 0.1978 | 0.2742 | 0.3815 | 0.3278 | 0.4041 | 0.5514 | 5.4178 | 0.4043 | 0.5385 | 0.7826 | 0.7820 |
| VirusGO | 0.7619 | 0.0556 | 0.8254 | 0.8648 | 0.6742 | 0.8511 | 0.0476 | 0.6190 | 0.0873 | 0.9421 | 0.8287 | 0.9949 |
| VirusPseAAC | 0.1905 | 0.2222 | 0.4381 | 0.5517 | 0.4370 | 0.5484 | 0.5238 | 1.2381 | 0.1429 | 0.6730 | 0.5641 | 0.8417 |
| Water-quality | 0.0094 | 0.3430 | 0.3534 | 0.5242 | 0.4780 | 0.5194 | 0.4434 | 9.7264 | 0.4481 | 0.6248 | 0.6973 | 0.7234 |
| Yahoo_Arts | 0.2029 | 0.0634 | 0.3356 | 0.4150 | 0.2691 | 0.4048 | 0.4780 | 6.6876 | 0.3818 | 0.5993 | 0.8854 | 0.9152 |
| Yahoo_Business | 0.5285 | 0.0272 | 0.7018 | 0.7966 | 0.1923 | 0.7100 | 0.1052 | 2.9733 | 0.1402 | 0.8687 | 0.8227 | 0.9750 |
| Yahoo_Computers | 0.2329 | 0.0445 | 0.4334 | 0.5454 | 0.2022 | 0.4992 | 0.3606 | 4.4602 | 0.2406 | 0.6984 | 0.8447 | 0.9304 |
| Yahoo_Education | 0.2369 | 0.0442 | 0.3776 | 0.4591 | 0.2475 | 0.4506 | 0.4480 | 5.3766 | 0.3573 | 0.6341 | 0.8520 | 0.9403 |
| Yahoo_Entertainment | 0.3582 | 0.0597 | 0.4975 | 0.5776 | 0.3010 | 0.5267 | 0.3409 | 2.9254 | 0.1326 | 0.7257 | 0.9187 | 0.9122 |
| Yahoo_Health | 0.2964 | 0.0410 | 0.5176 | 0.6449 | 0.1863 | 0.5830 | 0.2443 | 4.9305 | 0.2662 | 0.7433 | 0.8079 | 0.9565 |
| Yahoo_Recreation | 0.3281 | 0.0558 | 0.4497 | 0.5184 | 0.3792 | 0.5081 | 0.4030 | 4.0429 | 0.2685 | 0.6725 | 0.9188 | 0.9022 |
| Yahoo_Reference | 0.3873 | 0.0302 | 0.5037 | 0.5664 | 0.2298 | 0.5647 | 0.3636 | 3.3935 | 0.1574 | 0.7098 | 0.7669 | 0.9523 |
| Yahoo_Science | 0.2224 | 0.0357 | 0.3445 | 0.4154 | 0.2707 | 0.4231 | 0.4837 | 9.5956 | 0.3319 | 0.5693 | 0.9359 | 0.9539 |
| Yahoo_Social | 0.4538 | 0.0238 | 0.5942 | 0.6727 | 0.2674 | 0.6271 | 0.2574 | 3.5619 | 0.1226 | 0.7860 | 0.8954 | 0.9700 |
| Yahoo_Society | 0.1632 | 0.0658 | 0.3845 | 0.5156 | 0.1430 | 0.4215 | 0.4611 | 5.9302 | 0.1685 | 0.5622 | 0.6008 | 0.8502 |
| yeast | 0.1364 | 0.2042 | 0.4539 | 0.5992 | 0.3696 | 0.6028 | 0.2479 | 6.7355 | 0.2696 | 0.7460 | 0.6883 | 0.8235 |
| Yelp | 0.3539 | 0.2165 | 0.6382 | 0.7578 | 0.7076 | 0.7286 | 0.1206 | 1.3280 | 0.1156 | 0.8949 | 0.8379 | 0.8517 |

Table 136: Detailed results for BAGGING(BR)

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5563 | 0.0306 | 0.5189 | 0.5720 | 0.6711 | 0.6499 | 0.2866 | 1.3040 | 0.1306 | 0.8311 | 0.9783 | 0.9650 |
| 3s-bbc1000 | 0.0833 | 0.3333 | 0.2060 | 0.2604 | 0.2567 | 0.2800 | 0.6667 | 2.0278 | 0.5417 | 0.5541 | 0.6594 | 0.6378 |
| 3s-guardian1000 | 0.0245 | 0.1984 | 0.0448 | 0.0289 | 0.0902 | 0.1361 | 0.5567 | 2.0885 | 0.4614 | 0.5583 | 0.6614 | 0.7110 |
| 3s-inter3000 | 0.0326 | 0.2212 | 0.0438 | 0.1188 | 0.1248 | 0.1130 | 0.6369 | 1.8509 | 0.3577 | 0.5452 | 0.3644 | 0.6124 |
| 3s-reuters1000 | 0.0491 | 0.2021 | 0.0041 | 0.0372 | 0.0245 | 0.0302 | 0.8061 | 2.1465 | 0.7052 | 0.4767 | 0.5618 | 0.5787 |
| amphibians | 0.0000 | 0.2867 | 0.5167 | 0.7483 | 0.5731 | 0.7399 | 0.2690 | 2.6243 | 0.1059 | 0.8222 | 0.6295 | 0.7575 |
| bibtex | 0.1617 | 0.0340 | 0.3097 | 0.4478 | 0.2434 | 0.4018 | 0.3369 | 32.9264 | 0.2250 | 0.5685 | 0.9518 | 0.9472 |
| birds | 0.2287 | 0.0907 | 0.3867 | 0.4458 | 0.3191 | 0.4879 | 0.3260 | 4.2182 | 0.1897 | 0.7045 | 0.8121 | 0.8655 |
| bookmarks10% | 0.2079 | 0.0000 | 0.2491 | 0.2706 | 0.1033 | 0.1895 | 0.6603 | 82.4233 | 0.5487 | 0.3286 | 0.9411 | 0.9301 |
| CAL500 | 0.0000 | 0.1861 | 0.1840 | 0.3757 | 0.0558 | 0.3619 | 0.1662 | 141.4982 | 0.4291 | 0.4643 | 0.5299 | 0.7983 |
| corel16k001 | 0.0000 | 0.0134 | 0.0301 | 0.0426 | 0.0000 | 0.0086 | 0.7732 | 95.7377 | 0.6134 | 0.1698 | 0.9401 | 0.9612 |
| Corel5k | 0.0038 | 0.0387 | 0.0442 | 0.0923 | 0.0000 | 0.1162 | 0.7311 | 137.9166 | 0.5416 | 0.2300 | 0.6073 | 0.9631 |
| delicious | 0.0000 | 0.0193 | 0.0197 | 0.0366 | 0.0135 | 0.0259 | 0.4636 | 892.3412 | 0.7146 | 0.2000 | 0.9835 | 0.9894 |
| emotions | 0.3191 | 0.1588 | 0.5705 | 0.6545 | 0.6191 | 0.6887 | 0.2526 | 1.6904 | 0.2226 | 0.8061 | 0.8151 | 0.8441 |
| enron | 0.1539 | 0.0610 | 0.4247 | 0.5464 | 0.1838 | 0.5469 | 0.1520 | 15.0909 | 0.1494 | 0.7174 | 0.6747 | 0.8930 |
| EukaryoteGO | 0.7295 | 0.0555 | 0.7644 | 0.8266 | 0.7243 | 0.8340 | 0.1574 | 0.4608 | 0.0000 | 0.9197 | 0.9590 | 1.0000 |
| EukaryotePseAAC | 0.1071 | 0.0274 | 0.1012 | 0.1601 | 0.0587 | 0.2092 | 0.5854 | 2.5957 | 0.0780 | 0.6027 | 0.7836 | 0.8645 |
| flags | 0.2204 | 0.3042 | 0.5553 | 0.7259 | 0.6360 | 0.7449 | 0.0959 | 3.5718 | 0.1897 | 0.8708 | 0.7342 | 0.8462 |
| foodtruck | 0.2968 | 0.1546 | 0.5078 | 0.6044 | 0.2199 | 0.5217 | 0.3351 | 3.0532 | 0.2981 | 0.7356 | 0.6324 | 0.8032 |
| genbase | 0.9649 | 0.0229 | 0.9799 | 0.9811 | 0.6412 | 0.9462 | 0.0071 | 0.2563 | 0.0000 | 1.0000 | 0.6369 | 0.9577 |
| GnegativeGO | 0.9206 | 0.0000 | 0.9524 | 1.0000 | 0.7933 | 0.9590 | 0.0611 | 0.0913 | 0.0117 | 0.9830 | 0.8930 | 0.9500 |
| GnegativePseAAC | 0.5915 | 0.0914 | 0.6349 | 0.5824 | 0.2645 | 0.7242 | 0.2986 | 0.6997 | 0.1477 | 0.8420 | 0.7566 | 0.9205 |
| GpositiveGO | 0.8771 | 0.0558 | 0.8707 | 0.8734 | 0.8370 | 0.9393 | 0.1215 | 0.1480 | 0.0783 | 0.9415 | 0.9581 | 1.0000 |
| GpositivePseAAC | 0.5562 | 0.1346 | 0.5427 | 0.5574 | 0.4052 | 0.6330 | 0.2693 | 0.4456 | 0.1154 | 0.8550 | 0.8350 | 0.8588 |
| HumanGO | 0.6014 | 0.0474 | 0.7072 | 0.7624 | 0.6402 | 0.7094 | 0.2174 | 0.6794 | 0.0392 | 0.8832 | 0.9405 | 0.9507 |
| HumanPseAAC | 0.1128 | 0.0741 | 0.1081 | 0.1389 | 0.0153 | 0.1626 | 0.6072 | 2.3301 | 0.0829 | 0.6071 | 0.7609 | 0.8508 |
| Image | 0.5442 | 0.1654 | 0.5843 | 0.6437 | 0.6936 | 0.6681 | 0.2291 | 0.7133 | 0.0988 | 0.8290 | 0.8816 | 0.8992 |
| IMDB-ECC-F10% | 0.0359 | 0.0851 | 0.0664 | 0.0604 | 0.0370 | 0.0562 | 0.8197 | 13.9386 | 0.7952 | 0.2799 | 0.8722 | 0.9325 |
| IMDB-F10% | 0.0000 | 0.0618 | 0.0201 | 0.0663 | 0.0162 | 0.0411 | 0.8780 | 14.7681 | 0.8314 | 0.2368 | 0.9183 | 0.9107 |
| LLOG-F | 0.1065 | 0.0606 | 0.1244 | 0.0919 | 0.0383 | 0.1849 | 0.6082 | 12.2066 | 0.2364 | 0.4475 | 0.5386 | 0.8910 |
| mediamill10% | 0.0375 | 0.0646 | 0.3795 | 0.5289 | 0.0497 | 0.4404 | 0.2820 | 64.6194 | 0.5215 | 0.4571 | 0.7767 | 0.9646 |
| medical | 0.6824 | 0.0000 | 0.7590 | 0.8060 | 0.3005 | 0.8008 | 0.1182 | 1.6444 | 0.0560 | 0.8851 | 0.5572 | 0.9522 |
| Music | 0.1983 | 0.2521 | 0.4737 | 0.5778 | 0.6457 | 0.6455 | 0.2794 | 1.9396 | 0.2044 | 0.8208 | 0.8047 | 0.8139 |
| NUS-WIDE-bow10% | 0.0119 | 0.0753 | 0.0321 | 0.0000 | 0.0034 | 0.0306 | 0.9770 | 46.6454 | 0.9477 | 0.0937 | 0.8427 | 1.0000 |
| NUS-WIDE-cVLADplus10% | 0.0178 | 0.0184 | 0.0000 | 0.0163 | 0.0000 | 0.0228 | 0.9806 | 47.0798 | 0.9896 | 0.0983 | 0.8451 | 0.9462 |
| OHSUMED-F | 0.2462 | 0.0488 | 0.4401 | 0.5142 | 0.3531 | 0.5262 | 0.2916 | 3.7739 | 0.1050 | 0.7376 | 0.9048 | 0.9081 |
| PlantGO | 0.6240 | 0.0268 | 0.7327 | 0.7400 | 0.6253 | 0.7423 | 0.2466 | 0.6339 | 0.0791 | 0.8971 | 0.9939 | 0.9939 |
| PlantPseAAC | 0.0232 | 0.1045 | 0.0305 | 0.0965 | 0.0160 | 0.0926 | 0.6400 | 2.2424 | 0.1935 | 0.5815 | 0.6867 | 0.8262 |
| rcv1subset1 | 0.0123 | 0.0552 | 0.1846 | 0.2554 | 0.1579 | 0.3219 | 0.4494 | 17.7549 | 0.1738 | 0.5638 | 0.9069 | 0.9310 |
| REUTERS-K500-EX2 | 0.3218 | 0.0178 | 0.3915 | 0.4466 | 0.2363 | 0.5086 | 0.4280 | 12.9033 | 0.1695 | 0.6580 | 0.7135 | 0.9733 |
| scene | 0.6046 | 0.1079 | 0.6168 | 0.6267 | 0.7640 | 0.7209 | 0.1888 | 0.4164 | 0.0937 | 0.8665 | 0.9477 | 0.9311 |
| sider_CDK_ECFP4 | 0.0000 | 0.4497 | 0.1712 | 0.2892 | 0.1759 | 0.2980 | 0.1831 | 23.1268 | 0.3458 | 0.7610 | 0.6931 | 0.8157 |
| sider_MordredDesc | 0.0000 | 0.4280 | 0.2277 | 0.3840 | 0.2425 | 0.3749 | 0.1690 | 22.2465 | 0.2802 | 0.7693 | 0.6513 | 0.7740 |
| sider_RDKit_desc | 0.0070 | 0.4515 | 0.1933 | 0.3375 | 0.1791 | 0.3084 | 0.1831 | 23.0352 | 0.3110 | 0.7609 | 0.6477 | 0.7724 |
| SLASHDOT-F | 0.3499 | 0.0434 | 0.4015 | 0.4248 | 0.3168 | 0.5309 | 0.4254 | 3.4396 | 0.1764 | 0.6556 | 0.6731 | 0.9250 |
| solar_flare-L3 | 0.1606 | 0.4400 | 0.4006 | 0.4814 | 0.3118 | 0.4837 | 0.8189 | 0.8174 | 0.4428 | 0.5673 | 0.2640 | 0.6614 |
| Stackex_chemistry | 0.0359 | 0.0141 | 0.1226 | 0.1767 | 0.0827 | 0.1997 | 0.6983 | 90.4181 | 0.6859 | 0.2606 | 0.9085 | 0.9886 |
| Stackex_chess | 0.0379 | 0.0458 | 0.2068 | 0.2583 | 0.0831 | 0.3237 | 0.5331 | 71.8129 | 0.3773 | 0.4320 | 0.5390 | 0.9899 |
| Stackex_coffee | 0.0000 | 0.0317 | 0.0000 | 0.0035 | 0.0264 | 0.0904 | 0.7394 | 60.9444 | 0.4395 | 0.2834 | 0.2147 | 0.9384 |
| Stackex_cooking | 0.0541 | 0.0067 | 0.2095 | 0.3070 | 0.1309 | 0.3118 | 0.6048 | 200.9217 | 0.6423 | 0.3022 | 0.9212 | 0.9964 |
| Stackex_philosophy | 0.0923 | 0.0163 | 0.2036 | 0.2997 | 0.0988 | 0.3491 | 0.4527 | 74.2866 | 0.3333 | 0.4357 | 0.7201 | 0.9958 |
| tmc2007-500 | 0.2058 | 0.0996 | 0.4906 | 0.6519 | 0.5304 | 0.6291 | 0.2435 | 2.7702 | 0.0761 | 0.7928 | 0.9238 | 0.9796 |
| tox21_CDK_ECFP4 | 0.1130 | 0.1812 | 0.2864 | 0.3838 | 0.3202 | 0.4038 | 0.5000 | 5.0616 | 0.4304 | 0.5607 | 0.7830 | 0.7587 |
| tox21_RDKit_desc | 0.0856 | 0.1978 | 0.2742 | 0.3815 | 0.3278 | 0.4041 | 0.5514 | 5.4178 | 0.4043 | 0.5385 | 0.7826 | 0.7820 |
| VirusGO | 0.8318 | 0.0283 | 0.8561 | 0.9183 | 0.6849 | 0.8532 | 0.0804 | 0.3164 | 0.0891 | 0.9332 | 0.7920 | 1.0000 |
| VirusPseAAC | 0.4054 | 0.1032 | 0.5609 | 0.5625 | 0.3517 | 0.6637 | 0.3221 | 0.7471 | 0.0478 | 0.7769 | 0.6156 | 0.8979 |
| Water-quality | 0.0349 | 0.2713 | 0.4163 | 0.5958 | 0.4744 | 0.5975 | 0.1906 | 8.5800 | 0.2157 | 0.7643 | 0.7023 | 0.7311 |
| Yahoo_Arts | 0.2178 | 0.0524 | 0.3161 | 0.3445 | 0.3155 | 0.4196 | 0.3807 | 7.6019 | 0.3715 | 0.5779 | 0.9241 | 0.9609 |
| Yahoo_Business | 0.5476 | 0.0375 | 0.6980 | 0.7714 | 0.3863 | 0.7557 | 0.0773 | 2.2436 | 0.1546 | 0.9169 | 0.7832 | 0.9534 |
| Yahoo_Computers | 0.3227 | 0.0301 | 0.4019 | 0.4761 | 0.2832 | 0.4932 | 0.3606 | 4.8033 | 0.4024 | 0.6589 | 0.8576 | 0.9523 |
| Yahoo_Education | 0.2109 | 0.0165 | 0.2614 | 0.2341 | 0.2151 | 0.3674 | 0.5020 | 6.3712 | 0.4491 | 0.6344 | 0.8644 | 0.9390 |
| Yahoo_Entertainment | 0.3741 | 0.0356 | 0.4027 | 0.4502 | 0.3680 | 0.4971 | 0.3460 | 3.0625 | 0.3656 | 0.7051 | 0.9348 | 0.9860 |
| Yahoo_Health | 0.3994 | 0.0784 | 0.5815 | 0.6526 | 0.2883 | 0.6143 | 0.2633 | 4.1392 | 0.1904 | 0.7648 | 0.7725 | 0.9830 |
| Yahoo_Recreation | 0.3567 | 0.0273 | 0.4417 | 0.4777 | 0.4455 | 0.5441 | 0.3689 | 4.3093 | 0.3049 | 0.6685 | 0.9778 | 0.9780 |
| Yahoo_Reference | 0.3663 | 0.0242 | 0.3846 | 0.4205 | 0.2466 | 0.5041 | 0.4053 | 3.1164 | 0.3079 | 0.6830 | 0.7990 | 0.9619 |
| Yahoo_Science | 0.2870 | 0.0345 | 0.3427 | 0.3634 | 0.3092 | 0.4054 | 0.4031 | 8.7151 | 0.3405 | 0.5837 | 0.9278 | 0.9360 |
| Yahoo_Social | 0.4957 | 0.0109 | 0.5263 | 0.5398 | 0.3227 | 0.5960 | 0.2950 | 5.0969 | 0.3016 | 0.7241 | 0.8553 | 0.9603 |
| Yahoo_Society | 0.1632 | 0.0658 | 0.3845 | 0.5156 | 0.1430 | 0.4215 | 0.4611 | 5.9302 | 0.1685 | 0.5622 | 0.6008 | 0.8502 |
| yeast | 0.1734 | 0.1939 | 0.4804 | 0.6868 | 0.3937 | 0.6430 | 0.2378 | 6.2400 | 0.2147 | 0.7845 | 0.7113 | 0.8711 |
| Yelp | 0.5416 | 0.1671 | 0.7439 | 0.7951 | 0.7885 | 0.8209 | 0.0881 | 1.1048 | 0.1239 | 0.9247 | 0.8629 | 0.9129 |

Table 137: Detailed results for Massive for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5099 | 0.0282 | 0.5649 | 0.5931 | 0.6873 | 0.6929 | 0.2951 | 2.2593 | 0.2153 | 0.7722 | 0.9837 | 0.9839 |
| 3s-bbc1000 | 0.1389 | 0.2824 | 0.1944 | 0.2315 | 0.1878 | 0.2469 | 0.7500 | 2.7778 | 0.6609 | 0.4529 | 0.7703 | 0.7211 |
| 3s-guardian1000 | 0.1613 | 0.2634 | 0.2527 | 0.3037 | 0.2053 | 0.3288 | 0.5484 | 2.3548 | 0.5000 | 0.5858 | 0.7701 | 0.7923 |
| 3s-inter3000 | 0.2353 | 0.2451 | 0.2941 | 0.3235 | 0.0870 | 0.3243 | 0.8235 | 2.2353 | 0.6353 | 0.4520 | 0.5010 | 0.6726 |
| 3s-reuters1000 | 0.0667 | 0.3278 | 0.0833 | 0.0909 | 0.0683 | 0.0923 | 0.9000 | 2.5333 | 0.7467 | 0.3817 | 0.8211 | 0.7477 |
| amphibians | 0.1111 | 0.3095 | 0.4619 | 0.6784 | 0.2762 | 0.5618 | 0.2778 | 2.5000 | 0.1056 | 0.8385 | 0.7483 | 0.8092 |
| bibtex | 0.1831 | 0.0121 | 0.3595 | 0.4498 | 0.3031 | 0.4785 | 0.4361 | 72.3313 | 0.5775 | 0.4280 | 1.0000 | 1.0000 |
| birds | 0.2051 | 0.0918 | 0.3434 | 0.4120 | 0.2718 | 0.4035 | 0.5128 | 7.6410 | 0.4771 | 0.5037 | 0.8399 | 0.9383 |
| bookmarks10% | 0.1821 | 0.0087 | 0.2180 | 0.2393 | 0.1120 | 0.2615 | 0.7260 | 103.5770 | 0.7667 | 0.2604 | 0.9789 | 1.0000 |
| CAL500 | 0.0000 | 0.1373 | 0.1712 | 0.2913 | 0.0350 | 0.2852 | 0.2745 | 151.0392 | 0.6543 | 0.4252 | 0.8374 | 0.9529 |
| corel16k001 | 0.0051 | 0.0188 | 0.0473 | 0.0710 | 0.0307 | 0.0901 | 0.8647 | 113.4315 | 0.9420 | 0.0890 | 1.0000 | 0.9861 |
| Corel5k | 0.0099 | 0.0091 | 0.0505 | 0.0703 | 0.0193 | 0.0993 | 0.8406 | 164.6697 | 0.9456 | 0.1614 | 0.6866 | 0.9998 |
| delicious | 0.0000 | 0.6071 | 0.0211 | 0.0412 | 0.0493 | 0.0424 | 0.7058 | 923.5664 | 0.9541 | 0.0573 | 0.9818 | 0.9997 |
| emotions | 0.3167 | 0.1917 | 0.5903 | 0.7151 | 0.6887 | 0.7039 | 0.2667 | 1.7167 | 0.2267 | 0.8073 | 0.8765 | 0.8876 |
| enron | 0.1696 | 0.0516 | 0.4319 | 0.5571 | 0.1373 | 0.5366 | 0.3450 | 23.5906 | 0.3652 | 0.6020 | 0.8268 | 0.9811 |
| EukaryoteGO | 0.7010 | 0.0182 | 0.7902 | 0.8338 | 0.6578 | 0.8306 | 0.1778 | 0.9188 | 0.0544 | 0.8866 | 0.9929 | 0.9947 |
| EukaryotePseAAC | 0.2674 | 0.0552 | 0.3589 | 0.4073 | 0.1451 | 0.4360 | 0.5712 | 6.3651 | 0.5301 | 0.4958 | 0.9799 | 0.9786 |
| flags | 0.2500 | 0.2286 | 0.6192 | 0.7379 | 0.5818 | 0.7460 | 0.2000 | 3.5500 | 0.2258 | 0.8150 | 0.6879 | 0.8061 |
| foodtruck | 0.3659 | 0.1443 | 0.4877 | 0.5921 | 0.0903 | 0.4741 | 0.2439 | 4.4390 | 0.4408 | 0.7207 | 0.8516 | 0.9559 |
| genbase | 0.9552 | 0.0022 | 0.9776 | 0.9888 | 0.6144 | 0.9756 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0134 | 0.9464 | 0.9553 | 0.8175 | 0.9481 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7500 | 0.0545 | 0.7810 | 0.7964 | 0.4467 | 0.7889 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8617 | 0.9892 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8699 | 0.9333 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9962 |
| GpositivePseAAC | 0.7500 | 0.1154 | 0.7500 | 0.7500 | 0.5801 | 0.7647 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6945 | 0.0342 | 0.7604 | 0.7951 | 0.6943 | 0.7818 | 0.1640 | 1.1608 | 0.1133 | 0.8750 | 0.9849 | 0.9883 |
| HumanPseAAC | 0.3590 | 0.0924 | 0.4042 | 0.4392 | 0.1870 | 0.4259 | 0.5396 | 3.6481 | 0.5103 | 0.5687 | 0.9723 | 0.9677 |
| Image | 0.5450 | 0.1650 | 0.6208 | 0.6595 | 0.6389 | 0.6341 | 0.3000 | 1.0100 | 0.2854 | 0.7980 | 0.9350 | 0.9317 |
| IMDB-ECC-F10% | 0.0597 | 0.0849 | 0.1456 | 0.1932 | 0.0255 | 0.1917 | 0.6352 | 12.3491 | 0.7371 | 0.3729 | 0.9908 | 0.9758 |
| IMDB-F10% | 0.0497 | 0.0904 | 0.1381 | 0.1887 | 0.0236 | 0.1890 | 0.5915 | 12.7399 | 0.7206 | 0.3833 | 0.9864 | 0.9746 |
| LLOG-F | 0.1721 | 0.0162 | 0.2015 | 0.2192 | 0.0529 | 0.2952 | 0.7377 | 28.6967 | 0.7794 | 0.2796 | 0.5980 | 0.9978 |
| mediamill10% | 0.1021 | 0.0310 | 0.4303 | 0.5881 | 0.0473 | 0.5351 | 0.1520 | 59.3658 | 0.4458 | 0.5607 | 0.8125 | 0.9934 |
| medical | 0.6327 | 0.0109 | 0.7457 | 0.8008 | 0.2970 | 0.8095 | 0.1837 | 4.9388 | 0.1281 | 0.8359 | 0.5530 | 0.9977 |
| Music | 0.2833 | 0.1722 | 0.5944 | 0.7310 | 0.7212 | 0.7328 | 0.2167 | 1.9333 | 0.2271 | 0.8269 | 0.9108 | 0.9032 |
| NUS-WIDE-bow10% | 0.1859 | 0.0253 | 0.3133 | 0.3768 | 0.0412 | 0.3736 | 0.5289 | 34.4281 | 0.5798 | 0.4417 | 0.8753 | 0.9974 |
| NUS-WIDE-cVLADplus10% | 0.1963 | 0.0298 | 0.3216 | 0.3842 | 0.0415 | 0.3502 | 0.6414 | 38.5027 | 0.7076 | 0.3548 | 0.8773 | 1.0000 |
| OHSUMED-F | 0.2297 | 0.0577 | 0.4243 | 0.5278 | 0.4041 | 0.5470 | 0.3482 | 6.7803 | 0.3545 | 0.6430 | 0.9656 | 0.9698 |
| PlantGO | 0.6875 | 0.0434 | 0.7170 | 0.7335 | 0.6316 | 0.7500 | 0.2292 | 1.0521 | 0.0992 | 0.8484 | 0.9905 | 0.9856 |
| PlantPseAAC | 0.2857 | 0.1037 | 0.3231 | 0.3452 | 0.2050 | 0.3711 | 0.5918 | 3.1020 | 0.4902 | 0.5513 | 0.9420 | 0.9367 |
| rcv1subset1 | 0.0967 | 0.0298 | 0.2775 | 0.3731 | 0.2128 | 0.3907 | 0.4250 | 42.6400 | 0.4716 | 0.4792 | 0.9275 | 0.9878 |
| REUTERS-K500-EX2 | 0.3282 | 0.0115 | 0.3989 | 0.4384 | 0.2331 | 0.4900 | 0.5292 | 32.4416 | 0.5352 | 0.4827 | 0.7837 | 0.9972 |
| scene | 0.6639 | 0.0844 | 0.7178 | 0.7445 | 0.7674 | 0.7540 | 0.2075 | 0.8050 | 0.1606 | 0.8482 | 0.9690 | 0.9724 |
| sider_CDK_ECFP4 | 0.0141 | 0.2684 | 0.6389 | 0.7877 | 0.6312 | 0.7852 | 0.3028 | 19.1338 | 0.1574 | 0.7968 | 0.5760 | 0.7715 |
| sider_MordredDesc | 0.0140 | 0.2695 | 0.6196 | 0.7778 | 0.6167 | 0.7674 | 0.3187 | 19.1462 | 0.1817 | 0.7579 | 0.5703 | 0.7728 |
| sider_RDKit_desc | 0.0141 | 0.2856 | 0.6260 | 0.7790 | 0.5883 | 0.7736 | 0.3099 | 20.2887 | 0.2281 | 0.7206 | 0.5958 | 0.7352 |
| SLASHDOT-F | 0.3968 | 0.0422 | 0.4863 | 0.5341 | 0.3477 | 0.5693 | 0.4233 | 6.0741 | 0.4035 | 0.6167 | 0.7598 | 0.9857 |
| solar_flare-L3 | 0.6000 | 0.2000 | 0.6000 | 0.6000 | 0.4333 | 0.6667 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.8000 |
| Stackex_chemistry | 0.0385 | 0.0122 | 0.0995 | 0.1331 | 0.0527 | 0.1697 | 0.7901 | 105.8220 | 0.8700 | 0.1515 | 0.9248 | 0.9978 |
| Stackex_chess | 0.0417 | 0.0102 | 0.1370 | 0.1916 | 0.0526 | 0.2510 | 0.6905 | 138.5000 | 0.8131 | 0.1981 | 0.5491 | 0.9983 |
| Stackex_coffee | 0.0435 | 0.0198 | 0.0616 | 0.0739 | 0.0159 | 0.0968 | 0.8261 | 75.4783 | 0.8702 | 0.1388 | 0.2554 | 0.9877 |
| Stackex_cooking | 0.0594 | 0.0052 | 0.1895 | 0.2626 | 0.1013 | 0.3050 | 0.6394 | 225.2659 | 0.7658 | 0.2318 | 0.9346 | 1.0000 |
| Stackex_philosophy | 0.0673 | 0.0092 | 0.1686 | 0.2304 | 0.0555 | 0.2657 | 0.6869 | 135.6828 | 0.7842 | 0.2116 | 0.7427 | 1.0000 |
| tmc2007-500 | 0.2972 | 0.0628 | 0.5538 | 0.6829 | 0.5660 | 0.6691 | 0.2526 | 4.1737 | 0.1473 | 0.7669 | 0.9452 | 0.9828 |
| tox21_CDK_ECFP4 | 0.1473 | 0.1635 | 0.3339 | 0.4293 | 0.3747 | 0.4431 | 0.4623 | 5.3356 | 0.4873 | 0.5720 | 0.9028 | 0.9029 |
| tox21_RDKit_desc | 0.1644 | 0.1721 | 0.3094 | 0.4058 | 0.2629 | 0.3841 | 0.5068 | 5.5171 | 0.5117 | 0.5500 | 0.9014 | 0.9031 |
| VirusGO | 0.7143 | 0.0635 | 0.8254 | 0.8651 | 0.6868 | 0.8400 | 0.1429 | 0.6190 | 0.0934 | 0.8944 | 0.7895 | 0.9552 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.2857 | 0.8571 | 0.1857 | 0.7992 | 0.7071 | 0.9160 |
| Water-quality | 0.0094 | 0.3295 | 0.2690 | 0.4155 | 0.2838 | 0.4130 | 0.2642 | 9.1321 | 0.3559 | 0.6935 | 0.7664 | 0.7605 |
| Yahoo_Arts | 0.1991 | 0.0633 | 0.2896 | 0.3428 | 0.2106 | 0.3634 | 0.5156 | 10.5312 | 0.6181 | 0.4996 | 0.9491 | 0.9807 |
| Yahoo_Business | 0.5842 | 0.0257 | 0.7233 | 0.8259 | 0.2989 | 0.7282 | 0.0885 | 3.1978 | 0.2238 | 0.8862 | 0.8599 | 1.0000 |
| Yahoo_Computers | 0.3904 | 0.0422 | 0.4854 | 0.5502 | 0.2499 | 0.5078 | 0.3791 | 6.5526 | 0.4267 | 0.6135 | 0.8899 | 0.9822 |
| Yahoo_Education | 0.1449 | 0.0458 | 0.2032 | 0.2450 | 0.1497 | 0.3092 | 0.6178 | 9.4459 | 0.6533 | 0.4914 | 0.8751 | 0.9915 |
| Yahoo_Entertainment | 0.4202 | 0.0733 | 0.5309 | 0.5817 | 0.3583 | 0.5417 | 0.3897 | 3.9587 | 0.3890 | 0.6824 | 0.9690 | 0.9794 |
| Yahoo_Health | 0.4053 | 0.0396 | 0.5478 | 0.6263 | 0.2452 | 0.5849 | 0.3138 | 6.3872 | 0.3458 | 0.7023 | 0.8304 | 0.9892 |
| Yahoo_Recreation | 0.2358 | 0.0599 | 0.2906 | 0.3323 | 0.3072 | 0.3908 | 0.5199 | 6.5281 | 0.5533 | 0.5673 | 0.9679 | 0.9657 |
| Yahoo_Reference | 0.4527 | 0.0310 | 0.5076 | 0.5553 | 0.1772 | 0.5348 | 0.3997 | 5.4084 | 0.4375 | 0.6296 | 0.8049 | 0.9842 |
| Yahoo_Science | 0.2055 | 0.0387 | 0.2611 | 0.3017 | 0.1599 | 0.3372 | 0.6318 | 13.7137 | 0.6758 | 0.4125 | 0.9605 | 0.9877 |
| Yahoo_Social | 0.4823 | 0.0275 | 0.5336 | 0.5701 | 0.1630 | 0.5455 | 0.3724 | 7.4989 | 0.3828 | 0.6456 | 0.9042 | 0.9761 |
| Yahoo_Society | 0.3225 | 0.0839 | 0.4516 | 0.5551 | 0.2298 | 0.4667 | 0.3642 | 8.3998 | 0.4778 | 0.5881 | 0.9447 | 0.9883 |
| yeast | 0.2190 | 0.1933 | 0.5489 | 0.6767 | 0.4010 | 0.6697 | 0.2521 | 6.2645 | 0.2415 | 0.7501 | 0.8291 | 0.8863 |
| Yelp | 0.3998 | 0.1922 | 0.6227 | 0.7221 | 0.6618 | 0.7166 | 0.1954 | 1.3829 | 0.2095 | 0.8617 | 0.8660 | 0.8915 |

Table 138: Detailed results for Massive (1K) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4009 | 0.0377 | 0.4731 | 0.5145 | 0.5884 | 0.6027 | 0.3200 | 2.4793 | 0.2376 | 0.7516 | 0.9718 | 0.9730 |
| 3s-bbc1000 | 0.1667 | 0.2639 | 0.2477 | 0.2986 | 0.2553 | 0.3133 | 0.7500 | 2.9444 | 0.6741 | 0.4340 | 0.7778 | 0.7341 |
| 3s-guardian1000 | 0.1935 | 0.2581 | 0.2715 | 0.3310 | 0.2673 | 0.3514 | 0.5806 | 2.0968 | 0.4806 | 0.5927 | 0.8036 | 0.8188 |
| 3s-inter3000 | 0.2353 | 0.2451 | 0.2941 | 0.3235 | 0.0870 | 0.3243 | 0.8235 | 2.4118 | 0.6824 | 0.4363 | 0.5229 | 0.7103 |
| 3s-reuters1000 | 0.0667 | 0.3333 | 0.0833 | 0.0909 | 0.0723 | 0.0909 | 0.9000 | 2.5333 | 0.7800 | 0.3856 | 0.8374 | 0.7601 |
| amphibians | 0.1111 | 0.3016 | 0.4685 | 0.6839 | 0.3885 | 0.5870 | 0.1667 | 2.3889 | 0.0759 | 0.9006 | 0.7366 | 0.7989 |
| bibtex | 0.1676 | 0.0128 | 0.3272 | 0.4151 | 0.2704 | 0.4419 | 0.4162 | 69.4162 | 0.5487 | 0.4432 | 0.9956 | 0.9955 |
| birds | 0.1795 | 0.0918 | 0.3301 | 0.3977 | 0.2619 | 0.4035 | 0.5128 | 7.5641 | 0.4795 | 0.5121 | 0.8457 | 0.9397 |
| bookmarks10% | 0.1800 | 0.0096 | 0.2080 | 0.2283 | 0.0789 | 0.2427 | 0.7517 | 105.1913 | 0.7655 | 0.2470 | 0.9834 | 0.9979 |
| CAL500 | 0.0000 | 0.1375 | 0.1676 | 0.2858 | 0.0349 | 0.2815 | 0.4314 | 151.0980 | 0.5996 | 0.4327 | 0.8315 | 0.9441 |
| corel16k001 | 0.0131 | 0.0235 | 0.1015 | 0.1533 | 0.0274 | 0.1467 | 0.8431 | 113.4662 | 0.9220 | 0.1054 | 0.9978 | 0.9979 |
| Corel5k | 0.0080 | 0.0095 | 0.0419 | 0.0604 | 0.0171 | 0.0847 | 0.8620 | 163.9580 | 0.9407 | 0.1586 | 0.6785 | 0.9994 |
| delicious | 0.0000 | 0.5984 | 0.0213 | 0.0408 | 0.0486 | 0.0427 | 0.7157 | 928.2209 | 0.9669 | 0.0570 | 0.9790 | 0.9961 |
| emotions | 0.3333 | 0.1806 | 0.5986 | 0.7235 | 0.6809 | 0.7085 | 0.2667 | 1.6667 | 0.2125 | 0.8178 | 0.8872 | 0.8924 |
| enron | 0.1579 | 0.0501 | 0.4529 | 0.5839 | 0.1735 | 0.5609 | 0.2690 | 22.6667 | 0.3423 | 0.6228 | 0.8227 | 0.9790 |
| EukaryoteGO | 0.7062 | 0.0190 | 0.7848 | 0.8242 | 0.6441 | 0.8207 | 0.1637 | 0.6353 | 0.0282 | 0.9007 | 0.9913 | 0.9945 |
| EukaryotePseAAC | 0.1918 | 0.0598 | 0.2936 | 0.3482 | 0.1069 | 0.3936 | 0.5714 | 5.4646 | 0.4323 | 0.5386 | 0.9552 | 0.9599 |
| flags | 0.2500 | 0.2357 | 0.6050 | 0.7243 | 0.5415 | 0.7317 | 0.2500 | 3.6000 | 0.2417 | 0.8125 | 0.6891 | 0.7903 |
| foodtruck | 0.3659 | 0.1423 | 0.4877 | 0.5921 | 0.0926 | 0.4776 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8569 | 0.9577 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0000 | 0.2388 | 0.0006 | 0.9950 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9143 | 0.0152 | 0.9393 | 0.9518 | 0.8127 | 0.9416 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7643 | 0.0500 | 0.7881 | 0.8000 | 0.4549 | 0.8028 | 0.1786 | 0.6000 | 0.1236 | 0.8789 | 0.8558 | 0.9848 |
| GpositiveGO | 0.8846 | 0.0529 | 0.8942 | 0.8990 | 0.8311 | 0.8952 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9962 |
| GpositivePseAAC | 0.7500 | 0.1202 | 0.7500 | 0.7500 | 0.5751 | 0.7573 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6752 | 0.0358 | 0.7554 | 0.7975 | 0.6694 | 0.7752 | 0.1640 | 0.7170 | 0.0560 | 0.8951 | 0.9819 | 0.9868 |
| HumanPseAAC | 0.2637 | 0.0907 | 0.3339 | 0.3709 | 0.1605 | 0.4006 | 0.5531 | 2.9453 | 0.3423 | 0.6021 | 0.9209 | 0.9242 |
| Image | 0.5300 | 0.1690 | 0.6125 | 0.6544 | 0.6309 | 0.6253 | 0.3100 | 1.0400 | 0.2817 | 0.7901 | 0.9127 | 0.9069 |
| IMDB-ECC-F10% | 0.0587 | 0.0848 | 0.1451 | 0.1929 | 0.0280 | 0.1890 | 0.6394 | 12.3229 | 0.7291 | 0.3722 | 0.9868 | 0.9733 |
| IMDB-F10% | 0.0481 | 0.0909 | 0.1287 | 0.1735 | 0.0185 | 0.1725 | 0.6123 | 13.2262 | 0.7531 | 0.3614 | 0.9870 | 0.9746 |
| LLOG-F | 0.1557 | 0.0164 | 0.1892 | 0.2091 | 0.0512 | 0.2788 | 0.7049 | 27.4016 | 0.7534 | 0.3049 | 0.5978 | 0.9974 |
| mediamill10% | 0.0784 | 0.0316 | 0.4297 | 0.5920 | 0.0527 | 0.5382 | 0.2233 | 57.9026 | 0.4354 | 0.5438 | 0.8090 | 0.9919 |
| medical | 0.6531 | 0.0107 | 0.7577 | 0.8103 | 0.2985 | 0.8127 | 0.1633 | 5.0510 | 0.1334 | 0.8334 | 0.5528 | 0.9977 |
| Music | 0.2833 | 0.1639 | 0.6028 | 0.7438 | 0.7331 | 0.7446 | 0.2667 | 2.0167 | 0.2584 | 0.8015 | 0.9098 | 0.8979 |
| NUS-WIDE-bow10% | 0.1637 | 0.0266 | 0.2957 | 0.3666 | 0.0404 | 0.3619 | 0.5214 | 33.3620 | 0.5646 | 0.4402 | 0.8772 | 0.9884 |
| NUS-WIDE-cVLADplus10% | 0.1822 | 0.0251 | 0.3128 | 0.3813 | 0.0445 | 0.3888 | 0.5247 | 31.5243 | 0.5242 | 0.4670 | 0.8779 | 0.9876 |
| OHSUMED-F | 0.1981 | 0.0607 | 0.3753 | 0.4714 | 0.3469 | 0.5040 | 0.3704 | 6.3999 | 0.3307 | 0.6363 | 0.9507 | 0.9530 |
| PlantGO | 0.6979 | 0.0408 | 0.7222 | 0.7361 | 0.6461 | 0.7614 | 0.2188 | 1.0000 | 0.1052 | 0.8510 | 0.9901 | 0.9853 |
| PlantPseAAC | 0.2653 | 0.1080 | 0.3248 | 0.3560 | 0.2045 | 0.3744 | 0.5918 | 3.0918 | 0.4868 | 0.5544 | 0.9458 | 0.9396 |
| rcv1subset1 | 0.0750 | 0.0325 | 0.2954 | 0.4132 | 0.2220 | 0.4139 | 0.3900 | 30.1967 | 0.3105 | 0.5467 | 0.9197 | 0.9813 |
| REUTERS-K500-EX2 | 0.3024 | 0.0125 | 0.3718 | 0.4122 | 0.2092 | 0.4551 | 0.4794 | 26.3832 | 0.4483 | 0.5362 | 0.7804 | 0.9936 |
| scene | 0.6473 | 0.0858 | 0.7054 | 0.7343 | 0.7638 | 0.7500 | 0.2075 | 0.6846 | 0.1330 | 0.8591 | 0.9608 | 0.9660 |
| sider_CDK_ECFP4 | 0.0282 | 0.2486 | 0.6511 | 0.7973 | 0.6292 | 0.7954 | 0.2887 | 19.0282 | 0.1590 | 0.7838 | 0.5750 | 0.7776 |
| sider_MordredDesc | 0.0141 | 0.2700 | 0.6180 | 0.7769 | 0.6022 | 0.7775 | 0.2887 | 19.5986 | 0.1937 | 0.7578 | 0.5648 | 0.7594 |
| sider_RDKit_desc | 0.0141 | 0.2861 | 0.6264 | 0.7786 | 0.5852 | 0.7739 | 0.3099 | 20.2254 | 0.2058 | 0.7580 | 0.5837 | 0.7516 |
| SLASHDOT-F | 0.4048 | 0.0388 | 0.4938 | 0.5410 | 0.3656 | 0.5937 | 0.3862 | 4.5238 | 0.2901 | 0.6762 | 0.7441 | 0.9706 |
| solar_flare-L3 | 0.4000 | 0.4000 | 0.4000 | 0.4000 | 0.1905 | 0.4000 | 0.4000 | 0.4000 | 0.3000 | 0.8000 | 0.4444 | 0.8000 |
| Stackex_chemistry | 0.0231 | 0.0137 | 0.0759 | 0.1132 | 0.0448 | 0.1468 | 0.7925 | 105.5951 | 0.8676 | 0.1556 | 0.9161 | 0.9960 |
| Stackex_chess | 0.0357 | 0.0105 | 0.1293 | 0.1857 | 0.0509 | 0.2366 | 0.6310 | 131.4167 | 0.7651 | 0.2309 | 0.5484 | 0.9974 |
| Stackex_coffee | 0.0435 | 0.0198 | 0.0725 | 0.0851 | 0.0213 | 0.1250 | 0.7826 | 75.3478 | 0.8450 | 0.1550 | 0.2572 | 0.9918 |
| Stackex_cooking | 0.0232 | 0.0062 | 0.1069 | 0.1598 | 0.0461 | 0.1934 | 0.7498 | 237.1942 | 0.8518 | 0.1560 | 0.9237 | 0.9986 |
| Stackex_philosophy | 0.0477 | 0.0104 | 0.1346 | 0.1926 | 0.0603 | 0.2269 | 0.7060 | 133.2487 | 0.7849 | 0.2116 | 0.7483 | 0.9970 |
| tmc2007-500 | 0.2706 | 0.0644 | 0.5336 | 0.6655 | 0.5358 | 0.6477 | 0.2811 | 3.9832 | 0.1318 | 0.7682 | 0.9497 | 0.9631 |
| tox21_CDK_ECFP4 | 0.1301 | 0.1647 | 0.3073 | 0.3971 | 0.3432 | 0.4247 | 0.4897 | 4.9247 | 0.3875 | 0.5920 | 0.8710 | 0.8622 |
| tox21_RDKit_desc | 0.1199 | 0.1844 | 0.2603 | 0.3555 | 0.2174 | 0.3475 | 0.5034 | 5.3048 | 0.4272 | 0.5742 | 0.8676 | 0.8597 |
| VirusGO | 0.7143 | 0.0635 | 0.8254 | 0.8651 | 0.6868 | 0.8400 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.8019 | 0.9675 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.2857 | 0.8571 | 0.1762 | 0.8008 | 0.7331 | 0.9215 |
| Water-quality | 0.0000 | 0.3261 | 0.2612 | 0.4016 | 0.2663 | 0.4025 | 0.2925 | 9.1604 | 0.3598 | 0.6914 | 0.7726 | 0.7679 |
| Yahoo_Arts | 0.0921 | 0.0747 | 0.1400 | 0.1794 | 0.1287 | 0.2191 | 0.6222 | 11.6061 | 0.6416 | 0.4198 | 0.9187 | 0.9534 |
| Yahoo_Business | 0.5160 | 0.0319 | 0.6922 | 0.7937 | 0.2152 | 0.6769 | 0.1266 | 3.2273 | 0.2278 | 0.8689 | 0.8462 | 0.9903 |
| Yahoo_Computers | 0.3494 | 0.0480 | 0.4398 | 0.5081 | 0.1819 | 0.4530 | 0.4129 | 6.8908 | 0.4555 | 0.5829 | 0.8819 | 0.9758 |
| Yahoo_Education | 0.0806 | 0.0675 | 0.1260 | 0.1574 | 0.0408 | 0.1598 | 0.6218 | 10.0748 | 0.6335 | 0.4647 | 0.8838 | 0.9703 |
| Yahoo_Entertainment | 0.3087 | 0.0783 | 0.3705 | 0.4124 | 0.2040 | 0.3772 | 0.5530 | 4.7918 | 0.4956 | 0.5553 | 0.9622 | 0.9552 |
| Yahoo_Health | 0.3268 | 0.0505 | 0.4365 | 0.5099 | 0.1649 | 0.4537 | 0.4430 | 7.7416 | 0.4201 | 0.6028 | 0.8156 | 0.9741 |
| Yahoo_Recreation | 0.1403 | 0.0769 | 0.1909 | 0.2320 | 0.2094 | 0.2810 | 0.6048 | 7.3009 | 0.5872 | 0.4995 | 0.9539 | 0.9445 |
| Yahoo_Reference | 0.4122 | 0.0376 | 0.4736 | 0.5152 | 0.1033 | 0.4744 | 0.4396 | 6.0772 | 0.4364 | 0.6098 | 0.8030 | 0.9837 |
| Yahoo_Science | 0.0933 | 0.0514 | 0.1241 | 0.1585 | 0.0899 | 0.1808 | 0.7652 | 15.3546 | 0.7757 | 0.3212 | 0.9475 | 0.9733 |
| Yahoo_Social | 0.4406 | 0.0310 | 0.5065 | 0.5480 | 0.1171 | 0.5005 | 0.4249 | 8.0149 | 0.4184 | 0.6100 | 0.9093 | 0.9856 |
| Yahoo_Society | 0.2576 | 0.0685 | 0.3715 | 0.4537 | 0.1108 | 0.3880 | 0.4773 | 8.9187 | 0.5332 | 0.5256 | 0.9311 | 0.9672 |
| yeast | 0.2190 | 0.1957 | 0.5401 | 0.6683 | 0.3736 | 0.6609 | 0.2479 | 6.1901 | 0.2084 | 0.7636 | 0.8121 | 0.8722 |
| Yelp | 0.3330 | 0.2239 | 0.5651 | 0.6748 | 0.6157 | 0.6657 | 0.2493 | 1.4706 | 0.2281 | 0.8324 | 0.8324 | 0.8606 |

Table 139: Detailed results for Massive for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5658 | 0.0256 | 0.5887 | 0.6113 | 0.7148 | 0.7257 | 0.2891 | 2.3953 | 0.2286 | 0.7698 | 0.9823 | 1.0000 |
| 3s-bbc1000 | 0.1389 | 0.2500 | 0.1713 | 0.1908 | 0.1695 | 0.2286 | 0.7500 | 3.1389 | 0.7005 | 0.4173 | 0.7631 | 0.7172 |
| 3s-guardian1000 | 0.0645 | 0.2527 | 0.1382 | 0.1806 | 0.2213 | 0.2540 | 0.5161 | 1.9677 | 0.4492 | 0.6261 | 0.7997 | 0.8190 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.0588 | 0.6235 | 0.4735 | 0.5204 | 0.6971 |
| 3s-reuters1000 | 0.0667 | 0.2889 | 0.0944 | 0.1106 | 0.1180 | 0.1333 | 0.9000 | 2.5000 | 0.7533 | 0.3928 | 0.8173 | 0.7462 |
| amphibians | 0.1111 | 0.2857 | 0.5321 | 0.7416 | 0.5155 | 0.6786 | 0.2222 | 2.5556 | 0.1111 | 0.8543 | 0.7360 | 0.8043 |
| bibtex | 0.1848 | 0.0120 | 0.3547 | 0.4460 | 0.3078 | 0.4808 | 0.4399 | 71.6006 | 0.5826 | 0.4235 | 0.9996 | 0.9945 |
| birds | 0.2308 | 0.0837 | 0.3678 | 0.4333 | 0.3422 | 0.4655 | 0.5128 | 7.3846 | 0.4839 | 0.5100 | 0.8461 | 0.9441 |
| bookmarks10% | 0.1894 | 0.0090 | 0.2198 | 0.2411 | 0.1093 | 0.2601 | 0.7156 | 106.7834 | 0.7592 | 0.2565 | 0.9778 | 1.0000 |
| CAL500 | 0.0000 | 0.1394 | 0.2061 | 0.3441 | 0.0615 | 0.3353 | 0.2941 | 151.1176 | 0.6351 | 0.4316 | 0.8316 | 0.9500 |
| corel16k001 | 0.0088 | 0.0187 | 0.0436 | 0.0634 | 0.0325 | 0.0820 | 0.8796 | 115.2397 | 0.9484 | 0.0875 | 1.0000 | 0.9970 |
| Corel5k | 0.0060 | 0.0090 | 0.0564 | 0.0841 | 0.0234 | 0.1145 | 0.8584 | 165.2947 | 0.9355 | 0.1633 | 0.6855 | 0.9868 |
| delicious | 0.0000 | 0.0248 | 0.0931 | 0.1628 | 0.0829 | 0.1733 | 0.5391 | 900.2567 | 0.8534 | 0.1486 | 1.0000 | 1.0000 |
| emotions | 0.3000 | 0.1833 | 0.5653 | 0.6928 | 0.6520 | 0.6916 | 0.3000 | 1.7833 | 0.2433 | 0.7893 | 0.8757 | 0.8893 |
| enron | 0.1813 | 0.0497 | 0.4637 | 0.5963 | 0.1544 | 0.5739 | 0.3216 | 24.2047 | 0.3717 | 0.6020 | 0.8255 | 0.9811 |
| EukaryoteGO | 0.6933 | 0.0184 | 0.7912 | 0.8384 | 0.7127 | 0.8303 | 0.1740 | 0.8634 | 0.0489 | 0.8903 | 0.9928 | 0.9947 |
| EukaryotePseAAC | 0.1874 | 0.0518 | 0.2169 | 0.2348 | 0.1113 | 0.3068 | 0.5382 | 6.1800 | 0.4967 | 0.5255 | 0.9698 | 0.9644 |
| flags | 0.2500 | 0.2429 | 0.6269 | 0.7390 | 0.5954 | 0.7463 | 0.2000 | 3.5500 | 0.2092 | 0.8167 | 0.6826 | 0.8035 |
| foodtruck | 0.2927 | 0.1545 | 0.4621 | 0.6003 | 0.1389 | 0.4933 | 0.2439 | 4.6098 | 0.4507 | 0.7172 | 0.8535 | 0.9559 |
| genbase | 0.9771 | 0.0011 | 0.9988 | 0.9868 | 0.6532 | 0.9835 | 0.0000 | 0.3018 | 0.0018 | 0.9850 | 0.6703 | 0.9864 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8262 | 0.9556 | 0.0357 | 0.1143 | 0.0215 | 0.9774 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7357 | 0.0500 | 0.7536 | 0.7625 | 0.4249 | 0.7941 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8625 | 0.9895 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8652 | 0.9333 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9975 | 0.9972 |
| GpositivePseAAC | 0.6923 | 0.1202 | 0.6923 | 0.6923 | 0.5495 | 0.7423 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9841 | 0.9760 |
| HumanGO | 0.6881 | 0.0354 | 0.7658 | 0.8063 | 0.6947 | 0.7849 | 0.1640 | 1.0804 | 0.1036 | 0.8796 | 0.9851 | 0.9884 |
| HumanPseAAC | 0.2698 | 0.0843 | 0.3002 | 0.3132 | 0.1603 | 0.3625 | 0.5243 | 3.4157 | 0.4643 | 0.5886 | 0.9608 | 0.9498 |
| Image | 0.5650 | 0.1530 | 0.6183 | 0.6454 | 0.6436 | 0.6417 | 0.3200 | 1.0300 | 0.2817 | 0.7896 | 0.9298 | 0.9260 |
| IMDB-ECC-F10% | 0.0302 | 0.0685 | 0.0581 | 0.0727 | 0.0326 | 0.0947 | 0.6258 | 12.3197 | 0.7354 | 0.3734 | 1.0000 | 0.9803 |
| IMDB-F10% | 0.0199 | 0.0736 | 0.0495 | 0.0658 | 0.0315 | 0.0885 | 0.5982 | 12.6547 | 0.7196 | 0.3857 | 0.9902 | 0.9662 |
| LLOG-F | 0.1639 | 0.0162 | 0.1974 | 0.2169 | 0.0533 | 0.2885 | 0.7295 | 28.5574 | 0.7740 | 0.2870 | 0.5984 | 0.9982 |
| mediamill10% | 0.0926 | 0.0295 | 0.4622 | 0.6225 | 0.0830 | 0.5764 | 0.1758 | 59.3468 | 0.4475 | 0.5499 | 0.8133 | 0.9940 |
| medical | 0.6327 | 0.0111 | 0.7389 | 0.7923 | 0.2822 | 0.8048 | 0.1633 | 4.9490 | 0.1281 | 0.8427 | 0.5529 | 0.9976 |
| Music | 0.2833 | 0.1722 | 0.5722 | 0.6969 | 0.7127 | 0.7232 | 0.1833 | 2.0333 | 0.2462 | 0.8168 | 0.9146 | 0.9035 |
| NUS-WIDE-bow10% | 0.1178 | 0.0248 | 0.2235 | 0.2750 | 0.0449 | 0.3363 | 0.5437 | 35.6362 | 0.6021 | 0.4257 | 0.8719 | 0.9927 |
| NUS-WIDE-cVLADplus10% | 0.1426 | 0.0234 | 0.2512 | 0.3093 | 0.0529 | 0.3716 | 0.5540 | 35.0278 | 0.6439 | 0.4133 | 0.8847 | 0.9867 |
| OHSUMED-F | 0.2345 | 0.0572 | 0.4351 | 0.5358 | 0.4369 | 0.5594 | 0.3520 | 7.5710 | 0.4171 | 0.6150 | 0.9797 | 0.9829 |
| PlantGO | 0.6979 | 0.0391 | 0.7344 | 0.7508 | 0.6389 | 0.7783 | 0.2292 | 0.9583 | 0.0966 | 0.8510 | 0.9903 | 0.9854 |
| PlantPseAAC | 0.2449 | 0.0927 | 0.2704 | 0.2831 | 0.1979 | 0.3473 | 0.6020 | 3.1939 | 0.5004 | 0.5432 | 0.9398 | 0.9333 |
| rcv1subset1 | 0.1231 | 0.0309 | 0.3197 | 0.4341 | 0.2562 | 0.4373 | 0.4289 | 38.5518 | 0.4206 | 0.4994 | 0.9345 | 0.9864 |
| REUTERS-K500-EX2 | 0.3007 | 0.0112 | 0.3662 | 0.4018 | 0.2348 | 0.4713 | 0.5189 | 32.4467 | 0.5338 | 0.4867 | 0.7838 | 0.9971 |
| scene | 0.6556 | 0.0871 | 0.7192 | 0.7516 | 0.7619 | 0.7510 | 0.2075 | 0.8091 | 0.1606 | 0.8475 | 0.9688 | 0.9724 |
| sider_CDK_ECFP4 | 0.0141 | 0.2413 | 0.6528 | 0.8002 | 0.6373 | 0.7977 | 0.3028 | 19.0211 | 0.1586 | 0.7903 | 0.5884 | 0.7809 |
| sider_MordredDesc | 0.0140 | 0.2586 | 0.6259 | 0.7742 | 0.6059 | 0.7917 | 0.1429 | 20.0224 | 0.1785 | 0.7900 | 0.5832 | 0.7722 |
| sider_RDKit_desc | 0.0141 | 0.2608 | 0.6361 | 0.7888 | 0.5955 | 0.7847 | 0.2676 | 19.9155 | 0.1986 | 0.7502 | 0.5800 | 0.7598 |
| SLASHDOT-F | 0.4074 | 0.0396 | 0.4954 | 0.5440 | 0.3863 | 0.5913 | 0.4233 | 6.2593 | 0.4113 | 0.6118 | 0.7590 | 0.9848 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0456 | 0.0119 | 0.1057 | 0.1404 | 0.0668 | 0.1778 | 0.7760 | 104.9277 | 0.8671 | 0.1563 | 0.9067 | 1.0000 |
| Stackex_chess | 0.0417 | 0.0101 | 0.1525 | 0.2158 | 0.0584 | 0.2739 | 0.6607 | 134.8631 | 0.7995 | 0.2131 | 0.5493 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0219 | 0.0417 | 0.0642 | 0.0156 | 0.1143 | 0.8261 | 75.4348 | 0.8916 | 0.1281 | 0.2566 | 0.9898 |
| Stackex_cooking | 0.0665 | 0.0052 | 0.2010 | 0.2680 | 0.1087 | 0.3128 | 0.6326 | 223.7663 | 0.7722 | 0.2332 | 0.9265 | 0.9883 |
| Stackex_philosophy | 0.0552 | 0.0093 | 0.1697 | 0.2364 | 0.0654 | 0.2754 | 0.6743 | 136.5958 | 0.7785 | 0.2226 | 0.7423 | 0.9983 |
| tmc2007-500 | 0.2883 | 0.0613 | 0.5499 | 0.6827 | 0.5696 | 0.6638 | 0.2523 | 4.1135 | 0.1450 | 0.7834 | 0.9551 | 0.9582 |
| tox21_CDK_ECFP4 | 0.1336 | 0.1587 | 0.2798 | 0.3538 | 0.3675 | 0.4184 | 0.4623 | 5.3219 | 0.4840 | 0.5735 | 0.9004 | 0.9017 |
| tox21_RDKit_desc | 0.0788 | 0.1630 | 0.1676 | 0.2236 | 0.2073 | 0.2781 | 0.5000 | 5.4932 | 0.5095 | 0.5532 | 0.9055 | 0.9070 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7942 | 0.9655 |
| VirusPseAAC | 0.5238 | 0.1032 | 0.5714 | 0.5943 | 0.3667 | 0.6667 | 0.2857 | 0.9524 | 0.2048 | 0.7944 | 0.7153 | 0.9160 |
| Water-quality | 0.0094 | 0.3046 | 0.3524 | 0.5199 | 0.4242 | 0.5301 | 0.2925 | 9.1887 | 0.3539 | 0.6873 | 0.7725 | 0.7620 |
| Yahoo_Arts | 0.1810 | 0.0638 | 0.2637 | 0.3186 | 0.2148 | 0.3594 | 0.5018 | 10.3258 | 0.6149 | 0.5069 | 0.9248 | 0.9744 |
| Yahoo_Business | 0.5662 | 0.0268 | 0.7244 | 0.8253 | 0.3229 | 0.7308 | 0.0902 | 3.1587 | 0.2238 | 0.8906 | 0.8510 | 1.0000 |
| Yahoo_Computers | 0.3838 | 0.0375 | 0.4547 | 0.5087 | 0.2404 | 0.5126 | 0.3819 | 6.6083 | 0.4176 | 0.6092 | 0.8864 | 0.9734 |
| Yahoo_Education | 0.1412 | 0.0413 | 0.1850 | 0.2111 | 0.1549 | 0.2980 | 0.5569 | 9.1184 | 0.5658 | 0.5307 | 0.8983 | 0.9734 |
| Yahoo_Entertainment | 0.2781 | 0.0552 | 0.3322 | 0.3609 | 0.2398 | 0.4257 | 0.4377 | 4.1348 | 0.3850 | 0.6456 | 0.9568 | 0.9655 |
| Yahoo_Health | 0.4144 | 0.0386 | 0.5423 | 0.6118 | 0.2441 | 0.5905 | 0.3075 | 6.5609 | 0.3451 | 0.6967 | 0.8331 | 0.9782 |
| Yahoo_Recreation | 0.2798 | 0.0208 | 0.3964 | 0.4350 | 0.4115 | 0.5068 | 0.4727 | 6.2193 | 0.4827 | 0.6100 | 0.9547 | 0.9756 |
| Yahoo_Reference | 0.4115 | 0.0294 | 0.4571 | 0.4871 | 0.1728 | 0.5207 | 0.3926 | 5.4738 | 0.4264 | 0.6354 | 0.8102 | 0.9891 |
| Yahoo_Science | 0.2262 | 0.0394 | 0.2868 | 0.3260 | 0.1760 | 0.3440 | 0.6270 | 13.6277 | 0.6524 | 0.4257 | 0.9627 | 0.9944 |
| Yahoo_Social | 0.4200 | 0.0235 | 0.4667 | 0.4937 | 0.1550 | 0.5403 | 0.3688 | 7.5998 | 0.3915 | 0.6471 | 0.9141 | 0.9902 |
| Yahoo_Society | 0.3134 | 0.0795 | 0.4370 | 0.5550 | 0.2078 | 0.4559 | 0.3723 | 8.2847 | 0.4810 | 0.5935 | 0.9527 | 0.9594 |
| yeast | 0.2008 | 0.1897 | 0.5215 | 0.6633 | 0.3837 | 0.6603 | 0.2585 | 6.1956 | 0.2392 | 0.7491 | 0.8185 | 0.8875 |
| Yelp | 0.3968 | 0.1940 | 0.6184 | 0.7194 | 0.6511 | 0.7141 | 0.2173 | 1.3769 | 0.2093 | 0.8544 | 0.8629 | 0.8886 |

Table 140: Detailed results for Massive (1K) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4015 | 0.0345 | 0.4461 | 0.4713 | 0.5816 | 0.5941 | 0.3211 | 2.5674 | 0.2408 | 0.7489 | 0.9735 | 0.9746 |
| 3s-bbc1000 | 0.1389 | 0.2454 | 0.1944 | 0.2315 | 0.2056 | 0.2740 | 0.7222 | 2.6944 | 0.6150 | 0.4666 | 0.7822 | 0.7315 |
| 3s-guardian1000 | 0.1613 | 0.2419 | 0.2457 | 0.3037 | 0.2777 | 0.3478 | 0.4516 | 2.1290 | 0.4629 | 0.6347 | 0.8175 | 0.8263 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.2941 | 0.5412 | 0.4422 | 0.5300 | 0.6812 |
| 3s-reuters1000 | 0.0333 | 0.2333 | 0.0667 | 0.0833 | 0.1161 | 0.1250 | 0.9000 | 2.6000 | 0.7475 | 0.3817 | 0.8167 | 0.7420 |
| amphibians | 0.1111 | 0.2619 | 0.5784 | 0.7800 | 0.5422 | 0.7179 | 0.2778 | 2.5556 | 0.1037 | 0.8315 | 0.7673 | 0.8128 |
| bibtex | 0.1838 | 0.0123 | 0.3364 | 0.4205 | 0.2644 | 0.4454 | 0.4243 | 68.7878 | 0.5460 | 0.4442 | 0.9952 | 0.9951 |
| birds | 0.1795 | 0.0837 | 0.3373 | 0.4155 | 0.3518 | 0.4655 | 0.5128 | 7.6667 | 0.4809 | 0.5080 | 0.8421 | 0.9366 |
| bookmarks10% | 0.1743 | 0.0092 | 0.1992 | 0.2175 | 0.0819 | 0.2363 | 0.7449 | 105.6754 | 0.7653 | 0.2490 | 0.9839 | 0.9983 |
| CAL500 | 0.0000 | 0.1389 | 0.2170 | 0.3584 | 0.0681 | 0.3514 | 0.3725 | 151.0392 | 0.6341 | 0.4350 | 0.8334 | 0.9516 |
| corel16k001 | 0.0089 | 0.0187 | 0.0438 | 0.0635 | 0.0325 | 0.0831 | 0.8782 | 116.0169 | 0.9523 | 0.0864 | 1.0000 | 0.9865 |
| Corel5k | 0.0040 | 0.0094 | 0.0562 | 0.0851 | 0.0223 | 0.1107 | 0.8280 | 162.9360 | 0.9330 | 0.1651 | 0.6785 | 0.9994 |
| delicious | 0.0000 | 0.0251 | 0.0932 | 0.1613 | 0.0817 | 0.1757 | 0.5455 | 888.8045 | 0.8552 | 0.1506 | 0.9884 | 0.9987 |
| emotions | 0.3167 | 0.1861 | 0.5597 | 0.6736 | 0.6601 | 0.6884 | 0.3000 | 1.7500 | 0.2311 | 0.7948 | 0.8753 | 0.8876 |
| enron | 0.1696 | 0.0500 | 0.4454 | 0.5757 | 0.1758 | 0.5730 | 0.2573 | 22.6316 | 0.3414 | 0.6221 | 0.8232 | 0.9789 |
| EukaryoteGO | 0.6946 | 0.0195 | 0.7753 | 0.8160 | 0.6539 | 0.8157 | 0.1675 | 0.5876 | 0.0253 | 0.9002 | 0.9911 | 0.9944 |
| EukaryotePseAAC | 0.1403 | 0.0516 | 0.1680 | 0.1821 | 0.0736 | 0.2576 | 0.5457 | 4.8893 | 0.3829 | 0.5692 | 0.9534 | 0.9583 |
| flags | 0.2500 | 0.2214 | 0.6417 | 0.7539 | 0.6186 | 0.7634 | 0.2000 | 3.5500 | 0.2258 | 0.8167 | 0.7091 | 0.8090 |
| foodtruck | 0.2927 | 0.1524 | 0.4653 | 0.6047 | 0.1262 | 0.4966 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8543 | 0.9561 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2388 | 0.0006 | 0.9950 | 0.6667 | 0.9995 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9571 | 0.9714 | 0.8298 | 0.9592 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8737 | 0.9979 |
| GnegativePseAAC | 0.7286 | 0.0545 | 0.7429 | 0.7500 | 0.4169 | 0.7766 | 0.1786 | 0.5929 | 0.1225 | 0.8801 | 0.8551 | 0.9845 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9135 | 0.9279 | 0.8639 | 0.9245 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1058 | 0.7308 | 0.7308 | 0.5806 | 0.7755 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6913 | 0.0345 | 0.7768 | 0.8207 | 0.7103 | 0.7928 | 0.1479 | 0.7299 | 0.0527 | 0.9026 | 0.9814 | 0.9865 |
| HumanPseAAC | 0.2315 | 0.0861 | 0.2524 | 0.2644 | 0.1345 | 0.3169 | 0.5531 | 2.9357 | 0.3497 | 0.6012 | 0.9234 | 0.9251 |
| Image | 0.5350 | 0.1620 | 0.5983 | 0.6305 | 0.6255 | 0.6233 | 0.3200 | 1.0450 | 0.2888 | 0.7859 | 0.9156 | 0.9120 |
| IMDB-ECC-F10% | 0.0136 | 0.0688 | 0.0258 | 0.0339 | 0.0196 | 0.0467 | 0.6394 | 12.4906 | 0.7440 | 0.3669 | 0.9872 | 0.9739 |
| IMDB-F10% | 0.0075 | 0.0721 | 0.0150 | 0.0192 | 0.0113 | 0.0256 | 0.6089 | 13.2113 | 0.7507 | 0.3629 | 0.9889 | 0.9758 |
| LLOG-F | 0.1721 | 0.0160 | 0.2015 | 0.2192 | 0.0548 | 0.2981 | 0.7213 | 28.1066 | 0.7712 | 0.2877 | 0.5975 | 0.9968 |
| mediamill10% | 0.0879 | 0.0297 | 0.4597 | 0.6210 | 0.0902 | 0.5741 | 0.2375 | 60.5819 | 0.4635 | 0.5272 | 0.8145 | 0.9944 |
| medical | 0.6429 | 0.0107 | 0.7440 | 0.7950 | 0.2856 | 0.8112 | 0.1633 | 5.0306 | 0.1331 | 0.8393 | 0.5530 | 0.9977 |
| Music | 0.2833 | 0.1722 | 0.5806 | 0.7090 | 0.7165 | 0.7257 | 0.2833 | 2.0167 | 0.2584 | 0.7959 | 0.9103 | 0.9043 |
| NUS-WIDE-bow10% | 0.1113 | 0.0253 | 0.2108 | 0.2647 | 0.0414 | 0.3211 | 0.5247 | 33.2402 | 0.5715 | 0.4396 | 0.8776 | 0.9885 |
| NUS-WIDE-cVLADplus10% | 0.1375 | 0.0236 | 0.2429 | 0.2956 | 0.0506 | 0.3552 | 0.5114 | 31.5970 | 0.5335 | 0.4637 | 0.8775 | 0.9878 |
| OHSUMED-F | 0.1989 | 0.0591 | 0.3639 | 0.4527 | 0.3455 | 0.4947 | 0.3661 | 6.7272 | 0.3409 | 0.6314 | 0.9496 | 0.9525 |
| PlantGO | 0.6979 | 0.0373 | 0.7396 | 0.7586 | 0.6471 | 0.7882 | 0.2188 | 1.0521 | 0.0992 | 0.8519 | 0.9903 | 0.9852 |
| PlantPseAAC | 0.2347 | 0.0961 | 0.2823 | 0.3094 | 0.2114 | 0.3687 | 0.5918 | 3.1837 | 0.5088 | 0.5476 | 0.9451 | 0.9383 |
| rcv1subset1 | 0.0483 | 0.0322 | 0.2866 | 0.4125 | 0.2451 | 0.4179 | 0.3800 | 29.2517 | 0.2991 | 0.5603 | 0.9197 | 0.9815 |
| REUTERS-K500-EX2 | 0.2749 | 0.0116 | 0.3303 | 0.3600 | 0.2097 | 0.4345 | 0.4914 | 27.3316 | 0.4704 | 0.5240 | 0.7809 | 0.9940 |
| scene | 0.6349 | 0.0878 | 0.6888 | 0.7155 | 0.7484 | 0.7381 | 0.2075 | 0.7054 | 0.1349 | 0.8571 | 0.9608 | 0.9666 |
| sider_CDK_ECFP4 | 0.0141 | 0.2428 | 0.6511 | 0.7981 | 0.6310 | 0.7968 | 0.0986 | 19.4930 | 0.1757 | 0.7857 | 0.5769 | 0.7671 |
| sider_MordredDesc | 0.0141 | 0.2587 | 0.6229 | 0.7769 | 0.6111 | 0.7823 | 0.0986 | 19.7746 | 0.1852 | 0.7863 | 0.5634 | 0.7645 |
| sider_RDKit_desc | 0.0141 | 0.2825 | 0.6292 | 0.7814 | 0.5999 | 0.7761 | 0.0986 | 20.6127 | 0.2526 | 0.7250 | 0.5903 | 0.7185 |
| SLASHDOT-F | 0.3862 | 0.0397 | 0.4819 | 0.5328 | 0.3765 | 0.5844 | 0.3889 | 4.4339 | 0.2859 | 0.6744 | 0.7442 | 0.9717 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.2222 | 0.6600 |
| Stackex_chemistry | 0.0202 | 0.0126 | 0.0572 | 0.0822 | 0.0383 | 0.1143 | 0.8069 | 105.5951 | 0.8652 | 0.1540 | 0.9161 | 0.9960 |
| Stackex_chess | 0.0238 | 0.0102 | 0.1310 | 0.1905 | 0.0587 | 0.2505 | 0.6369 | 133.8631 | 0.7775 | 0.2256 | 0.5483 | 0.9973 |
| Stackex_coffee | 0.0000 | 0.0201 | 0.0652 | 0.1030 | 0.0254 | 0.1493 | 0.8261 | 75.4348 | 0.8916 | 0.1281 | 0.2567 | 0.9904 |
| Stackex_cooking | 0.0000 | 0.1513 | 0.0085 | 0.0168 | 0.0258 | 0.0168 | 0.8812 | 251.6667 | 0.9309 | 0.0828 | 0.9246 | 0.9996 |
| Stackex_philosophy | 0.0452 | 0.0096 | 0.1265 | 0.1753 | 0.0509 | 0.2171 | 0.6985 | 132.0653 | 0.7741 | 0.2205 | 0.7482 | 0.9969 |
| tmc2007-500 | 0.2787 | 0.0636 | 0.5418 | 0.6729 | 0.5254 | 0.6517 | 0.2860 | 3.9462 | 0.1284 | 0.7678 | 0.9494 | 0.9627 |
| tox21_CDK_ECFP4 | 0.1233 | 0.1601 | 0.2790 | 0.3591 | 0.3715 | 0.4101 | 0.4897 | 4.7671 | 0.3640 | 0.5967 | 0.8709 | 0.8596 |
| tox21_RDKit_desc | 0.0856 | 0.1650 | 0.1879 | 0.2506 | 0.2123 | 0.2985 | 0.5103 | 5.3493 | 0.4296 | 0.5720 | 0.8668 | 0.8600 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.1429 | 0.6190 | 0.0934 | 0.8944 | 0.8019 | 0.9727 |
| VirusPseAAC | 0.5238 | 0.1111 | 0.5714 | 0.5943 | 0.3667 | 0.6500 | 0.2857 | 0.8571 | 0.1762 | 0.8008 | 0.7268 | 0.9232 |
| Water-quality | 0.0094 | 0.3080 | 0.3671 | 0.5339 | 0.4200 | 0.5379 | 0.2642 | 9.2830 | 0.3679 | 0.6932 | 0.7732 | 0.7661 |
| Yahoo_Arts | 0.0935 | 0.0697 | 0.1278 | 0.1558 | 0.1125 | 0.1994 | 0.6302 | 10.4499 | 0.6494 | 0.4470 | 0.9199 | 0.9520 |
| Yahoo_Business | 0.5205 | 0.0303 | 0.6893 | 0.7844 | 0.1697 | 0.6798 | 0.1292 | 3.3307 | 0.2335 | 0.8652 | 0.8452 | 0.9899 |
| Yahoo_Computers | 0.3406 | 0.0407 | 0.4127 | 0.4651 | 0.1646 | 0.4606 | 0.4104 | 6.8964 | 0.4554 | 0.5842 | 0.8827 | 0.9765 |
| Yahoo_Education | 0.0615 | 0.0476 | 0.0932 | 0.1192 | 0.0821 | 0.1848 | 0.6193 | 10.0856 | 0.6083 | 0.4696 | 0.8843 | 0.9676 |
| Yahoo_Entertainment | 0.1736 | 0.0641 | 0.2138 | 0.2422 | 0.1947 | 0.3231 | 0.5460 | 4.7266 | 0.5010 | 0.5590 | 0.9640 | 0.9574 |
| Yahoo_Health | 0.3094 | 0.0479 | 0.4173 | 0.4862 | 0.1820 | 0.4551 | 0.4365 | 7.6938 | 0.4154 | 0.6085 | 0.8143 | 0.9734 |
| Yahoo_Recreation | 0.1216 | 0.0663 | 0.1576 | 0.1846 | 0.1935 | 0.2577 | 0.6150 | 7.4248 | 0.6929 | 0.4806 | 0.9583 | 0.9591 |
| Yahoo_Reference | 0.3238 | 0.0325 | 0.3543 | 0.3754 | 0.1022 | 0.4267 | 0.4446 | 5.8680 | 0.4300 | 0.6124 | 0.8013 | 0.9830 |
| Yahoo_Science | 0.0793 | 0.0456 | 0.1055 | 0.1328 | 0.0831 | 0.1650 | 0.7605 | 15.5194 | 0.7699 | 0.3213 | 0.9478 | 0.9740 |
| Yahoo_Social | 0.3746 | 0.0254 | 0.4114 | 0.4321 | 0.0892 | 0.4823 | 0.4224 | 8.1576 | 0.4245 | 0.6081 | 0.9096 | 0.9858 |
| Yahoo_Society | 0.2135 | 0.0606 | 0.2856 | 0.3371 | 0.0951 | 0.3442 | 0.4773 | 8.8264 | 0.5307 | 0.5278 | 0.9331 | 0.9686 |
| yeast | 0.1736 | 0.1924 | 0.5248 | 0.6601 | 0.3777 | 0.6532 | 0.2107 | 6.2066 | 0.2148 | 0.7655 | 0.8103 | 0.8703 |
| Yelp | 0.3569 | 0.2114 | 0.5798 | 0.6864 | 0.6054 | 0.6803 | 0.2522 | 1.5115 | 0.2267 | 0.8257 | 0.8330 | 0.8578 |

Table 141: Detailed results for Massive for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5415 | 0.0305 | 0.6178 | 0.6717 | 0.6982 | 0.7104 | 0.3059 | 2.5312 | 0.2388 | 0.7650 | 0.9923 | 0.9808 |
| 3s-bbc1000 | 0.1111 | 0.3472 | 0.2523 | 0.3225 | 0.2516 | 0.3119 | 0.7778 | 2.7778 | 0.6407 | 0.4469 | 0.7717 | 0.7292 |
| 3s-guardian1000 | 0.1935 | 0.3226 | 0.3237 | 0.4101 | 0.2511 | 0.3617 | 0.4516 | 2.0645 | 0.4605 | 0.6403 | 0.8112 | 0.8225 |
| 3s-inter3000 | 0.0000 | 0.4314 | 0.2206 | 0.3114 | 0.2079 | 0.3125 | 0.8235 | 2.1765 | 0.6368 | 0.4578 | 0.4913 | 0.6832 |
| 3s-reuters1000 | 0.0667 | 0.3389 | 0.1167 | 0.1373 | 0.1017 | 0.1408 | 0.9000 | 2.7000 | 0.7933 | 0.3689 | 0.8224 | 0.7483 |
| amphibians | 0.0000 | 0.2778 | 0.5196 | 0.7350 | 0.5023 | 0.6847 | 0.2222 | 2.5000 | 0.1167 | 0.8570 | 0.7410 | 0.7981 |
| bibtex | 0.1903 | 0.0120 | 0.3637 | 0.4549 | 0.3282 | 0.4898 | 0.4340 | 71.3405 | 0.5737 | 0.4287 | 1.0000 | 0.9852 |
| birds | 0.1795 | 0.0985 | 0.3530 | 0.4446 | 0.3517 | 0.4511 | 0.4615 | 7.5128 | 0.4776 | 0.5340 | 0.8444 | 0.9376 |
| bookmarks10% | 0.1897 | 0.0089 | 0.2202 | 0.2440 | 0.1181 | 0.2650 | 0.7360 | 105.9131 | 0.7641 | 0.2586 | 0.9850 | 0.9916 |
| CAL500 | 0.0000 | 0.2122 | 0.3151 | 0.4767 | 0.1442 | 0.4768 | 0.3333 | 151.0980 | 0.6376 | 0.4251 | 0.8341 | 0.9499 |
| corel16k001 | 0.0000 | 0.0631 | 0.1123 | 0.1945 | 0.0402 | 0.1955 | 0.8723 | 115.1285 | 0.9359 | 0.0890 | 1.0000 | 1.0000 |
| Corel5k | 0.0000 | 0.0139 | 0.1445 | 0.2304 | 0.0261 | 0.2344 | 0.8451 | 162.3274 | 0.9405 | 0.1623 | 0.6730 | 0.9860 |
| delicious | 0.0000 | 0.0514 | 0.1349 | 0.2336 | 0.0896 | 0.2353 | 0.5291 | 904.0442 | 0.8485 | 0.1525 | 0.9830 | 0.9953 |
| emotions | 0.3000 | 0.1972 | 0.5833 | 0.7093 | 0.6901 | 0.7029 | 0.3000 | 1.7833 | 0.2399 | 0.7893 | 0.8776 | 0.8880 |
| enron | 0.1813 | 0.0525 | 0.4865 | 0.6144 | 0.1590 | 0.5911 | 0.2573 | 24.3977 | 0.3722 | 0.6148 | 0.8261 | 0.9816 |
| EukaryoteGO | 0.7109 | 0.0189 | 0.8019 | 0.8238 | 0.7289 | 0.8229 | 0.1657 | 0.8580 | 0.0510 | 0.8989 | 0.9908 | 1.0000 |
| EukaryotePseAAC | 0.3018 | 0.0566 | 0.3987 | 0.4560 | 0.1468 | 0.4590 | 0.5362 | 6.1606 | 0.5051 | 0.5333 | 0.9741 | 0.9877 |
| flags | 0.2500 | 0.2357 | 0.6367 | 0.7488 | 0.6094 | 0.7556 | 0.2000 | 3.5500 | 0.2175 | 0.8167 | 0.6820 | 0.8022 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1447 | 0.5000 | 0.2439 | 4.4390 | 0.4435 | 0.7210 | 0.8519 | 0.9545 |
| genbase | 0.9419 | 0.0017 | 0.9904 | 0.9898 | 0.6139 | 0.9833 | 0.0151 | 0.2399 | 0.0009 | 1.0000 | 0.6428 | 0.9913 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9571 | 0.9714 | 0.8300 | 0.9595 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8741 | 0.9981 |
| GnegativePseAAC | 0.7500 | 0.0518 | 0.7988 | 0.8232 | 0.4893 | 0.8041 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8622 | 0.9893 |
| GpositiveGO | 0.9231 | 0.0288 | 0.9423 | 0.9519 | 0.8791 | 0.9434 | 0.0577 | 0.1538 | 0.0417 | 0.9615 | 0.9972 | 0.9972 |
| GpositivePseAAC | 0.7308 | 0.1202 | 0.7404 | 0.7452 | 0.5738 | 0.7573 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9841 | 0.9760 |
| HumanGO | 0.6881 | 0.0363 | 0.7765 | 0.8227 | 0.7019 | 0.7882 | 0.1640 | 1.0965 | 0.1032 | 0.8785 | 0.9851 | 0.9884 |
| HumanPseAAC | 0.3129 | 0.0991 | 0.4115 | 0.4591 | 0.1886 | 0.4368 | 0.5310 | 3.3542 | 0.4755 | 0.5900 | 0.9411 | 0.9501 |
| Image | 0.5200 | 0.1740 | 0.6175 | 0.6671 | 0.6357 | 0.6282 | 0.3050 | 1.0100 | 0.2767 | 0.7979 | 0.9297 | 0.9256 |
| IMDB-ECC-F10% | 0.0000 | 0.2345 | 0.1496 | 0.2501 | 0.0840 | 0.2489 | 0.6265 | 12.2604 | 0.7407 | 0.3795 | 0.9744 | 0.9847 |
| IMDB-F10% | 0.0000 | 0.2659 | 0.1558 | 0.2611 | 0.0966 | 0.2642 | 0.5866 | 12.8633 | 0.7195 | 0.3846 | 0.9859 | 0.9810 |
| LLOG-F | 0.1721 | 0.0162 | 0.2015 | 0.2192 | 0.0538 | 0.2952 | 0.7377 | 28.6639 | 0.7821 | 0.2794 | 0.5987 | 0.9985 |
| mediamill10% | 0.0831 | 0.0302 | 0.4699 | 0.6311 | 0.0857 | 0.5840 | 0.1520 | 59.8670 | 0.4578 | 0.5516 | 0.8135 | 0.9943 |
| medical | 0.6735 | 0.0104 | 0.7738 | 0.8281 | 0.2946 | 0.8189 | 0.1429 | 4.9898 | 0.1321 | 0.8546 | 0.5528 | 0.9978 |
| Music | 0.2833 | 0.1694 | 0.6111 | 0.7597 | 0.7341 | 0.7426 | 0.3000 | 2.0333 | 0.2597 | 0.7876 | 0.9092 | 0.9001 |
| NUS-WIDE-bow10% | 0.1380 | 0.0284 | 0.3156 | 0.4193 | 0.0476 | 0.4049 | 0.5274 | 34.3417 | 0.5986 | 0.4311 | 0.8781 | 0.9791 |
| NUS-WIDE-cVLADplus10% | 0.1761 | 0.0305 | 0.3368 | 0.4240 | 0.0556 | 0.3954 | 0.5711 | 35.7316 | 0.6550 | 0.4035 | 0.8918 | 0.9823 |
| OHSUMED-F | 0.2259 | 0.0590 | 0.4399 | 0.5501 | 0.4433 | 0.5655 | 0.3506 | 7.5864 | 0.4204 | 0.6109 | 0.9872 | 0.9926 |
| PlantGO | 0.6875 | 0.0391 | 0.7448 | 0.7717 | 0.6388 | 0.7847 | 0.2292 | 1.0000 | 0.1052 | 0.8475 | 0.9902 | 0.9857 |
| PlantPseAAC | 0.2653 | 0.1156 | 0.3537 | 0.4036 | 0.2111 | 0.3982 | 0.5918 | 3.0714 | 0.4961 | 0.5520 | 0.9430 | 0.9369 |
| rcv1subset1 | 0.1012 | 0.0318 | 0.3534 | 0.4773 | 0.2652 | 0.4697 | 0.3919 | 38.0622 | 0.4101 | 0.5115 | 0.9120 | 0.9878 |
| REUTERS-K500-EX2 | 0.3333 | 0.0116 | 0.4099 | 0.4558 | 0.2489 | 0.5007 | 0.5052 | 32.5670 | 0.5368 | 0.4914 | 0.7840 | 0.9974 |
| scene | 0.6515 | 0.0864 | 0.7420 | 0.7880 | 0.7760 | 0.7646 | 0.2116 | 0.8257 | 0.1639 | 0.8447 | 0.9683 | 0.9721 |
| sider_CDK_ECFP4 | 0.0211 | 0.2397 | 0.6522 | 0.7985 | 0.6349 | 0.7993 | 0.0986 | 19.2254 | 0.1643 | 0.8002 | 0.5914 | 0.7817 |
| sider_MordredDesc | 0.0141 | 0.2676 | 0.6258 | 0.7824 | 0.6116 | 0.7793 | 0.3076 | 19.9550 | 0.2222 | 0.7465 | 0.5806 | 0.7353 |
| sider_RDKit_desc | 0.0141 | 0.2762 | 0.6329 | 0.7834 | 0.6087 | 0.7799 | 0.1761 | 19.9718 | 0.1897 | 0.7681 | 0.5985 | 0.7736 |
| SLASHDOT-F | 0.3995 | 0.0410 | 0.5076 | 0.5651 | 0.3875 | 0.5965 | 0.4048 | 5.8201 | 0.3844 | 0.6297 | 0.7586 | 0.9852 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.3333 | 0.7000 |
| Stackex_chemistry | 0.0444 | 0.0158 | 0.1449 | 0.2089 | 0.0566 | 0.2037 | 0.7869 | 106.0609 | 0.8716 | 0.1525 | 0.9201 | 0.9870 |
| Stackex_chess | 0.0357 | 0.0101 | 0.1544 | 0.2190 | 0.0539 | 0.2802 | 0.6641 | 136.2320 | 0.8154 | 0.2012 | 0.5547 | 1.0000 |
| Stackex_coffee | 0.0000 | 0.0226 | 0.0471 | 0.0884 | 0.0140 | 0.1111 | 0.8261 | 78.3043 | 0.8852 | 0.1309 | 0.2554 | 0.9896 |
| Stackex_cooking | 0.0656 | 0.0052 | 0.2066 | 0.2810 | 0.1125 | 0.3221 | 0.6227 | 223.5577 | 0.7787 | 0.2333 | 0.9285 | 0.9935 |
| Stackex_philosophy | 0.0529 | 0.0092 | 0.1638 | 0.2324 | 0.0621 | 0.2732 | 0.6967 | 135.5361 | 0.7883 | 0.2145 | 0.7554 | 0.9914 |
| tmc2007-500 | 0.2547 | 0.0663 | 0.5782 | 0.7255 | 0.5900 | 0.6747 | 0.2545 | 4.1112 | 0.1465 | 0.7740 | 0.9557 | 0.9731 |
| tox21_CDK_ECFP4 | 0.1507 | 0.1781 | 0.3639 | 0.4746 | 0.3926 | 0.4658 | 0.4658 | 5.3219 | 0.4881 | 0.5719 | 0.8981 | 0.8998 |
| tox21_RDKit_desc | 0.1267 | 0.1881 | 0.3333 | 0.4522 | 0.3159 | 0.4334 | 0.5000 | 5.5685 | 0.5256 | 0.5507 | 0.9102 | 0.9125 |
| VirusGO | 0.7619 | 0.0635 | 0.8333 | 0.8611 | 0.6711 | 0.8400 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.8050 | 0.9703 |
| VirusPseAAC | 0.4762 | 0.1190 | 0.5714 | 0.6190 | 0.3583 | 0.6512 | 0.2857 | 0.9048 | 0.1952 | 0.8024 | 0.7302 | 0.9168 |
| Water-quality | 0.0000 | 0.3261 | 0.4305 | 0.6072 | 0.4993 | 0.6020 | 0.2642 | 9.2453 | 0.3536 | 0.6968 | 0.7680 | 0.7611 |
| Yahoo_Arts | 0.2056 | 0.0694 | 0.2959 | 0.3640 | 0.2150 | 0.3755 | 0.4928 | 10.3392 | 0.5716 | 0.5051 | 0.9460 | 0.9612 |
| Yahoo_Business | 0.5649 | 0.0271 | 0.7298 | 0.8229 | 0.3009 | 0.7208 | 0.0874 | 3.2126 | 0.2240 | 0.8943 | 0.8680 | 0.9881 |
| Yahoo_Computers | 0.3904 | 0.0449 | 0.4879 | 0.5663 | 0.2531 | 0.5023 | 0.3834 | 6.3788 | 0.4114 | 0.6113 | 0.8833 | 0.9727 |
| Yahoo_Education | 0.2560 | 0.0451 | 0.3339 | 0.3899 | 0.1886 | 0.4129 | 0.5103 | 8.8647 | 0.5594 | 0.5475 | 0.8993 | 0.9888 |
| Yahoo_Entertainment | 0.3458 | 0.0702 | 0.4510 | 0.5234 | 0.2846 | 0.4842 | 0.4422 | 4.2819 | 0.4046 | 0.6247 | 0.9687 | 0.9579 |
| Yahoo_Health | 0.4068 | 0.0413 | 0.5542 | 0.6515 | 0.2448 | 0.5907 | 0.3048 | 6.5022 | 0.3501 | 0.7035 | 0.8283 | 0.9988 |
| Yahoo_Recreation | 0.2247 | 0.0699 | 0.3130 | 0.3636 | 0.3116 | 0.3919 | 0.5070 | 6.5507 | 0.5451 | 0.5730 | 0.9637 | 0.9744 |
| Yahoo_Reference | 0.4554 | 0.0320 | 0.5277 | 0.5689 | 0.1793 | 0.5385 | 0.3812 | 5.4561 | 0.4212 | 0.6467 | 0.8153 | 0.9987 |
| Yahoo_Science | 0.1971 | 0.0416 | 0.2508 | 0.2932 | 0.1618 | 0.3205 | 0.6410 | 13.7030 | 0.6549 | 0.4106 | 0.9545 | 0.9794 |
| Yahoo_Social | 0.4623 | 0.0295 | 0.5440 | 0.5800 | 0.1776 | 0.5324 | 0.3746 | 7.5040 | 0.3847 | 0.6552 | 0.9254 | 0.9749 |
| Yahoo_Society | 0.3282 | 0.0795 | 0.4409 | 0.5607 | 0.2120 | 0.4623 | 0.3869 | 8.4468 | 0.4910 | 0.6018 | 0.9401 | 0.9640 |
| yeast | 0.1956 | 0.2093 | 0.5590 | 0.6942 | 0.4490 | 0.6716 | 0.2521 | 6.2913 | 0.2323 | 0.7500 | 0.8197 | 0.8959 |
| Yelp | 0.3858 | 0.1992 | 0.6365 | 0.7468 | 0.6796 | 0.7279 | 0.2024 | 1.3709 | 0.2129 | 0.8595 | 0.8620 | 0.8889 |

Table 142: Detailed results for Massive (1K) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3786 | 0.0439 | 0.4913 | 0.5579 | 0.5969 | 0.6000 | 0.3164 | 2.4424 | 0.2319 | 0.7556 | 0.9743 | 0.9752 |
| 3s-bbc1000 | 0.1389 | 0.3565 | 0.2338 | 0.2899 | 0.2153 | 0.2804 | 0.7500 | 3.0000 | 0.6928 | 0.4316 | 0.7690 | 0.7189 |
| 3s-guardian1000 | 0.1935 | 0.2903 | 0.3559 | 0.4504 | 0.2758 | 0.4000 | 0.4516 | 2.1290 | 0.4790 | 0.6360 | 0.8064 | 0.8257 |
| 3s-inter3000 | 0.0000 | 0.3039 | 0.3137 | 0.4377 | 0.2183 | 0.4364 | 0.8824 | 2.1765 | 0.6603 | 0.4225 | 0.4819 | 0.6673 |
| 3s-reuters1000 | 0.1000 | 0.3389 | 0.1722 | 0.2093 | 0.1858 | 0.2078 | 0.9000 | 2.6667 | 0.7867 | 0.3744 | 0.8695 | 0.7650 |
| amphibians | 0.1111 | 0.2540 | 0.5897 | 0.7771 | 0.5947 | 0.7419 | 0.2222 | 2.4444 | 0.0944 | 0.8663 | 0.7460 | 0.8063 |
| bibtex | 0.1635 | 0.0133 | 0.3374 | 0.4385 | 0.2909 | 0.4566 | 0.4243 | 68.5405 | 0.5457 | 0.4446 | 0.9954 | 0.9952 |
| birds | 0.1538 | 0.0999 | 0.3427 | 0.4453 | 0.3586 | 0.4559 | 0.5128 | 8.0513 | 0.5472 | 0.4981 | 0.8411 | 0.9388 |
| bookmarks10% | 0.1811 | 0.0098 | 0.2147 | 0.2397 | 0.1114 | 0.2542 | 0.7392 | 104.0501 | 0.7542 | 0.2580 | 0.9840 | 0.9984 |
| CAL500 | 0.0000 | 0.2105 | 0.3162 | 0.4774 | 0.1419 | 0.4776 | 0.1961 | 151.0392 | 0.6191 | 0.4429 | 0.8312 | 0.9455 |
| corel16k001 | 0.0000 | 0.0637 | 0.1109 | 0.1970 | 0.0401 | 0.1952 | 0.8832 | 113.7257 | 0.9383 | 0.0892 | 0.9900 | 1.0000 |
| Corel5k | 0.0000 | 0.0141 | 0.1465 | 0.2346 | 0.0298 | 0.2412 | 0.8320 | 162.1080 | 0.9259 | 0.1712 | 0.6785 | 0.9993 |
| delicious | 0.0000 | 0.0510 | 0.1367 | 0.2352 | 0.0886 | 0.2321 | 0.5221 | 896.1171 | 0.8387 | 0.1536 | 0.9895 | 0.9932 |
| emotions | 0.3333 | 0.1889 | 0.5972 | 0.7188 | 0.6949 | 0.7094 | 0.3000 | 1.7667 | 0.2378 | 0.7920 | 0.8788 | 0.8897 |
| enron | 0.1404 | 0.0541 | 0.4668 | 0.6073 | 0.2184 | 0.5854 | 0.2339 | 22.0526 | 0.3261 | 0.6302 | 0.8222 | 0.9790 |
| EukaryoteGO | 0.6817 | 0.0206 | 0.7876 | 0.8402 | 0.6983 | 0.8157 | 0.1765 | 0.6005 | 0.0254 | 0.8954 | 0.9914 | 0.9944 |
| EukaryotePseAAC | 0.0965 | 0.0832 | 0.3107 | 0.4206 | 0.1238 | 0.4161 | 0.5727 | 5.4273 | 0.4392 | 0.5374 | 0.9577 | 0.9620 |
| flags | 0.2500 | 0.2429 | 0.6336 | 0.7517 | 0.5839 | 0.7500 | 0.2000 | 3.6000 | 0.2333 | 0.8208 | 0.6970 | 0.7971 |
| foodtruck | 0.2927 | 0.1565 | 0.4621 | 0.6010 | 0.1431 | 0.4967 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8549 | 0.9574 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8262 | 0.9556 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7643 | 0.0527 | 0.7988 | 0.8160 | 0.4790 | 0.8000 | 0.1857 | 0.6000 | 0.1236 | 0.8765 | 0.8556 | 0.9846 |
| GpositiveGO | 0.9038 | 0.0288 | 0.9423 | 0.9612 | 0.8836 | 0.9455 | 0.0769 | 0.1346 | 0.0385 | 0.9567 | 0.9961 | 0.9961 |
| GpositivePseAAC | 0.7500 | 0.1202 | 0.7596 | 0.7644 | 0.5823 | 0.7619 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9845 | 0.9763 |
| HumanGO | 0.6624 | 0.0361 | 0.7691 | 0.8236 | 0.7111 | 0.7876 | 0.1672 | 0.7428 | 0.0544 | 0.8938 | 0.9826 | 0.9867 |
| HumanPseAAC | 0.2283 | 0.1029 | 0.3617 | 0.4261 | 0.1791 | 0.4315 | 0.5466 | 2.9614 | 0.3476 | 0.6029 | 0.9226 | 0.9236 |
| Image | 0.4850 | 0.1840 | 0.6008 | 0.6594 | 0.6239 | 0.6183 | 0.3050 | 1.0400 | 0.2708 | 0.7927 | 0.9145 | 0.9092 |
| IMDB-ECC-F10% | 0.0000 | 0.2388 | 0.1482 | 0.2517 | 0.0788 | 0.2516 | 0.6405 | 12.3449 | 0.7341 | 0.3717 | 0.9898 | 0.9753 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1524 | 0.2590 | 0.0947 | 0.2594 | 0.6123 | 13.0050 | 0.7368 | 0.3705 | 0.9865 | 0.9748 |
| LLOG-F | 0.1230 | 0.0176 | 0.1755 | 0.2066 | 0.0495 | 0.2715 | 0.7295 | 28.3197 | 0.7712 | 0.2873 | 0.5967 | 0.9963 |
| mediamill10% | 0.0831 | 0.0303 | 0.4680 | 0.6278 | 0.0860 | 0.5836 | 0.2542 | 60.4679 | 0.4505 | 0.5349 | 0.8127 | 0.9934 |
| medical | 0.6633 | 0.0104 | 0.7696 | 0.8263 | 0.3063 | 0.8189 | 0.1837 | 5.0204 | 0.1331 | 0.8342 | 0.5525 | 0.9977 |
| Music | 0.2833 | 0.1750 | 0.5986 | 0.7385 | 0.7186 | 0.7319 | 0.2667 | 2.0000 | 0.2455 | 0.8043 | 0.9098 | 0.9001 |
| NUS-WIDE-bow10% | 0.1383 | 0.0285 | 0.3130 | 0.4225 | 0.0477 | 0.4025 | 0.5216 | 34.6447 | 0.5952 | 0.4312 | 0.8877 | 0.9770 |
| NUS-WIDE-cVLADplus10% | 0.1441 | 0.0290 | 0.3384 | 0.4457 | 0.0658 | 0.4271 | 0.5081 | 31.3021 | 0.5303 | 0.4677 | 0.8778 | 0.9877 |
| OHSUMED-F | 0.1658 | 0.0675 | 0.3895 | 0.5109 | 0.3850 | 0.5260 | 0.3647 | 6.4695 | 0.3259 | 0.6399 | 0.9506 | 0.9528 |
| PlantGO | 0.6667 | 0.0408 | 0.7396 | 0.7741 | 0.6480 | 0.7793 | 0.2292 | 1.0521 | 0.0992 | 0.8484 | 0.9894 | 0.9856 |
| PlantPseAAC | 0.2857 | 0.1131 | 0.3724 | 0.4254 | 0.2198 | 0.4141 | 0.5918 | 3.2143 | 0.5088 | 0.5449 | 0.9430 | 0.9363 |
| rcv1subset1 | 0.0433 | 0.0343 | 0.3528 | 0.5045 | 0.3039 | 0.4870 | 0.4067 | 33.5083 | 0.3541 | 0.5309 | 0.9218 | 0.9831 |
| REUTERS-K500-EX2 | 0.2955 | 0.0136 | 0.3981 | 0.4590 | 0.2586 | 0.4763 | 0.4931 | 26.6993 | 0.4575 | 0.5317 | 0.7809 | 0.9940 |
| scene | 0.6183 | 0.0927 | 0.7220 | 0.7736 | 0.7664 | 0.7509 | 0.2158 | 0.6971 | 0.1337 | 0.8543 | 0.9615 | 0.9665 |
| sider_CDK_ECFP4 | 0.0070 | 0.2465 | 0.6507 | 0.7963 | 0.6359 | 0.7964 | 0.1338 | 19.4789 | 0.1560 | 0.8173 | 0.5795 | 0.7849 |
| sider_MordredDesc | 0.0141 | 0.2663 | 0.6317 | 0.7827 | 0.6175 | 0.7833 | 0.2606 | 19.7817 | 0.1757 | 0.7776 | 0.5689 | 0.7689 |
| sider_RDKit_desc | 0.0141 | 0.2762 | 0.6325 | 0.7835 | 0.6063 | 0.7795 | 0.2746 | 20.2676 | 0.2234 | 0.7226 | 0.5889 | 0.7406 |
| SLASHDOT-F | 0.3915 | 0.0399 | 0.5060 | 0.5670 | 0.4000 | 0.6038 | 0.3915 | 4.4074 | 0.2843 | 0.6760 | 0.7443 | 0.9719 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0432 | 0.0180 | 0.1441 | 0.2177 | 0.0682 | 0.2035 | 0.7925 | 105.2219 | 0.8617 | 0.1609 | 0.9163 | 0.9962 |
| Stackex_chess | 0.0357 | 0.0109 | 0.1471 | 0.2165 | 0.0621 | 0.2723 | 0.6548 | 136.0357 | 0.7889 | 0.2163 | 0.5485 | 0.9974 |
| Stackex_coffee | 0.0000 | 0.0226 | 0.0536 | 0.0960 | 0.0224 | 0.1351 | 0.7826 | 73.7826 | 0.8378 | 0.1583 | 0.2547 | 0.9889 |
| Stackex_cooking | 0.0649 | 0.0053 | 0.2043 | 0.2800 | 0.1139 | 0.3253 | 0.6253 | 221.4423 | 0.7675 | 0.2318 | 0.9193 | 1.0000 |
| Stackex_philosophy | 0.0503 | 0.0111 | 0.1499 | 0.2185 | 0.0627 | 0.2465 | 0.7060 | 132.4849 | 0.7825 | 0.2120 | 0.7482 | 0.9968 |
| tmc2007-500 | 0.2448 | 0.0706 | 0.5580 | 0.7048 | 0.5687 | 0.6681 | 0.2748 | 3.9846 | 0.1328 | 0.7680 | 0.9498 | 0.9632 |
| tox21_CDK_ECFP4 | 0.1096 | 0.1889 | 0.3360 | 0.4571 | 0.3825 | 0.4456 | 0.4863 | 4.9110 | 0.3855 | 0.5898 | 0.8679 | 0.8587 |
| tox21_RDKit_desc | 0.0788 | 0.2069 | 0.3164 | 0.4597 | 0.2741 | 0.4241 | 0.5034 | 5.3390 | 0.4433 | 0.5690 | 0.8692 | 0.8648 |
| VirusGO | 0.7619 | 0.0635 | 0.8492 | 0.8768 | 0.6767 | 0.8462 | 0.0952 | 0.5238 | 0.0874 | 0.9206 | 0.8003 | 0.9703 |
| VirusPseAAC | 0.4762 | 0.1349 | 0.5635 | 0.6069 | 0.3487 | 0.6222 | 0.2857 | 0.8095 | 0.1762 | 0.8032 | 0.7174 | 0.9177 |
| Water-quality | 0.0094 | 0.3248 | 0.4411 | 0.6142 | 0.5079 | 0.6094 | 0.2642 | 9.3113 | 0.3648 | 0.6918 | 0.7693 | 0.7671 |
| Yahoo_Arts | 0.1135 | 0.0983 | 0.2359 | 0.3214 | 0.1386 | 0.2830 | 0.6008 | 11.5220 | 0.7369 | 0.4288 | 0.9258 | 0.9655 |
| Yahoo_Business | 0.5125 | 0.0339 | 0.6863 | 0.7884 | 0.1987 | 0.6601 | 0.1203 | 3.2790 | 0.2265 | 0.8714 | 0.8460 | 0.9902 |
| Yahoo_Computers | 0.3446 | 0.0520 | 0.4514 | 0.5305 | 0.1810 | 0.4502 | 0.4112 | 6.9526 | 0.4585 | 0.5810 | 0.8811 | 0.9753 |
| Yahoo_Education | 0.0066 | 0.0870 | 0.2183 | 0.3205 | 0.1567 | 0.2995 | 0.7207 | 10.2195 | 0.7629 | 0.4069 | 0.8807 | 0.9739 |
| Yahoo_Entertainment | 0.3040 | 0.0841 | 0.3812 | 0.4379 | 0.2187 | 0.3945 | 0.5483 | 4.7620 | 0.5075 | 0.5552 | 0.9633 | 0.9552 |
| Yahoo_Health | 0.3051 | 0.0533 | 0.4408 | 0.5291 | 0.1792 | 0.4625 | 0.4397 | 7.7231 | 0.4145 | 0.6055 | 0.8166 | 0.9746 |
| Yahoo_Recreation | 0.0733 | 0.1132 | 0.2383 | 0.3268 | 0.2372 | 0.3056 | 0.5994 | 7.1949 | 0.5776 | 0.5014 | 0.9503 | 0.9420 |
| Yahoo_Reference | 0.4134 | 0.0395 | 0.4789 | 0.5251 | 0.1045 | 0.4702 | 0.4396 | 6.0336 | 0.4354 | 0.6113 | 0.8013 | 0.9831 |
| Yahoo_Science | 0.1633 | 0.0661 | 0.2263 | 0.2800 | 0.0994 | 0.2222 | 0.7512 | 15.4168 | 0.7635 | 0.3249 | 0.9479 | 0.9739 |
| Yahoo_Social | 0.4175 | 0.0351 | 0.4988 | 0.5534 | 0.1175 | 0.4809 | 0.4257 | 7.8647 | 0.4119 | 0.6128 | 0.9087 | 0.9852 |
| Yahoo_Society | 0.2576 | 0.0708 | 0.3818 | 0.4721 | 0.1178 | 0.3919 | 0.4697 | 8.8643 | 0.5322 | 0.5290 | 0.9337 | 0.9689 |
| yeast | 0.1901 | 0.2004 | 0.5587 | 0.6886 | 0.4447 | 0.6805 | 0.2479 | 6.2190 | 0.2102 | 0.7597 | 0.8109 | 0.8713 |
| Yelp | 0.3001 | 0.2315 | 0.5800 | 0.7106 | 0.6345 | 0.6905 | 0.2512 | 1.4965 | 0.2182 | 0.8292 | 0.8324 | 0.8582 |

Table 143: Detailed results for Massive for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5080 | 0.0345 | 0.6190 | 0.6756 | 0.6820 | 0.6894 | 0.3023 | 2.4962 | 0.2443 | 0.7550 | 0.9794 | 0.9786 |
| 3s-bbc1000 | 0.0833 | 0.3750 | 0.2417 | 0.3335 | 0.3019 | 0.3306 | 0.7500 | 2.8611 | 0.6380 | 0.4390 | 0.7688 | 0.7206 |
| 3s-guardian1000 | 0.2258 | 0.2903 | 0.4054 | 0.5183 | 0.3094 | 0.4375 | 0.4839 | 1.8710 | 0.4210 | 0.6411 | 0.8314 | 0.8291 |
| 3s-inter3000 | 0.0000 | 0.5588 | 0.2265 | 0.3604 | 0.2884 | 0.3596 | 0.8235 | 2.1765 | 0.5779 | 0.4618 | 0.5363 | 0.6858 |
| 3s-reuters1000 | 0.0667 | 0.3389 | 0.1500 | 0.1826 | 0.1297 | 0.1867 | 0.9000 | 2.5667 | 0.7867 | 0.3817 | 0.8075 | 0.7397 |
| amphibians | 0.1111 | 0.2698 | 0.5651 | 0.7503 | 0.5986 | 0.7344 | 0.2222 | 2.5556 | 0.1111 | 0.8543 | 0.7480 | 0.8076 |
| bibtex | 0.1898 | 0.0121 | 0.3687 | 0.4634 | 0.3311 | 0.4853 | 0.4419 | 72.1871 | 0.5794 | 0.4300 | 1.0000 | 1.0000 |
| birds | 0.1282 | 0.1107 | 0.3362 | 0.4544 | 0.3492 | 0.4459 | 0.5128 | 7.9744 | 0.5223 | 0.5013 | 0.8431 | 0.9377 |
| bookmarks10% | 0.1871 | 0.0089 | 0.2214 | 0.2421 | 0.1132 | 0.2685 | 0.7391 | 105.2202 | 0.7733 | 0.2555 | 0.9755 | 0.9897 |
| CAL500 | 0.0000 | 0.2141 | 0.3114 | 0.4731 | 0.1435 | 0.4740 | 0.1373 | 151.0588 | 0.6132 | 0.4420 | 0.8323 | 0.9461 |
| corel16k001 | 0.0000 | 0.0460 | 0.1313 | 0.2183 | 0.0333 | 0.2171 | 0.9375 | 118.3109 | 0.9735 | 0.0569 | 1.0000 | 1.0000 |
| Corel5k | 0.0000 | 0.0180 | 0.1383 | 0.2271 | 0.0271 | 0.2287 | 0.8414 | 163.5963 | 0.9324 | 0.1629 | 0.6785 | 1.0000 |
| delicious | 0.0000 | 0.0450 | 0.1397 | 0.2429 | 0.0893 | 0.2471 | 0.5563 | 895.1744 | 0.8446 | 0.1532 | 0.9928 | 1.0000 |
| emotions | 0.2333 | 0.2139 | 0.5764 | 0.7185 | 0.6848 | 0.6932 | 0.3000 | 1.7667 | 0.2433 | 0.7920 | 0.8750 | 0.8874 |
| enron | 0.1637 | 0.0512 | 0.4880 | 0.6217 | 0.1819 | 0.5965 | 0.2690 | 23.7076 | 0.3681 | 0.6113 | 0.8271 | 0.9819 |
| EukaryoteGO | 0.6456 | 0.0217 | 0.7884 | 0.8575 | 0.7194 | 0.8166 | 0.1688 | 0.8570 | 0.0476 | 0.8931 | 0.9927 | 0.9948 |
| EukaryotePseAAC | 0.1200 | 0.0734 | 0.3420 | 0.4442 | 0.1451 | 0.4438 | 0.5348 | 6.2870 | 0.5140 | 0.5242 | 0.9673 | 0.9694 |
| flags | 0.2500 | 0.2429 | 0.6350 | 0.7465 | 0.6022 | 0.7500 | 0.2500 | 3.6000 | 0.2342 | 0.7997 | 0.6895 | 0.8032 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1444 | 0.5000 | 0.2439 | 4.6098 | 0.4507 | 0.7172 | 0.8565 | 0.9575 |
| genbase | 0.9600 | 0.0011 | 0.9870 | 0.9923 | 0.6504 | 0.9992 | 0.0147 | 0.2410 | 0.0009 | 0.9915 | 0.6667 | 1.0000 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9571 | 0.9714 | 0.8300 | 0.9595 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7500 | 0.0536 | 0.8060 | 0.8335 | 0.5023 | 0.8052 | 0.1786 | 0.6143 | 0.1464 | 0.8754 | 0.8618 | 0.9892 |
| GpositiveGO | 0.9038 | 0.0337 | 0.9327 | 0.9469 | 0.8750 | 0.9358 | 0.0577 | 0.1538 | 0.0449 | 0.9615 | 0.9968 | 0.9967 |
| GpositivePseAAC | 0.7500 | 0.1202 | 0.7500 | 0.7500 | 0.5751 | 0.7573 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6206 | 0.0404 | 0.7564 | 0.8230 | 0.6937 | 0.7778 | 0.1543 | 1.1093 | 0.1098 | 0.8813 | 0.9848 | 0.9885 |
| HumanPseAAC | 0.3033 | 0.1004 | 0.4149 | 0.4686 | 0.1943 | 0.4428 | 0.5383 | 3.3484 | 0.4743 | 0.5883 | 0.9595 | 0.9624 |
| Image | 0.4150 | 0.1940 | 0.5958 | 0.6866 | 0.6422 | 0.6312 | 0.3100 | 1.0250 | 0.2817 | 0.7938 | 0.9290 | 0.9252 |
| IMDB-ECC-F10% | 0.0000 | 0.2700 | 0.1394 | 0.2456 | 0.0931 | 0.2450 | 0.6404 | 12.2317 | 0.7275 | 0.3749 | 0.9978 | 0.9742 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1523 | 0.2639 | 0.0937 | 0.2643 | 0.5964 | 12.5860 | 0.7203 | 0.3837 | 0.9797 | 0.9730 |
| LLOG-F | 0.1721 | 0.0162 | 0.2015 | 0.2192 | 0.0532 | 0.2952 | 0.7377 | 28.4918 | 0.7713 | 0.2846 | 0.5986 | 0.9983 |
| mediamill10% | 0.0808 | 0.0301 | 0.4696 | 0.6335 | 0.0878 | 0.5877 | 0.1781 | 59.1093 | 0.4557 | 0.5430 | 0.8136 | 0.9941 |
| medical | 0.6633 | 0.0109 | 0.7721 | 0.8279 | 0.3073 | 0.8140 | 0.1633 | 5.0000 | 0.1328 | 0.8444 | 0.5532 | 0.9977 |
| Music | 0.2500 | 0.1972 | 0.5986 | 0.7415 | 0.7265 | 0.7259 | 0.2000 | 2.0000 | 0.2360 | 0.8209 | 0.9080 | 0.9049 |
| NUS-WIDE-bow10% | 0.1444 | 0.0280 | 0.3189 | 0.4085 | 0.0538 | 0.3981 | 0.5311 | 34.9406 | 0.6016 | 0.4234 | 0.8868 | 0.9817 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0376 | 0.2714 | 0.3994 | 0.0573 | 0.3813 | 0.5664 | 35.8603 | 0.6507 | 0.4047 | 0.8848 | 0.9976 |
| OHSUMED-F | 0.2267 | 0.0584 | 0.4465 | 0.5523 | 0.4484 | 0.5758 | 0.3572 | 7.6078 | 0.4155 | 0.6144 | 0.9650 | 0.9840 |
| PlantGO | 0.7083 | 0.0391 | 0.7760 | 0.8078 | 0.6706 | 0.7945 | 0.2292 | 1.0521 | 0.0992 | 0.8484 | 0.9904 | 0.9856 |
| PlantPseAAC | 0.2653 | 0.1148 | 0.3639 | 0.4189 | 0.2209 | 0.4105 | 0.6020 | 3.2041 | 0.5097 | 0.5412 | 0.9438 | 0.9379 |
| rcv1subset1 | 0.1018 | 0.0311 | 0.3647 | 0.4880 | 0.2647 | 0.4826 | 0.4362 | 38.1721 | 0.4265 | 0.5063 | 0.9258 | 0.9870 |
| REUTERS-K500-EX2 | 0.3316 | 0.0117 | 0.4129 | 0.4601 | 0.2473 | 0.5028 | 0.5086 | 32.0515 | 0.5305 | 0.4935 | 0.7839 | 0.9973 |
| scene | 0.5892 | 0.0954 | 0.7275 | 0.7960 | 0.7718 | 0.7570 | 0.2075 | 0.8091 | 0.1606 | 0.8475 | 0.9686 | 0.9722 |
| sider_CDK_ECFP4 | 0.0141 | 0.2407 | 0.6540 | 0.8003 | 0.6360 | 0.7984 | 0.2113 | 19.3169 | 0.1597 | 0.7988 | 0.5793 | 0.7764 |
| sider_MordredDesc | 0.0142 | 0.2605 | 0.6276 | 0.7858 | 0.6183 | 0.7835 | 0.3194 | 19.8751 | 0.2035 | 0.7439 | 0.5814 | 0.7439 |
| sider_RDKit_desc | 0.0141 | 0.2767 | 0.6334 | 0.7845 | 0.6023 | 0.7794 | 0.2887 | 20.2676 | 0.2529 | 0.7082 | 0.5960 | 0.7142 |
| SLASHDOT-F | 0.4021 | 0.0403 | 0.5131 | 0.5728 | 0.4095 | 0.6045 | 0.4286 | 5.9418 | 0.3911 | 0.6189 | 0.7595 | 0.9861 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7600 |
| Stackex_chemistry | 0.0114 | 0.0198 | 0.1354 | 0.2072 | 0.0675 | 0.2134 | 0.7784 | 106.2674 | 0.8633 | 0.1570 | 0.9188 | 0.9894 |
| Stackex_chess | 0.0357 | 0.0100 | 0.1576 | 0.2227 | 0.0570 | 0.2841 | 0.6905 | 138.1310 | 0.8131 | 0.1967 | 0.5494 | 0.9984 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0569 | 0.0978 | 0.0237 | 0.1408 | 0.8261 | 75.4348 | 0.8808 | 0.1343 | 0.2563 | 0.9903 |
| Stackex_cooking | 0.0652 | 0.0053 | 0.2037 | 0.2728 | 0.1122 | 0.3209 | 0.6295 | 223.8380 | 0.7734 | 0.2340 | 0.9351 | 0.9870 |
| Stackex_philosophy | 0.0527 | 0.0122 | 0.1954 | 0.2799 | 0.0603 | 0.2659 | 0.6748 | 133.3731 | 0.7960 | 0.2136 | 0.7410 | 1.0000 |
| tmc2007-500 | 0.2470 | 0.0690 | 0.5713 | 0.7236 | 0.6115 | 0.6765 | 0.2342 | 4.0499 | 0.1457 | 0.7900 | 0.9450 | 0.9748 |
| tox21_CDK_ECFP4 | 0.1336 | 0.1912 | 0.3510 | 0.4707 | 0.3877 | 0.4623 | 0.4726 | 5.4144 | 0.4916 | 0.5660 | 0.8986 | 0.9001 |
| tox21_RDKit_desc | 0.0445 | 0.2260 | 0.3038 | 0.4551 | 0.3177 | 0.4244 | 0.5034 | 5.4863 | 0.5055 | 0.5533 | 0.9041 | 0.9055 |
| VirusGO | 0.7619 | 0.0794 | 0.8254 | 0.8530 | 0.6267 | 0.8077 | 0.0952 | 0.5238 | 0.0779 | 0.9206 | 0.7972 | 0.9703 |
| VirusPseAAC | 0.2381 | 0.1905 | 0.5159 | 0.6286 | 0.3690 | 0.6000 | 0.4286 | 1.0476 | 0.2048 | 0.7317 | 0.7090 | 0.9092 |
| Water-quality | 0.0094 | 0.3288 | 0.4285 | 0.6065 | 0.5032 | 0.6000 | 0.2925 | 9.0943 | 0.3582 | 0.6823 | 0.7680 | 0.7640 |
| Yahoo_Arts | 0.1914 | 0.0687 | 0.2923 | 0.3497 | 0.2113 | 0.3717 | 0.5036 | 10.1006 | 0.5609 | 0.5029 | 0.9297 | 0.9796 |
| Yahoo_Business | 0.5709 | 0.0274 | 0.7261 | 0.8089 | 0.3210 | 0.7197 | 0.0912 | 3.1708 | 0.2222 | 0.8993 | 0.8522 | 0.9937 |
| Yahoo_Computers | 0.3863 | 0.0454 | 0.4960 | 0.5728 | 0.2433 | 0.5050 | 0.3823 | 6.5534 | 0.4231 | 0.6137 | 0.8892 | 0.9820 |
| Yahoo_Education | 0.0067 | 0.0850 | 0.2398 | 0.3544 | 0.1898 | 0.3328 | 0.5597 | 9.2128 | 0.5768 | 0.5114 | 0.8957 | 0.9775 |
| Yahoo_Entertainment | 0.3238 | 0.0780 | 0.4528 | 0.5251 | 0.2835 | 0.4732 | 0.4346 | 4.2075 | 0.4088 | 0.6297 | 0.9560 | 0.9612 |
| Yahoo_Health | 0.4038 | 0.0409 | 0.5625 | 0.6462 | 0.2424 | 0.5811 | 0.3131 | 6.3589 | 0.3476 | 0.6892 | 0.8315 | 0.9924 |
| Yahoo_Recreation | 0.2160 | 0.0741 | 0.2980 | 0.3658 | 0.3054 | 0.3831 | 0.5131 | 6.5436 | 0.5571 | 0.5567 | 0.9676 | 0.9591 |
| Yahoo_Reference | 0.4483 | 0.0336 | 0.5281 | 0.5804 | 0.1695 | 0.5382 | 0.3926 | 5.3272 | 0.4232 | 0.6548 | 0.8190 | 0.9904 |
| Yahoo_Science | 0.1574 | 0.0568 | 0.2783 | 0.3550 | 0.1639 | 0.3095 | 0.6276 | 13.6852 | 0.6670 | 0.4161 | 0.9449 | 0.9930 |
| Yahoo_Social | 0.4626 | 0.0302 | 0.5495 | 0.6047 | 0.1800 | 0.5362 | 0.3774 | 7.3930 | 0.3886 | 0.6427 | 0.9087 | 0.9839 |
| Yahoo_Society | 0.3258 | 0.0691 | 0.4420 | 0.5575 | 0.2222 | 0.4750 | 0.3845 | 8.3440 | 0.4599 | 0.5977 | 0.9416 | 0.9771 |
| yeast | 0.1694 | 0.2202 | 0.5518 | 0.6927 | 0.4521 | 0.6740 | 0.2521 | 6.2066 | 0.2350 | 0.7530 | 0.8271 | 0.8855 |
| Yelp | 0.3430 | 0.2090 | 0.6244 | 0.7473 | 0.6782 | 0.7264 | 0.2044 | 1.3619 | 0.2087 | 0.8612 | 0.8622 | 0.8884 |

Table 144: Detailed results for Massive (1K) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3185 | 0.0560 | 0.4638 | 0.5524 | 0.5560 | 0.5546 | 0.3247 | 2.5083 | 0.2441 | 0.7477 | 0.9720 | 0.9736 |
| 3s-bbc1000 | 0.1667 | 0.3333 | 0.2810 | 0.3521 | 0.3269 | 0.3455 | 0.7500 | 2.7222 | 0.6477 | 0.4539 | 0.7989 | 0.7488 |
| 3s-guardian1000 | 0.1613 | 0.3387 | 0.3328 | 0.4460 | 0.2618 | 0.3762 | 0.5161 | 2.1935 | 0.4960 | 0.6051 | 0.7878 | 0.8025 |
| 3s-inter3000 | 0.0000 | 0.5686 | 0.2235 | 0.3567 | 0.2805 | 0.3556 | 0.8235 | 2.1765 | 0.5897 | 0.4618 | 0.5022 | 0.6984 |
| 3s-reuters1000 | 0.0667 | 0.3444 | 0.1111 | 0.1333 | 0.1006 | 0.1389 | 0.9000 | 2.5000 | 0.7800 | 0.3844 | 0.8358 | 0.7610 |
| amphibians | 0.0556 | 0.2619 | 0.5660 | 0.7544 | 0.5906 | 0.7360 | 0.2222 | 2.5000 | 0.1000 | 0.8570 | 0.7304 | 0.7996 |
| bibtex | 0.1541 | 0.0136 | 0.3389 | 0.4455 | 0.2947 | 0.4598 | 0.4297 | 69.2419 | 0.5534 | 0.4432 | 0.9957 | 0.9955 |
| birds | 0.1026 | 0.1161 | 0.3221 | 0.4466 | 0.3458 | 0.4342 | 0.5128 | 7.8462 | 0.4897 | 0.5098 | 0.8410 | 0.9363 |
| bookmarks10% | 0.1800 | 0.0102 | 0.2160 | 0.2413 | 0.1073 | 0.2539 | 0.7369 | 105.7210 | 0.7573 | 0.2570 | 0.9837 | 0.9981 |
| CAL500 | 0.0000 | 0.2106 | 0.3139 | 0.4754 | 0.1422 | 0.4757 | 0.1961 | 151.0784 | 0.5976 | 0.4437 | 0.8254 | 0.9400 |
| corel16k001 | 0.0000 | 0.0456 | 0.1321 | 0.2196 | 0.0334 | 0.2184 | 0.9381 | 119.5798 | 0.9705 | 0.0569 | 1.0000 | 0.9946 |
| Corel5k | 0.0000 | 0.0188 | 0.1291 | 0.2144 | 0.0310 | 0.2191 | 0.7980 | 162.5040 | 0.9149 | 0.1750 | 0.6783 | 0.9991 |
| delicious | 0.0000 | 0.0449 | 0.1398 | 0.2412 | 0.0888 | 0.2455 | 0.5580 | 890.2974 | 0.8479 | 0.1553 | 0.9968 | 1.0000 |
| emotions | 0.2500 | 0.2111 | 0.5819 | 0.7206 | 0.6901 | 0.6984 | 0.3000 | 1.7500 | 0.2365 | 0.7948 | 0.8790 | 0.8905 |
| enron | 0.1404 | 0.0541 | 0.4775 | 0.6176 | 0.2093 | 0.5917 | 0.2690 | 22.3158 | 0.3463 | 0.6206 | 0.8219 | 0.9787 |
| EukaryoteGO | 0.6237 | 0.0237 | 0.7772 | 0.8525 | 0.6938 | 0.8029 | 0.1675 | 0.7139 | 0.0350 | 0.8963 | 0.9911 | 0.9944 |
| EukaryotePseAAC | 0.0875 | 0.0855 | 0.3149 | 0.4285 | 0.1379 | 0.4209 | 0.5714 | 5.2870 | 0.4141 | 0.5473 | 0.9553 | 0.9594 |
| flags | 0.2500 | 0.2357 | 0.6569 | 0.7702 | 0.6190 | 0.7626 | 0.2500 | 3.5500 | 0.2050 | 0.8212 | 0.6850 | 0.7934 |
| foodtruck | 0.2927 | 0.1545 | 0.4661 | 0.6027 | 0.1447 | 0.5000 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8542 | 0.9561 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0299 | 0.2537 | 0.0015 | 0.9838 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9143 | 0.0125 | 0.9500 | 0.9678 | 0.8251 | 0.9527 | 0.0357 | 0.1071 | 0.0215 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7214 | 0.0563 | 0.7881 | 0.8210 | 0.4818 | 0.7934 | 0.1786 | 0.6143 | 0.1399 | 0.8769 | 0.8556 | 0.9844 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1250 | 0.7500 | 0.7595 | 0.5774 | 0.7547 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6174 | 0.0409 | 0.7551 | 0.8231 | 0.7127 | 0.7769 | 0.1640 | 0.7717 | 0.0581 | 0.8929 | 0.9822 | 0.9866 |
| HumanPseAAC | 0.2026 | 0.1102 | 0.3844 | 0.4742 | 0.2052 | 0.4558 | 0.5498 | 2.8424 | 0.3149 | 0.6094 | 0.9212 | 0.9247 |
| Image | 0.3450 | 0.2320 | 0.5496 | 0.6544 | 0.6040 | 0.5915 | 0.3150 | 1.0450 | 0.2879 | 0.7887 | 0.9123 | 0.9077 |
| IMDB-ECC-F10% | 0.0000 | 0.2686 | 0.1406 | 0.2418 | 0.0834 | 0.2421 | 0.6405 | 12.4591 | 0.7439 | 0.3674 | 0.9919 | 0.9759 |
| IMDB-F10% | 0.0000 | 0.2910 | 0.1524 | 0.2635 | 0.0890 | 0.2616 | 0.6164 | 13.1226 | 0.7476 | 0.3644 | 0.9866 | 0.9749 |
| LLOG-F | 0.1639 | 0.0166 | 0.1988 | 0.2178 | 0.0530 | 0.2897 | 0.7459 | 28.5492 | 0.7795 | 0.2787 | 0.5968 | 0.9966 |
| mediamill10% | 0.0831 | 0.0303 | 0.4688 | 0.6321 | 0.0871 | 0.5845 | 0.2518 | 59.3159 | 0.4543 | 0.5335 | 0.8133 | 0.9940 |
| medical | 0.6531 | 0.0109 | 0.7585 | 0.8117 | 0.2834 | 0.8125 | 0.1633 | 4.9184 | 0.1276 | 0.8461 | 0.5531 | 0.9977 |
| Music | 0.2667 | 0.1750 | 0.5944 | 0.7398 | 0.7257 | 0.7319 | 0.3167 | 2.0167 | 0.2618 | 0.7848 | 0.9149 | 0.8985 |
| NUS-WIDE-bow10% | 0.1444 | 0.0280 | 0.3226 | 0.4134 | 0.0546 | 0.3993 | 0.5277 | 35.3365 | 0.6020 | 0.4184 | 0.8843 | 0.9917 |
| NUS-WIDE-cVLADplus10% | 0.0081 | 0.0388 | 0.2743 | 0.4188 | 0.0728 | 0.4004 | 0.5162 | 32.1884 | 0.5338 | 0.4609 | 0.8774 | 0.9874 |
| OHSUMED-F | 0.1407 | 0.0714 | 0.3805 | 0.5107 | 0.3815 | 0.5228 | 0.3597 | 6.6310 | 0.3338 | 0.6373 | 0.9508 | 0.9532 |
| PlantGO | 0.6875 | 0.0417 | 0.7604 | 0.7949 | 0.6646 | 0.7798 | 0.2292 | 1.0521 | 0.0992 | 0.8484 | 0.9909 | 0.9859 |
| PlantPseAAC | 0.2755 | 0.1148 | 0.3656 | 0.4193 | 0.2185 | 0.4105 | 0.5918 | 3.0918 | 0.4995 | 0.5506 | 0.9451 | 0.9381 |
| rcv1subset1 | 0.0400 | 0.0345 | 0.3452 | 0.4995 | 0.3140 | 0.4801 | 0.3983 | 29.7550 | 0.3011 | 0.5528 | 0.9197 | 0.9813 |
| REUTERS-K500-EX2 | 0.2440 | 0.0155 | 0.3770 | 0.4540 | 0.2440 | 0.4584 | 0.4931 | 28.2113 | 0.4748 | 0.5178 | 0.7806 | 0.9939 |
| scene | 0.5270 | 0.1072 | 0.6978 | 0.7811 | 0.7541 | 0.7359 | 0.2033 | 0.6390 | 0.1204 | 0.8651 | 0.9595 | 0.9651 |
| sider_CDK_ECFP4 | 0.0282 | 0.2423 | 0.6530 | 0.7994 | 0.6366 | 0.7972 | 0.1549 | 19.0493 | 0.1579 | 0.7961 | 0.5868 | 0.7775 |
| sider_MordredDesc | 0.0141 | 0.2624 | 0.6270 | 0.7804 | 0.6107 | 0.7830 | 0.3099 | 19.7113 | 0.2001 | 0.7426 | 0.5633 | 0.7474 |
| sider_RDKit_desc | 0.0141 | 0.2663 | 0.6364 | 0.7873 | 0.5966 | 0.7838 | 0.2817 | 19.8592 | 0.1831 | 0.7672 | 0.5904 | 0.7666 |
| SLASHDOT-F | 0.3915 | 0.0456 | 0.5251 | 0.5996 | 0.4184 | 0.5955 | 0.3862 | 4.4286 | 0.2827 | 0.6817 | 0.7453 | 0.9722 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.6667 | 0.8200 |
| Stackex_chemistry | 0.0101 | 0.0218 | 0.1279 | 0.2026 | 0.0566 | 0.2002 | 0.8026 | 106.0331 | 0.8718 | 0.1533 | 0.9166 | 0.9966 |
| Stackex_chess | 0.0357 | 0.0109 | 0.1529 | 0.2218 | 0.0716 | 0.2808 | 0.6964 | 135.3988 | 0.8045 | 0.1980 | 0.5486 | 0.9977 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0609 | 0.0996 | 0.0237 | 0.1408 | 0.8696 | 75.5217 | 0.8462 | 0.1242 | 0.2566 | 0.9903 |
| Stackex_cooking | 0.0654 | 0.0052 | 0.2037 | 0.2759 | 0.1117 | 0.3236 | 0.6361 | 221.7583 | 0.7850 | 0.2357 | 0.9298 | 0.9911 |
| Stackex_philosophy | 0.0427 | 0.0138 | 0.1691 | 0.2587 | 0.0519 | 0.2364 | 0.7186 | 134.4271 | 0.7917 | 0.2031 | 0.7482 | 0.9970 |
| tmc2007-500 | 0.2416 | 0.0710 | 0.5579 | 0.7063 | 0.5738 | 0.6679 | 0.2570 | 3.9951 | 0.1307 | 0.7757 | 0.9497 | 0.9629 |
| tox21_CDK_ECFP4 | 0.1096 | 0.1952 | 0.3485 | 0.4778 | 0.3928 | 0.4614 | 0.4829 | 4.8801 | 0.3775 | 0.5948 | 0.8695 | 0.8612 |
| tox21_RDKit_desc | 0.0308 | 0.2500 | 0.2855 | 0.4425 | 0.2734 | 0.4089 | 0.5034 | 5.2911 | 0.4301 | 0.5715 | 0.8692 | 0.8628 |
| VirusGO | 0.7619 | 0.0635 | 0.8492 | 0.8768 | 0.6767 | 0.8462 | 0.0952 | 0.4762 | 0.0726 | 0.9246 | 0.8111 | 0.9786 |
| VirusPseAAC | 0.2857 | 0.1746 | 0.5556 | 0.6723 | 0.3889 | 0.6333 | 0.2857 | 0.9048 | 0.2048 | 0.7968 | 0.7350 | 0.9278 |
| Water-quality | 0.0000 | 0.3524 | 0.4293 | 0.6088 | 0.4988 | 0.5974 | 0.2736 | 9.2264 | 0.3616 | 0.6947 | 0.7710 | 0.7678 |
| Yahoo_Arts | 0.1108 | 0.0992 | 0.2391 | 0.3274 | 0.1343 | 0.2877 | 0.5968 | 11.1495 | 0.6260 | 0.4391 | 0.9208 | 0.9558 |
| Yahoo_Business | 0.4884 | 0.0349 | 0.6786 | 0.7941 | 0.2063 | 0.6650 | 0.1283 | 3.2522 | 0.2346 | 0.8660 | 0.8459 | 0.9902 |
| Yahoo_Computers | 0.3373 | 0.0529 | 0.4508 | 0.5338 | 0.1805 | 0.4513 | 0.4120 | 6.9735 | 0.4529 | 0.5827 | 0.8813 | 0.9756 |
| Yahoo_Education | 0.0000 | 0.1092 | 0.1860 | 0.2937 | 0.1301 | 0.2820 | 0.7140 | 10.2968 | 0.7775 | 0.4079 | 0.8828 | 0.9759 |
| Yahoo_Entertainment | 0.0424 | 0.1097 | 0.2850 | 0.3919 | 0.1954 | 0.3715 | 0.5452 | 4.7306 | 0.5023 | 0.5583 | 0.9671 | 0.9594 |
| Yahoo_Health | 0.2823 | 0.0571 | 0.4374 | 0.5386 | 0.1770 | 0.4644 | 0.4419 | 7.6265 | 0.4183 | 0.6058 | 0.8158 | 0.9743 |
| Yahoo_Recreation | 0.0055 | 0.1389 | 0.2086 | 0.3116 | 0.2189 | 0.2918 | 0.6126 | 7.3040 | 0.6934 | 0.4838 | 0.9570 | 0.9574 |
| Yahoo_Reference | 0.4134 | 0.0392 | 0.4829 | 0.5310 | 0.1168 | 0.4768 | 0.4446 | 5.9539 | 0.4342 | 0.6096 | 0.8015 | 0.9831 |
| Yahoo_Science | 0.1586 | 0.0707 | 0.2292 | 0.2881 | 0.0902 | 0.2210 | 0.7792 | 15.5365 | 0.7860 | 0.3090 | 0.9451 | 0.9717 |
| Yahoo_Social | 0.4068 | 0.0362 | 0.4988 | 0.5615 | 0.1196 | 0.4832 | 0.4274 | 8.0198 | 0.4149 | 0.6107 | 0.9088 | 0.9854 |
| Yahoo_Society | 0.0207 | 0.0953 | 0.2869 | 0.4247 | 0.1273 | 0.3758 | 0.4752 | 8.8953 | 0.5355 | 0.5261 | 0.9319 | 0.9678 |
| yeast | 0.1240 | 0.2252 | 0.5467 | 0.6914 | 0.4466 | 0.6727 | 0.2521 | 6.2603 | 0.2176 | 0.7519 | 0.8111 | 0.8699 |
| Yelp | 0.2642 | 0.2467 | 0.5842 | 0.7284 | 0.6455 | 0.7001 | 0.2582 | 1.4995 | 0.2278 | 0.8250 | 0.8305 | 0.8564 |

Table 145: Detailed results for Massive for F1-macro metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.1900 | 0.0756 | 0.3613 | 0.4398 | 0.4739 | 0.4316 | 0.4930 | 2.4520 | 0.1257 | 0.6365 | 0.8546 | 0.8109 |
| 3s-bbc1000 | 0.0000 | 0.4444 | 0.2032 | 0.3041 | 0.3242 | 0.3043 | 0.7500 | 2.4444 | 0.4208 | 0.4650 | 0.6000 | 0.5942 |
| 3s-guardian1000 | 0.0000 | 0.5914 | 0.1194 | 0.1788 | 0.1766 | 0.1791 | 0.5484 | 1.9032 | 0.3218 | 0.6126 | 0.5395 | 0.6485 |
| 3s-inter3000 | 0.0000 | 0.8235 | 0.1765 | 0.3000 | 0.2829 | 0.3000 | 0.8824 | 2.4118 | 0.4691 | 0.3882 | 0.2699 | 0.5159 |
| 3s-reuters1000 | 0.0000 | 0.6444 | 0.1472 | 0.2357 | 0.2123 | 0.2368 | 0.8667 | 2.7000 | 0.5350 | 0.3828 | 0.5810 | 0.4808 |
| amphibians | 0.1111 | 0.5238 | 0.4458 | 0.6167 | 0.5706 | 0.6207 | 0.2222 | 2.5556 | 0.0833 | 0.8574 | 0.6865 | 0.7803 |
| bibtex | 0.0382 | 0.0260 | 0.2317 | 0.3667 | 0.2873 | 0.3332 | 0.6649 | 40.4195 | 0.1367 | 0.3715 | 0.6909 | 0.6935 |
| birds | 0.0513 | 0.1390 | 0.3457 | 0.4913 | 0.3607 | 0.4432 | 0.5128 | 5.6667 | 0.2026 | 0.5361 | 0.7215 | 0.8041 |
| bookmarks10% | 0.0046 | 0.0305 | 0.0977 | 0.1707 | 0.1384 | 0.1595 | 0.8401 | 62.2614 | 0.2070 | 0.2227 | 0.5648 | 0.5718 |
| CAL500 | 0.0000 | 0.6072 | 0.1796 | 0.3042 | 0.2291 | 0.3042 | 0.8235 | 162.9804 | 0.3794 | 0.2471 | 0.5831 | 0.6444 |
| corel16k001 | 0.0000 | 0.1309 | 0.0516 | 0.0960 | 0.0626 | 0.0970 | 0.9198 | 105.8410 | 0.3859 | 0.0988 | 0.6485 | 0.6010 |
| Corel5k | 0.0000 | 0.1376 | 0.0301 | 0.0562 | 0.0589 | 0.0572 | 0.9209 | 131.5360 | 0.1562 | 0.1260 | 0.4727 | 0.8355 |
| delicious | 0.0000 | 0.1378 | 0.0664 | 0.1274 | 0.1108 | 0.1270 | 0.9463 | 912.9068 | 0.3015 | 0.0610 | 0.7031 | 0.6949 |
| emotions | 0.2167 | 0.2083 | 0.5500 | 0.6846 | 0.6688 | 0.6862 | 0.2500 | 1.5500 | 0.1237 | 0.8234 | 0.8472 | 0.8798 |
| enron | 0.0000 | 0.1195 | 0.2733 | 0.4292 | 0.2260 | 0.4273 | 0.4152 | 12.6023 | 0.0834 | 0.6403 | 0.6459 | 0.9052 |
| EukaryoteGO | 0.4162 | 0.0419 | 0.6439 | 0.7567 | 0.6219 | 0.6917 | 0.2809 | 1.3286 | 0.0530 | 0.8194 | 0.8198 | 0.8025 |
| EukaryotePseAAC | 0.0000 | 0.2378 | 0.1104 | 0.1845 | 0.1625 | 0.1889 | 0.5580 | 5.5375 | 0.4389 | 0.5397 | 0.9652 | 0.9695 |
| flags | 0.0000 | 0.3643 | 0.5329 | 0.6722 | 0.5858 | 0.6752 | 0.1500 | 3.6500 | 0.1983 | 0.8269 | 0.5966 | 0.7800 |
| foodtruck | 0.0000 | 0.7033 | 0.1959 | 0.3301 | 0.2959 | 0.3295 | 0.2439 | 3.0976 | 0.1542 | 0.7564 | 0.5543 | 0.7814 |
| genbase | 0.0000 | 0.0783 | 0.3625 | 0.5219 | 0.6218 | 0.5297 | 0.0000 | 0.5879 | 0.0075 | 0.9900 | 0.6242 | 0.9921 |
| GnegativeGO | 0.9286 | 0.0134 | 0.9429 | 0.9500 | 0.8141 | 0.9481 | 0.0357 | 0.0929 | 0.0057 | 0.9810 | 0.8521 | 0.9934 |
| GnegativePseAAC | 0.7143 | 0.0536 | 0.7643 | 0.7891 | 0.4715 | 0.7917 | 0.1786 | 0.5143 | 0.0648 | 0.8819 | 0.7387 | 0.9470 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9961 | 0.9827 |
| GpositivePseAAC | 0.6923 | 0.1154 | 0.7596 | 0.7918 | 0.6907 | 0.7818 | 0.2885 | 0.4808 | 0.1603 | 0.8269 | 0.9045 | 0.8964 |
| HumanGO | 0.6367 | 0.0395 | 0.7546 | 0.8128 | 0.6817 | 0.7772 | 0.1704 | 0.5145 | 0.0230 | 0.8999 | 0.9745 | 0.9806 |
| HumanPseAAC | 0.0000 | 0.3031 | 0.1195 | 0.1948 | 0.1909 | 0.1945 | 0.5268 | 3.4734 | 0.4789 | 0.5836 | 0.9465 | 0.9595 |
| Image | 0.4600 | 0.1810 | 0.6000 | 0.6698 | 0.6379 | 0.6314 | 0.3050 | 0.8500 | 0.1592 | 0.8074 | 0.8482 | 0.8391 |
| IMDB-ECC-F10% | 0.0000 | 0.2486 | 0.1169 | 0.2044 | 0.0947 | 0.1966 | 0.6459 | 14.0847 | 0.3632 | 0.3530 | 0.5508 | 0.6074 |
| IMDB-F10% | 0.0000 | 0.3789 | 0.1092 | 0.1907 | 0.1249 | 0.1937 | 0.7185 | 12.2138 | 0.2966 | 0.3816 | 0.5371 | 0.6330 |
| LLOG-F | 0.0000 | 0.1120 | 0.0537 | 0.0968 | 0.1061 | 0.1001 | 0.7049 | 13.5656 | 0.1454 | 0.3782 | 0.4448 | 0.8500 |
| mediamill10% | 0.0000 | 0.2668 | 0.1182 | 0.2128 | 0.2780 | 0.2119 | 0.1710 | 19.1401 | 0.0563 | 0.6269 | 0.7301 | 0.9359 |
| medical | 0.0000 | 0.0651 | 0.2828 | 0.4324 | 0.3419 | 0.4317 | 0.1837 | 1.5612 | 0.0190 | 0.8757 | 0.5460 | 0.9769 |
| Music | 0.1500 | 0.2306 | 0.5542 | 0.6919 | 0.7050 | 0.6960 | 0.2500 | 1.9667 | 0.1660 | 0.7962 | 0.8566 | 0.8620 |
| NUS-WIDE-bow10% | 0.0000 | 0.1013 | 0.0863 | 0.1574 | 0.0441 | 0.1583 | 0.5411 | 34.4097 | 0.5869 | 0.4300 | 0.8700 | 1.0000 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.1747 | 0.0649 | 0.1208 | 0.0713 | 0.1226 | 0.9318 | 26.0576 | 0.2075 | 0.1870 | 0.5362 | 0.7204 |
| OHSUMED-F | 0.2007 | 0.0640 | 0.4412 | 0.5606 | 0.4378 | 0.5622 | 0.3428 | 6.5714 | 0.3299 | 0.6532 | 0.9757 | 0.9547 |
| PlantGO | 0.6875 | 0.0399 | 0.7760 | 0.8209 | 0.7543 | 0.7946 | 0.1979 | 0.4062 | 0.0254 | 0.8895 | 0.9730 | 0.9789 |
| PlantPseAAC | 0.2245 | 0.1156 | 0.3333 | 0.3930 | 0.2734 | 0.3982 | 0.6122 | 2.3469 | 0.1943 | 0.5719 | 0.7841 | 0.8301 |
| rcv1subset1 | 0.1001 | 0.0314 | 0.3419 | 0.4485 | 0.2550 | 0.4624 | 0.4214 | 40.9956 | 0.4378 | 0.4910 | 0.9165 | 0.9923 |
| REUTERS-K500-EX2 | 0.0000 | 0.0302 | 0.2383 | 0.3593 | 0.2913 | 0.3560 | 0.5504 | 6.6644 | 0.0460 | 0.5768 | 0.7057 | 0.9585 |
| scene | 0.6556 | 0.0816 | 0.7441 | 0.7883 | 0.7930 | 0.7757 | 0.2116 | 0.4025 | 0.0606 | 0.8791 | 0.9436 | 0.9527 |
| sider_CDK_ECFP4 | 0.0070 | 0.3709 | 0.5753 | 0.7340 | 0.6545 | 0.7337 | 0.1268 | 19.4718 | 0.1451 | 0.8171 | 0.5622 | 0.7848 |
| sider_MordredDesc | 0.0000 | 0.4002 | 0.5429 | 0.7194 | 0.6418 | 0.7173 | 0.3427 | 19.8468 | 0.2060 | 0.7570 | 0.5888 | 0.7444 |
| sider_RDKit_desc | 0.0000 | 0.4713 | 0.5278 | 0.6912 | 0.6440 | 0.6911 | 0.1127 | 19.1408 | 0.1392 | 0.8220 | 0.5601 | 0.7854 |
| SLASHDOT-F | 0.3730 | 0.0469 | 0.5357 | 0.6172 | 0.4288 | 0.5988 | 0.3836 | 2.1693 | 0.0815 | 0.7140 | 0.6809 | 0.9184 |
| solar_flare-L3 | 0.0000 | 0.5333 | 0.4000 | 0.5714 | 0.5167 | 0.5556 | 0.4000 | 0.8000 | 0.4000 | 0.7333 | 0.5000 | 0.6600 |
| Stackex_chemistry | 0.0000 | 0.0477 | 0.0844 | 0.1488 | 0.1108 | 0.1499 | 0.8985 | 51.8285 | 0.1846 | 0.1850 | 0.5355 | 0.6624 |
| Stackex_chess | 0.0000 | 0.1030 | 0.0397 | 0.0757 | 0.0973 | 0.0775 | 0.8393 | 66.1726 | 0.1739 | 0.1860 | 0.4156 | 0.8269 |
| Stackex_coffee | 0.0000 | 0.1181 | 0.0610 | 0.1133 | 0.0473 | 0.1117 | 0.8696 | 56.9130 | 0.2690 | 0.2465 | 0.2071 | 0.6915 |
| Stackex_cooking | 0.0000 | 0.0476 | 0.0423 | 0.0789 | 0.1258 | 0.0791 | 0.8605 | 161.7145 | 0.2397 | 0.1514 | 0.6235 | 0.6810 |
| Stackex_philosophy | 0.0000 | 0.0518 | 0.0790 | 0.1428 | 0.1151 | 0.1415 | 0.8947 | 57.3109 | 0.1439 | 0.1990 | 0.5776 | 0.8352 |
| tmc2007-500 | 0.2519 | 0.0702 | 0.5734 | 0.7096 | 0.6087 | 0.6785 | 0.2584 | 3.9858 | 0.1427 | 0.7724 | 0.9566 | 0.9709 |
| tox21_CDK_ECFP4 | 0.0582 | 0.2252 | 0.3151 | 0.4592 | 0.4048 | 0.4424 | 0.4829 | 4.1301 | 0.2215 | 0.6090 | 0.6845 | 0.7565 |
| tox21_RDKit_desc | 0.0034 | 0.3270 | 0.2753 | 0.4287 | 0.3832 | 0.4209 | 0.4818 | 4.1458 | 0.2231 | 0.6108 | 0.6785 | 0.7509 |
| VirusGO | 0.7619 | 0.0635 | 0.8333 | 0.8611 | 0.6711 | 0.8400 | 0.0952 | 0.6667 | 0.0874 | 0.9127 | 0.7405 | 0.9196 |
| VirusPseAAC | 0.1905 | 0.1825 | 0.5079 | 0.6373 | 0.3889 | 0.6230 | 0.2857 | 0.6190 | 0.1012 | 0.8270 | 0.6307 | 0.9004 |
| Water-quality | 0.0000 | 0.4394 | 0.4277 | 0.6012 | 0.5671 | 0.6010 | 0.3113 | 9.2075 | 0.2876 | 0.6701 | 0.6680 | 0.6895 |
| Yahoo_Arts | 0.1893 | 0.0677 | 0.2707 | 0.3326 | 0.2129 | 0.3544 | 0.5327 | 10.2463 | 0.6306 | 0.4877 | 0.9348 | 0.9646 |
| Yahoo_Business | 0.0000 | 0.0602 | 0.4133 | 0.5705 | 0.3149 | 0.5373 | 0.0984 | 3.1058 | 0.2049 | 0.8969 | 0.8630 | 1.0000 |
| Yahoo_Computers | 0.3873 | 0.0412 | 0.4857 | 0.5412 | 0.2603 | 0.5222 | 0.3789 | 6.5084 | 0.4169 | 0.6140 | 0.8942 | 0.9760 |
| Yahoo_Education | 0.0000 | 0.1524 | 0.1221 | 0.2096 | 0.1453 | 0.2052 | 0.9517 | 8.8873 | 0.2234 | 0.3106 | 0.5496 | 0.7394 |
| Yahoo_Entertainment | 0.2723 | 0.0631 | 0.3621 | 0.4201 | 0.2797 | 0.4563 | 0.4357 | 4.2100 | 0.4108 | 0.6358 | 0.9794 | 0.9702 |
| Yahoo_Health | 0.0011 | 0.0943 | 0.2592 | 0.3922 | 0.2419 | 0.3767 | 0.4151 | 4.7008 | 0.0841 | 0.6724 | 0.5994 | 0.8922 |
| Yahoo_Recreation | 0.2267 | 0.0671 | 0.2992 | 0.3568 | 0.3016 | 0.3949 | 0.5036 | 6.2567 | 0.5323 | 0.5750 | 0.9564 | 0.9664 |
| Yahoo_Reference | 0.0025 | 0.1080 | 0.1246 | 0.1976 | 0.1278 | 0.2014 | 0.7579 | 9.5728 | 0.2683 | 0.3785 | 0.5973 | 0.7280 |
| Yahoo_Science | 0.1333 | 0.0551 | 0.3082 | 0.4127 | 0.2389 | 0.3783 | 0.6044 | 6.2166 | 0.1127 | 0.5324 | 0.7508 | 0.8736 |
| Yahoo_Social | 0.0413 | 0.0846 | 0.2280 | 0.3473 | 0.1709 | 0.3013 | 0.7087 | 7.8861 | 0.1611 | 0.4505 | 0.5287 | 0.7355 |
| Yahoo_Society | 0.3376 | 0.0619 | 0.4596 | 0.5683 | 0.2235 | 0.4776 | 0.3761 | 8.3871 | 0.4619 | 0.6069 | 0.9424 | 0.9983 |
| yeast | 0.0000 | 0.4049 | 0.3883 | 0.5461 | 0.4822 | 0.5480 | 0.2120 | 6.2330 | 0.2280 | 0.7829 | 0.8134 | 0.8744 |
| Yelp | 0.2682 | 0.2345 | 0.5917 | 0.7316 | 0.6671 | 0.7106 | 0.2064 | 1.3330 | 0.1262 | 0.8613 | 0.8009 | 0.8542 |

Table 146: Detailed results for Massive (1K) for F1-macro metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.1411 | 0.0890 | 0.2753 | 0.3610 | 0.4322 | 0.3732 | 0.5897 | 4.9901 | 0.2603 | 0.5263 | 0.7080 | 0.6466 |
| 3s-bbc1000 | 0.0000 | 0.4537 | 0.1722 | 0.2540 | 0.2702 | 0.2687 | 0.7500 | 2.5278 | 0.4374 | 0.4599 | 0.6176 | 0.5996 |
| 3s-guardian1000 | 0.0000 | 0.5753 | 0.1194 | 0.1788 | 0.1805 | 0.1832 | 0.5161 | 1.8710 | 0.3073 | 0.6288 | 0.5426 | 0.6524 |
| 3s-inter3000 | 0.0000 | 0.8235 | 0.1765 | 0.3000 | 0.2829 | 0.3000 | 0.9412 | 2.3529 | 0.4603 | 0.3706 | 0.3150 | 0.5284 |
| 3s-reuters1000 | 0.0000 | 0.6722 | 0.1550 | 0.2464 | 0.1911 | 0.2484 | 0.9000 | 2.5333 | 0.5033 | 0.3844 | 0.5614 | 0.5099 |
| amphibians | 0.1111 | 0.5238 | 0.4458 | 0.6167 | 0.5706 | 0.6207 | 0.2222 | 2.5000 | 0.0778 | 0.8593 | 0.6842 | 0.7842 |
| bibtex | 0.0000 | 0.1138 | 0.0598 | 0.1129 | 0.2000 | 0.1147 | 0.7446 | 57.1000 | 0.2143 | 0.2752 | 0.7900 | 0.7321 |
| birds | 0.0769 | 0.1228 | 0.3521 | 0.5130 | 0.3311 | 0.4417 | 0.4872 | 5.8205 | 0.2155 | 0.5444 | 0.7276 | 0.7956 |
| bookmarks10% | 0.0047 | 0.0305 | 0.0971 | 0.1708 | 0.1378 | 0.1578 | 0.8380 | 61.5261 | 0.2069 | 0.2226 | 0.5674 | 0.5789 |
| CAL500 | 0.0000 | 0.6729 | 0.1704 | 0.2908 | 0.2344 | 0.2908 | 0.1765 | 138.0980 | 0.2114 | 0.4180 | 0.5272 | 0.7890 |
| corel16k001 | 0.0000 | 0.1291 | 0.0514 | 0.0953 | 0.0626 | 0.0968 | 0.9219 | 104.7176 | 0.3826 | 0.0979 | 0.6452 | 0.6010 |
| Corel5k | 0.0000 | 0.3494 | 0.0103 | 0.0203 | 0.0255 | 0.0203 | 0.9620 | 220.3980 | 0.2820 | 0.0675 | 0.4162 | 0.7171 |
| delicious | 0.0000 | 0.1378 | 0.0662 | 0.1276 | 0.1106 | 0.1256 | 0.9399 | 901.7118 | 0.2987 | 0.0615 | 0.7117 | 0.6895 |
| emotions | 0.2167 | 0.2083 | 0.5611 | 0.7015 | 0.6723 | 0.6914 | 0.2500 | 1.5667 | 0.1237 | 0.8234 | 0.8450 | 0.8793 |
| enron | 0.0000 | 0.1768 | 0.1622 | 0.2793 | 0.1666 | 0.2758 | 0.4971 | 27.8304 | 0.2362 | 0.5233 | 0.4483 | 0.5923 |
| EukaryoteGO | 0.3686 | 0.0460 | 0.6090 | 0.7326 | 0.4564 | 0.6675 | 0.2938 | 1.3106 | 0.0492 | 0.8115 | 0.8470 | 0.8700 |
| EukaryotePseAAC | 0.0026 | 0.2087 | 0.1609 | 0.2631 | 0.1405 | 0.2495 | 0.6898 | 4.2214 | 0.1791 | 0.5009 | 0.5501 | 0.6848 |
| flags | 0.0000 | 0.3571 | 0.5405 | 0.6818 | 0.6186 | 0.6875 | 0.2000 | 3.6000 | 0.1975 | 0.8227 | 0.6141 | 0.7804 |
| foodtruck | 0.0000 | 0.7033 | 0.1923 | 0.3261 | 0.2987 | 0.3268 | 0.2439 | 3.0488 | 0.1472 | 0.7598 | 0.5503 | 0.7856 |
| genbase | 0.0000 | 0.0746 | 0.3649 | 0.5347 | 0.6184 | 0.5455 | 0.0000 | 0.6119 | 0.0081 | 0.9881 | 0.6291 | 0.9863 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9500 | 0.9607 | 0.8120 | 0.9553 | 0.0357 | 0.0929 | 0.0057 | 0.9810 | 0.8518 | 0.9936 |
| GnegativePseAAC | 0.7071 | 0.0545 | 0.7560 | 0.7802 | 0.4683 | 0.7889 | 0.1786 | 0.5500 | 0.0713 | 0.8789 | 0.7357 | 0.9294 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9231 | 0.9327 | 0.8605 | 0.9245 | 0.0577 | 0.0769 | 0.0192 | 0.9712 | 0.9970 | 0.9956 |
| GpositivePseAAC | 0.6538 | 0.1250 | 0.7115 | 0.7393 | 0.6582 | 0.7547 | 0.2308 | 0.3654 | 0.1218 | 0.8654 | 0.8895 | 0.9068 |
| HumanGO | 0.3955 | 0.0763 | 0.5622 | 0.6533 | 0.5334 | 0.6048 | 0.4116 | 2.2122 | 0.1333 | 0.7398 | 0.6542 | 0.6542 |
| HumanPseAAC | 0.0322 | 0.2223 | 0.1721 | 0.2555 | 0.1606 | 0.2342 | 0.7074 | 4.0900 | 0.2799 | 0.4650 | 0.4879 | 0.6433 |
| Image | 0.4350 | 0.1890 | 0.5708 | 0.6395 | 0.6130 | 0.6087 | 0.3350 | 0.9600 | 0.1858 | 0.7817 | 0.7954 | 0.7879 |
| IMDB-ECC-F10% | 0.0000 | 0.4142 | 0.0805 | 0.1488 | 0.1112 | 0.1549 | 0.8008 | 14.1583 | 0.3973 | 0.2794 | 0.5075 | 0.5313 |
| IMDB-F10% | 0.0008 | 0.1854 | 0.0849 | 0.1458 | 0.0709 | 0.1431 | 0.8542 | 16.2560 | 0.4459 | 0.2671 | 0.5197 | 0.5409 |
| LLOG-F | 0.0000 | 0.1072 | 0.0554 | 0.0995 | 0.0915 | 0.1041 | 0.7213 | 15.1230 | 0.1659 | 0.3664 | 0.4407 | 0.8165 |
| mediamill10% | 0.0000 | 0.2866 | 0.1097 | 0.1987 | 0.2708 | 0.1980 | 0.6366 | 19.2969 | 0.0608 | 0.5655 | 0.7258 | 0.9304 |
| medical | 0.0000 | 0.0637 | 0.2914 | 0.4434 | 0.3622 | 0.4436 | 0.2245 | 1.5714 | 0.0195 | 0.8522 | 0.5448 | 0.9737 |
| Music | 0.2667 | 0.2028 | 0.5681 | 0.6970 | 0.6921 | 0.6971 | 0.2500 | 1.9833 | 0.1637 | 0.7953 | 0.8555 | 0.8647 |
| NUS-WIDE-bow10% | 0.0000 | 0.1007 | 0.0860 | 0.1573 | 0.0435 | 0.1584 | 0.5436 | 33.9597 | 0.5805 | 0.4258 | 0.8571 | 0.9896 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.2707 | 0.0525 | 0.1010 | 0.0482 | 0.0985 | 0.8187 | 31.1242 | 0.2450 | 0.2413 | 0.4529 | 0.6449 |
| OHSUMED-F | 0.0007 | 0.1647 | 0.1572 | 0.2555 | 0.2063 | 0.2533 | 0.5657 | 7.5829 | 0.2339 | 0.5112 | 0.6184 | 0.6521 |
| PlantGO | 0.7292 | 0.0373 | 0.7917 | 0.8243 | 0.7405 | 0.8037 | 0.2083 | 0.4375 | 0.0274 | 0.8840 | 0.9716 | 0.9742 |
| PlantPseAAC | 0.2551 | 0.1054 | 0.3401 | 0.3882 | 0.2723 | 0.4095 | 0.6224 | 2.2857 | 0.1900 | 0.5683 | 0.7895 | 0.8380 |
| rcv1subset1 | 0.0000 | 0.1038 | 0.0802 | 0.1423 | 0.1735 | 0.1451 | 0.6667 | 29.1117 | 0.1298 | 0.3971 | 0.7056 | 0.7846 |
| REUTERS-K500-EX2 | 0.0000 | 0.1279 | 0.0541 | 0.1010 | 0.1795 | 0.1011 | 0.7234 | 19.2526 | 0.1415 | 0.4019 | 0.4985 | 0.6785 |
| scene | 0.5436 | 0.1037 | 0.6556 | 0.7101 | 0.7314 | 0.7180 | 0.2697 | 0.6639 | 0.1099 | 0.8305 | 0.7939 | 0.7920 |
| sider_CDK_ECFP4 | 0.0000 | 0.3425 | 0.5746 | 0.7386 | 0.5877 | 0.7351 | 0.2535 | 20.3028 | 0.1801 | 0.7626 | 0.5027 | 0.7249 |
| sider_MordredDesc | 0.0000 | 0.3925 | 0.5497 | 0.7146 | 0.6288 | 0.7152 | 0.3239 | 21.3732 | 0.2181 | 0.7432 | 0.4700 | 0.6798 |
| sider_RDKit_desc | 0.0000 | 0.3878 | 0.5612 | 0.7234 | 0.6357 | 0.7221 | 0.2113 | 20.6268 | 0.2126 | 0.7370 | 0.4886 | 0.6923 |
| SLASHDOT-F | 0.0635 | 0.1287 | 0.2349 | 0.3369 | 0.2009 | 0.3115 | 0.7937 | 6.4709 | 0.2714 | 0.3989 | 0.5184 | 0.7020 |
| solar_flare-L3 | 0.0000 | 0.6667 | 0.3333 | 0.5000 | 0.4405 | 0.5000 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.5000 | 0.8600 |
| Stackex_chemistry | 0.0000 | 0.2728 | 0.0221 | 0.0431 | 0.0420 | 0.0431 | 0.9625 | 93.9352 | 0.3769 | 0.0739 | 0.5919 | 0.6170 |
| Stackex_chess | 0.0000 | 0.1044 | 0.0366 | 0.0698 | 0.0829 | 0.0722 | 0.7143 | 89.6369 | 0.2203 | 0.2511 | 0.4152 | 0.7713 |
| Stackex_coffee | 0.0000 | 0.1050 | 0.0695 | 0.1273 | 0.0549 | 0.1290 | 0.8696 | 51.8261 | 0.2464 | 0.2240 | 0.2066 | 0.7045 |
| Stackex_cooking | 0.0000 | 0.0472 | 0.0417 | 0.0788 | 0.1256 | 0.0795 | 0.8582 | 159.9176 | 0.2420 | 0.1511 | 0.6246 | 0.6896 |
| Stackex_philosophy | 0.0000 | 0.2208 | 0.0178 | 0.0350 | 0.0408 | 0.0351 | 0.9724 | 93.6357 | 0.2439 | 0.0853 | 0.5301 | 0.7338 |
| tmc2007-500 | 0.1073 | 0.1060 | 0.4533 | 0.6176 | 0.4711 | 0.5830 | 0.4115 | 4.5311 | 0.1064 | 0.6832 | 0.6495 | 0.7087 |
| tox21_CDK_ECFP4 | 0.0068 | 0.2822 | 0.1774 | 0.2856 | 0.1840 | 0.2981 | 0.6952 | 5.9521 | 0.3894 | 0.5137 | 0.4759 | 0.5113 |
| tox21_RDKit_desc | 0.0274 | 0.2392 | 0.1340 | 0.2079 | 0.1714 | 0.2368 | 0.7911 | 5.1884 | 0.3459 | 0.7363 | 0.3524 | 0.3740 |
| VirusGO | 0.7619 | 0.0714 | 0.8175 | 0.8532 | 0.6211 | 0.8163 | 0.0952 | 0.6667 | 0.0874 | 0.9127 | 0.7449 | 0.9224 |
| VirusPseAAC | 0.1905 | 0.1825 | 0.5079 | 0.6373 | 0.3889 | 0.6230 | 0.2857 | 0.6667 | 0.1107 | 0.8230 | 0.6366 | 0.9000 |
| Water-quality | 0.0000 | 0.4481 | 0.4200 | 0.5951 | 0.5698 | 0.5938 | 0.2830 | 9.3396 | 0.2886 | 0.6789 | 0.6598 | 0.6945 |
| Yahoo_Arts | 0.0000 | 0.1962 | 0.0601 | 0.1030 | 0.0892 | 0.1050 | 0.8051 | 12.4820 | 0.3750 | 0.3038 | 0.5542 | 0.5401 |
| Yahoo_Business | 0.1185 | 0.0640 | 0.4374 | 0.6043 | 0.1106 | 0.5286 | 0.2745 | 4.9323 | 0.0947 | 0.7764 | 0.5418 | 0.8720 |
| Yahoo_Computers | 0.0000 | 0.1895 | 0.1130 | 0.2020 | 0.0956 | 0.2033 | 0.6980 | 9.7590 | 0.2348 | 0.4308 | 0.5013 | 0.6322 |
| Yahoo_Education | 0.0000 | 0.2478 | 0.0417 | 0.0758 | 0.0407 | 0.0776 | 0.8246 | 15.8080 | 0.4058 | 0.2678 | 0.5357 | 0.5794 |
| Yahoo_Entertainment | 0.0126 | 0.2014 | 0.1698 | 0.2744 | 0.1463 | 0.2447 | 0.6709 | 5.8358 | 0.2364 | 0.4570 | 0.5610 | 0.7335 |
| Yahoo_Health | 0.0011 | 0.1230 | 0.1917 | 0.3109 | 0.1482 | 0.2979 | 0.5841 | 7.6808 | 0.1608 | 0.5233 | 0.4805 | 0.7562 |
| Yahoo_Recreation | 0.0008 | 0.1740 | 0.0584 | 0.0931 | 0.1323 | 0.1017 | 0.7592 | 7.6797 | 0.3059 | 0.3854 | 0.5327 | 0.5979 |
| Yahoo_Reference | 0.0000 | 0.2654 | 0.0746 | 0.1349 | 0.0678 | 0.1331 | 0.7484 | 9.9714 | 0.2747 | 0.4085 | 0.4694 | 0.6930 |
| Yahoo_Science | 0.0000 | 0.2998 | 0.0587 | 0.1083 | 0.0877 | 0.1085 | 0.8040 | 12.5428 | 0.2568 | 0.3346 | 0.5454 | 0.6097 |
| Yahoo_Social | 0.0000 | 0.4599 | 0.0502 | 0.0950 | 0.0692 | 0.0946 | 0.5437 | 10.5165 | 0.2291 | 0.5286 | 0.4987 | 0.6430 |
| Yahoo_Society | 0.0269 | 0.1138 | 0.0976 | 0.1497 | 0.0503 | 0.1494 | 0.8733 | 11.1033 | 0.3429 | 0.4644 | 0.3655 | 0.4018 |
| yeast | 0.0000 | 0.5384 | 0.3382 | 0.5109 | 0.4220 | 0.4972 | 0.2975 | 7.9793 | 0.2548 | 0.6654 | 0.5789 | 0.7040 |
| Yelp | 0.1625 | 0.3065 | 0.5130 | 0.6681 | 0.6157 | 0.6503 | 0.4227 | 2.8305 | 0.4655 | 0.6469 | 0.7645 | 0.5616 |

Table 147: Detailed results for Massive for F1-micro metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5522 | 0.0267 | 0.6169 | 0.6448 | 0.7078 | 0.7131 | 0.3029 | 2.4554 | 0.2445 | 0.7686 | 0.9969 | 0.9803 |
| 3s-bbc1000 | 0.1389 | 0.2639 | 0.2037 | 0.2479 | 0.2784 | 0.2785 | 0.6944 | 2.9167 | 0.7025 | 0.4620 | 0.8426 | 0.7793 |
| 3s-guardian1000 | 0.1290 | 0.2581 | 0.1973 | 0.2454 | 0.2504 | 0.2941 | 0.4839 | 1.9677 | 0.4532 | 0.6358 | 0.8223 | 0.8288 |
| 3s-inter3000 | 0.0000 | 0.5882 | 0.2176 | 0.3492 | 0.2699 | 0.3478 | 0.9412 | 2.6471 | 0.6838 | 0.3716 | 0.4937 | 0.6667 |
| 3s-reuters1000 | 0.0333 | 0.2833 | 0.0889 | 0.1159 | 0.1502 | 0.1639 | 0.9000 | 2.4333 | 0.7067 | 0.3933 | 0.8135 | 0.7399 |
| amphibians | 0.1111 | 0.2619 | 0.5706 | 0.7639 | 0.5911 | 0.7360 | 0.2778 | 2.3889 | 0.1019 | 0.8639 | 0.7461 | 0.8071 |
| bibtex | 0.1810 | 0.0120 | 0.3650 | 0.4514 | 0.3147 | 0.4889 | 0.4223 | 73.0858 | 0.5677 | 0.4333 | 0.9830 | 0.9905 |
| birds | 0.1795 | 0.1026 | 0.3419 | 0.4300 | 0.3207 | 0.4328 | 0.4872 | 7.6410 | 0.4957 | 0.5222 | 0.8395 | 0.9323 |
| bookmarks10% | 0.1890 | 0.0090 | 0.2208 | 0.2457 | 0.1160 | 0.2663 | 0.7429 | 106.6111 | 0.7560 | 0.2569 | 0.9730 | 1.0000 |
| CAL500 | 0.0000 | 0.2103 | 0.3141 | 0.4762 | 0.1437 | 0.4764 | 0.3137 | 151.0392 | 0.6218 | 0.4329 | 0.8302 | 0.9477 |
| corel16k001 | 0.0000 | 0.0518 | 0.1290 | 0.2128 | 0.0402 | 0.2166 | 0.8832 | 115.7054 | 0.9554 | 0.0882 | 0.9922 | 1.0000 |
| Corel5k | 0.0000 | 0.0140 | 0.1478 | 0.2291 | 0.0282 | 0.2390 | 0.8375 | 161.8487 | 0.9263 | 0.1688 | 0.6804 | 0.9912 |
| delicious | 0.0000 | 0.0371 | 0.1487 | 0.2533 | 0.0875 | 0.2607 | 0.5632 | 906.0234 | 0.8367 | 0.1480 | 0.9845 | 1.0000 |
| emotions | 0.3333 | 0.1917 | 0.5917 | 0.7104 | 0.6920 | 0.7064 | 0.3000 | 1.7500 | 0.2415 | 0.7929 | 0.8782 | 0.8891 |
| enron | 0.1696 | 0.0495 | 0.4819 | 0.6166 | 0.1778 | 0.5980 | 0.2982 | 24.1462 | 0.3788 | 0.6060 | 0.8264 | 0.9816 |
| EukaryoteGO | 0.7049 | 0.0180 | 0.8003 | 0.8473 | 0.7412 | 0.8333 | 0.1649 | 0.8144 | 0.0460 | 0.8960 | 0.9927 | 0.9948 |
| EukaryotePseAAC | 0.3045 | 0.0558 | 0.3862 | 0.4349 | 0.1468 | 0.4508 | 0.5229 | 6.0870 | 0.4931 | 0.5405 | 0.9619 | 0.9858 |
| flags | 0.2500 | 0.2357 | 0.6469 | 0.7596 | 0.6261 | 0.7626 | 0.2000 | 3.6500 | 0.2333 | 0.8120 | 0.7046 | 0.8000 |
| foodtruck | 0.0244 | 0.1829 | 0.3813 | 0.5628 | 0.1598 | 0.5161 | 0.2439 | 4.4146 | 0.4408 | 0.7212 | 0.8517 | 0.9558 |
| genbase | 0.9685 | 0.0011 | 0.9776 | 1.0000 | 0.6584 | 0.9919 | 0.0151 | 0.2408 | 0.0009 | 1.0000 | 0.6645 | 0.9994 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9571 | 0.9714 | 0.8300 | 0.9595 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9981 |
| GnegativePseAAC | 0.7357 | 0.0536 | 0.7810 | 0.8036 | 0.4677 | 0.7945 | 0.1714 | 0.6071 | 0.1454 | 0.8790 | 0.8617 | 0.9892 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9959 | 0.9960 |
| GpositivePseAAC | 0.7115 | 0.1106 | 0.7115 | 0.7115 | 0.5633 | 0.7629 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6592 | 0.0381 | 0.7647 | 0.8178 | 0.6917 | 0.7822 | 0.1736 | 1.1061 | 0.1072 | 0.8728 | 0.9851 | 0.9883 |
| HumanPseAAC | 0.3115 | 0.0931 | 0.3898 | 0.4287 | 0.1876 | 0.4326 | 0.5336 | 3.3280 | 0.4754 | 0.5862 | 0.9658 | 0.9429 |
| Image | 0.4800 | 0.1820 | 0.6233 | 0.6954 | 0.6503 | 0.6403 | 0.3100 | 1.0350 | 0.2867 | 0.7915 | 0.9310 | 0.9268 |
| IMDB-ECC-F10% | 0.0000 | 0.2680 | 0.1396 | 0.2473 | 0.0919 | 0.2454 | 0.6348 | 12.3170 | 0.7351 | 0.3778 | 0.9855 | 0.9654 |
| IMDB-F10% | 0.0000 | 0.2628 | 0.1538 | 0.2669 | 0.0963 | 0.2626 | 0.5839 | 12.5359 | 0.6999 | 0.4000 | 0.9691 | 0.9627 |
| LLOG-F | 0.1721 | 0.0162 | 0.2015 | 0.2192 | 0.0537 | 0.2952 | 0.7377 | 28.6967 | 0.7794 | 0.2806 | 0.5979 | 0.9977 |
| mediamill10% | 0.0784 | 0.0305 | 0.4676 | 0.6325 | 0.0801 | 0.5874 | 0.2447 | 59.6841 | 0.4514 | 0.5438 | 0.8128 | 0.9938 |
| medical | 0.6633 | 0.0100 | 0.7653 | 0.8161 | 0.2890 | 0.8254 | 0.1429 | 4.5204 | 0.1224 | 0.8594 | 0.5516 | 0.9976 |
| Music | 0.2833 | 0.1778 | 0.5778 | 0.7060 | 0.7122 | 0.7217 | 0.2667 | 2.0667 | 0.2705 | 0.7973 | 0.9102 | 0.9037 |
| NUS-WIDE-bow10% | 0.1454 | 0.0280 | 0.3154 | 0.4127 | 0.0457 | 0.4019 | 0.5620 | 35.2191 | 0.6031 | 0.4275 | 0.8830 | 0.9954 |
| NUS-WIDE-cVLADplus10% | 0.1712 | 0.0239 | 0.3105 | 0.3825 | 0.0576 | 0.4127 | 0.5610 | 35.4636 | 0.6587 | 0.4047 | 0.8880 | 0.9826 |
| OHSUMED-F | 0.2288 | 0.0583 | 0.4484 | 0.5490 | 0.4356 | 0.5645 | 0.3531 | 7.5198 | 0.4064 | 0.6157 | 0.9735 | 0.9850 |
| PlantGO | 0.6771 | 0.0382 | 0.7448 | 0.7767 | 0.6656 | 0.7905 | 0.2188 | 0.9896 | 0.1042 | 0.8527 | 0.9907 | 0.9857 |
| PlantPseAAC | 0.2857 | 0.1063 | 0.3469 | 0.3826 | 0.2181 | 0.3961 | 0.5816 | 3.1837 | 0.5092 | 0.5483 | 0.9465 | 0.9403 |
| rcv1subset1 | 0.0903 | 0.0310 | 0.3322 | 0.4587 | 0.2592 | 0.4553 | 0.4240 | 37.1884 | 0.4252 | 0.5100 | 0.9370 | 0.9749 |
| REUTERS-K500-EX2 | 0.3344 | 0.0117 | 0.4108 | 0.4605 | 0.2461 | 0.4997 | 0.5198 | 32.2857 | 0.5370 | 0.4849 | 0.7851 | 1.0000 |
| scene | 0.6515 | 0.0885 | 0.7317 | 0.7725 | 0.7679 | 0.7557 | 0.2116 | 0.8133 | 0.1614 | 0.8454 | 0.9688 | 0.9722 |
| sider_CDK_ECFP4 | 0.0211 | 0.2384 | 0.6513 | 0.7975 | 0.6317 | 0.7998 | 0.2394 | 19.4155 | 0.1801 | 0.7767 | 0.5826 | 0.7666 |
| sider_MordredDesc | 0.0070 | 0.2560 | 0.6350 | 0.7945 | 0.6218 | 0.7889 | 0.2804 | 19.3607 | 0.1760 | 0.7841 | 0.5652 | 0.7698 |
| sider_RDKit_desc | 0.0141 | 0.2752 | 0.6329 | 0.7840 | 0.5999 | 0.7796 | 0.3099 | 20.3169 | 0.2276 | 0.7282 | 0.5875 | 0.7385 |
| SLASHDOT-F | 0.4048 | 0.0405 | 0.5076 | 0.5642 | 0.3897 | 0.5983 | 0.4339 | 6.1799 | 0.4056 | 0.6100 | 0.7601 | 0.9868 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.6667 | 0.8200 |
| Stackex_chemistry | 0.0482 | 0.0121 | 0.1131 | 0.1508 | 0.0693 | 0.1902 | 0.7859 | 104.3936 | 0.8792 | 0.1614 | 0.9092 | 0.9981 |
| Stackex_chess | 0.0357 | 0.0101 | 0.1525 | 0.2151 | 0.0593 | 0.2739 | 0.6905 | 138.4405 | 0.8179 | 0.1938 | 0.5493 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0209 | 0.0413 | 0.0670 | 0.0115 | 0.0923 | 0.9130 | 78.2174 | 0.8961 | 0.0956 | 0.2577 | 0.9926 |
| Stackex_cooking | 0.0609 | 0.0053 | 0.2020 | 0.2793 | 0.1129 | 0.3244 | 0.6270 | 223.7103 | 0.7604 | 0.2348 | 0.9187 | 0.9919 |
| Stackex_philosophy | 0.0606 | 0.0094 | 0.1721 | 0.2387 | 0.0634 | 0.2806 | 0.7092 | 135.4395 | 0.7790 | 0.2134 | 0.7486 | 1.0000 |
| tmc2007-500 | 0.2535 | 0.0691 | 0.5797 | 0.7274 | 0.6063 | 0.6879 | 0.2707 | 4.0759 | 0.1409 | 0.7652 | 0.9491 | 0.9611 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1815 | 0.3498 | 0.4614 | 0.3926 | 0.4610 | 0.4760 | 5.4315 | 0.4983 | 0.5622 | 0.8988 | 0.9007 |
| tox21_RDKit_desc | 0.0510 | 0.2098 | 0.3249 | 0.4612 | 0.3340 | 0.4688 | 0.4963 | 5.5062 | 0.4974 | 0.5587 | 0.9100 | 0.9020 |
| VirusGO | 0.7619 | 0.0635 | 0.8333 | 0.8611 | 0.6711 | 0.8400 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.8003 | 0.9695 |
| VirusPseAAC | 0.2381 | 0.1667 | 0.5238 | 0.6454 | 0.3750 | 0.6316 | 0.2857 | 0.7619 | 0.1667 | 0.8111 | 0.7124 | 0.9139 |
| Water-quality | 0.0000 | 0.4057 | 0.4174 | 0.5925 | 0.5282 | 0.5916 | 0.2736 | 9.1698 | 0.3593 | 0.6932 | 0.7715 | 0.7644 |
| Yahoo_Arts | 0.1976 | 0.0680 | 0.2917 | 0.3595 | 0.2128 | 0.3661 | 0.5098 | 10.2032 | 0.5960 | 0.5020 | 0.9233 | 0.9667 |
| Yahoo_Business | 0.5656 | 0.0267 | 0.7356 | 0.8316 | 0.3247 | 0.7392 | 0.0892 | 3.2285 | 0.2261 | 0.8828 | 0.8577 | 1.0000 |
| Yahoo_Computers | 0.3968 | 0.0408 | 0.4888 | 0.5509 | 0.2579 | 0.5164 | 0.3778 | 6.4665 | 0.4148 | 0.6100 | 0.8972 | 0.9948 |
| Yahoo_Education | 0.1660 | 0.0495 | 0.2484 | 0.3051 | 0.1708 | 0.3464 | 0.5804 | 9.1427 | 0.6221 | 0.4966 | 0.8924 | 0.9824 |
| Yahoo_Entertainment | 0.3320 | 0.0628 | 0.4359 | 0.4942 | 0.2932 | 0.4956 | 0.4284 | 4.1814 | 0.4045 | 0.6310 | 0.9656 | 0.9603 |
| Yahoo_Health | 0.4039 | 0.0397 | 0.5339 | 0.6217 | 0.2434 | 0.5761 | 0.3080 | 6.5727 | 0.3512 | 0.7003 | 0.8204 | 0.9797 |
| Yahoo_Recreation | 0.3019 | 0.0698 | 0.3553 | 0.4377 | 0.3543 | 0.4420 | 0.4876 | 6.1273 | 0.5376 | 0.5963 | 0.9619 | 0.9716 |
| Yahoo_Reference | 0.4351 | 0.0300 | 0.4725 | 0.5132 | 0.1671 | 0.5185 | 0.3864 | 5.3830 | 0.4227 | 0.6490 | 0.8194 | 1.0000 |
| Yahoo_Science | 0.2043 | 0.0401 | 0.2597 | 0.2982 | 0.1692 | 0.3241 | 0.6301 | 13.8421 | 0.6749 | 0.4160 | 0.9621 | 0.9957 |
| Yahoo_Social | 0.4622 | 0.0249 | 0.5185 | 0.5456 | 0.1719 | 0.5538 | 0.3669 | 7.5007 | 0.3884 | 0.6504 | 0.9228 | 0.9750 |
| Yahoo_Society | 0.3205 | 0.0763 | 0.4418 | 0.5680 | 0.2058 | 0.4591 | 0.3848 | 8.2788 | 0.4733 | 0.6040 | 0.9196 | 0.9691 |
| yeast | 0.1953 | 0.2108 | 0.5478 | 0.6872 | 0.4511 | 0.6825 | 0.2558 | 6.1200 | 0.2270 | 0.7734 | 0.8168 | 0.8954 |
| Yelp | 0.3898 | 0.1984 | 0.6405 | 0.7506 | 0.6832 | 0.7306 | 0.2094 | 1.3848 | 0.2175 | 0.8568 | 0.8612 | 0.8885 |

Table 148: Detailed results for Massive (1K) for F1-micro metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3838 | 0.0400 | 0.4835 | 0.5409 | 0.6068 | 0.6092 | 0.3205 | 2.5119 | 0.2397 | 0.7503 | 0.9726 | 0.9738 |
| 3s-bbc1000 | 0.1389 | 0.2778 | 0.2231 | 0.2799 | 0.2884 | 0.3023 | 0.7500 | 2.9444 | 0.6630 | 0.4340 | 0.7947 | 0.7394 |
| 3s-guardian1000 | 0.0968 | 0.2849 | 0.2124 | 0.2807 | 0.2460 | 0.3117 | 0.5161 | 1.9677 | 0.4339 | 0.6212 | 0.7991 | 0.8092 |
| 3s-inter3000 | 0.0000 | 0.5686 | 0.2235 | 0.3567 | 0.2805 | 0.3556 | 0.8824 | 2.2353 | 0.5897 | 0.4275 | 0.4917 | 0.6878 |
| 3s-reuters1000 | 0.0333 | 0.2722 | 0.0750 | 0.0960 | 0.1286 | 0.1404 | 0.9000 | 2.6000 | 0.7867 | 0.3811 | 0.8125 | 0.7409 |
| amphibians | 0.1111 | 0.2381 | 0.5910 | 0.7783 | 0.5849 | 0.7500 | 0.2222 | 2.3889 | 0.0852 | 0.8824 | 0.7361 | 0.8045 |
| bibtex | 0.1608 | 0.0128 | 0.3341 | 0.4302 | 0.2796 | 0.4542 | 0.4189 | 69.5865 | 0.5540 | 0.4384 | 0.9957 | 0.9954 |
| birds | 0.1795 | 0.0972 | 0.3487 | 0.4366 | 0.3216 | 0.4462 | 0.5128 | 7.9487 | 0.5198 | 0.5007 | 0.8393 | 0.9350 |
| bookmarks10% | 0.1908 | 0.0089 | 0.2198 | 0.2433 | 0.1161 | 0.2642 | 0.7372 | 108.0792 | 0.7632 | 0.2547 | 0.9873 | 0.9993 |
| CAL500 | 0.0000 | 0.2137 | 0.3163 | 0.4780 | 0.1429 | 0.4783 | 0.3725 | 151.0588 | 0.6931 | 0.4066 | 0.8451 | 0.9597 |
| corel16k001 | 0.0000 | 0.0525 | 0.1286 | 0.2157 | 0.0408 | 0.2140 | 0.8792 | 115.0821 | 0.9677 | 0.0874 | 0.9978 | 0.9919 |
| Corel5k | 0.0000 | 0.0125 | 0.1440 | 0.2288 | 0.0262 | 0.2385 | 0.7800 | 162.8640 | 0.9127 | 0.1797 | 0.6783 | 0.9991 |
| delicious | 0.0000 | 0.0369 | 0.1482 | 0.2495 | 0.0868 | 0.2575 | 0.5658 | 904.7171 | 0.8476 | 0.1470 | 0.9918 | 0.9958 |
| emotions | 0.3000 | 0.1889 | 0.5806 | 0.7115 | 0.6891 | 0.7069 | 0.2667 | 1.7000 | 0.2173 | 0.8062 | 0.8807 | 0.8887 |
| enron | 0.1345 | 0.0516 | 0.4679 | 0.6147 | 0.2164 | 0.5880 | 0.2749 | 22.8363 | 0.3442 | 0.6156 | 0.8220 | 0.9786 |
| EukaryoteGO | 0.6907 | 0.0189 | 0.8013 | 0.8552 | 0.7020 | 0.8312 | 0.1546 | 0.5825 | 0.0261 | 0.9061 | 0.9913 | 0.9945 |
| EukaryotePseAAC | 0.1763 | 0.0678 | 0.3217 | 0.4022 | 0.1333 | 0.4237 | 0.5714 | 5.4775 | 0.4429 | 0.5342 | 0.9569 | 0.9620 |
| flags | 0.2500 | 0.2286 | 0.6467 | 0.7608 | 0.6843 | 0.7647 | 0.2000 | 3.6000 | 0.2217 | 0.8083 | 0.6798 | 0.8086 |
| foodtruck | 0.0244 | 0.1829 | 0.3813 | 0.5628 | 0.1598 | 0.5161 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8552 | 0.9573 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2388 | 0.0006 | 0.9950 | 0.6459 | 0.9995 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9571 | 0.9714 | 0.8298 | 0.9592 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9979 |
| GnegativePseAAC | 0.7429 | 0.0509 | 0.7738 | 0.7893 | 0.4763 | 0.7986 | 0.1714 | 0.5714 | 0.1158 | 0.8848 | 0.8572 | 0.9860 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.6923 | 0.1202 | 0.6923 | 0.6923 | 0.5495 | 0.7423 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6688 | 0.0365 | 0.7666 | 0.8156 | 0.7165 | 0.7825 | 0.1640 | 0.6945 | 0.0481 | 0.8958 | 0.9820 | 0.9867 |
| HumanPseAAC | 0.2251 | 0.1036 | 0.3588 | 0.4262 | 0.1970 | 0.4255 | 0.5466 | 3.0450 | 0.3581 | 0.5961 | 0.9215 | 0.9253 |
| Image | 0.4600 | 0.1870 | 0.6092 | 0.6826 | 0.6365 | 0.6297 | 0.2950 | 1.0150 | 0.2758 | 0.7964 | 0.9173 | 0.9105 |
| IMDB-ECC-F10% | 0.0000 | 0.2686 | 0.1408 | 0.2424 | 0.0824 | 0.2426 | 0.6405 | 12.4004 | 0.7374 | 0.3699 | 0.9864 | 0.9734 |
| IMDB-F10% | 0.0000 | 0.2907 | 0.1524 | 0.2634 | 0.1021 | 0.2616 | 0.6147 | 13.2444 | 0.7566 | 0.3606 | 0.9911 | 0.9770 |
| LLOG-F | 0.1475 | 0.0166 | 0.1892 | 0.2132 | 0.0530 | 0.2830 | 0.7131 | 27.6639 | 0.7549 | 0.2995 | 0.5972 | 0.9969 |
| mediamill10% | 0.0784 | 0.0301 | 0.4751 | 0.6394 | 0.0950 | 0.5924 | 0.2447 | 59.4276 | 0.4468 | 0.5453 | 0.8137 | 0.9939 |
| medical | 0.6429 | 0.0109 | 0.7526 | 0.8092 | 0.2872 | 0.8110 | 0.1837 | 5.0306 | 0.1332 | 0.8317 | 0.5529 | 0.9976 |
| Music | 0.2833 | 0.1750 | 0.5861 | 0.7181 | 0.7108 | 0.7249 | 0.2667 | 1.9833 | 0.2468 | 0.8070 | 0.9110 | 0.9032 |
| NUS-WIDE-bow10% | 0.1439 | 0.0278 | 0.3142 | 0.4078 | 0.0456 | 0.3985 | 0.5654 | 35.1934 | 0.5941 | 0.4218 | 0.8832 | 1.0000 |
| NUS-WIDE-cVLADplus10% | 0.1246 | 0.0295 | 0.3269 | 0.4384 | 0.0627 | 0.4261 | 0.5133 | 32.0728 | 0.5280 | 0.4658 | 0.8774 | 0.9877 |
| OHSUMED-F | 0.1644 | 0.0676 | 0.3824 | 0.5022 | 0.3801 | 0.5218 | 0.3690 | 6.5477 | 0.3303 | 0.6366 | 0.9485 | 0.9514 |
| PlantGO | 0.6875 | 0.0373 | 0.7552 | 0.7872 | 0.6761 | 0.7962 | 0.2292 | 0.9583 | 0.0966 | 0.8510 | 0.9901 | 0.9855 |
| PlantPseAAC | 0.2551 | 0.1088 | 0.3384 | 0.3864 | 0.2210 | 0.4019 | 0.5918 | 3.1939 | 0.5000 | 0.5475 | 0.9444 | 0.9369 |
| rcv1subset1 | 0.0400 | 0.0332 | 0.3461 | 0.4943 | 0.3018 | 0.4812 | 0.3900 | 29.4867 | 0.3036 | 0.5585 | 0.9194 | 0.9811 |
| REUTERS-K500-EX2 | 0.2887 | 0.0130 | 0.3757 | 0.4263 | 0.2208 | 0.4697 | 0.5172 | 29.0155 | 0.4917 | 0.5046 | 0.7816 | 0.9949 |
| scene | 0.6349 | 0.0920 | 0.7268 | 0.7734 | 0.7633 | 0.7514 | 0.2033 | 0.6971 | 0.1345 | 0.8596 | 0.9598 | 0.9655 |
| sider_CDK_ECFP4 | 0.0141 | 0.2470 | 0.6498 | 0.7961 | 0.6339 | 0.7955 | 0.2676 | 18.9930 | 0.1440 | 0.8023 | 0.5862 | 0.7919 |
| sider_MordredDesc | 0.0141 | 0.2621 | 0.6275 | 0.7811 | 0.6130 | 0.7829 | 0.2535 | 19.7042 | 0.1692 | 0.7838 | 0.5792 | 0.7756 |
| sider_RDKit_desc | 0.0141 | 0.2801 | 0.6292 | 0.7812 | 0.6027 | 0.7763 | 0.1408 | 19.9225 | 0.1867 | 0.7787 | 0.5820 | 0.7679 |
| SLASHDOT-F | 0.4021 | 0.0394 | 0.5068 | 0.5614 | 0.4086 | 0.6029 | 0.3889 | 4.4339 | 0.2869 | 0.6812 | 0.7457 | 0.9730 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.7600 |
| Stackex_chemistry | 0.0303 | 0.0148 | 0.0842 | 0.1258 | 0.0580 | 0.1598 | 0.8127 | 106.4438 | 0.8743 | 0.1491 | 0.9161 | 0.9961 |
| Stackex_chess | 0.0476 | 0.0105 | 0.1814 | 0.2542 | 0.0693 | 0.3050 | 0.6250 | 131.0357 | 0.7516 | 0.2484 | 0.5486 | 0.9975 |
| Stackex_coffee | 0.0000 | 0.0212 | 0.0652 | 0.1030 | 0.0237 | 0.1429 | 0.8696 | 75.4348 | 0.8820 | 0.1250 | 0.2567 | 0.9898 |
| Stackex_cooking | 0.0606 | 0.0052 | 0.2013 | 0.2777 | 0.1117 | 0.3228 | 0.6330 | 221.9688 | 0.7529 | 0.2336 | 0.9304 | 0.9875 |
| Stackex_philosophy | 0.0427 | 0.0109 | 0.1424 | 0.2115 | 0.0554 | 0.2446 | 0.7261 | 132.9146 | 0.7807 | 0.2102 | 0.7481 | 0.9968 |
| tmc2007-500 | 0.2490 | 0.0695 | 0.5572 | 0.7046 | 0.5714 | 0.6692 | 0.2955 | 4.0381 | 0.1322 | 0.7615 | 0.9497 | 0.9626 |
| tox21_CDK_ECFP4 | 0.1096 | 0.1924 | 0.3329 | 0.4489 | 0.3768 | 0.4402 | 0.4897 | 4.8493 | 0.3742 | 0.5939 | 0.8685 | 0.8594 |
| tox21_RDKit_desc | 0.0377 | 0.2269 | 0.3192 | 0.4631 | 0.3151 | 0.4551 | 0.5034 | 5.2568 | 0.4263 | 0.5724 | 0.8689 | 0.8619 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.1429 | 0.6190 | 0.0934 | 0.8944 | 0.7988 | 0.9695 |
| VirusPseAAC | 0.4762 | 0.1270 | 0.5635 | 0.6069 | 0.3533 | 0.6364 | 0.3333 | 0.8571 | 0.1857 | 0.7794 | 0.7251 | 0.9194 |
| Water-quality | 0.0000 | 0.4043 | 0.4206 | 0.5939 | 0.5347 | 0.5951 | 0.2830 | 9.3302 | 0.3648 | 0.6897 | 0.7705 | 0.7651 |
| Yahoo_Arts | 0.1068 | 0.0990 | 0.2390 | 0.3272 | 0.1422 | 0.2907 | 0.6155 | 11.7023 | 0.6446 | 0.4184 | 0.9201 | 0.9556 |
| Yahoo_Business | 0.5036 | 0.0331 | 0.6878 | 0.7975 | 0.2213 | 0.6764 | 0.1257 | 3.2745 | 0.2321 | 0.8683 | 0.8460 | 0.9901 |
| Yahoo_Computers | 0.3542 | 0.0494 | 0.4516 | 0.5256 | 0.1974 | 0.4587 | 0.4129 | 6.9526 | 0.4574 | 0.5811 | 0.8825 | 0.9764 |
| Yahoo_Education | 0.0075 | 0.0857 | 0.2207 | 0.3223 | 0.1118 | 0.3008 | 0.7290 | 10.2810 | 0.7930 | 0.4009 | 0.8841 | 0.9771 |
| Yahoo_Entertainment | 0.2883 | 0.0826 | 0.3672 | 0.4246 | 0.2140 | 0.3930 | 0.5412 | 4.7871 | 0.5095 | 0.5563 | 0.9623 | 0.9566 |
| Yahoo_Health | 0.2769 | 0.0560 | 0.4294 | 0.5288 | 0.1867 | 0.4627 | 0.4484 | 7.8208 | 0.4305 | 0.5977 | 0.8165 | 0.9746 |
| Yahoo_Recreation | 0.1294 | 0.0825 | 0.1847 | 0.2313 | 0.2183 | 0.2786 | 0.6134 | 7.3632 | 0.6945 | 0.4817 | 0.9560 | 0.9564 |
| Yahoo_Reference | 0.4060 | 0.0388 | 0.4740 | 0.5207 | 0.1022 | 0.4723 | 0.4408 | 6.0486 | 0.4354 | 0.6106 | 0.8015 | 0.9830 |
| Yahoo_Science | 0.1042 | 0.0535 | 0.1413 | 0.1800 | 0.1226 | 0.1952 | 0.7714 | 15.6299 | 0.7786 | 0.3136 | 0.9463 | 0.9723 |
| Yahoo_Social | 0.4076 | 0.0294 | 0.4619 | 0.4995 | 0.1184 | 0.4923 | 0.4274 | 8.0916 | 0.4218 | 0.6076 | 0.9098 | 0.9858 |
| Yahoo_Society | 0.2603 | 0.0704 | 0.3786 | 0.4640 | 0.1145 | 0.3887 | 0.4759 | 8.8533 | 0.5368 | 0.5249 | 0.9306 | 0.9669 |
| yeast | 0.1818 | 0.2060 | 0.5560 | 0.6910 | 0.4365 | 0.6772 | 0.2686 | 6.1983 | 0.2126 | 0.7506 | 0.8090 | 0.8710 |
| Yelp | 0.2971 | 0.2329 | 0.5862 | 0.7150 | 0.6282 | 0.6968 | 0.2512 | 1.5155 | 0.2212 | 0.8258 | 0.8286 | 0.8551 |

Table 149: Detailed results for Massive for One-error metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.1971 | 0.0417 | 0.1981 | 0.1986 | 0.2786 | 0.3231 | 0.3496 | 1.8211 | 0.1491 | 0.7542 | 0.9441 | 0.9449 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6667 | 2.5833 | 0.4792 | 0.5014 | 0.5616 | 0.5574 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6774 | 2.3226 | 0.5210 | 0.5188 | 0.4851 | 0.5877 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7647 | 2.6471 | 0.5324 | 0.4275 | 0.3280 | 0.5119 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8333 | 2.3333 | 0.5075 | 0.4275 | 0.6241 | 0.5564 |
| amphibians | 0.1111 | 0.3254 | 0.3382 | 0.4943 | 0.2432 | 0.4810 | 0.2778 | 2.7222 | 0.1083 | 0.8171 | 0.7134 | 0.7996 |
| bibtex | 0.0959 | 0.0130 | 0.1799 | 0.2346 | 0.0655 | 0.2495 | 0.3514 | 43.6865 | 0.2738 | 0.5683 | 0.9646 | 0.9721 |
| birds | 0.0256 | 0.0931 | 0.0321 | 0.0394 | 0.0207 | 0.0548 | 0.3333 | 4.1538 | 0.1420 | 0.6700 | 0.7718 | 0.8646 |
| bookmarks10% | 0.1458 | 0.0090 | 0.1600 | 0.1673 | 0.0241 | 0.1645 | 0.6503 | 79.3485 | 0.4926 | 0.3604 | 0.9375 | 0.9575 |
| CAL500 | 0.0000 | 0.1437 | 0.0530 | 0.1007 | 0.0140 | 0.0964 | 0.3922 | 142.4314 | 0.2494 | 0.4536 | 0.5644 | 0.8063 |
| corel16k001 | 0.0000 | 0.0188 | 0.0004 | 0.0005 | 0.0003 | 0.0005 | 0.7466 | 95.3893 | 0.6426 | 0.2103 | 0.9473 | 0.9518 |
| Corel5k | 0.0000 | 0.0094 | 0.0066 | 0.0099 | 0.0012 | 0.0123 | 0.7180 | 158.1320 | 0.7500 | 0.2142 | 0.6652 | 0.9857 |
| delicious | 0.0000 | 0.0385 | 0.0406 | 0.0776 | 0.0348 | 0.0779 | 0.4885 | 897.0920 | 0.7564 | 0.1768 | 0.9824 | 0.9884 |
| emotions | 0.0500 | 0.2639 | 0.1333 | 0.1687 | 0.2418 | 0.2520 | 0.2000 | 1.5000 | 0.1203 | 0.8442 | 0.8635 | 0.8846 |
| enron | 0.0643 | 0.0561 | 0.2120 | 0.3051 | 0.0470 | 0.3098 | 0.1988 | 13.9357 | 0.1318 | 0.7068 | 0.7134 | 0.9300 |
| EukaryoteGO | 0.6559 | 0.0200 | 0.7025 | 0.7262 | 0.4282 | 0.7891 | 0.1714 | 0.4124 | 0.0137 | 0.9045 | 0.9937 | 0.9954 |
| EukaryotePseAAC | 0.0051 | 0.0526 | 0.0051 | 0.0051 | 0.0015 | 0.0088 | 0.5495 | 2.3243 | 0.1023 | 0.6257 | 0.8010 | 0.9138 |
| flags | 0.0500 | 0.3000 | 0.3800 | 0.4957 | 0.3856 | 0.5714 | 0.2000 | 3.4500 | 0.1883 | 0.8404 | 0.6924 | 0.8026 |
| foodtruck | 0.0732 | 0.1728 | 0.1228 | 0.1507 | 0.0325 | 0.1584 | 0.2439 | 2.8049 | 0.1353 | 0.7802 | 0.6674 | 0.8148 |
| genbase | 0.9403 | 0.0022 | 0.9627 | 0.9738 | 0.5185 | 0.9747 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 1.0000 |
| GnegativeGO | 0.9143 | 0.0134 | 0.9357 | 0.9464 | 0.7766 | 0.9474 | 0.0143 | 0.0714 | 0.0062 | 0.9917 | 0.8731 | 0.9981 |
| GnegativePseAAC | 0.3071 | 0.0929 | 0.3071 | 0.3071 | 0.1152 | 0.4526 | 0.2500 | 0.6643 | 0.0901 | 0.8388 | 0.8077 | 0.9515 |
| GpositiveGO | 0.8654 | 0.0481 | 0.8750 | 0.8798 | 0.9117 | 0.9020 | 0.0769 | 0.1731 | 0.0577 | 0.9519 | 0.9942 | 0.9821 |
| GpositivePseAAC | 0.2885 | 0.1875 | 0.2885 | 0.2885 | 0.2839 | 0.4348 | 0.3654 | 0.5385 | 0.2115 | 0.7917 | 0.8663 | 0.8898 |
| HumanGO | 0.5916 | 0.0402 | 0.6270 | 0.6460 | 0.4407 | 0.7088 | 0.2090 | 0.6077 | 0.0362 | 0.8786 | 0.9787 | 0.9847 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5659 | 2.1736 | 0.1455 | 0.6110 | 0.7555 | 0.8629 |
| Image | 0.2300 | 0.1900 | 0.2425 | 0.2486 | 0.3239 | 0.3493 | 0.2800 | 0.9300 | 0.1929 | 0.8072 | 0.8649 | 0.8691 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6530 | 9.0985 | 0.3292 | 0.4421 | 0.7372 | 0.8201 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5998 | 9.2212 | 0.3119 | 0.4693 | 0.7262 | 0.8184 |
| LLOG-F | 0.0082 | 0.0179 | 0.0082 | 0.0082 | 0.0033 | 0.0120 | 0.6066 | 12.8361 | 0.2185 | 0.4801 | 0.5217 | 0.9156 |
| mediamill10% | 0.0903 | 0.0294 | 0.3933 | 0.5339 | 0.0349 | 0.4988 | 0.0119 | 4.3040 | 0.0032 | 0.9577 | 0.8203 | 0.9959 |
| medical | 0.5816 | 0.0120 | 0.6446 | 0.6734 | 0.2440 | 0.7464 | 0.1122 | 1.6735 | 0.0533 | 0.9130 | 0.5497 | 0.9946 |
| Music | 0.0333 | 0.2833 | 0.1222 | 0.1604 | 0.2448 | 0.2500 | 0.2333 | 1.8833 | 0.1641 | 0.8111 | 0.8640 | 0.8734 |
| NUS-WIDE-bow10% | 0.0014 | 0.0260 | 0.0125 | 0.0186 | 0.0034 | 0.0387 | 0.5699 | 19.6265 | 0.1912 | 0.4764 | 0.7014 | 0.8907 |
| NUS-WIDE-cVLADplus10% | 0.0019 | 0.0262 | 0.0052 | 0.0072 | 0.0012 | 0.0133 | 0.5314 | 17.7583 | 0.1652 | 0.5095 | 0.7097 | 0.9023 |
| OHSUMED-F | 0.1062 | 0.0650 | 0.1481 | 0.1692 | 0.0981 | 0.2124 | 0.3467 | 4.3374 | 0.1628 | 0.6996 | 0.8719 | 0.9061 |
| PlantGO | 0.5417 | 0.0486 | 0.5608 | 0.5718 | 0.5464 | 0.6744 | 0.2083 | 0.3958 | 0.0271 | 0.8878 | 0.9838 | 0.9817 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5918 | 2.1633 | 0.1798 | 0.5918 | 0.7653 | 0.8394 |
| rcv1subset1 | 0.0017 | 0.0294 | 0.0463 | 0.0668 | 0.0193 | 0.0776 | 0.3950 | 17.2983 | 0.1212 | 0.6043 | 0.8948 | 0.9622 |
| REUTERS-K500-EX2 | 0.1701 | 0.0122 | 0.1864 | 0.1950 | 0.0846 | 0.2513 | 0.4055 | 14.3093 | 0.2078 | 0.6521 | 0.7647 | 0.9804 |
| scene | 0.2531 | 0.1369 | 0.2656 | 0.2716 | 0.4067 | 0.4036 | 0.2199 | 0.4772 | 0.0802 | 0.8692 | 0.9406 | 0.9496 |
| sider_CDK_ECFP4 | 0.0000 | 0.2710 | 0.5227 | 0.7084 | 0.4717 | 0.7094 | 0.0986 | 18.8592 | 0.1167 | 0.8537 | 0.5726 | 0.8057 |
| sider_MordredDesc | 0.0000 | 0.3263 | 0.4041 | 0.5903 | 0.3599 | 0.5902 | 0.1197 | 18.9296 | 0.1223 | 0.8501 | 0.5678 | 0.8023 |
| sider_RDKit_desc | 0.0000 | 0.3122 | 0.4310 | 0.6182 | 0.3903 | 0.6187 | 0.0915 | 19.1620 | 0.1250 | 0.8470 | 0.5725 | 0.8033 |
| SLASHDOT-F | 0.2222 | 0.0474 | 0.2429 | 0.2533 | 0.1452 | 0.3367 | 0.4418 | 3.7169 | 0.1989 | 0.6611 | 0.6927 | 0.9317 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.2000 | 0.2000 | 0.1333 | 0.2857 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.8400 |
| Stackex_chemistry | 0.0072 | 0.0120 | 0.0190 | 0.0253 | 0.0083 | 0.0344 | 0.6196 | 72.8674 | 0.5152 | 0.3399 | 0.8911 | 0.9729 |
| Stackex_chess | 0.0119 | 0.0102 | 0.0576 | 0.0840 | 0.0110 | 0.1176 | 0.5179 | 94.8631 | 0.4523 | 0.3952 | 0.5326 | 0.9799 |
| Stackex_coffee | 0.0000 | 0.0180 | 0.0145 | 0.0217 | 0.0081 | 0.0377 | 0.7826 | 56.6957 | 0.3625 | 0.3183 | 0.2469 | 0.9628 |
| Stackex_cooking | 0.0300 | 0.0054 | 0.0866 | 0.1144 | 0.0362 | 0.1388 | 0.5005 | 161.9449 | 0.4696 | 0.4108 | 0.9158 | 0.9916 |
| Stackex_philosophy | 0.0352 | 0.0091 | 0.0987 | 0.1318 | 0.0236 | 0.1625 | 0.5050 | 97.6457 | 0.4763 | 0.4065 | 0.7321 | 0.9822 |
| tmc2007-500 | 0.0899 | 0.0845 | 0.1879 | 0.2353 | 0.0948 | 0.2753 | 0.3206 | 2.8867 | 0.0616 | 0.7586 | 0.9189 | 0.9452 |
| tox21_CDK_ECFP4 | 0.0205 | 0.1724 | 0.0401 | 0.0515 | 0.0895 | 0.0765 | 0.4692 | 3.9315 | 0.2131 | 0.6265 | 0.7043 | 0.7732 |
| tox21_RDKit_desc | 0.0137 | 0.1749 | 0.0232 | 0.0287 | 0.0535 | 0.0437 | 0.4452 | 3.7466 | 0.1897 | 0.6462 | 0.7317 | 0.7895 |
| VirusGO | 0.7143 | 0.0714 | 0.7857 | 0.8213 | 0.6060 | 0.8000 | 0.0476 | 0.3810 | 0.0536 | 0.9563 | 0.8044 | 0.9861 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2381 | 0.8095 | 0.1417 | 0.8365 | 0.4734 | 0.8637 |
| Water-quality | 0.0094 | 0.3464 | 0.1031 | 0.1663 | 0.0894 | 0.1736 | 0.1698 | 8.8302 | 0.2390 | 0.7373 | 0.7236 | 0.7518 |
| Yahoo_Arts | 0.0601 | 0.0605 | 0.0829 | 0.0944 | 0.0568 | 0.1338 | 0.4085 | 5.6475 | 0.1989 | 0.6548 | 0.8336 | 0.8941 |
| Yahoo_Business | 0.4938 | 0.0286 | 0.6390 | 0.7200 | 0.0613 | 0.6591 | 0.1016 | 1.9447 | 0.0654 | 0.9043 | 0.7937 | 0.9717 |
| Yahoo_Computers | 0.2522 | 0.0388 | 0.2924 | 0.3177 | 0.0412 | 0.3549 | 0.3928 | 3.7277 | 0.1432 | 0.6927 | 0.8063 | 0.9334 |
| Yahoo_Education | 0.0723 | 0.0403 | 0.0804 | 0.0848 | 0.0757 | 0.1454 | 0.4298 | 4.4015 | 0.1653 | 0.6623 | 0.8280 | 0.9385 |
| Yahoo_Entertainment | 0.1650 | 0.0587 | 0.1759 | 0.1827 | 0.0999 | 0.2482 | 0.3433 | 2.4572 | 0.1460 | 0.7408 | 0.9019 | 0.9213 |
| Yahoo_Health | 0.3659 | 0.0356 | 0.4536 | 0.5044 | 0.1822 | 0.5370 | 0.3051 | 3.3963 | 0.1086 | 0.7694 | 0.7867 | 0.9619 |
| Yahoo_Recreation | 0.1769 | 0.0541 | 0.1936 | 0.2027 | 0.1446 | 0.2690 | 0.3250 | 3.4723 | 0.1824 | 0.7309 | 0.8990 | 0.9108 |
| Yahoo_Reference | 0.2080 | 0.0288 | 0.2237 | 0.2317 | 0.0630 | 0.3357 | 0.3088 | 2.5940 | 0.1285 | 0.7654 | 0.7556 | 0.9612 |
| Yahoo_Science | 0.0980 | 0.0333 | 0.1099 | 0.1167 | 0.0499 | 0.1575 | 0.4028 | 6.9129 | 0.2310 | 0.6474 | 0.8991 | 0.9345 |
| Yahoo_Social | 0.3243 | 0.0237 | 0.3484 | 0.3614 | 0.0959 | 0.4534 | 0.2574 | 3.3259 | 0.1081 | 0.7977 | 0.8724 | 0.9711 |
| Yahoo_Society | 0.0771 | 0.0581 | 0.0919 | 0.1008 | 0.0492 | 0.1246 | 0.3340 | 5.4477 | 0.1949 | 0.6939 | 0.8095 | 0.8967 |
| yeast | 0.0331 | 0.2583 | 0.1632 | 0.2300 | 0.1245 | 0.2834 | 0.2397 | 5.9835 | 0.1558 | 0.7688 | 0.7367 | 0.8517 |
| Yelp | 0.2144 | 0.2582 | 0.3583 | 0.4327 | 0.3597 | 0.4955 | 0.2283 | 1.4038 | 0.1778 | 0.8454 | 0.8107 | 0.8516 |

Table 150: Detailed results for Massive (1K) for One-error metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.1592 | 0.0438 | 0.1603 | 0.1608 | 0.2253 | 0.2693 | 0.3454 | 1.6411 | 0.1372 | 0.7611 | 0.9525 | 0.9534 |
| 3s-bbc1000 | 0.0000 | 0.2130 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6944 | 2.6667 | 0.5224 | 0.5037 | 0.6169 | 0.5977 |
| 3s-guardian1000 | 0.0000 | 0.2097 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7097 | 2.1613 | 0.4435 | 0.5285 | 0.5984 | 0.6705 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.4706 | 0.5132 | 0.3892 | 0.4520 | 0.5840 |
| 3s-reuters1000 | 0.0333 | 0.1722 | 0.0333 | 0.0333 | 0.0667 | 0.0606 | 0.7667 | 2.5333 | 0.5475 | 0.4558 | 0.5782 | 0.5667 |
| amphibians | 0.1111 | 0.3492 | 0.3419 | 0.5282 | 0.3035 | 0.5000 | 0.2222 | 2.9444 | 0.1583 | 0.8289 | 0.6826 | 0.7665 |
| bibtex | 0.0838 | 0.0133 | 0.1566 | 0.2046 | 0.0546 | 0.2231 | 0.3703 | 43.5230 | 0.2813 | 0.5423 | 0.9613 | 0.9693 |
| birds | 0.1282 | 0.0837 | 0.1667 | 0.1839 | 0.1637 | 0.2439 | 0.2821 | 3.3846 | 0.1082 | 0.7349 | 0.8025 | 0.9015 |
| bookmarks10% | 0.1390 | 0.0090 | 0.1534 | 0.1606 | 0.0201 | 0.1523 | 0.6560 | 77.4237 | 0.4812 | 0.3579 | 0.9296 | 0.9503 |
| CAL500 | 0.0000 | 0.1448 | 0.0546 | 0.1078 | 0.0158 | 0.1020 | 0.4314 | 137.6275 | 0.2397 | 0.4523 | 0.5873 | 0.8161 |
| corel16k001 | 0.0000 | 0.1119 | 0.0343 | 0.0633 | 0.0229 | 0.0641 | 0.9220 | 116.3732 | 0.9845 | 0.0724 | 0.9971 | 1.0000 |
| Corel5k | 0.0000 | 0.0095 | 0.0022 | 0.0034 | 0.0009 | 0.0045 | 0.7320 | 156.4260 | 0.7485 | 0.2108 | 0.6651 | 0.9859 |
| delicious | 0.0000 | 0.6604 | 0.0209 | 0.0416 | 0.0465 | 0.0410 | 0.7104 | 917.1338 | 0.9603 | 0.0530 | 0.9895 | 1.0000 |
| emotions | 0.1500 | 0.2278 | 0.2861 | 0.3430 | 0.4037 | 0.4384 | 0.2333 | 1.6000 | 0.1517 | 0.8275 | 0.8626 | 0.8779 |
| enron | 0.0643 | 0.0532 | 0.2588 | 0.3690 | 0.0681 | 0.3821 | 0.2339 | 13.9942 | 0.1413 | 0.7008 | 0.7312 | 0.9349 |
| EukaryoteGO | 0.6314 | 0.0216 | 0.6680 | 0.6864 | 0.4055 | 0.7642 | 0.1714 | 0.3982 | 0.0131 | 0.9063 | 0.9938 | 0.9954 |
| EukaryotePseAAC | 0.0051 | 0.0526 | 0.0051 | 0.0051 | 0.0015 | 0.0088 | 0.5637 | 2.4106 | 0.1063 | 0.6124 | 0.8054 | 0.9093 |
| flags | 0.2000 | 0.2857 | 0.4892 | 0.6201 | 0.4552 | 0.6226 | 0.2000 | 3.3500 | 0.1850 | 0.8425 | 0.6898 | 0.8127 |
| foodtruck | 0.2195 | 0.1484 | 0.3114 | 0.3873 | 0.0826 | 0.3652 | 0.2195 | 2.6829 | 0.1173 | 0.8054 | 0.6818 | 0.8300 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9938 | 0.6296 | 0.9877 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9286 | 0.0107 | 0.9500 | 0.9607 | 0.8255 | 0.9583 | 0.0143 | 0.0857 | 0.0092 | 0.9899 | 0.8738 | 0.9993 |
| GnegativePseAAC | 0.3643 | 0.0857 | 0.3643 | 0.3643 | 0.1477 | 0.5152 | 0.2357 | 0.6214 | 0.0867 | 0.8473 | 0.8009 | 0.9534 |
| GpositiveGO | 0.8846 | 0.0433 | 0.8942 | 0.8990 | 0.9224 | 0.9126 | 0.0769 | 0.1346 | 0.0641 | 0.9567 | 0.9982 | 0.9971 |
| GpositivePseAAC | 0.4038 | 0.1635 | 0.4038 | 0.4038 | 0.3837 | 0.5526 | 0.4615 | 0.8462 | 0.3333 | 0.7131 | 0.8177 | 0.8458 |
| HumanGO | 0.5820 | 0.0413 | 0.6206 | 0.6399 | 0.4434 | 0.7039 | 0.2122 | 0.6141 | 0.0367 | 0.8763 | 0.9789 | 0.9854 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5659 | 2.1447 | 0.1441 | 0.6130 | 0.7209 | 0.8645 |
| Image | 0.2200 | 0.1900 | 0.2350 | 0.2423 | 0.3155 | 0.3448 | 0.2650 | 0.8250 | 0.1650 | 0.8245 | 0.8783 | 0.8816 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6384 | 8.3040 | 0.2653 | 0.4681 | 0.7191 | 0.8223 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5982 | 8.6727 | 0.2792 | 0.4757 | 0.7162 | 0.8212 |
| LLOG-F | 0.0246 | 0.0176 | 0.0287 | 0.0306 | 0.0090 | 0.0473 | 0.6230 | 12.8689 | 0.2405 | 0.4605 | 0.5202 | 0.9232 |
| mediamill10% | 0.3325 | 0.0143 | 0.7139 | 0.8264 | 0.1961 | 0.8065 | 0.0000 | 3.5416 | 0.0002 | 0.9982 | 0.8213 | 0.9995 |
| medical | 0.6429 | 0.0111 | 0.7245 | 0.7617 | 0.2833 | 0.7879 | 0.1531 | 2.5204 | 0.0750 | 0.8865 | 0.5519 | 0.9967 |
| Music | 0.0833 | 0.2361 | 0.2694 | 0.3468 | 0.4285 | 0.4586 | 0.2333 | 1.8500 | 0.1494 | 0.8143 | 0.8632 | 0.8712 |
| NUS-WIDE-bow10% | 0.0000 | 0.0384 | 0.0231 | 0.0380 | 0.0076 | 0.0517 | 0.6759 | 30.0639 | 0.4382 | 0.3290 | 0.8394 | 0.9233 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.0263 | 0.0022 | 0.0034 | 0.0006 | 0.0067 | 0.5557 | 18.4610 | 0.1713 | 0.4990 | 0.6947 | 0.8953 |
| OHSUMED-F | 0.0826 | 0.0664 | 0.1203 | 0.1402 | 0.0776 | 0.1817 | 0.3388 | 4.5305 | 0.1773 | 0.6974 | 0.8739 | 0.9053 |
| PlantGO | 0.6042 | 0.0495 | 0.6302 | 0.6431 | 0.5984 | 0.6984 | 0.2500 | 0.9688 | 0.0985 | 0.8367 | 0.9831 | 0.9826 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6020 | 2.0816 | 0.1813 | 0.5958 | 0.7827 | 0.8440 |
| rcv1subset1 | 0.0000 | 0.0297 | 0.0332 | 0.0485 | 0.0145 | 0.0586 | 0.4433 | 16.4133 | 0.1113 | 0.5865 | 0.8907 | 0.9601 |
| REUTERS-K500-EX2 | 0.1460 | 0.0125 | 0.1578 | 0.1637 | 0.0642 | 0.2145 | 0.4210 | 13.1271 | 0.1930 | 0.6473 | 0.7625 | 0.9788 |
| scene | 0.2241 | 0.1411 | 0.2344 | 0.2395 | 0.3746 | 0.3665 | 0.1992 | 0.3900 | 0.0617 | 0.8860 | 0.9512 | 0.9585 |
| sider_CDK_ECFP4 | 0.0000 | 0.2616 | 0.5401 | 0.7207 | 0.5027 | 0.7247 | 0.1197 | 18.7465 | 0.1305 | 0.8305 | 0.5729 | 0.7971 |
| sider_MordredDesc | 0.0000 | 0.3190 | 0.4148 | 0.6026 | 0.3874 | 0.6061 | 0.0986 | 19.1056 | 0.1323 | 0.8300 | 0.5735 | 0.7964 |
| sider_RDKit_desc | 0.0000 | 0.3070 | 0.4384 | 0.6304 | 0.4172 | 0.6321 | 0.1408 | 18.9437 | 0.1265 | 0.8308 | 0.5777 | 0.8002 |
| SLASHDOT-F | 0.2222 | 0.0468 | 0.2469 | 0.2592 | 0.1516 | 0.3462 | 0.4471 | 3.6429 | 0.2008 | 0.6634 | 0.7073 | 0.9411 |
| solar_flare-L3 | 0.6000 | 0.2000 | 0.6000 | 0.6000 | 0.2857 | 0.6667 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.6667 | 0.9800 |
| Stackex_chemistry | 0.0029 | 0.0121 | 0.0066 | 0.0084 | 0.0033 | 0.0108 | 0.6311 | 74.6700 | 0.5084 | 0.3374 | 0.8882 | 0.9701 |
| Stackex_chess | 0.0179 | 0.0101 | 0.0885 | 0.1234 | 0.0235 | 0.1612 | 0.5595 | 92.2738 | 0.4551 | 0.3718 | 0.5361 | 0.9834 |
| Stackex_coffee | 0.0435 | 0.0198 | 0.0978 | 0.1417 | 0.0325 | 0.1515 | 0.7391 | 60.0000 | 0.5309 | 0.3030 | 0.2498 | 0.9770 |
| Stackex_cooking | 0.0000 | 0.3597 | 0.0076 | 0.0150 | 0.0772 | 0.0150 | 0.6849 | 221.9719 | 0.7850 | 0.2132 | 0.9009 | 0.9886 |
| Stackex_philosophy | 0.0528 | 0.0093 | 0.0993 | 0.1248 | 0.0192 | 0.1386 | 0.5025 | 94.6206 | 0.4627 | 0.4105 | 0.7298 | 0.9804 |
| tmc2007-500 | 0.0738 | 0.0874 | 0.1478 | 0.1835 | 0.0755 | 0.2169 | 0.3178 | 2.8930 | 0.0604 | 0.7609 | 0.9160 | 0.9449 |
| tox21_CDK_ECFP4 | 0.0240 | 0.1718 | 0.0448 | 0.0580 | 0.0942 | 0.0851 | 0.4795 | 3.9486 | 0.2137 | 0.6243 | 0.7045 | 0.7724 |
| tox21_RDKit_desc | 0.0103 | 0.1755 | 0.0191 | 0.0236 | 0.0514 | 0.0376 | 0.4110 | 3.8116 | 0.1930 | 0.6566 | 0.7259 | 0.7862 |
| VirusGO | 0.7619 | 0.0635 | 0.8016 | 0.8284 | 0.6548 | 0.8182 | 0.0476 | 0.4762 | 0.0694 | 0.9500 | 0.8212 | 0.9917 |
| VirusPseAAC | 0.1905 | 0.1508 | 0.1905 | 0.1905 | 0.1970 | 0.2963 | 0.3333 | 0.7619 | 0.1226 | 0.7968 | 0.6237 | 0.9050 |
| Water-quality | 0.0000 | 0.3349 | 0.1426 | 0.2321 | 0.1410 | 0.2389 | 0.2170 | 8.5189 | 0.2289 | 0.7440 | 0.7224 | 0.7576 |
| Yahoo_Arts | 0.0467 | 0.0615 | 0.0675 | 0.0784 | 0.0402 | 0.1086 | 0.4085 | 5.4166 | 0.1918 | 0.6572 | 0.8294 | 0.8889 |
| Yahoo_Business | 0.4857 | 0.0292 | 0.6289 | 0.7088 | 0.0461 | 0.6493 | 0.1078 | 2.1497 | 0.0690 | 0.8958 | 0.7935 | 0.9723 |
| Yahoo_Computers | 0.2313 | 0.0391 | 0.2725 | 0.2972 | 0.0424 | 0.3373 | 0.4048 | 3.8048 | 0.1473 | 0.6843 | 0.7976 | 0.9290 |
| Yahoo_Education | 0.0432 | 0.0414 | 0.0483 | 0.0514 | 0.0353 | 0.0997 | 0.4497 | 4.3175 | 0.1691 | 0.6512 | 0.8137 | 0.9312 |
| Yahoo_Entertainment | 0.1359 | 0.0603 | 0.1461 | 0.1521 | 0.0828 | 0.2107 | 0.3417 | 2.3888 | 0.1329 | 0.7419 | 0.9038 | 0.9237 |
| Yahoo_Health | 0.3062 | 0.0366 | 0.3713 | 0.4102 | 0.1477 | 0.4742 | 0.3062 | 3.2085 | 0.1081 | 0.7692 | 0.7806 | 0.9596 |
| Yahoo_Recreation | 0.1426 | 0.0558 | 0.1582 | 0.1670 | 0.1208 | 0.2284 | 0.3546 | 3.2689 | 0.1708 | 0.7207 | 0.8940 | 0.9077 |
| Yahoo_Reference | 0.1743 | 0.0299 | 0.1895 | 0.1972 | 0.0411 | 0.2944 | 0.3325 | 2.3910 | 0.1108 | 0.7548 | 0.7496 | 0.9586 |
| Yahoo_Science | 0.0778 | 0.0339 | 0.0867 | 0.0913 | 0.0383 | 0.1245 | 0.4246 | 7.3064 | 0.2470 | 0.6328 | 0.8903 | 0.9271 |
| Yahoo_Social | 0.2913 | 0.0248 | 0.3128 | 0.3246 | 0.0658 | 0.4124 | 0.2624 | 3.2698 | 0.1052 | 0.7914 | 0.8590 | 0.9662 |
| Yahoo_Society | 0.0640 | 0.0588 | 0.0762 | 0.0835 | 0.0370 | 0.1042 | 0.3430 | 5.0448 | 0.1621 | 0.6966 | 0.7952 | 0.8915 |
| yeast | 0.0372 | 0.2571 | 0.1670 | 0.2375 | 0.1280 | 0.2924 | 0.2562 | 6.0909 | 0.1616 | 0.7602 | 0.7319 | 0.8519 |
| Yelp | 0.1884 | 0.2654 | 0.3326 | 0.4066 | 0.2968 | 0.4716 | 0.2522 | 1.4467 | 0.1844 | 0.8305 | 0.7992 | 0.8413 |

Table 151: Detailed results for Massive for Coverage metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.2718 | 0.0389 | 0.2733 | 0.2741 | 0.3680 | 0.4139 | 0.4321 | 2.3299 | 0.1206 | 0.6796 | 0.9310 | 0.9033 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8056 | 2.5833 | 0.4579 | 0.4377 | 0.5803 | 0.5615 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6774 | 1.8710 | 0.3169 | 0.5720 | 0.6033 | 0.7148 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7647 | 1.9412 | 0.3765 | 0.4863 | 0.3934 | 0.5886 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8333 | 2.0667 | 0.4100 | 0.4539 | 0.5910 | 0.5598 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5556 | 0.0889 | 0.8543 | 0.6443 | 0.7819 |
| bibtex | 0.1230 | 0.0132 | 0.2324 | 0.3039 | 0.1216 | 0.3076 | 0.5284 | 30.5905 | 0.1104 | 0.4157 | 0.8777 | 0.8884 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 4.1026 | 0.1351 | 0.6920 | 0.7563 | 0.8679 |
| bookmarks10% | 0.1606 | 0.0089 | 0.1712 | 0.1771 | 0.0307 | 0.1783 | 0.6879 | 52.6595 | 0.1725 | 0.3370 | 0.7237 | 0.8039 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1569 | 138.1961 | 0.2006 | 0.4702 | 0.5214 | 0.8030 |
| corel16k001 | 0.0036 | 0.0230 | 0.0875 | 0.1385 | 0.0072 | 0.1478 | 0.7872 | 56.2491 | 0.1914 | 0.2439 | 0.6063 | 0.8060 |
| Corel5k | 0.0000 | 0.0157 | 0.1251 | 0.2058 | 0.0104 | 0.2050 | 0.9120 | 129.7200 | 0.1605 | 0.1237 | 0.3726 | 0.8426 |
| delicious | 0.0000 | 0.0640 | 0.0798 | 0.1475 | 0.0650 | 0.1487 | 0.8210 | 798.9869 | 0.2352 | 0.1426 | 0.6777 | 0.7966 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 1.5667 | 0.1235 | 0.8409 | 0.8563 | 0.8840 |
| enron | 0.1228 | 0.0545 | 0.2850 | 0.3992 | 0.0544 | 0.3431 | 0.1988 | 12.0643 | 0.0777 | 0.7030 | 0.6121 | 0.9114 |
| EukaryoteGO | 0.6817 | 0.0184 | 0.7496 | 0.7837 | 0.5030 | 0.8166 | 0.1688 | 0.4008 | 0.0115 | 0.9057 | 0.9932 | 0.9951 |
| EukaryotePseAAC | 0.0142 | 0.0522 | 0.0142 | 0.0142 | 0.0055 | 0.0240 | 0.5534 | 2.3681 | 0.0981 | 0.6187 | 0.7551 | 0.9102 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 3.4500 | 0.1900 | 0.8280 | 0.6911 | 0.8135 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2683 | 2.7805 | 0.1150 | 0.7781 | 0.6815 | 0.8229 |
| genbase | 0.9104 | 0.0033 | 0.9478 | 0.9661 | 0.4691 | 0.9615 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9996 |
| GnegativeGO | 0.9071 | 0.0152 | 0.9250 | 0.9338 | 0.6860 | 0.9395 | 0.0214 | 0.0929 | 0.0048 | 0.9871 | 0.8684 | 0.9972 |
| GnegativePseAAC | 0.3000 | 0.0938 | 0.3000 | 0.3000 | 0.1100 | 0.4444 | 0.2429 | 0.6571 | 0.0854 | 0.8419 | 0.8046 | 0.9523 |
| GpositiveGO | 0.8846 | 0.0481 | 0.8846 | 0.8846 | 0.9173 | 0.9020 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9938 | 0.9948 |
| GpositivePseAAC | 0.2308 | 0.1923 | 0.2308 | 0.2308 | 0.2491 | 0.3750 | 0.3846 | 0.6346 | 0.2179 | 0.7740 | 0.8412 | 0.8601 |
| HumanGO | 0.5981 | 0.0411 | 0.6452 | 0.6699 | 0.4240 | 0.7172 | 0.2154 | 0.6109 | 0.0300 | 0.8765 | 0.9715 | 0.9807 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5498 | 2.1801 | 0.1434 | 0.6178 | 0.7380 | 0.8601 |
| Image | 0.1750 | 0.2000 | 0.1850 | 0.1899 | 0.2573 | 0.2806 | 0.2400 | 0.7900 | 0.1408 | 0.8371 | 0.8739 | 0.8774 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6992 | 7.3281 | 0.1755 | 0.4330 | 0.5940 | 0.8115 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6098 | 7.4896 | 0.1702 | 0.4883 | 0.6103 | 0.8177 |
| LLOG-F | 0.0164 | 0.0178 | 0.0164 | 0.0164 | 0.0058 | 0.0240 | 0.6311 | 11.6311 | 0.1398 | 0.4505 | 0.4588 | 0.8765 |
| mediamill10% | 0.0903 | 0.0306 | 0.3692 | 0.5000 | 0.0291 | 0.4700 | 0.0356 | 4.1425 | 0.0028 | 0.9468 | 0.8187 | 0.9955 |
| medical | 0.6531 | 0.0109 | 0.7143 | 0.7428 | 0.2647 | 0.7838 | 0.1224 | 1.3673 | 0.0197 | 0.9087 | 0.5474 | 0.9882 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 1.9500 | 0.1572 | 0.8061 | 0.8544 | 0.8647 |
| NUS-WIDE-bow10% | 0.0057 | 0.0258 | 0.0227 | 0.0322 | 0.0052 | 0.0607 | 0.6161 | 17.1537 | 0.1244 | 0.4274 | 0.6262 | 0.8716 |
| NUS-WIDE-cVLADplus10% | 0.0138 | 0.0257 | 0.0279 | 0.0362 | 0.0053 | 0.0581 | 0.5728 | 15.9558 | 0.1106 | 0.4779 | 0.6423 | 0.8830 |
| OHSUMED-F | 0.1070 | 0.0653 | 0.1452 | 0.1652 | 0.0936 | 0.2033 | 0.4415 | 4.5657 | 0.1270 | 0.6399 | 0.8284 | 0.8710 |
| PlantGO | 0.5833 | 0.0495 | 0.5885 | 0.5911 | 0.5862 | 0.6667 | 0.1979 | 0.3333 | 0.0209 | 0.8967 | 0.9740 | 0.9824 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6224 | 2.1735 | 0.1803 | 0.5835 | 0.7761 | 0.8416 |
| rcv1subset1 | 0.0200 | 0.0296 | 0.1406 | 0.2029 | 0.0413 | 0.2206 | 0.6150 | 20.2233 | 0.0877 | 0.4237 | 0.8160 | 0.8989 |
| REUTERS-K500-EX2 | 0.2543 | 0.0119 | 0.2924 | 0.3127 | 0.1138 | 0.3596 | 0.5189 | 8.8041 | 0.0622 | 0.5561 | 0.6831 | 0.9298 |
| scene | 0.1950 | 0.1466 | 0.2033 | 0.2074 | 0.3328 | 0.3248 | 0.2199 | 0.4025 | 0.0605 | 0.8770 | 0.9464 | 0.9555 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 18.6408 | 0.1206 | 0.8329 | 0.5738 | 0.8035 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 18.8169 | 0.1274 | 0.8458 | 0.5651 | 0.7999 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.1127 | 0.1321 | 0.8273 | 0.5629 | 0.7950 |
| SLASHDOT-F | 0.2196 | 0.0470 | 0.2416 | 0.2526 | 0.1458 | 0.3384 | 0.5053 | 3.0899 | 0.1213 | 0.6013 | 0.6210 | 0.8786 |
| solar_flare-L3 | 0.2000 | 0.4000 | 0.2000 | 0.2000 | 0.1333 | 0.2500 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.2778 | 0.7400 |
| Stackex_chemistry | 0.0173 | 0.0193 | 0.1265 | 0.2032 | 0.0280 | 0.1999 | 0.8674 | 41.7608 | 0.1446 | 0.2213 | 0.6788 | 0.8503 |
| Stackex_chess | 0.0060 | 0.0145 | 0.1284 | 0.2040 | 0.0233 | 0.1994 | 0.7440 | 62.9524 | 0.1618 | 0.2699 | 0.4447 | 0.8853 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8261 | 49.0000 | 0.2714 | 0.3233 | 0.2377 | 0.9183 |
| Stackex_cooking | 0.0126 | 0.0085 | 0.1394 | 0.2240 | 0.0701 | 0.2245 | 0.8783 | 120.0213 | 0.1790 | 0.1852 | 0.6894 | 0.8346 |
| Stackex_philosophy | 0.0377 | 0.0113 | 0.1669 | 0.2457 | 0.0364 | 0.2326 | 0.7362 | 57.7211 | 0.1417 | 0.2975 | 0.5270 | 0.8514 |
| tmc2007-500 | 0.0615 | 0.0905 | 0.1052 | 0.1278 | 0.0563 | 0.1425 | 0.2955 | 3.1367 | 0.0652 | 0.7530 | 0.9089 | 0.9323 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.0377 | 0.2104 | 0.6165 | 0.6989 | 0.7646 |
| tox21_RDKit_desc | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0020 | 0.0032 | 0.4658 | 3.8459 | 0.1940 | 0.6381 | 0.7244 | 0.7868 |
| VirusGO | 0.7143 | 0.0873 | 0.7143 | 0.7143 | 0.5926 | 0.7317 | 0.0476 | 0.3810 | 0.0381 | 0.9619 | 0.7949 | 0.9739 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4286 | 0.9524 | 0.1607 | 0.7373 | 0.5938 | 0.8864 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2264 | 8.7358 | 0.2356 | 0.7262 | 0.7126 | 0.7459 |
| Yahoo_Arts | 0.0628 | 0.0609 | 0.0834 | 0.0956 | 0.0475 | 0.1254 | 0.5167 | 4.6729 | 0.1168 | 0.5916 | 0.7468 | 0.8647 |
| Yahoo_Business | 0.4439 | 0.0297 | 0.6295 | 0.7297 | 0.0719 | 0.6896 | 0.1052 | 1.8806 | 0.0282 | 0.8998 | 0.7076 | 0.9557 |
| Yahoo_Computers | 0.3004 | 0.0382 | 0.3547 | 0.3890 | 0.0448 | 0.4095 | 0.3871 | 3.5695 | 0.0691 | 0.6828 | 0.7159 | 0.9016 |
| Yahoo_Education | 0.1131 | 0.0389 | 0.1294 | 0.1383 | 0.0621 | 0.2128 | 0.5561 | 3.4447 | 0.0776 | 0.5835 | 0.7099 | 0.9167 |
| Yahoo_Entertainment | 0.1964 | 0.0579 | 0.2105 | 0.2188 | 0.1036 | 0.2726 | 0.4478 | 2.6677 | 0.0929 | 0.6742 | 0.8083 | 0.8960 |
| Yahoo_Health | 0.3572 | 0.0373 | 0.4463 | 0.4979 | 0.1485 | 0.5113 | 0.3257 | 2.8111 | 0.0501 | 0.7478 | 0.7195 | 0.9429 |
| Yahoo_Recreation | 0.1964 | 0.0534 | 0.2143 | 0.2247 | 0.1463 | 0.2883 | 0.4677 | 3.4669 | 0.1186 | 0.6436 | 0.8404 | 0.8654 |
| Yahoo_Reference | 0.3661 | 0.0269 | 0.3952 | 0.4106 | 0.0789 | 0.4914 | 0.3998 | 2.7298 | 0.0662 | 0.6854 | 0.6214 | 0.9246 |
| Yahoo_Science | 0.1882 | 0.0311 | 0.2140 | 0.2281 | 0.0768 | 0.2819 | 0.6143 | 5.5956 | 0.1048 | 0.5156 | 0.7961 | 0.8816 |
| Yahoo_Social | 0.4886 | 0.0238 | 0.5179 | 0.5537 | 0.0879 | 0.5681 | 0.3171 | 2.8500 | 0.0524 | 0.7480 | 0.7210 | 0.9312 |
| Yahoo_Society | 0.1625 | 0.0541 | 0.1970 | 0.2174 | 0.0602 | 0.2491 | 0.4146 | 4.5496 | 0.1043 | 0.6488 | 0.7104 | 0.8687 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2314 | 6.0909 | 0.1557 | 0.7682 | 0.7536 | 0.8533 |
| Yelp | 0.0060 | 0.3581 | 0.0060 | 0.0060 | 0.0056 | 0.0066 | 0.2293 | 1.3968 | 0.1418 | 0.8431 | 0.7783 | 0.8393 |

Table 152: Detailed results for Massive (1K) for Coverage metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.2376 | 0.0405 | 0.2396 | 0.2407 | 0.3276 | 0.3738 | 0.4580 | 2.2448 | 0.1159 | 0.6730 | 0.9242 | 0.9017 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6944 | 2.3889 | 0.4231 | 0.5102 | 0.5939 | 0.5923 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6129 | 2.0968 | 0.3621 | 0.5640 | 0.4872 | 0.6417 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.1765 | 0.4147 | 0.4284 | 0.3987 | 0.5847 |
| 3s-reuters1000 | 0.0000 | 0.1833 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.4667 | 0.4767 | 0.4175 | 0.5358 | 0.4941 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.7222 | 0.1139 | 0.8288 | 0.6705 | 0.7886 |
| bibtex | 0.1014 | 0.0130 | 0.1982 | 0.2591 | 0.0831 | 0.2739 | 0.4514 | 32.1081 | 0.1147 | 0.4613 | 0.8696 | 0.8830 |
| birds | 0.1026 | 0.0891 | 0.1154 | 0.1215 | 0.0979 | 0.1316 | 0.2821 | 3.5897 | 0.1093 | 0.7259 | 0.7815 | 0.8927 |
| bookmarks10% | 0.1795 | 0.0094 | 0.2128 | 0.2322 | 0.0634 | 0.2289 | 0.7379 | 49.9570 | 0.1637 | 0.3217 | 0.7313 | 0.8065 |
| CAL500 | 0.0000 | 0.1484 | 0.0053 | 0.0102 | 0.0017 | 0.0105 | 0.3529 | 142.3922 | 0.2094 | 0.4452 | 0.5127 | 0.7958 |
| corel16k001 | 0.0065 | 0.0227 | 0.0779 | 0.1209 | 0.0067 | 0.1225 | 0.7727 | 56.8867 | 0.1994 | 0.2131 | 0.5880 | 0.7984 |
| Corel5k | 0.0000 | 0.0196 | 0.0873 | 0.1510 | 0.0115 | 0.1516 | 0.9200 | 124.0580 | 0.1653 | 0.1097 | 0.4382 | 0.8512 |
| delicious | 0.0000 | 0.0591 | 0.0946 | 0.1731 | 0.1277 | 0.1787 | 0.6600 | 772.6253 | 0.1952 | 0.1732 | 0.6975 | 0.8081 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.5167 | 0.1247 | 0.8345 | 0.8665 | 0.8896 |
| enron | 0.1111 | 0.0546 | 0.3063 | 0.4183 | 0.0883 | 0.3774 | 0.2573 | 12.1754 | 0.0789 | 0.6759 | 0.6132 | 0.9090 |
| EukaryoteGO | 0.6791 | 0.0192 | 0.7382 | 0.7685 | 0.5070 | 0.8052 | 0.1675 | 0.4188 | 0.0125 | 0.9057 | 0.9933 | 0.9945 |
| EukaryotePseAAC | 0.0064 | 0.0525 | 0.0064 | 0.0064 | 0.0024 | 0.0110 | 0.5676 | 2.4234 | 0.1001 | 0.6098 | 0.7812 | 0.9071 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.5000 | 0.1933 | 0.8369 | 0.7341 | 0.8257 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2927 | 2.7317 | 0.1139 | 0.7608 | 0.6772 | 0.8270 |
| genbase | 0.9254 | 0.0028 | 0.9652 | 0.9825 | 0.6173 | 0.9697 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9996 |
| GnegativeGO | 0.9000 | 0.0152 | 0.9179 | 0.9267 | 0.6830 | 0.9391 | 0.0214 | 0.0857 | 0.0043 | 0.9875 | 0.8684 | 0.9975 |
| GnegativePseAAC | 0.3500 | 0.0875 | 0.3500 | 0.3500 | 0.1397 | 0.5000 | 0.2357 | 0.6714 | 0.0899 | 0.8428 | 0.7852 | 0.9508 |
| GpositiveGO | 0.8654 | 0.0529 | 0.8654 | 0.8654 | 0.9120 | 0.8911 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9962 | 0.9961 |
| GpositivePseAAC | 0.4423 | 0.1587 | 0.4423 | 0.4423 | 0.3772 | 0.5823 | 0.3846 | 0.7308 | 0.2756 | 0.7564 | 0.8189 | 0.8465 |
| HumanGO | 0.6045 | 0.0388 | 0.6468 | 0.6690 | 0.4499 | 0.7270 | 0.2122 | 0.5884 | 0.0294 | 0.8762 | 0.9750 | 0.9817 |
| HumanPseAAC | 0.0032 | 0.0843 | 0.0032 | 0.0032 | 0.0015 | 0.0054 | 0.5723 | 2.1350 | 0.1383 | 0.6081 | 0.7476 | 0.8654 |
| Image | 0.1900 | 0.1960 | 0.2050 | 0.2122 | 0.2870 | 0.3099 | 0.2550 | 0.7600 | 0.1313 | 0.8356 | 0.8817 | 0.8857 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6405 | 7.2128 | 0.1713 | 0.4746 | 0.5744 | 0.8134 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6885 | 7.5800 | 0.1742 | 0.4510 | 0.5741 | 0.8146 |
| LLOG-F | 0.0164 | 0.0179 | 0.0287 | 0.0347 | 0.0113 | 0.0575 | 0.7377 | 11.8443 | 0.1333 | 0.3942 | 0.4552 | 0.8798 |
| mediamill10% | 0.6176 | 0.0088 | 0.8559 | 0.9194 | 0.3289 | 0.8886 | 0.0000 | 3.4751 | 0.0001 | 0.9993 | 0.8204 | 0.9990 |
| medical | 0.6531 | 0.0111 | 0.7517 | 0.7976 | 0.3476 | 0.8016 | 0.1327 | 2.0714 | 0.0317 | 0.8800 | 0.5455 | 0.9751 |
| Music | 0.0000 | 0.3250 | 0.0083 | 0.0111 | 0.0159 | 0.0168 | 0.2167 | 1.8000 | 0.1431 | 0.8278 | 0.8734 | 0.8770 |
| NUS-WIDE-bow10% | 0.0014 | 0.0261 | 0.0102 | 0.0148 | 0.0027 | 0.0293 | 0.5585 | 17.7769 | 0.1334 | 0.4854 | 0.6155 | 0.8727 |
| NUS-WIDE-cVLADplus10% | 0.0038 | 0.0261 | 0.0097 | 0.0131 | 0.0019 | 0.0207 | 0.5328 | 17.2388 | 0.1262 | 0.5108 | 0.6376 | 0.8796 |
| OHSUMED-F | 0.0948 | 0.0660 | 0.1352 | 0.1563 | 0.0846 | 0.1967 | 0.4314 | 4.7495 | 0.1338 | 0.6303 | 0.8324 | 0.8655 |
| PlantGO | 0.5938 | 0.0477 | 0.6545 | 0.6846 | 0.6345 | 0.7264 | 0.2500 | 0.5417 | 0.0402 | 0.8529 | 0.9719 | 0.9751 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5918 | 2.0714 | 0.1719 | 0.5938 | 0.7895 | 0.8471 |
| rcv1subset1 | 0.0067 | 0.0295 | 0.0998 | 0.1484 | 0.0296 | 0.1646 | 0.6350 | 21.0233 | 0.0936 | 0.4039 | 0.8187 | 0.8948 |
| REUTERS-K500-EX2 | 0.2234 | 0.0123 | 0.2485 | 0.2617 | 0.0953 | 0.3097 | 0.5533 | 9.9244 | 0.0727 | 0.5074 | 0.6868 | 0.9232 |
| scene | 0.2199 | 0.1432 | 0.2282 | 0.2323 | 0.3600 | 0.3551 | 0.2116 | 0.3983 | 0.0602 | 0.8805 | 0.9485 | 0.9580 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1197 | 18.9437 | 0.1302 | 0.8223 | 0.5773 | 0.7957 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0915 | 18.9296 | 0.1228 | 0.8476 | 0.5751 | 0.8055 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1761 | 19.0000 | 0.1311 | 0.8272 | 0.5687 | 0.7881 |
| SLASHDOT-F | 0.2222 | 0.0465 | 0.2443 | 0.2552 | 0.1473 | 0.3430 | 0.5450 | 3.2619 | 0.1300 | 0.5746 | 0.6233 | 0.8704 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.2000 | 0.2000 | 0.1333 | 0.2857 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0231 | 0.0173 | 0.1178 | 0.1854 | 0.0281 | 0.1799 | 0.8703 | 43.0043 | 0.1525 | 0.2063 | 0.6746 | 0.8416 |
| Stackex_chess | 0.0119 | 0.0157 | 0.1353 | 0.2245 | 0.0392 | 0.2093 | 0.7738 | 66.4048 | 0.1738 | 0.2469 | 0.4110 | 0.8596 |
| Stackex_coffee | 0.0000 | 0.0247 | 0.1551 | 0.2427 | 0.0473 | 0.2391 | 0.7826 | 42.6087 | 0.2293 | 0.3231 | 0.2381 | 0.9276 |
| Stackex_cooking | 0.0106 | 0.0091 | 0.1149 | 0.1846 | 0.0548 | 0.1860 | 0.8667 | 132.3208 | 0.2616 | 0.1858 | 0.8122 | 0.8876 |
| Stackex_philosophy | 0.0226 | 0.0199 | 0.1255 | 0.2117 | 0.0344 | 0.1850 | 0.8191 | 51.5251 | 0.1290 | 0.2478 | 0.5741 | 0.8717 |
| tmc2007-500 | 0.0563 | 0.0915 | 0.0925 | 0.1110 | 0.0412 | 0.1239 | 0.3021 | 3.3322 | 0.0710 | 0.7364 | 0.9059 | 0.9271 |
| tox21_CDK_ECFP4 | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0060 | 0.0032 | 0.5068 | 4.0925 | 0.2163 | 0.6031 | 0.6983 | 0.7664 |
| tox21_RDKit_desc | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0020 | 0.0032 | 0.4178 | 3.7808 | 0.1884 | 0.6548 | 0.7305 | 0.7873 |
| VirusGO | 0.7619 | 0.0794 | 0.7619 | 0.7619 | 0.6029 | 0.7619 | 0.0952 | 0.3810 | 0.0571 | 0.9405 | 0.8037 | 0.9857 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.7143 | 0.1131 | 0.8206 | 0.6154 | 0.8919 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2264 | 8.5943 | 0.2298 | 0.7283 | 0.7196 | 0.7499 |
| Yahoo_Arts | 0.0601 | 0.0610 | 0.0815 | 0.0929 | 0.0456 | 0.1226 | 0.4726 | 4.7557 | 0.1174 | 0.6061 | 0.7511 | 0.8634 |
| Yahoo_Business | 0.4528 | 0.0297 | 0.6198 | 0.7125 | 0.0518 | 0.6749 | 0.1123 | 2.0107 | 0.0326 | 0.8898 | 0.6965 | 0.9512 |
| Yahoo_Computers | 0.2803 | 0.0384 | 0.3300 | 0.3607 | 0.0421 | 0.3863 | 0.4185 | 3.7992 | 0.0759 | 0.6583 | 0.6900 | 0.8964 |
| Yahoo_Education | 0.1205 | 0.0394 | 0.1408 | 0.1522 | 0.0594 | 0.2259 | 0.5387 | 3.4389 | 0.0773 | 0.5981 | 0.6879 | 0.9188 |
| Yahoo_Entertainment | 0.1783 | 0.0590 | 0.1906 | 0.1979 | 0.0878 | 0.2494 | 0.4148 | 2.8107 | 0.0977 | 0.6764 | 0.7963 | 0.8944 |
| Yahoo_Health | 0.3485 | 0.0373 | 0.4338 | 0.4838 | 0.1437 | 0.5076 | 0.3127 | 2.8686 | 0.0513 | 0.7419 | 0.6995 | 0.9424 |
| Yahoo_Recreation | 0.1793 | 0.0548 | 0.1924 | 0.1999 | 0.1204 | 0.2567 | 0.4536 | 3.5207 | 0.1229 | 0.6400 | 0.8350 | 0.8589 |
| Yahoo_Reference | 0.3611 | 0.0271 | 0.3918 | 0.4077 | 0.0710 | 0.4875 | 0.3973 | 2.9153 | 0.0712 | 0.6865 | 0.6621 | 0.9205 |
| Yahoo_Science | 0.1415 | 0.0326 | 0.1614 | 0.1718 | 0.0573 | 0.2212 | 0.5490 | 5.6905 | 0.1033 | 0.5583 | 0.7897 | 0.8796 |
| Yahoo_Social | 0.4835 | 0.0240 | 0.5249 | 0.5479 | 0.0890 | 0.5540 | 0.3168 | 2.9299 | 0.0541 | 0.7439 | 0.7073 | 0.9279 |
| Yahoo_Society | 0.1419 | 0.0552 | 0.1694 | 0.1853 | 0.0497 | 0.2155 | 0.3994 | 4.7672 | 0.1112 | 0.6445 | 0.7067 | 0.8619 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2107 | 6.0000 | 0.1530 | 0.7780 | 0.7486 | 0.8550 |
| Yelp | 0.0010 | 0.3591 | 0.0010 | 0.0010 | 0.0009 | 0.0011 | 0.2463 | 1.4267 | 0.1508 | 0.8343 | 0.7566 | 0.8301 |

Table 153: Detailed results for Massive for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.2599 | 0.0388 | 0.2617 | 0.2626 | 0.3648 | 0.4043 | 0.2925 | 0.9315 | 0.0491 | 0.8115 | 0.9617 | 0.9624 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7778 | 2.1111 | 0.3765 | 0.5088 | 0.5643 | 0.5791 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6452 | 2.1613 | 0.3742 | 0.5317 | 0.5459 | 0.6501 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.0588 | 0.4000 | 0.4069 | 0.4525 | 0.6660 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8333 | 2.6000 | 0.5067 | 0.4078 | 0.5499 | 0.5074 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.5000 | 0.0796 | 0.8519 | 0.6806 | 0.8050 |
| bibtex | 0.1108 | 0.0129 | 0.2032 | 0.2621 | 0.0926 | 0.2785 | 0.3797 | 31.4162 | 0.1732 | 0.5701 | 0.9408 | 0.9552 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3077 | 3.9231 | 0.1313 | 0.7066 | 0.7587 | 0.8743 |
| bookmarks10% | 0.1777 | 0.0090 | 0.1868 | 0.1918 | 0.0318 | 0.1871 | 0.6116 | 60.5820 | 0.2943 | 0.3949 | 0.8571 | 0.8941 |
| CAL500 | 0.0000 | 0.1490 | 0.0006 | 0.0012 | 0.0003 | 0.0015 | 0.1765 | 146.5294 | 0.2154 | 0.4389 | 0.5209 | 0.7910 |
| corel16k001 | 0.0000 | 0.0188 | 0.0025 | 0.0035 | 0.0011 | 0.0040 | 0.6754 | 58.5200 | 0.2776 | 0.3044 | 0.8280 | 0.8804 |
| Corel5k | 0.0000 | 0.0094 | 0.0201 | 0.0317 | 0.0054 | 0.0415 | 0.7240 | 140.9560 | 0.4426 | 0.2463 | 0.6247 | 0.9515 |
| delicious | 0.0000 | 0.0820 | 0.0435 | 0.0859 | 0.0437 | 0.0852 | 0.9389 | 931.7383 | 0.3396 | 0.0649 | 0.6620 | 0.6806 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.5833 | 0.1328 | 0.8164 | 0.8614 | 0.8847 |
| enron | 0.0994 | 0.0594 | 0.1819 | 0.2408 | 0.0343 | 0.2041 | 0.2164 | 12.0526 | 0.0833 | 0.7123 | 0.6663 | 0.9198 |
| EukaryoteGO | 0.6469 | 0.0209 | 0.6860 | 0.7056 | 0.4745 | 0.7701 | 0.1740 | 0.4227 | 0.0130 | 0.9019 | 0.9935 | 0.9951 |
| EukaryotePseAAC | 0.0090 | 0.0524 | 0.0090 | 0.0090 | 0.0040 | 0.0154 | 0.5560 | 2.3320 | 0.0964 | 0.6193 | 0.7723 | 0.9111 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.5500 | 0.1842 | 0.8369 | 0.6795 | 0.8166 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 2.7317 | 0.1108 | 0.7920 | 0.6844 | 0.8251 |
| genbase | 0.8657 | 0.0066 | 0.9179 | 0.9503 | 0.3951 | 0.9200 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9997 |
| GnegativeGO | 0.8929 | 0.0187 | 0.9036 | 0.9089 | 0.6697 | 0.9242 | 0.0214 | 0.1143 | 0.0084 | 0.9850 | 0.8674 | 0.9954 |
| GnegativePseAAC | 0.3071 | 0.0929 | 0.3071 | 0.3071 | 0.1152 | 0.4526 | 0.2357 | 0.6429 | 0.0829 | 0.8452 | 0.8049 | 0.9531 |
| GpositiveGO | 0.8462 | 0.0481 | 0.8558 | 0.8606 | 0.9111 | 0.9000 | 0.0962 | 0.1538 | 0.0449 | 0.9471 | 0.9938 | 0.9925 |
| GpositivePseAAC | 0.2885 | 0.1875 | 0.2885 | 0.2885 | 0.2714 | 0.4348 | 0.3269 | 0.5962 | 0.2115 | 0.7981 | 0.8096 | 0.8570 |
| HumanGO | 0.5370 | 0.0450 | 0.5713 | 0.5890 | 0.4105 | 0.6585 | 0.1897 | 0.5884 | 0.0270 | 0.8879 | 0.9739 | 0.9820 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5627 | 2.1286 | 0.1405 | 0.6151 | 0.7421 | 0.8646 |
| Image | 0.1650 | 0.2050 | 0.1700 | 0.1725 | 0.2292 | 0.2545 | 0.2650 | 0.8950 | 0.1629 | 0.8202 | 0.8645 | 0.8686 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6164 | 7.2442 | 0.1695 | 0.4835 | 0.6081 | 0.8112 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5965 | 7.6752 | 0.1741 | 0.4871 | 0.6105 | 0.8127 |
| LLOG-F | 0.0164 | 0.0178 | 0.0164 | 0.0164 | 0.0058 | 0.0240 | 0.5820 | 9.0820 | 0.1085 | 0.5042 | 0.4907 | 0.9089 |
| mediamill10% | 0.0926 | 0.0313 | 0.3504 | 0.4733 | 0.0322 | 0.4504 | 0.0356 | 4.1544 | 0.0027 | 0.9505 | 0.8190 | 0.9957 |
| medical | 0.6531 | 0.0109 | 0.7109 | 0.7377 | 0.2632 | 0.7818 | 0.1327 | 1.4082 | 0.0344 | 0.9106 | 0.5483 | 0.9928 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1500 | 1.8667 | 0.1431 | 0.8355 | 0.8622 | 0.8715 |
| NUS-WIDE-bow10% | 0.0010 | 0.0262 | 0.0054 | 0.0080 | 0.0017 | 0.0176 | 0.5323 | 17.7997 | 0.1410 | 0.4944 | 0.6420 | 0.8745 |
| NUS-WIDE-cVLADplus10% | 0.0038 | 0.0262 | 0.0057 | 0.0072 | 0.0011 | 0.0115 | 0.5271 | 16.9329 | 0.1256 | 0.5052 | 0.6496 | 0.8813 |
| OHSUMED-F | 0.1041 | 0.0653 | 0.1439 | 0.1649 | 0.0964 | 0.2052 | 0.3374 | 3.2513 | 0.0823 | 0.7231 | 0.8688 | 0.9138 |
| PlantGO | 0.5729 | 0.0486 | 0.5833 | 0.5885 | 0.5958 | 0.6706 | 0.1979 | 0.3542 | 0.0224 | 0.8932 | 0.9746 | 0.9824 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5918 | 2.1020 | 0.1728 | 0.5927 | 0.8013 | 0.8432 |
| rcv1subset1 | 0.0067 | 0.0292 | 0.0585 | 0.0826 | 0.0242 | 0.0931 | 0.3933 | 13.6533 | 0.0657 | 0.6249 | 0.8727 | 0.9547 |
| REUTERS-K500-EX2 | 0.2182 | 0.0118 | 0.2393 | 0.2511 | 0.1015 | 0.3093 | 0.4141 | 8.5756 | 0.1103 | 0.6596 | 0.7450 | 0.9692 |
| scene | 0.2116 | 0.1445 | 0.2178 | 0.2209 | 0.3466 | 0.3407 | 0.2075 | 0.4481 | 0.0693 | 0.8743 | 0.9421 | 0.9501 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1127 | 18.8662 | 0.1245 | 0.8335 | 0.5680 | 0.7993 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0775 | 18.9859 | 0.1156 | 0.8528 | 0.5704 | 0.8115 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1127 | 18.8239 | 0.1255 | 0.8467 | 0.5769 | 0.8010 |
| SLASHDOT-F | 0.2460 | 0.0443 | 0.2676 | 0.2788 | 0.1737 | 0.3741 | 0.4101 | 2.2434 | 0.0880 | 0.6969 | 0.6768 | 0.9261 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.3000 | 0.4000 | 0.3238 | 0.5000 | 0.4000 | 0.4000 | 0.3000 | 0.8000 | 0.3333 | 0.7600 |
| Stackex_chemistry | 0.0101 | 0.0120 | 0.0274 | 0.0365 | 0.0143 | 0.0495 | 0.6254 | 48.3256 | 0.2656 | 0.3765 | 0.8417 | 0.9367 |
| Stackex_chess | 0.0179 | 0.0103 | 0.0778 | 0.1091 | 0.0201 | 0.1400 | 0.5476 | 69.2500 | 0.2767 | 0.4141 | 0.5078 | 0.9567 |
| Stackex_coffee | 0.0000 | 0.0180 | 0.0145 | 0.0217 | 0.0081 | 0.0377 | 0.7391 | 39.5217 | 0.2181 | 0.3501 | 0.2461 | 0.9227 |
| Stackex_cooking | 0.0357 | 0.0054 | 0.1147 | 0.1548 | 0.0514 | 0.1868 | 0.4986 | 146.4879 | 0.3810 | 0.4147 | 0.8956 | 0.9764 |
| Stackex_philosophy | 0.0503 | 0.0092 | 0.1156 | 0.1511 | 0.0347 | 0.1726 | 0.5151 | 73.5302 | 0.3039 | 0.4235 | 0.6986 | 0.9539 |
| tmc2007-500 | 0.0531 | 0.0909 | 0.0917 | 0.1119 | 0.0558 | 0.1273 | 0.2654 | 2.6598 | 0.0496 | 0.7876 | 0.9237 | 0.9497 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4589 | 3.8767 | 0.1979 | 0.6388 | 0.7107 | 0.7794 |
| tox21_RDKit_desc | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0020 | 0.0032 | 0.4452 | 3.8082 | 0.1911 | 0.6425 | 0.7303 | 0.7901 |
| VirusGO | 0.7143 | 0.0873 | 0.7143 | 0.7143 | 0.5926 | 0.7317 | 0.0476 | 0.3810 | 0.0345 | 0.9563 | 0.7774 | 0.9691 |
| VirusPseAAC | 0.0476 | 0.1746 | 0.0476 | 0.0476 | 0.0303 | 0.0833 | 0.2857 | 0.7143 | 0.1095 | 0.8151 | 0.6304 | 0.8945 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2170 | 8.7264 | 0.2380 | 0.7280 | 0.7151 | 0.7482 |
| Yahoo_Arts | 0.1439 | 0.0555 | 0.1811 | 0.1994 | 0.1548 | 0.2558 | 0.3474 | 3.7877 | 0.0839 | 0.7132 | 0.7970 | 0.8972 |
| Yahoo_Business | 0.5134 | 0.0275 | 0.6461 | 0.7115 | 0.1374 | 0.6725 | 0.0884 | 1.6612 | 0.0270 | 0.9180 | 0.7609 | 0.9742 |
| Yahoo_Computers | 0.2741 | 0.0489 | 0.3651 | 0.4554 | 0.0944 | 0.4101 | 0.4652 | 7.6275 | 0.1670 | 0.6038 | 0.5745 | 0.6898 |
| Yahoo_Education | 0.1306 | 0.0375 | 0.1497 | 0.1605 | 0.1191 | 0.2531 | 0.3940 | 2.6338 | 0.0598 | 0.6984 | 0.7995 | 0.9391 |
| Yahoo_Entertainment | 0.2667 | 0.0542 | 0.2845 | 0.2995 | 0.1710 | 0.3554 | 0.2884 | 1.9243 | 0.0575 | 0.7802 | 0.8839 | 0.9454 |
| Yahoo_Health | 0.3444 | 0.0335 | 0.4128 | 0.4524 | 0.2203 | 0.5249 | 0.2016 | 2.3049 | 0.0374 | 0.8422 | 0.7679 | 0.9637 |
| Yahoo_Recreation | 0.2593 | 0.0496 | 0.2820 | 0.2967 | 0.2415 | 0.3800 | 0.2907 | 2.3974 | 0.0732 | 0.7694 | 0.8803 | 0.9254 |
| Yahoo_Reference | 0.0322 | 0.0652 | 0.2482 | 0.3434 | 0.1132 | 0.3415 | 0.9446 | 5.1242 | 0.1335 | 0.3782 | 0.4349 | 0.6818 |
| Yahoo_Science | 0.1238 | 0.0360 | 0.1594 | 0.1842 | 0.0619 | 0.2311 | 0.5660 | 7.2031 | 0.1383 | 0.5305 | 0.6888 | 0.7465 |
| Yahoo_Social | 0.2431 | 0.0418 | 0.3703 | 0.4431 | 0.0626 | 0.4189 | 0.4694 | 7.4174 | 0.1541 | 0.6110 | 0.5241 | 0.7079 |
| Yahoo_Society | 0.1536 | 0.0657 | 0.2078 | 0.2513 | 0.0523 | 0.2576 | 0.5431 | 9.3389 | 0.2426 | 0.5085 | 0.5366 | 0.7025 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2438 | 6.0785 | 0.1544 | 0.7667 | 0.7573 | 0.8544 |
| Yelp | 0.0847 | 0.3374 | 0.0975 | 0.1050 | 0.0765 | 0.1187 | 0.1476 | 1.2044 | 0.0960 | 0.8973 | 0.8466 | 0.8890 |

Table 154: Detailed results for Massive (1K) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.2329 | 0.0406 | 0.2342 | 0.2348 | 0.3231 | 0.3673 | 0.3128 | 1.0197 | 0.0536 | 0.7973 | 0.9582 | 0.9587 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6944 | 2.2222 | 0.4047 | 0.5203 | 0.6078 | 0.6027 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7742 | 2.5161 | 0.4516 | 0.4629 | 0.5096 | 0.5990 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7647 | 2.0000 | 0.3838 | 0.4755 | 0.4783 | 0.6336 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.5333 | 0.5058 | 0.3967 | 0.5422 | 0.5061 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.7222 | 0.1139 | 0.8288 | 0.6661 | 0.7883 |
| bibtex | 0.1014 | 0.0129 | 0.1940 | 0.2522 | 0.0865 | 0.2704 | 0.3797 | 27.6527 | 0.1438 | 0.5733 | 0.9269 | 0.9481 |
| birds | 0.1026 | 0.0891 | 0.1154 | 0.1215 | 0.0979 | 0.1316 | 0.3077 | 3.3846 | 0.1073 | 0.7200 | 0.7870 | 0.8961 |
| bookmarks10% | 0.1503 | 0.0095 | 0.1714 | 0.1845 | 0.0289 | 0.1750 | 0.6822 | 66.1993 | 0.3454 | 0.3481 | 0.8657 | 0.8980 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2549 | 138.4902 | 0.2046 | 0.4619 | 0.5120 | 0.7983 |
| corel16k001 | 0.0000 | 0.0365 | 0.0563 | 0.1026 | 0.0181 | 0.0997 | 0.9686 | 68.6117 | 0.2368 | 0.1397 | 0.5904 | 0.6683 |
| Corel5k | 0.0000 | 0.0120 | 0.0248 | 0.0406 | 0.0062 | 0.0499 | 0.6900 | 140.7100 | 0.4338 | 0.2500 | 0.6221 | 0.9505 |
| delicious | 0.0000 | 0.0819 | 0.0432 | 0.0840 | 0.0433 | 0.0841 | 0.9337 | 942.9814 | 0.3388 | 0.0645 | 0.6520 | 0.6807 |
| emotions | 0.0500 | 0.2944 | 0.0583 | 0.0622 | 0.0547 | 0.0702 | 0.2500 | 1.5667 | 0.1311 | 0.8332 | 0.8658 | 0.8783 |
| enron | 0.1170 | 0.0569 | 0.2335 | 0.3113 | 0.0691 | 0.2813 | 0.2164 | 12.7076 | 0.0842 | 0.7079 | 0.6704 | 0.9186 |
| EukaryoteGO | 0.6495 | 0.0206 | 0.6969 | 0.7209 | 0.4953 | 0.7775 | 0.1662 | 0.3969 | 0.0127 | 0.9085 | 0.9935 | 0.9950 |
| EukaryotePseAAC | 0.0064 | 0.0525 | 0.0064 | 0.0064 | 0.0024 | 0.0110 | 0.5689 | 2.4311 | 0.1014 | 0.6094 | 0.7684 | 0.9066 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1000 | 3.5500 | 0.1850 | 0.8549 | 0.7339 | 0.8289 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2195 | 2.6341 | 0.1047 | 0.8032 | 0.6702 | 0.8263 |
| genbase | 0.9254 | 0.0033 | 0.9602 | 0.9776 | 0.5802 | 0.9634 | 0.0149 | 0.2239 | 0.0006 | 0.9938 | 0.6667 | 0.9994 |
| GnegativeGO | 0.9000 | 0.0161 | 0.9143 | 0.9214 | 0.6813 | 0.9353 | 0.0143 | 0.0929 | 0.0092 | 0.9893 | 0.8733 | 0.9989 |
| GnegativePseAAC | 0.3214 | 0.0920 | 0.3214 | 0.3214 | 0.1214 | 0.4663 | 0.2429 | 0.6286 | 0.0846 | 0.8432 | 0.7831 | 0.9531 |
| GpositiveGO | 0.8654 | 0.0529 | 0.8654 | 0.8654 | 0.9120 | 0.8911 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9962 | 0.9961 |
| GpositivePseAAC | 0.4038 | 0.1587 | 0.4038 | 0.4038 | 0.3621 | 0.5600 | 0.4423 | 0.8077 | 0.2885 | 0.7244 | 0.8093 | 0.8358 |
| HumanGO | 0.5595 | 0.0439 | 0.5938 | 0.6116 | 0.4513 | 0.6735 | 0.1833 | 0.5402 | 0.0275 | 0.8904 | 0.9791 | 0.9845 |
| HumanPseAAC | 0.0000 | 0.0845 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5756 | 2.1897 | 0.1433 | 0.6038 | 0.7398 | 0.8640 |
| Image | 0.1850 | 0.1990 | 0.1950 | 0.1999 | 0.2694 | 0.2918 | 0.2600 | 0.7400 | 0.1288 | 0.8379 | 0.8881 | 0.8924 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6143 | 7.1981 | 0.1667 | 0.4881 | 0.5815 | 0.8112 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5808 | 7.6214 | 0.1727 | 0.4972 | 0.6099 | 0.8152 |
| LLOG-F | 0.0246 | 0.0177 | 0.0287 | 0.0306 | 0.0104 | 0.0471 | 0.6066 | 12.0574 | 0.1608 | 0.4924 | 0.4950 | 0.8984 |
| mediamill10% | 0.5843 | 0.0088 | 0.8550 | 0.9188 | 0.3225 | 0.8886 | 0.0000 | 3.4703 | 0.0001 | 0.9981 | 0.8204 | 0.9991 |
| medical | 0.6531 | 0.0104 | 0.7500 | 0.8000 | 0.3724 | 0.8083 | 0.1429 | 1.4286 | 0.0361 | 0.8975 | 0.5508 | 0.9952 |
| Music | 0.0000 | 0.3250 | 0.0083 | 0.0111 | 0.0159 | 0.0168 | 0.2000 | 1.8500 | 0.1437 | 0.8258 | 0.8645 | 0.8714 |
| NUS-WIDE-bow10% | 0.0019 | 0.0258 | 0.0086 | 0.0129 | 0.0023 | 0.0257 | 0.5225 | 17.4139 | 0.1333 | 0.4972 | 0.6468 | 0.8818 |
| NUS-WIDE-cVLADplus10% | 0.0010 | 0.0263 | 0.0019 | 0.0027 | 0.0004 | 0.0040 | 0.5842 | 17.1675 | 0.1279 | 0.4821 | 0.6356 | 0.8794 |
| OHSUMED-F | 0.0955 | 0.0656 | 0.1396 | 0.1623 | 0.0977 | 0.2045 | 0.3561 | 3.5966 | 0.0931 | 0.7038 | 0.8550 | 0.9045 |
| PlantGO | 0.5625 | 0.0547 | 0.5938 | 0.6094 | 0.5868 | 0.6557 | 0.1979 | 0.5000 | 0.0460 | 0.8846 | 0.9768 | 0.9810 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5612 | 1.9388 | 0.1607 | 0.6160 | 0.7824 | 0.8466 |
| rcv1subset1 | 0.0000 | 0.0297 | 0.0370 | 0.0538 | 0.0147 | 0.0616 | 0.4250 | 13.2250 | 0.0613 | 0.6073 | 0.8694 | 0.9528 |
| REUTERS-K500-EX2 | 0.1735 | 0.0124 | 0.1916 | 0.2016 | 0.0766 | 0.2520 | 0.4364 | 8.6254 | 0.0954 | 0.6520 | 0.7441 | 0.9683 |
| scene | 0.2241 | 0.1404 | 0.2344 | 0.2395 | 0.3776 | 0.3676 | 0.1660 | 0.3402 | 0.0499 | 0.9044 | 0.9511 | 0.9598 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0915 | 18.7676 | 0.1272 | 0.8343 | 0.5838 | 0.7989 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0915 | 18.9437 | 0.1279 | 0.8402 | 0.5732 | 0.7985 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1127 | 18.9014 | 0.1208 | 0.8446 | 0.5707 | 0.8041 |
| SLASHDOT-F | 0.2434 | 0.0439 | 0.2716 | 0.2859 | 0.1824 | 0.3845 | 0.4206 | 2.2910 | 0.0915 | 0.6937 | 0.6749 | 0.9261 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.3889 | 0.7800 |
| Stackex_chemistry | 0.0144 | 0.0121 | 0.0266 | 0.0343 | 0.0126 | 0.0418 | 0.6427 | 48.9597 | 0.2587 | 0.3684 | 0.8370 | 0.9339 |
| Stackex_chess | 0.0119 | 0.0101 | 0.0998 | 0.1479 | 0.0370 | 0.1967 | 0.5833 | 75.1369 | 0.3346 | 0.3824 | 0.5152 | 0.9609 |
| Stackex_coffee | 0.0435 | 0.0223 | 0.1087 | 0.1637 | 0.0406 | 0.1600 | 0.7826 | 47.1304 | 0.3089 | 0.2850 | 0.2432 | 0.9296 |
| Stackex_cooking | 0.0263 | 0.0072 | 0.1691 | 0.2626 | 0.0734 | 0.2694 | 0.7720 | 132.4765 | 0.1851 | 0.2118 | 0.7615 | 0.8050 |
| Stackex_philosophy | 0.0528 | 0.0092 | 0.1224 | 0.1598 | 0.0343 | 0.1834 | 0.4698 | 69.4899 | 0.2845 | 0.4542 | 0.7010 | 0.9562 |
| tmc2007-500 | 0.0462 | 0.0915 | 0.0814 | 0.0992 | 0.0447 | 0.1166 | 0.2853 | 2.7493 | 0.0528 | 0.7747 | 0.9199 | 0.9469 |
| tox21_CDK_ECFP4 | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0060 | 0.0032 | 0.4692 | 3.9555 | 0.2029 | 0.6317 | 0.7110 | 0.7776 |
| tox21_RDKit_desc | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0020 | 0.0032 | 0.4212 | 3.7945 | 0.1884 | 0.6508 | 0.7288 | 0.7886 |
| VirusGO | 0.7619 | 0.0794 | 0.7619 | 0.7619 | 0.6029 | 0.7619 | 0.0476 | 0.3333 | 0.0476 | 0.9643 | 0.8037 | 0.9865 |
| VirusPseAAC | 0.1429 | 0.1587 | 0.1429 | 0.1429 | 0.1667 | 0.2308 | 0.3333 | 0.6667 | 0.1107 | 0.8032 | 0.6276 | 0.8911 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1887 | 8.5094 | 0.2271 | 0.7372 | 0.7165 | 0.7536 |
| Yahoo_Arts | 0.0614 | 0.0609 | 0.0822 | 0.0934 | 0.0471 | 0.1254 | 0.4085 | 3.8638 | 0.0883 | 0.6775 | 0.7920 | 0.8923 |
| Yahoo_Business | 0.4742 | 0.0294 | 0.6118 | 0.6888 | 0.0389 | 0.6413 | 0.1132 | 1.8137 | 0.0277 | 0.9025 | 0.7477 | 0.9663 |
| Yahoo_Computers | 0.1582 | 0.0412 | 0.1778 | 0.1893 | 0.0326 | 0.2300 | 0.3639 | 3.0273 | 0.0603 | 0.7229 | 0.7447 | 0.9229 |
| Yahoo_Education | 0.0549 | 0.0410 | 0.0613 | 0.0649 | 0.0400 | 0.1191 | 0.4497 | 2.8520 | 0.0645 | 0.6678 | 0.7587 | 0.9358 |
| Yahoo_Entertainment | 0.1799 | 0.0589 | 0.1908 | 0.1973 | 0.0915 | 0.2483 | 0.3331 | 2.1273 | 0.0670 | 0.7502 | 0.8540 | 0.9260 |
| Yahoo_Health | 0.2465 | 0.0392 | 0.2926 | 0.3200 | 0.1409 | 0.4004 | 0.2682 | 2.2682 | 0.0384 | 0.8009 | 0.7490 | 0.9569 |
| Yahoo_Recreation | 0.1684 | 0.0551 | 0.1817 | 0.1895 | 0.1132 | 0.2461 | 0.3437 | 2.5986 | 0.0812 | 0.7345 | 0.8648 | 0.9084 |
| Yahoo_Reference | 0.0320 | 0.0667 | 0.2445 | 0.3342 | 0.1118 | 0.3413 | 0.9452 | 5.0939 | 0.1320 | 0.3741 | 0.4315 | 0.6854 |
| Yahoo_Science | 0.1220 | 0.0368 | 0.1576 | 0.1841 | 0.0615 | 0.2284 | 0.5773 | 7.3460 | 0.1411 | 0.5335 | 0.6839 | 0.7555 |
| Yahoo_Social | 0.2413 | 0.0419 | 0.3673 | 0.4439 | 0.0622 | 0.4131 | 0.4672 | 7.5563 | 0.1572 | 0.6114 | 0.5131 | 0.7108 |
| Yahoo_Society | 0.1517 | 0.0661 | 0.2080 | 0.2497 | 0.0511 | 0.2539 | 0.5494 | 9.3226 | 0.2416 | 0.5035 | 0.5318 | 0.7036 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2025 | 6.0083 | 0.1504 | 0.7834 | 0.7574 | 0.8567 |
| Yelp | 0.0678 | 0.3414 | 0.0819 | 0.0899 | 0.0604 | 0.1046 | 0.2084 | 1.3450 | 0.1294 | 0.8579 | 0.8068 | 0.8573 |

Table 155: Detailed results for Massive for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.2567 | 0.0395 | 0.2578 | 0.2583 | 0.3499 | 0.3957 | 0.4310 | 2.3729 | 0.1227 | 0.6756 | 0.9331 | 0.8977 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7778 | 2.4722 | 0.4415 | 0.4764 | 0.4956 | 0.5393 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6129 | 2.1613 | 0.3694 | 0.5543 | 0.5828 | 0.6655 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.1765 | 0.4147 | 0.4324 | 0.3969 | 0.5933 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.2000 | 0.4308 | 0.4328 | 0.6264 | 0.5610 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5000 | 0.0787 | 0.8700 | 0.6647 | 0.7935 |
| bibtex | 0.1203 | 0.0125 | 0.2350 | 0.3060 | 0.1322 | 0.3245 | 0.5122 | 28.9554 | 0.1036 | 0.4406 | 0.8805 | 0.8950 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3077 | 4.0000 | 0.1364 | 0.6890 | 0.7619 | 0.8725 |
| bookmarks10% | 0.1595 | 0.0093 | 0.1775 | 0.1868 | 0.0306 | 0.1804 | 0.7118 | 53.8610 | 0.1740 | 0.3315 | 0.7134 | 0.8005 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4314 | 138.5294 | 0.2059 | 0.4591 | 0.5154 | 0.7968 |
| corel16k001 | 0.0051 | 0.0232 | 0.0937 | 0.1471 | 0.0083 | 0.1572 | 0.7771 | 57.4764 | 0.1953 | 0.2329 | 0.5972 | 0.8008 |
| Corel5k | 0.0000 | 0.0197 | 0.0975 | 0.1644 | 0.0117 | 0.1667 | 0.7740 | 128.2120 | 0.1587 | 0.1716 | 0.3716 | 0.8425 |
| delicious | 0.0130 | 0.4945 | 0.0145 | 0.0543 | 0.0422 | 0.0527 | 0.8878 | 912.0294 | 0.5139 | 0.0633 | 0.8433 | 0.6865 |
| emotions | 0.0167 | 0.3028 | 0.0167 | 0.0167 | 0.0167 | 0.0180 | 0.3000 | 1.6500 | 0.1438 | 0.7998 | 0.8656 | 0.8849 |
| enron | 0.0760 | 0.0565 | 0.2494 | 0.3629 | 0.0610 | 0.3155 | 0.2339 | 12.3684 | 0.0791 | 0.6916 | 0.5948 | 0.9102 |
| EukaryoteGO | 0.6869 | 0.0181 | 0.7564 | 0.7909 | 0.5339 | 0.8207 | 0.1765 | 0.4085 | 0.0119 | 0.9022 | 0.9935 | 0.9953 |
| EukaryotePseAAC | 0.0142 | 0.0522 | 0.0142 | 0.0142 | 0.0067 | 0.0241 | 0.5663 | 2.3797 | 0.0984 | 0.6110 | 0.7820 | 0.9094 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 3.3000 | 0.1883 | 0.8288 | 0.6952 | 0.8090 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2195 | 2.7317 | 0.1128 | 0.7993 | 0.6829 | 0.8175 |
| genbase | 0.8657 | 0.0055 | 0.9279 | 0.9556 | 0.4247 | 0.9342 | 0.0000 | 0.2090 | 0.0000 | 1.0000 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9000 | 0.0170 | 0.9143 | 0.9214 | 0.6798 | 0.9319 | 0.0214 | 0.1000 | 0.0066 | 0.9869 | 0.8648 | 0.9942 |
| GnegativePseAAC | 0.3000 | 0.0938 | 0.3000 | 0.3000 | 0.1100 | 0.4444 | 0.2571 | 0.6714 | 0.0884 | 0.8364 | 0.7746 | 0.9480 |
| GpositiveGO | 0.8269 | 0.0625 | 0.8269 | 0.8269 | 0.8958 | 0.8687 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9942 | 0.9956 |
| GpositivePseAAC | 0.3077 | 0.1971 | 0.3077 | 0.3077 | 0.2833 | 0.4384 | 0.4231 | 0.7308 | 0.2628 | 0.7436 | 0.8186 | 0.8459 |
| HumanGO | 0.6013 | 0.0402 | 0.6404 | 0.6610 | 0.4128 | 0.7191 | 0.2283 | 0.6174 | 0.0298 | 0.8681 | 0.9719 | 0.9813 |
| HumanPseAAC | 0.0032 | 0.0843 | 0.0032 | 0.0032 | 0.0015 | 0.0054 | 0.5820 | 2.1865 | 0.1451 | 0.6001 | 0.7435 | 0.8630 |
| Image | 0.1250 | 0.2110 | 0.1350 | 0.1398 | 0.1932 | 0.2156 | 0.2850 | 0.8350 | 0.1508 | 0.8160 | 0.8722 | 0.8711 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6331 | 7.3166 | 0.1727 | 0.4774 | 0.5811 | 0.8123 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6114 | 7.4532 | 0.1701 | 0.4909 | 0.6311 | 0.8190 |
| LLOG-F | 0.0246 | 0.0175 | 0.0328 | 0.0364 | 0.0102 | 0.0588 | 0.5984 | 10.9426 | 0.1315 | 0.4669 | 0.4703 | 0.8875 |
| mediamill10% | 0.0998 | 0.0299 | 0.3895 | 0.5194 | 0.0329 | 0.4873 | 0.0166 | 4.0356 | 0.0025 | 0.9564 | 0.8193 | 0.9960 |
| medical | 0.5918 | 0.0125 | 0.6650 | 0.6990 | 0.2457 | 0.7442 | 0.1327 | 1.4490 | 0.0206 | 0.9089 | 0.5448 | 0.9842 |
| Music | 0.0000 | 0.3250 | 0.0083 | 0.0111 | 0.0159 | 0.0168 | 0.2167 | 1.8333 | 0.1373 | 0.8178 | 0.8674 | 0.8758 |
| NUS-WIDE-bow10% | 0.0019 | 0.0259 | 0.0154 | 0.0229 | 0.0040 | 0.0450 | 0.5557 | 17.0766 | 0.1171 | 0.4882 | 0.6222 | 0.8733 |
| NUS-WIDE-cVLADplus10% | 0.0062 | 0.0260 | 0.0124 | 0.0167 | 0.0022 | 0.0251 | 0.5633 | 16.7136 | 0.1166 | 0.4937 | 0.6395 | 0.8764 |
| OHSUMED-F | 0.1070 | 0.0651 | 0.1480 | 0.1692 | 0.0957 | 0.2098 | 0.4587 | 4.6296 | 0.1310 | 0.6252 | 0.8381 | 0.8683 |
| PlantGO | 0.5833 | 0.0477 | 0.6042 | 0.6144 | 0.5967 | 0.6857 | 0.1667 | 0.3646 | 0.0212 | 0.9091 | 0.9747 | 0.9792 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5714 | 2.0918 | 0.1729 | 0.6035 | 0.8063 | 0.8433 |
| rcv1subset1 | 0.0133 | 0.0294 | 0.1309 | 0.1919 | 0.0390 | 0.2127 | 0.5817 | 19.6867 | 0.0869 | 0.4284 | 0.8022 | 0.9029 |
| REUTERS-K500-EX2 | 0.2526 | 0.0119 | 0.3025 | 0.3305 | 0.1305 | 0.3784 | 0.4983 | 8.9072 | 0.0617 | 0.5733 | 0.6875 | 0.9311 |
| scene | 0.2324 | 0.1404 | 0.2407 | 0.2447 | 0.3770 | 0.3715 | 0.1826 | 0.3651 | 0.0531 | 0.8960 | 0.9537 | 0.9606 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1831 | 18.8873 | 0.1359 | 0.8129 | 0.5633 | 0.7891 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0915 | 18.9859 | 0.1194 | 0.8510 | 0.5715 | 0.8071 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.0704 | 0.1227 | 0.8438 | 0.5654 | 0.7990 |
| SLASHDOT-F | 0.2328 | 0.0465 | 0.2562 | 0.2677 | 0.1569 | 0.3539 | 0.5106 | 3.0688 | 0.1224 | 0.5985 | 0.6352 | 0.8798 |
| solar_flare-L3 | 0.4000 | 0.3333 | 0.4000 | 0.4000 | 0.3000 | 0.4444 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.8000 |
| Stackex_chemistry | 0.0216 | 0.0182 | 0.1333 | 0.2113 | 0.0335 | 0.2072 | 0.8343 | 39.3256 | 0.1334 | 0.2622 | 0.6853 | 0.8604 |
| Stackex_chess | 0.0179 | 0.0108 | 0.0876 | 0.1247 | 0.0121 | 0.1485 | 0.8512 | 56.3036 | 0.1453 | 0.2213 | 0.4515 | 0.8881 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7391 | 42.1739 | 0.2142 | 0.3642 | 0.2383 | 0.9206 |
| Stackex_cooking | 0.0135 | 0.0078 | 0.1340 | 0.2080 | 0.0713 | 0.2161 | 0.7614 | 118.9749 | 0.1702 | 0.2303 | 0.6753 | 0.8374 |
| Stackex_philosophy | 0.0477 | 0.0105 | 0.1567 | 0.2244 | 0.0406 | 0.2306 | 0.8543 | 56.1181 | 0.1400 | 0.2122 | 0.5282 | 0.8545 |
| tmc2007-500 | 0.0514 | 0.0920 | 0.0846 | 0.1019 | 0.0406 | 0.1134 | 0.3364 | 3.2643 | 0.0689 | 0.7322 | 0.9017 | 0.9288 |
| tox21_CDK_ECFP4 | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0060 | 0.0032 | 0.5205 | 4.1096 | 0.2194 | 0.6023 | 0.7006 | 0.7615 |
| tox21_RDKit_desc | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0020 | 0.0032 | 0.4247 | 3.8596 | 0.1930 | 0.6531 | 0.7242 | 0.7852 |
| VirusGO | 0.7143 | 0.0873 | 0.7143 | 0.7143 | 0.5926 | 0.7317 | 0.0476 | 0.3810 | 0.0476 | 0.9619 | 0.7714 | 0.9632 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3810 | 0.7619 | 0.1357 | 0.7794 | 0.6849 | 0.9076 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2170 | 8.6415 | 0.2379 | 0.7266 | 0.7173 | 0.7487 |
| Yahoo_Arts | 0.0694 | 0.0602 | 0.0961 | 0.1098 | 0.0548 | 0.1433 | 0.4780 | 4.6008 | 0.1135 | 0.6092 | 0.7510 | 0.8666 |
| Yahoo_Business | 0.4857 | 0.0283 | 0.6491 | 0.7402 | 0.0817 | 0.6939 | 0.1105 | 1.8717 | 0.0284 | 0.8957 | 0.7210 | 0.9560 |
| Yahoo_Computers | 0.2851 | 0.0382 | 0.3355 | 0.3673 | 0.0460 | 0.3943 | 0.3968 | 3.5454 | 0.0703 | 0.6885 | 0.7144 | 0.9014 |
| Yahoo_Education | 0.1255 | 0.0381 | 0.1467 | 0.1588 | 0.1000 | 0.2430 | 0.5254 | 3.5894 | 0.0802 | 0.5886 | 0.7079 | 0.9163 |
| Yahoo_Entertainment | 0.1854 | 0.0587 | 0.1977 | 0.2046 | 0.0945 | 0.2562 | 0.4053 | 2.6229 | 0.0889 | 0.6931 | 0.8078 | 0.8977 |
| Yahoo_Health | 0.3811 | 0.0363 | 0.4697 | 0.5218 | 0.1616 | 0.5386 | 0.3181 | 2.8230 | 0.0507 | 0.7381 | 0.7278 | 0.9429 |
| Yahoo_Recreation | 0.1995 | 0.0534 | 0.2153 | 0.2245 | 0.1464 | 0.2883 | 0.5129 | 3.5674 | 0.1235 | 0.6049 | 0.8374 | 0.8620 |
| Yahoo_Reference | 0.0854 | 0.0389 | 0.1106 | 0.1228 | 0.0443 | 0.1794 | 0.4809 | 7.1134 | 0.1781 | 0.5675 | 0.5646 | 0.7900 |
| Yahoo_Science | 0.1438 | 0.0366 | 0.1846 | 0.2051 | 0.0607 | 0.2496 | 0.6410 | 7.4103 | 0.1381 | 0.4912 | 0.7003 | 0.8516 |
| Yahoo_Social | 0.0750 | 0.0500 | 0.1019 | 0.1185 | 0.0491 | 0.1262 | 0.7678 | 7.9381 | 0.1664 | 0.4000 | 0.5422 | 0.7581 |
| Yahoo_Society | 0.0125 | 0.0657 | 0.0184 | 0.0217 | 0.0149 | 0.0309 | 0.7988 | 15.8296 | 0.5162 | 0.2528 | 0.5965 | 0.5100 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2149 | 6.1653 | 0.1550 | 0.7732 | 0.7465 | 0.8522 |
| Yelp | 0.0040 | 0.3585 | 0.0040 | 0.0040 | 0.0118 | 0.0044 | 0.2383 | 1.3779 | 0.1374 | 0.8449 | 0.7812 | 0.8459 |

Table 156: Detailed results for Massive (1K) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.2386 | 0.0405 | 0.2404 | 0.2413 | 0.3308 | 0.3742 | 0.4352 | 2.3408 | 0.1209 | 0.6775 | 0.9280 | 0.8996 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6944 | 2.3889 | 0.4262 | 0.5093 | 0.5938 | 0.5917 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6452 | 2.1290 | 0.3685 | 0.5516 | 0.4750 | 0.6348 |
| 3s-inter3000 | 0.0000 | 0.1863 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.0588 | 0.3912 | 0.4431 | 0.4237 | 0.6098 |
| 3s-reuters1000 | 0.0000 | 0.1833 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.3333 | 0.4592 | 0.4186 | 0.5516 | 0.5300 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2778 | 2.7222 | 0.1139 | 0.8288 | 0.6665 | 0.7883 |
| bibtex | 0.1054 | 0.0129 | 0.1982 | 0.2575 | 0.0835 | 0.2709 | 0.4541 | 29.5338 | 0.1046 | 0.4649 | 0.8778 | 0.8912 |
| birds | 0.1026 | 0.0891 | 0.1154 | 0.1215 | 0.0979 | 0.1316 | 0.3077 | 3.7179 | 0.1181 | 0.6981 | 0.7806 | 0.8927 |
| bookmarks10% | 0.1617 | 0.0094 | 0.1726 | 0.1779 | 0.0264 | 0.1721 | 0.7232 | 59.0774 | 0.2027 | 0.3105 | 0.7238 | 0.7959 |
| CAL500 | 0.0000 | 0.1485 | 0.0038 | 0.0074 | 0.0015 | 0.0075 | 0.2745 | 139.5882 | 0.2084 | 0.4550 | 0.5137 | 0.7966 |
| corel16k001 | 0.0007 | 0.0226 | 0.0273 | 0.0439 | 0.0107 | 0.0505 | 0.8685 | 81.6519 | 0.2817 | 0.1937 | 0.6994 | 0.6932 |
| Corel5k | 0.0000 | 0.0231 | 0.1065 | 0.1819 | 0.0120 | 0.1799 | 0.9320 | 122.9740 | 0.1594 | 0.1431 | 0.4439 | 0.8593 |
| delicious | 0.0127 | 0.4983 | 0.0144 | 0.0530 | 0.0423 | 0.0530 | 0.8913 | 905.1017 | 0.5175 | 0.0630 | 0.8550 | 0.6842 |
| emotions | 0.0000 | 0.3028 | 0.0083 | 0.0111 | 0.0119 | 0.0180 | 0.2167 | 1.5333 | 0.1199 | 0.8420 | 0.8690 | 0.8930 |
| enron | 0.0994 | 0.0533 | 0.3369 | 0.4672 | 0.0909 | 0.4229 | 0.3099 | 12.7251 | 0.0825 | 0.6679 | 0.6084 | 0.9056 |
| EukaryoteGO | 0.6688 | 0.0198 | 0.7262 | 0.7554 | 0.5099 | 0.7974 | 0.1675 | 0.3969 | 0.0113 | 0.9072 | 0.9932 | 0.9949 |
| EukaryotePseAAC | 0.0064 | 0.0525 | 0.0064 | 0.0064 | 0.0024 | 0.0110 | 0.5689 | 2.4981 | 0.1040 | 0.6063 | 0.7340 | 0.9033 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.5000 | 0.1892 | 0.8399 | 0.7283 | 0.8271 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2927 | 2.6585 | 0.1059 | 0.7659 | 0.6812 | 0.8329 |
| genbase | 0.9403 | 0.0022 | 0.9701 | 0.9850 | 0.6173 | 0.9756 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9996 |
| GnegativeGO | 0.8929 | 0.0179 | 0.9036 | 0.9089 | 0.6713 | 0.9275 | 0.0143 | 0.0786 | 0.0032 | 0.9911 | 0.8676 | 0.9970 |
| GnegativePseAAC | 0.3500 | 0.0875 | 0.3500 | 0.3500 | 0.1369 | 0.5000 | 0.2571 | 0.6286 | 0.0819 | 0.8377 | 0.8084 | 0.9545 |
| GpositiveGO | 0.8654 | 0.0529 | 0.8654 | 0.8654 | 0.9120 | 0.8911 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9951 | 0.9959 |
| GpositivePseAAC | 0.4423 | 0.1587 | 0.4423 | 0.4423 | 0.3965 | 0.5823 | 0.4423 | 0.7500 | 0.2692 | 0.7340 | 0.8333 | 0.8569 |
| HumanGO | 0.6109 | 0.0388 | 0.6581 | 0.6827 | 0.4561 | 0.7330 | 0.1897 | 0.6238 | 0.0318 | 0.8834 | 0.9732 | 0.9807 |
| HumanPseAAC | 0.0032 | 0.0843 | 0.0032 | 0.0032 | 0.0015 | 0.0054 | 0.5659 | 2.2122 | 0.1453 | 0.6086 | 0.7153 | 0.8600 |
| Image | 0.1950 | 0.1970 | 0.2025 | 0.2062 | 0.2678 | 0.2989 | 0.2050 | 0.7350 | 0.1237 | 0.8577 | 0.8795 | 0.8833 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6405 | 7.4832 | 0.1794 | 0.4683 | 0.5781 | 0.8096 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6098 | 7.7150 | 0.1769 | 0.4854 | 0.6112 | 0.8133 |
| LLOG-F | 0.0246 | 0.0175 | 0.0410 | 0.0488 | 0.0145 | 0.0805 | 0.6885 | 10.5656 | 0.1153 | 0.4369 | 0.4830 | 0.8911 |
| mediamill10% | 0.5653 | 0.0102 | 0.8258 | 0.9007 | 0.2756 | 0.8688 | 0.0000 | 3.4703 | 0.0001 | 0.9991 | 0.8209 | 0.9989 |
| medical | 0.6429 | 0.0107 | 0.7483 | 0.7993 | 0.3511 | 0.8050 | 0.1327 | 2.2041 | 0.0323 | 0.8765 | 0.5318 | 0.9723 |
| Music | 0.0000 | 0.3250 | 0.0083 | 0.0111 | 0.0159 | 0.0168 | 0.2333 | 1.8500 | 0.1483 | 0.8242 | 0.8671 | 0.8722 |
| NUS-WIDE-bow10% | 0.0925 | 0.0340 | 0.1483 | 0.1950 | 0.0166 | 0.1632 | 0.8673 | 30.7495 | 0.2646 | 0.2055 | 0.5144 | 0.6966 |
| NUS-WIDE-cVLADplus10% | 0.0014 | 0.0261 | 0.0065 | 0.0094 | 0.0016 | 0.0177 | 0.5576 | 16.4510 | 0.1213 | 0.4956 | 0.6482 | 0.8830 |
| OHSUMED-F | 0.0955 | 0.0655 | 0.1388 | 0.1615 | 0.0892 | 0.2042 | 0.4401 | 4.7258 | 0.1338 | 0.6263 | 0.8245 | 0.8654 |
| PlantGO | 0.6146 | 0.0495 | 0.6354 | 0.6458 | 0.6125 | 0.7016 | 0.2292 | 0.4896 | 0.0360 | 0.8669 | 0.9708 | 0.9767 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6020 | 2.0816 | 0.1751 | 0.5868 | 0.7967 | 0.8459 |
| rcv1subset1 | 0.0117 | 0.0298 | 0.1065 | 0.1592 | 0.0306 | 0.1755 | 0.5633 | 21.4450 | 0.0952 | 0.4397 | 0.8006 | 0.8900 |
| REUTERS-K500-EX2 | 0.2113 | 0.0123 | 0.2523 | 0.2754 | 0.1047 | 0.3229 | 0.5704 | 9.9656 | 0.0739 | 0.5100 | 0.6898 | 0.9205 |
| scene | 0.2033 | 0.1459 | 0.2116 | 0.2157 | 0.3420 | 0.3344 | 0.1867 | 0.3776 | 0.0554 | 0.8926 | 0.9481 | 0.9575 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 18.8803 | 0.1374 | 0.8231 | 0.5761 | 0.7902 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1690 | 19.1549 | 0.1312 | 0.8188 | 0.5726 | 0.7947 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0845 | 19.1549 | 0.1303 | 0.8356 | 0.5643 | 0.7985 |
| SLASHDOT-F | 0.2249 | 0.0462 | 0.2482 | 0.2598 | 0.1533 | 0.3514 | 0.5053 | 3.1085 | 0.1231 | 0.6009 | 0.6247 | 0.8761 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.2000 | 0.2000 | 0.1333 | 0.2857 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0086 | 0.0211 | 0.1198 | 0.2003 | 0.0335 | 0.1981 | 0.8573 | 43.1369 | 0.1541 | 0.1981 | 0.6505 | 0.8387 |
| Stackex_chess | 0.0000 | 0.0165 | 0.1187 | 0.2061 | 0.0295 | 0.1928 | 0.7440 | 62.7917 | 0.1609 | 0.2693 | 0.4392 | 0.8698 |
| Stackex_coffee | 0.0000 | 0.0230 | 0.1790 | 0.2752 | 0.0600 | 0.2857 | 0.7391 | 52.4348 | 0.2849 | 0.3309 | 0.2451 | 0.9337 |
| Stackex_cooking | 0.0281 | 0.0068 | 0.0970 | 0.1314 | 0.0276 | 0.1467 | 0.8342 | 123.2339 | 0.1696 | 0.2079 | 0.7348 | 0.8165 |
| Stackex_philosophy | 0.0050 | 0.0186 | 0.1219 | 0.2127 | 0.0369 | 0.1973 | 0.8216 | 54.6533 | 0.1384 | 0.2287 | 0.5562 | 0.8678 |
| tmc2007-500 | 0.0752 | 0.0884 | 0.1399 | 0.1714 | 0.0625 | 0.1965 | 0.3542 | 3.2745 | 0.0697 | 0.7281 | 0.9070 | 0.9288 |
| tox21_CDK_ECFP4 | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0060 | 0.0032 | 0.5068 | 4.1164 | 0.2180 | 0.6037 | 0.6902 | 0.7612 |
| tox21_RDKit_desc | 0.0034 | 0.1787 | 0.0034 | 0.0034 | 0.0020 | 0.0032 | 0.4110 | 3.8767 | 0.1930 | 0.6523 | 0.7261 | 0.7870 |
| VirusGO | 0.7619 | 0.0794 | 0.7619 | 0.7619 | 0.6029 | 0.7619 | 0.0476 | 0.3333 | 0.0476 | 0.9643 | 0.8037 | 0.9865 |
| VirusPseAAC | 0.0476 | 0.1746 | 0.0476 | 0.0476 | 0.0303 | 0.0833 | 0.2857 | 0.7143 | 0.1131 | 0.8151 | 0.6145 | 0.8886 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2264 | 8.6226 | 0.2350 | 0.7283 | 0.7061 | 0.7451 |
| Yahoo_Arts | 0.0614 | 0.0613 | 0.0775 | 0.0874 | 0.0426 | 0.1156 | 0.5407 | 4.8852 | 0.1233 | 0.5787 | 0.7546 | 0.8573 |
| Yahoo_Business | 0.3449 | 0.0334 | 0.5746 | 0.6873 | 0.0603 | 0.6723 | 0.4617 | 2.3601 | 0.0437 | 0.7217 | 0.7046 | 0.9450 |
| Yahoo_Computers | 0.2843 | 0.0387 | 0.3311 | 0.3611 | 0.0418 | 0.3847 | 0.4104 | 3.7719 | 0.0762 | 0.6644 | 0.6995 | 0.8946 |
| Yahoo_Education | 0.0923 | 0.0396 | 0.1044 | 0.1112 | 0.0534 | 0.1785 | 0.5528 | 3.5536 | 0.0806 | 0.5826 | 0.6691 | 0.9145 |
| Yahoo_Entertainment | 0.1846 | 0.0587 | 0.1975 | 0.2049 | 0.0919 | 0.2566 | 0.3928 | 2.7903 | 0.0928 | 0.6810 | 0.7930 | 0.8968 |
| Yahoo_Health | 0.3626 | 0.0369 | 0.4469 | 0.4974 | 0.1453 | 0.5194 | 0.3094 | 2.9425 | 0.0527 | 0.7424 | 0.7213 | 0.9400 |
| Yahoo_Recreation | 0.1824 | 0.0545 | 0.1959 | 0.2036 | 0.1237 | 0.2612 | 0.5019 | 3.4645 | 0.1216 | 0.6185 | 0.8420 | 0.8628 |
| Yahoo_Reference | 0.0854 | 0.0385 | 0.1099 | 0.1236 | 0.0435 | 0.1799 | 0.4869 | 7.1600 | 0.1820 | 0.5677 | 0.5540 | 0.7857 |
| Yahoo_Science | 0.1455 | 0.0370 | 0.1841 | 0.2017 | 0.0608 | 0.2501 | 0.6348 | 7.4680 | 0.1406 | 0.4894 | 0.6950 | 0.8454 |
| Yahoo_Social | 0.0742 | 0.0512 | 0.1030 | 0.1187 | 0.0495 | 0.1256 | 0.7741 | 7.9203 | 0.1665 | 0.3966 | 0.5407 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0653 | 0.0181 | 0.0219 | 0.0147 | 0.0306 | 0.8109 | 16.0427 | 0.5072 | 0.2531 | 0.5952 | 0.5025 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2397 | 6.0702 | 0.1544 | 0.7675 | 0.7599 | 0.8541 |
| Yelp | 0.0020 | 0.3589 | 0.0020 | 0.0020 | 0.0019 | 0.0022 | 0.2582 | 1.4526 | 0.1557 | 0.8273 | 0.7627 | 0.8297 |

Table 157: Detailed results for Massive for AUC-macro metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4445 | 0.0300 | 0.4547 | 0.4597 | 0.5848 | 0.6104 | 0.3491 | 2.9082 | 0.2911 | 0.7220 | 0.9895 | 0.9896 |
| 3s-bbc1000 | 0.0000 | 0.2130 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7222 | 2.8333 | 0.7831 | 0.4653 | 0.8637 | 0.8422 |
| 3s-guardian1000 | 0.1613 | 0.1882 | 0.1774 | 0.1851 | 0.0870 | 0.2553 | 0.5806 | 2.3226 | 0.5935 | 0.5712 | 0.9120 | 0.8992 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.8824 | 0.8824 | 0.3745 | 0.6295 | 0.8122 |
| 3s-reuters1000 | 0.0000 | 0.1889 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9000 | 2.8000 | 0.9000 | 0.3656 | 0.9067 | 0.8102 |
| amphibians | 0.1667 | 0.2778 | 0.5296 | 0.7202 | 0.4111 | 0.6237 | 0.4444 | 2.8889 | 0.1870 | 0.7533 | 0.7518 | 0.8030 |
| bibtex | 0.1878 | 0.0120 | 0.3724 | 0.4665 | 0.3332 | 0.4902 | 0.4392 | 72.0892 | 0.5734 | 0.4287 | 0.9977 | 0.9977 |
| birds | 0.1026 | 0.0823 | 0.1816 | 0.2210 | 0.1374 | 0.2824 | 0.4615 | 8.1538 | 0.5614 | 0.4979 | 0.8577 | 0.9549 |
| bookmarks10% | 0.1676 | 0.0089 | 0.1800 | 0.1943 | 0.0640 | 0.2079 | 0.7067 | 104.1497 | 0.7561 | 0.2761 | 0.9847 | 0.9928 |
| CAL500 | 0.0000 | 0.7344 | 0.1620 | 0.2764 | 0.2156 | 0.2734 | 0.4494 | 151.9617 | 0.9789 | 0.2728 | 0.8908 | 0.9980 |
| corel16k001 | 0.0000 | 0.7198 | 0.0182 | 0.0356 | 0.0298 | 0.0350 | 0.9689 | 119.1442 | 0.9918 | 0.0466 | 1.0000 | 1.0000 |
| Corel5k | 0.0000 | 0.8872 | 0.0099 | 0.0198 | 0.0169 | 0.0198 | 1.0000 | 169.9413 | 0.9973 | 0.1087 | 0.6834 | 0.9989 |
| delicious | 0.0000 | 0.0432 | 0.0454 | 0.0858 | 0.0417 | 0.0872 | 0.5282 | 895.6047 | 0.8374 | 0.1503 | 0.9910 | 1.0000 |
| emotions | 0.1167 | 0.2778 | 0.4708 | 0.6091 | 0.5987 | 0.6183 | 0.2333 | 2.0500 | 0.3078 | 0.7969 | 0.9389 | 0.9131 |
| enron | 0.1345 | 0.0489 | 0.3848 | 0.5066 | 0.0969 | 0.5105 | 0.2515 | 26.4444 | 0.4434 | 0.5747 | 0.8315 | 0.9858 |
| EukaryoteGO | 0.7062 | 0.0186 | 0.7807 | 0.8179 | 0.5680 | 0.8222 | 0.1701 | 1.0052 | 0.0628 | 0.8872 | 0.9937 | 0.9951 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.1500 | 0.2571 | 0.5525 | 0.6985 | 0.4663 | 0.6897 | 0.2500 | 3.6500 | 0.2700 | 0.7853 | 0.7245 | 0.8232 |
| foodtruck | 0.3659 | 0.1423 | 0.4869 | 0.5923 | 0.0718 | 0.4697 | 0.2439 | 4.3902 | 0.4423 | 0.7253 | 0.8633 | 0.9622 |
| genbase | 0.9104 | 0.0039 | 0.9478 | 0.9639 | 0.5144 | 0.9565 | 0.0149 | 0.2687 | 0.0017 | 0.9851 | 0.6666 | 0.9997 |
| GnegativeGO | 0.9143 | 0.0152 | 0.9321 | 0.9410 | 0.8152 | 0.9408 | 0.0357 | 0.1214 | 0.0245 | 0.9768 | 0.8740 | 0.9981 |
| GnegativePseAAC | 0.6929 | 0.0509 | 0.7000 | 0.7036 | 0.3989 | 0.7765 | 0.1929 | 0.6714 | 0.1700 | 0.8635 | 0.8627 | 0.9902 |
| GpositiveGO | 0.0000 | 0.7452 | 0.2548 | 0.4061 | 0.3753 | 0.4061 | 0.7885 | 1.8462 | 1.0000 | 0.4567 | 1.0000 | 1.0000 |
| GpositivePseAAC | 0.0000 | 0.7500 | 0.2500 | 0.4000 | 0.3875 | 0.4000 | 0.6538 | 1.4808 | 1.0000 | 0.5561 | 1.0000 | 1.0000 |
| HumanGO | 0.6720 | 0.0354 | 0.7390 | 0.7741 | 0.6285 | 0.7695 | 0.1640 | 1.2315 | 0.1212 | 0.8714 | 0.9860 | 0.9891 |
| HumanPseAAC | 0.3537 | 0.0914 | 0.4068 | 0.4347 | 0.1844 | 0.4265 | 0.5434 | 3.6109 | 0.5035 | 0.5704 | 0.9581 | 0.9589 |
| Image | 0.5450 | 0.1550 | 0.6083 | 0.6401 | 0.6403 | 0.6370 | 0.3100 | 1.0900 | 0.3329 | 0.7830 | 0.9520 | 0.9467 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7264 | 13.6394 | 0.8327 | 0.3000 | 0.9904 | 0.9846 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7713 | 14.6504 | 0.8764 | 0.2658 | 0.9918 | 0.9899 |
| LLOG-F | 0.0000 | 0.0292 | 0.0843 | 0.1209 | 0.0426 | 0.1470 | 0.7623 | 29.5820 | 0.8081 | 0.2561 | 0.5992 | 0.9990 |
| mediamill10% | 0.0713 | 0.0318 | 0.4138 | 0.5715 | 0.0330 | 0.5149 | 0.1948 | 63.5012 | 0.5121 | 0.4953 | 0.8160 | 0.9954 |
| medical | 0.6531 | 0.0104 | 0.7457 | 0.7925 | 0.2748 | 0.8130 | 0.1939 | 5.5204 | 0.1641 | 0.8126 | 0.5536 | 0.9977 |
| Music | 0.2500 | 0.1861 | 0.5056 | 0.6111 | 0.6845 | 0.6884 | 0.2000 | 2.0167 | 0.2516 | 0.8140 | 0.9180 | 0.9092 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0379 | 0.2690 | 0.4005 | 0.0571 | 0.3850 | 0.5595 | 35.5385 | 0.6571 | 0.4051 | 0.8836 | 0.9950 |
| OHSUMED-F | 0.2283 | 0.0584 | 0.4432 | 0.5542 | 0.4509 | 0.5682 | 0.3553 | 7.6892 | 0.4133 | 0.6154 | 0.9768 | 0.9798 |
| PlantGO | 0.6354 | 0.0477 | 0.6510 | 0.6588 | 0.5153 | 0.7059 | 0.2188 | 1.2500 | 0.1450 | 0.8375 | 0.9905 | 0.9876 |
| PlantPseAAC | 0.1224 | 0.0859 | 0.1327 | 0.1376 | 0.1005 | 0.2171 | 0.5816 | 3.2857 | 0.5546 | 0.5394 | 0.9567 | 0.9503 |
| rcv1subset1 | 0.1017 | 0.0315 | 0.3605 | 0.4876 | 0.2623 | 0.4817 | 0.4417 | 37.7800 | 0.4218 | 0.5022 | 0.9263 | 0.9868 |
| REUTERS-K500-EX2 | 0.3299 | 0.0119 | 0.4133 | 0.4631 | 0.2446 | 0.5007 | 0.5069 | 32.3299 | 0.5319 | 0.4912 | 0.7839 | 0.9972 |
| scene | 0.1535 | 0.2116 | 0.4302 | 0.5452 | 0.6403 | 0.5335 | 0.2697 | 1.0747 | 0.4129 | 0.7958 | 0.9787 | 0.9740 |
| sider_CDK_ECFP4 | 0.0141 | 0.2483 | 0.6447 | 0.7944 | 0.6095 | 0.7920 | 0.2324 | 19.9014 | 0.1763 | 0.7934 | 0.6156 | 0.7831 |
| sider_MordredDesc | 0.0141 | 0.2486 | 0.6259 | 0.7860 | 0.5850 | 0.7850 | 0.2817 | 20.3028 | 0.1951 | 0.7762 | 0.5960 | 0.7708 |
| sider_RDKit_desc | 0.0141 | 0.2754 | 0.6270 | 0.7812 | 0.5765 | 0.7761 | 0.2887 | 21.0493 | 0.3016 | 0.6863 | 0.6221 | 0.6958 |
| SLASHDOT-F | 0.3492 | 0.0408 | 0.3929 | 0.4150 | 0.2932 | 0.4993 | 0.4656 | 7.1614 | 0.4848 | 0.5619 | 0.7642 | 0.9907 |
| solar_flare-L3 | 0.0000 | 0.6667 | 0.3333 | 0.5000 | 0.4405 | 0.5000 | 0.4000 | 0.4000 | 0.4000 | 0.8000 | 0.6667 | 0.9200 |
| Stackex_chemistry | 0.0000 | 0.7313 | 0.0135 | 0.0263 | 0.0305 | 0.0269 | 0.9510 | 112.6812 | 0.9771 | 0.0545 | 0.9123 | 1.0000 |
| Stackex_chess | 0.0000 | 0.9071 | 0.0103 | 0.0205 | 0.0231 | 0.0206 | 0.9464 | 158.4698 | 0.9934 | 0.0399 | 0.5467 | 1.0000 |
| Stackex_coffee | 0.0000 | 0.0438 | 0.0171 | 0.0311 | 0.0122 | 0.0312 | 0.9565 | 78.1739 | 0.9212 | 0.0777 | 0.2569 | 0.9948 |
| Stackex_cooking | 0.0000 | 0.9206 | 0.0058 | 0.0115 | 0.0161 | 0.0114 | 0.9730 | 260.9215 | 1.0000 | 0.0330 | 0.9265 | 0.9989 |
| Stackex_philosophy | 0.0000 | 0.8189 | 0.0102 | 0.0200 | 0.0231 | 0.0200 | 0.9817 | 153.9028 | 0.9993 | 0.0341 | 0.7426 | 1.0000 |
| tmc2007-500 | 0.2469 | 0.0692 | 0.5718 | 0.7214 | 0.6052 | 0.6811 | 0.2339 | 4.0486 | 0.1445 | 0.7875 | 0.9592 | 0.9703 |
| tox21_CDK_ECFP4 | 0.1233 | 0.1889 | 0.3505 | 0.4726 | 0.3904 | 0.4635 | 0.4658 | 5.3493 | 0.4885 | 0.5701 | 0.8999 | 0.9008 |
| tox21_RDKit_desc | 0.0479 | 0.1658 | 0.1073 | 0.1460 | 0.1444 | 0.1986 | 0.5000 | 5.7500 | 0.5565 | 0.5310 | 0.9180 | 0.9192 |
| VirusGO | 0.7143 | 0.0714 | 0.8016 | 0.8523 | 0.6156 | 0.8085 | 0.0952 | 0.7619 | 0.1409 | 0.9000 | 0.8155 | 0.9865 |
| VirusPseAAC | 0.0000 | 0.2937 | 0.2540 | 0.3571 | 0.3232 | 0.3729 | 0.4286 | 1.2381 | 0.3524 | 0.7127 | 0.7940 | 0.9569 |
| Water-quality | 0.0000 | 0.3349 | 0.1528 | 0.2489 | 0.1374 | 0.2702 | 0.2736 | 9.9151 | 0.4511 | 0.6813 | 0.8188 | 0.8126 |
| Yahoo_Arts | 0.1909 | 0.0682 | 0.2891 | 0.3548 | 0.2100 | 0.3668 | 0.4993 | 10.0895 | 0.5572 | 0.5099 | 0.9341 | 0.9702 |
| Yahoo_Business | 0.5695 | 0.0271 | 0.7277 | 0.8179 | 0.3221 | 0.7253 | 0.0918 | 3.1720 | 0.2226 | 0.8869 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.4017 | 0.0416 | 0.5562 | 0.6456 | 0.2427 | 0.5888 | 0.3138 | 6.4365 | 0.3454 | 0.6951 | 0.8285 | 0.9848 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3286 | 0.0683 | 0.4515 | 0.5512 | 0.2258 | 0.4627 | 0.3839 | 8.2896 | 0.4588 | 0.6037 | 0.9397 | 0.9807 |
| yeast | 0.1942 | 0.1919 | 0.5074 | 0.6447 | 0.3359 | 0.6381 | 0.2562 | 6.2107 | 0.2656 | 0.7499 | 0.8397 | 0.8946 |
| Yelp | 0.3450 | 0.2134 | 0.5548 | 0.6549 | 0.5933 | 0.6681 | 0.2393 | 1.5783 | 0.3256 | 0.8261 | 0.8908 | 0.9058 |

Table 158: Detailed results for Massive (1K) for AUC-macro metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.1872 | 0.0422 | 0.1885 | 0.1892 | 0.2708 | 0.3103 | 0.3112 | 2.4248 | 0.2292 | 0.7590 | 0.9735 | 0.9750 |
| 3s-bbc1000 | 0.0000 | 0.2130 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7778 | 2.8889 | 0.6720 | 0.4312 | 0.7677 | 0.7222 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4839 | 2.0000 | 0.4597 | 0.6360 | 0.7970 | 0.8119 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.5294 | 0.7059 | 0.3755 | 0.4694 | 0.6567 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9000 | 2.6333 | 0.7867 | 0.3800 | 0.8253 | 0.7506 |
| amphibians | 0.1111 | 0.3095 | 0.4619 | 0.6784 | 0.2762 | 0.5618 | 0.2222 | 2.5000 | 0.1167 | 0.8570 | 0.7471 | 0.8061 |
| bibtex | 0.1054 | 0.0130 | 0.1831 | 0.2346 | 0.0522 | 0.2464 | 0.4068 | 67.0486 | 0.5374 | 0.4547 | 0.9953 | 0.9951 |
| birds | 0.1026 | 0.0850 | 0.1645 | 0.1994 | 0.1300 | 0.2588 | 0.4615 | 7.7949 | 0.4934 | 0.5267 | 0.8426 | 0.9380 |
| bookmarks10% | 0.1656 | 0.0089 | 0.1775 | 0.1918 | 0.0639 | 0.2093 | 0.6968 | 105.2706 | 0.7514 | 0.2729 | 0.9719 | 0.9938 |
| CAL500 | 0.0000 | 0.1394 | 0.1510 | 0.2613 | 0.0303 | 0.2544 | 0.2745 | 151.0784 | 0.6323 | 0.4332 | 0.8325 | 0.9489 |
| corel16k001 | 0.0000 | 0.7286 | 0.0179 | 0.0355 | 0.0299 | 0.0353 | 0.9707 | 119.3120 | 0.9947 | 0.0466 | 1.0000 | 1.0000 |
| Corel5k | 0.0000 | 0.8818 | 0.0099 | 0.0199 | 0.0171 | 0.0198 | 0.9995 | 167.4115 | 0.9914 | 0.1093 | 0.6737 | 1.0000 |
| delicious | 0.0000 | 0.0432 | 0.0459 | 0.0857 | 0.0422 | 0.0885 | 0.5218 | 897.8099 | 0.8439 | 0.1502 | 0.9770 | 0.9923 |
| emotions | 0.2833 | 0.1917 | 0.5097 | 0.6080 | 0.5989 | 0.6533 | 0.3000 | 1.7667 | 0.2380 | 0.7901 | 0.8816 | 0.8913 |
| enron | 0.1111 | 0.0506 | 0.3411 | 0.4654 | 0.0811 | 0.4694 | 0.2632 | 22.3041 | 0.3333 | 0.6228 | 0.8226 | 0.9787 |
| EukaryoteGO | 0.6920 | 0.0195 | 0.7562 | 0.7882 | 0.3829 | 0.8087 | 0.1701 | 0.6018 | 0.0274 | 0.8974 | 0.9911 | 0.9944 |
| EukaryotePseAAC | 0.0347 | 0.0514 | 0.0373 | 0.0386 | 0.0160 | 0.0660 | 0.5676 | 5.0489 | 0.3970 | 0.5545 | 0.9536 | 0.9581 |
| flags | 0.1500 | 0.2571 | 0.5633 | 0.6958 | 0.4820 | 0.7000 | 0.2000 | 3.4500 | 0.2033 | 0.8233 | 0.7152 | 0.8104 |
| foodtruck | 0.3659 | 0.1423 | 0.4869 | 0.5923 | 0.0718 | 0.4697 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8537 | 0.9560 |
| genbase | 0.9254 | 0.0028 | 0.9577 | 0.9713 | 0.5185 | 0.9686 | 0.0149 | 0.2537 | 0.0012 | 0.9900 | 0.6655 | 0.9997 |
| GnegativeGO | 0.9214 | 0.0143 | 0.9393 | 0.9481 | 0.8163 | 0.9444 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.6571 | 0.0545 | 0.6679 | 0.6732 | 0.3205 | 0.7570 | 0.1786 | 0.5929 | 0.1236 | 0.8801 | 0.8555 | 0.9841 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9231 | 0.9231 | 0.8680 | 0.9320 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9962 |
| GpositivePseAAC | 0.6731 | 0.1202 | 0.6731 | 0.6731 | 0.5474 | 0.7368 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6752 | 0.0349 | 0.7283 | 0.7557 | 0.5583 | 0.7669 | 0.1576 | 0.7428 | 0.0543 | 0.8978 | 0.9827 | 0.9867 |
| HumanPseAAC | 0.0675 | 0.0841 | 0.0691 | 0.0699 | 0.0255 | 0.1073 | 0.5595 | 3.1511 | 0.3853 | 0.5888 | 0.9305 | 0.9320 |
| Image | 0.4700 | 0.1600 | 0.5092 | 0.5288 | 0.5635 | 0.5789 | 0.3000 | 1.0000 | 0.2675 | 0.7986 | 0.9118 | 0.9048 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6415 | 12.3616 | 0.7355 | 0.3694 | 0.9875 | 0.9737 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6156 | 13.2129 | 0.7498 | 0.3613 | 0.9858 | 0.9751 |
| LLOG-F | 0.1148 | 0.0164 | 0.1277 | 0.1369 | 0.0317 | 0.1935 | 0.7049 | 27.0082 | 0.7399 | 0.3124 | 0.5969 | 0.9966 |
| mediamill10% | 0.0760 | 0.0320 | 0.4075 | 0.5621 | 0.0306 | 0.5038 | 0.1591 | 59.5914 | 0.4543 | 0.5537 | 0.8132 | 0.9940 |
| medical | 0.6531 | 0.0098 | 0.7517 | 0.7993 | 0.2861 | 0.8245 | 0.1531 | 5.0102 | 0.1325 | 0.8470 | 0.5530 | 0.9977 |
| Music | 0.2333 | 0.1833 | 0.5000 | 0.6123 | 0.6791 | 0.6887 | 0.1833 | 1.9833 | 0.2353 | 0.8251 | 0.9125 | 0.9011 |
| NUS-WIDE-bow10% | 0.1449 | 0.0275 | 0.3171 | 0.4098 | 0.0542 | 0.4003 | 0.5419 | 34.6210 | 0.6122 | 0.4291 | 0.8898 | 1.0000 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0377 | 0.2695 | 0.3954 | 0.0575 | 0.3815 | 0.5663 | 36.0376 | 0.6641 | 0.4041 | 0.8705 | 1.0000 |
| OHSUMED-F | 0.1163 | 0.0642 | 0.1695 | 0.1967 | 0.0928 | 0.2418 | 0.3776 | 6.5915 | 0.3324 | 0.6318 | 0.9494 | 0.9522 |
| PlantGO | 0.6667 | 0.0443 | 0.6823 | 0.6900 | 0.5730 | 0.7302 | 0.2292 | 0.9583 | 0.0957 | 0.8510 | 0.9898 | 0.9852 |
| PlantPseAAC | 0.1224 | 0.0859 | 0.1327 | 0.1376 | 0.0802 | 0.2171 | 0.6020 | 3.1327 | 0.4979 | 0.5475 | 0.9411 | 0.9357 |
| rcv1subset1 | 0.0050 | 0.0288 | 0.0790 | 0.1134 | 0.0308 | 0.1261 | 0.4283 | 30.4367 | 0.3056 | 0.5511 | 0.9191 | 0.9811 |
| REUTERS-K500-EX2 | 0.1873 | 0.0119 | 0.2212 | 0.2389 | 0.0957 | 0.3062 | 0.4777 | 28.7663 | 0.4756 | 0.5239 | 0.7809 | 0.9940 |
| scene | 0.5560 | 0.0961 | 0.5871 | 0.6023 | 0.6930 | 0.6819 | 0.2033 | 0.7137 | 0.1457 | 0.8584 | 0.9619 | 0.9670 |
| sider_CDK_ECFP4 | 0.0211 | 0.2389 | 0.6528 | 0.8006 | 0.6023 | 0.7974 | 0.2676 | 19.4577 | 0.1960 | 0.7539 | 0.5806 | 0.7470 |
| sider_MordredDesc | 0.0141 | 0.2561 | 0.6199 | 0.7813 | 0.5904 | 0.7823 | 0.1479 | 19.8380 | 0.1882 | 0.7824 | 0.5760 | 0.7615 |
| sider_RDKit_desc | 0.0141 | 0.2775 | 0.6299 | 0.7825 | 0.5827 | 0.7776 | 0.3028 | 19.8239 | 0.2052 | 0.7562 | 0.5809 | 0.7552 |
| SLASHDOT-F | 0.2725 | 0.0433 | 0.2972 | 0.3095 | 0.1944 | 0.4079 | 0.3968 | 4.3862 | 0.2804 | 0.6731 | 0.7450 | 0.9724 |
| solar_flare-L3 | 0.4000 | 0.2667 | 0.4000 | 0.4000 | 0.3333 | 0.5000 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.8400 |
| Stackex_chemistry | 0.0058 | 0.0121 | 0.0117 | 0.0152 | 0.0023 | 0.0201 | 0.8026 | 105.7853 | 0.8717 | 0.1542 | 0.9160 | 0.9960 |
| Stackex_chess | 0.0119 | 0.0099 | 0.0804 | 0.1160 | 0.0270 | 0.1678 | 0.6250 | 133.0774 | 0.7710 | 0.2282 | 0.5485 | 0.9975 |
| Stackex_coffee | 0.0435 | 0.0187 | 0.0652 | 0.0843 | 0.0122 | 0.1017 | 0.8261 | 75.3913 | 0.8705 | 0.1352 | 0.2546 | 0.9878 |
| Stackex_cooking | 0.0000 | 0.9339 | 0.0058 | 0.0114 | 0.0161 | 0.0115 | 0.9750 | 261.1422 | 0.9980 | 0.0327 | 0.9282 | 0.9852 |
| Stackex_philosophy | 0.0201 | 0.0095 | 0.0413 | 0.0534 | 0.0065 | 0.0639 | 0.7161 | 132.5603 | 0.7905 | 0.2063 | 0.7480 | 0.9967 |
| tmc2007-500 | 0.2262 | 0.0688 | 0.4214 | 0.5212 | 0.2666 | 0.5366 | 0.2913 | 4.2262 | 0.1464 | 0.7591 | 0.9520 | 0.9642 |
| tox21_CDK_ECFP4 | 0.0479 | 0.1635 | 0.0960 | 0.1239 | 0.1539 | 0.1779 | 0.4863 | 4.7740 | 0.3679 | 0.5958 | 0.8695 | 0.8584 |
| tox21_RDKit_desc | 0.0205 | 0.1718 | 0.0492 | 0.0686 | 0.0735 | 0.0988 | 0.5000 | 5.3664 | 0.4392 | 0.5701 | 0.8677 | 0.8613 |
| VirusGO | 0.6667 | 0.0794 | 0.7460 | 0.7933 | 0.6187 | 0.7826 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.8050 | 0.9750 |
| VirusPseAAC | 0.3810 | 0.1270 | 0.4048 | 0.4163 | 0.3222 | 0.5294 | 0.2857 | 0.8095 | 0.1762 | 0.8032 | 0.7185 | 0.9211 |
| Water-quality | 0.0000 | 0.3322 | 0.1630 | 0.2645 | 0.1400 | 0.2845 | 0.2736 | 9.4245 | 0.3619 | 0.6903 | 0.7717 | 0.7653 |
| Yahoo_Arts | 0.0360 | 0.0628 | 0.0439 | 0.0488 | 0.0208 | 0.0628 | 0.6048 | 11.4927 | 0.7211 | 0.4309 | 0.9294 | 0.9689 |
| Yahoo_Business | 0.5152 | 0.0291 | 0.6642 | 0.7479 | 0.0409 | 0.6632 | 0.1275 | 3.3075 | 0.2295 | 0.8664 | 0.8450 | 0.9900 |
| Yahoo_Computers | 0.2996 | 0.0385 | 0.3625 | 0.4018 | 0.0428 | 0.4165 | 0.4153 | 6.9727 | 0.4593 | 0.5789 | 0.8832 | 0.9767 |
| Yahoo_Education | 0.0125 | 0.0432 | 0.0134 | 0.0142 | 0.0076 | 0.0228 | 0.7315 | 10.3649 | 0.7883 | 0.4005 | 0.8853 | 0.9785 |
| Yahoo_Entertainment | 0.1194 | 0.0619 | 0.1271 | 0.1317 | 0.0667 | 0.1737 | 0.5467 | 4.7070 | 0.5033 | 0.5575 | 0.9623 | 0.9540 |
| Yahoo_Health | 0.2714 | 0.0462 | 0.3341 | 0.3732 | 0.0873 | 0.3693 | 0.4441 | 7.5928 | 0.4130 | 0.6061 | 0.8159 | 0.9742 |
| Yahoo_Recreation | 0.0351 | 0.0615 | 0.0389 | 0.0411 | 0.0477 | 0.0677 | 0.6298 | 7.5331 | 0.7137 | 0.4697 | 0.9616 | 0.9616 |
| Yahoo_Reference | 0.2030 | 0.0296 | 0.2140 | 0.2195 | 0.0256 | 0.3156 | 0.4471 | 5.8618 | 0.4244 | 0.6112 | 0.8006 | 0.9823 |
| Yahoo_Science | 0.0093 | 0.0361 | 0.0109 | 0.0116 | 0.0031 | 0.0169 | 0.7574 | 15.4806 | 0.7660 | 0.3215 | 0.9481 | 0.9742 |
| Yahoo_Social | 0.2682 | 0.0262 | 0.2859 | 0.2957 | 0.0320 | 0.3744 | 0.4224 | 8.0231 | 0.4161 | 0.6118 | 0.9097 | 0.9858 |
| Yahoo_Society | 0.1412 | 0.0563 | 0.1666 | 0.1831 | 0.0204 | 0.2110 | 0.4704 | 8.9766 | 0.5365 | 0.5263 | 0.9299 | 0.9664 |
| yeast | 0.1694 | 0.1951 | 0.4923 | 0.6300 | 0.3097 | 0.6238 | 0.2438 | 6.1529 | 0.2120 | 0.7565 | 0.8135 | 0.8721 |
| Yelp | 0.2403 | 0.2443 | 0.4179 | 0.5050 | 0.3160 | 0.5383 | 0.2582 | 1.5115 | 0.2207 | 0.8243 | 0.8286 | 0.8562 |

Table 159: Detailed results for Massive for AUC-micro metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4445 | 0.0300 | 0.4547 | 0.4597 | 0.5848 | 0.6104 | 0.3491 | 2.9082 | 0.2911 | 0.7220 | 0.9895 | 0.9896 |
| 3s-bbc1000 | 0.0000 | 0.2130 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7222 | 2.8333 | 0.7831 | 0.4653 | 0.8637 | 0.8422 |
| 3s-guardian1000 | 0.1613 | 0.1882 | 0.1774 | 0.1851 | 0.0870 | 0.2553 | 0.5806 | 2.3226 | 0.5935 | 0.5712 | 0.9120 | 0.8992 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8824 | 2.8824 | 0.8824 | 0.3745 | 0.6295 | 0.8122 |
| 3s-reuters1000 | 0.0000 | 0.1889 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9000 | 2.8000 | 0.9000 | 0.3656 | 0.9067 | 0.8102 |
| amphibians | 0.1667 | 0.2778 | 0.5296 | 0.7202 | 0.4111 | 0.6237 | 0.4444 | 2.8889 | 0.1870 | 0.7533 | 0.7518 | 0.8030 |
| bibtex | 0.1878 | 0.0120 | 0.3724 | 0.4665 | 0.3332 | 0.4902 | 0.4392 | 72.0892 | 0.5734 | 0.4287 | 0.9977 | 0.9977 |
| birds | 0.1026 | 0.0823 | 0.1816 | 0.2210 | 0.1374 | 0.2824 | 0.4615 | 8.1538 | 0.5614 | 0.4979 | 0.8577 | 0.9549 |
| bookmarks10% | 0.0000 | 0.8456 | 0.0104 | 0.0205 | 0.0279 | 0.0201 | 0.9694 | 124.9682 | 0.9542 | 0.0623 | 0.9983 | 0.9973 |
| CAL500 | 0.0000 | 0.6862 | 0.1547 | 0.2735 | 0.1939 | 0.2726 | 0.8113 | 151.8607 | 1.0000 | 0.2483 | 0.9028 | 1.0000 |
| corel16k001 | 0.0000 | 0.7261 | 0.0193 | 0.0382 | 0.0280 | 0.0379 | 0.9723 | 119.7510 | 0.9944 | 0.0399 | 0.9858 | 1.0000 |
| Corel5k | 0.0000 | 0.0093 | 0.0263 | 0.0392 | 0.0114 | 0.0546 | 0.8767 | 162.1173 | 0.9385 | 0.1514 | 0.6799 | 1.0000 |
| delicious | 0.0000 | 0.0455 | 0.1393 | 0.2457 | 0.0881 | 0.2403 | 0.5443 | 916.6301 | 0.8380 | 0.1534 | 1.0000 | 0.9964 |
| emotions | 0.1167 | 0.2778 | 0.4708 | 0.6091 | 0.5987 | 0.6183 | 0.2333 | 2.0500 | 0.3078 | 0.7969 | 0.9389 | 0.9131 |
| enron | 0.1345 | 0.0489 | 0.3848 | 0.5066 | 0.0969 | 0.5105 | 0.2515 | 26.4444 | 0.4434 | 0.5747 | 0.8315 | 0.9858 |
| EukaryoteGO | 0.7062 | 0.0186 | 0.7807 | 0.8179 | 0.5680 | 0.8222 | 0.1701 | 1.0052 | 0.0628 | 0.8872 | 0.9937 | 0.9951 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.1500 | 0.2571 | 0.5525 | 0.6985 | 0.4663 | 0.6897 | 0.2500 | 3.6500 | 0.2700 | 0.7853 | 0.7245 | 0.8232 |
| foodtruck | 0.3659 | 0.1423 | 0.4869 | 0.5923 | 0.0718 | 0.4697 | 0.2439 | 4.3902 | 0.4423 | 0.7253 | 0.8633 | 0.9622 |
| genbase | 0.9104 | 0.0039 | 0.9478 | 0.9639 | 0.5144 | 0.9565 | 0.0149 | 0.2687 | 0.0017 | 0.9851 | 0.6666 | 0.9997 |
| GnegativeGO | 0.9143 | 0.0152 | 0.9321 | 0.9410 | 0.8152 | 0.9408 | 0.0357 | 0.1214 | 0.0245 | 0.9768 | 0.8740 | 0.9981 |
| GnegativePseAAC | 0.6929 | 0.0509 | 0.7000 | 0.7036 | 0.3989 | 0.7765 | 0.1929 | 0.6714 | 0.1700 | 0.8635 | 0.8627 | 0.9902 |
| GpositiveGO | 0.0000 | 0.7452 | 0.2548 | 0.4061 | 0.3753 | 0.4061 | 0.7885 | 1.8462 | 1.0000 | 0.4567 | 1.0000 | 1.0000 |
| GpositivePseAAC | 0.0000 | 0.7500 | 0.2500 | 0.4000 | 0.3875 | 0.4000 | 0.6538 | 1.4808 | 1.0000 | 0.5561 | 1.0000 | 1.0000 |
| HumanGO | 0.6720 | 0.0354 | 0.7390 | 0.7741 | 0.6285 | 0.7695 | 0.1640 | 1.2315 | 0.1212 | 0.8714 | 0.9860 | 0.9891 |
| HumanPseAAC | 0.3537 | 0.0914 | 0.4068 | 0.4347 | 0.1844 | 0.4265 | 0.5434 | 3.6109 | 0.5035 | 0.5704 | 0.9581 | 0.9589 |
| Image | 0.5450 | 0.1550 | 0.6083 | 0.6401 | 0.6403 | 0.6370 | 0.3100 | 1.0900 | 0.3329 | 0.7830 | 0.9520 | 0.9467 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7264 | 13.6394 | 0.8327 | 0.3000 | 0.9904 | 0.9846 |
| IMDB-F10% | 0.0522 | 0.0904 | 0.1408 | 0.1910 | 0.0279 | 0.1925 | 0.5857 | 12.7755 | 0.7197 | 0.3867 | 0.9855 | 0.9750 |
| LLOG-F | 0.0000 | 0.0292 | 0.0843 | 0.1209 | 0.0426 | 0.1470 | 0.7623 | 29.5820 | 0.8081 | 0.2561 | 0.5992 | 0.9990 |
| mediamill10% | 0.0713 | 0.0318 | 0.4138 | 0.5715 | 0.0330 | 0.5149 | 0.1948 | 63.5012 | 0.5121 | 0.4953 | 0.8160 | 0.9954 |
| medical | 0.6531 | 0.0104 | 0.7457 | 0.7925 | 0.2748 | 0.8130 | 0.1939 | 5.5204 | 0.1641 | 0.8126 | 0.5536 | 0.9977 |
| Music | 0.2500 | 0.1861 | 0.5056 | 0.6111 | 0.6845 | 0.6884 | 0.2000 | 2.0167 | 0.2516 | 0.8140 | 0.9180 | 0.9092 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0379 | 0.2690 | 0.4005 | 0.0571 | 0.3850 | 0.5595 | 35.5385 | 0.6571 | 0.4051 | 0.8836 | 0.9950 |
| OHSUMED-F | 0.2283 | 0.0584 | 0.4432 | 0.5542 | 0.4509 | 0.5682 | 0.3553 | 7.6892 | 0.4133 | 0.6154 | 0.9768 | 0.9798 |
| PlantGO | 0.6354 | 0.0477 | 0.6510 | 0.6588 | 0.5153 | 0.7059 | 0.2188 | 1.2500 | 0.1450 | 0.8375 | 0.9905 | 0.9876 |
| PlantPseAAC | 0.1224 | 0.0859 | 0.1327 | 0.1376 | 0.1005 | 0.2171 | 0.5816 | 3.2857 | 0.5546 | 0.5394 | 0.9567 | 0.9503 |
| rcv1subset1 | 0.1017 | 0.0315 | 0.3605 | 0.4876 | 0.2623 | 0.4817 | 0.4417 | 37.7800 | 0.4218 | 0.5022 | 0.9263 | 0.9868 |
| REUTERS-K500-EX2 | 0.3299 | 0.0119 | 0.4133 | 0.4631 | 0.2446 | 0.5007 | 0.5069 | 32.3299 | 0.5319 | 0.4912 | 0.7839 | 0.9972 |
| scene | 0.1535 | 0.2116 | 0.4302 | 0.5452 | 0.6403 | 0.5335 | 0.2697 | 1.0747 | 0.4129 | 0.7958 | 0.9787 | 0.9740 |
| sider_CDK_ECFP4 | 0.0141 | 0.2483 | 0.6447 | 0.7944 | 0.6095 | 0.7920 | 0.2324 | 19.9014 | 0.1763 | 0.7934 | 0.6156 | 0.7831 |
| sider_MordredDesc | 0.0141 | 0.2681 | 0.6151 | 0.7774 | 0.6106 | 0.7782 | 0.3169 | 19.4085 | 0.1817 | 0.7627 | 0.5686 | 0.7624 |
| sider_RDKit_desc | 0.0141 | 0.2754 | 0.6270 | 0.7812 | 0.5765 | 0.7761 | 0.2887 | 21.0493 | 0.3016 | 0.6863 | 0.6221 | 0.6958 |
| SLASHDOT-F | 0.3492 | 0.0408 | 0.3929 | 0.4150 | 0.2932 | 0.4993 | 0.4656 | 7.1614 | 0.4848 | 0.5619 | 0.7642 | 0.9907 |
| solar_flare-L3 | 0.0000 | 0.6667 | 0.3333 | 0.5000 | 0.4405 | 0.5000 | 0.4000 | 0.4000 | 0.4000 | 0.8000 | 0.6667 | 0.9200 |
| Stackex_chemistry | 0.0320 | 0.0119 | 0.0673 | 0.0872 | 0.0281 | 0.1096 | 0.7814 | 104.2723 | 0.8669 | 0.1638 | 0.9089 | 0.9982 |
| Stackex_chess | 0.0000 | 0.7608 | 0.0116 | 0.0229 | 0.0290 | 0.0232 | 0.9504 | 158.8244 | 0.9906 | 0.0339 | 0.5461 | 1.0000 |
| Stackex_coffee | 0.0000 | 0.0438 | 0.0171 | 0.0311 | 0.0122 | 0.0312 | 0.9565 | 78.1739 | 0.9212 | 0.0777 | 0.2569 | 0.9948 |
| Stackex_cooking | 0.0655 | 0.0053 | 0.2022 | 0.2718 | 0.1108 | 0.3218 | 0.6320 | 223.2772 | 0.7659 | 0.2379 | 0.9172 | 1.0000 |
| Stackex_philosophy | 0.0000 | 0.7935 | 0.0110 | 0.0220 | 0.0280 | 0.0218 | 0.9645 | 152.1150 | 0.9881 | 0.0321 | 0.7618 | 1.0000 |
| tmc2007-500 | 0.2469 | 0.0692 | 0.5718 | 0.7214 | 0.6052 | 0.6811 | 0.2339 | 4.0486 | 0.1445 | 0.7875 | 0.9592 | 0.9703 |
| tox21_CDK_ECFP4 | 0.1233 | 0.1889 | 0.3505 | 0.4726 | 0.3904 | 0.4635 | 0.4658 | 5.3493 | 0.4885 | 0.5701 | 0.8999 | 0.9008 |
| tox21_RDKit_desc | 0.0514 | 0.1647 | 0.1145 | 0.1574 | 0.1446 | 0.2063 | 0.5171 | 5.9212 | 0.6117 | 0.5110 | 0.9305 | 0.9332 |
| VirusGO | 0.7143 | 0.0714 | 0.8016 | 0.8523 | 0.6156 | 0.8085 | 0.0952 | 0.7619 | 0.1409 | 0.9000 | 0.8155 | 0.9865 |
| VirusPseAAC | 0.0000 | 0.2937 | 0.2540 | 0.3571 | 0.3232 | 0.3729 | 0.4286 | 1.2381 | 0.3524 | 0.7127 | 0.7940 | 0.9569 |
| Water-quality | 0.0000 | 0.3356 | 0.1677 | 0.2713 | 0.1513 | 0.2845 | 0.3868 | 9.5377 | 0.4318 | 0.6656 | 0.8040 | 0.7989 |
| Yahoo_Arts | 0.1909 | 0.0682 | 0.2891 | 0.3548 | 0.2100 | 0.3668 | 0.4993 | 10.0895 | 0.5572 | 0.5099 | 0.9341 | 0.9702 |
| Yahoo_Business | 0.5695 | 0.0271 | 0.7277 | 0.8179 | 0.3221 | 0.7253 | 0.0918 | 3.1720 | 0.2226 | 0.8869 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.4017 | 0.0416 | 0.5562 | 0.6456 | 0.2427 | 0.5888 | 0.3138 | 6.4365 | 0.3454 | 0.6951 | 0.8285 | 0.9848 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3251 | 0.0695 | 0.4423 | 0.5617 | 0.2213 | 0.4662 | 0.3798 | 8.4645 | 0.4701 | 0.5918 | 0.9194 | 0.9824 |
| yeast | 0.2066 | 0.1924 | 0.5117 | 0.6498 | 0.3362 | 0.6398 | 0.2810 | 6.2397 | 0.2764 | 0.7488 | 0.8403 | 0.8937 |
| Yelp | 0.3809 | 0.1996 | 0.6046 | 0.7068 | 0.6490 | 0.6997 | 0.2532 | 1.4845 | 0.3251 | 0.8327 | 0.9118 | 0.9203 |

Table 160: Detailed results for Massive (1K) for AUC-micro metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.1955 | 0.0417 | 0.1974 | 0.1983 | 0.2841 | 0.3234 | 0.3864 | 3.2583 | 0.3209 | 0.6914 | 0.9827 | 0.9829 |
| 3s-bbc1000 | 0.0000 | 0.2176 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7500 | 3.1111 | 0.7053 | 0.4293 | 0.7759 | 0.7264 |
| 3s-guardian1000 | 0.0000 | 0.2097 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5161 | 2.0323 | 0.4661 | 0.6199 | 0.8046 | 0.8192 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8235 | 2.3529 | 0.6015 | 0.4441 | 0.4741 | 0.6726 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9000 | 2.6333 | 0.7933 | 0.3761 | 0.7739 | 0.7200 |
| amphibians | 0.1111 | 0.3095 | 0.4619 | 0.6784 | 0.2762 | 0.5618 | 0.3333 | 2.6111 | 0.1204 | 0.8126 | 0.7243 | 0.7981 |
| bibtex | 0.0986 | 0.0131 | 0.1767 | 0.2282 | 0.0475 | 0.2413 | 0.4122 | 68.1527 | 0.5378 | 0.4533 | 0.9957 | 0.9954 |
| birds | 0.1026 | 0.0837 | 0.1645 | 0.1994 | 0.1323 | 0.2619 | 0.5128 | 7.4103 | 0.4781 | 0.5086 | 0.8418 | 0.9347 |
| bookmarks10% | 0.0000 | 0.8346 | 0.0104 | 0.0204 | 0.0275 | 0.0199 | 0.9670 | 123.8630 | 0.9452 | 0.0620 | 0.9924 | 0.9837 |
| CAL500 | 0.0000 | 0.1382 | 0.1519 | 0.2629 | 0.0321 | 0.2588 | 0.4314 | 151.0588 | 0.6207 | 0.4306 | 0.8346 | 0.9464 |
| corel16k001 | 0.0000 | 0.7259 | 0.0191 | 0.0379 | 0.0282 | 0.0384 | 0.9594 | 119.8859 | 0.9798 | 0.0401 | 0.9907 | 0.9959 |
| Corel5k | 0.0000 | 0.0094 | 0.0267 | 0.0391 | 0.0115 | 0.0551 | 0.8647 | 164.5209 | 0.9271 | 0.1498 | 0.6809 | 0.9888 |
| delicious | 0.0000 | 0.0459 | 0.1373 | 0.2459 | 0.0885 | 0.2382 | 0.5377 | 918.8279 | 0.8425 | 0.1548 | 0.9872 | 1.0000 |
| emotions | 0.2667 | 0.1944 | 0.4931 | 0.5913 | 0.5952 | 0.6465 | 0.3000 | 1.7667 | 0.2421 | 0.7920 | 0.8737 | 0.8876 |
| enron | 0.1170 | 0.0509 | 0.3460 | 0.4703 | 0.0787 | 0.4695 | 0.2573 | 22.0234 | 0.3336 | 0.6289 | 0.8222 | 0.9789 |
| EukaryoteGO | 0.6907 | 0.0194 | 0.7577 | 0.7915 | 0.4060 | 0.8094 | 0.1637 | 0.6108 | 0.0278 | 0.9011 | 0.9917 | 0.9945 |
| EukaryotePseAAC | 0.0373 | 0.0514 | 0.0386 | 0.0392 | 0.0163 | 0.0659 | 0.5586 | 5.2214 | 0.4088 | 0.5537 | 0.9550 | 0.9592 |
| flags | 0.2000 | 0.2643 | 0.5508 | 0.6761 | 0.4712 | 0.6891 | 0.2000 | 3.7000 | 0.2508 | 0.8083 | 0.6899 | 0.7934 |
| foodtruck | 0.3659 | 0.1423 | 0.4869 | 0.5923 | 0.0718 | 0.4697 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8559 | 0.9574 |
| genbase | 0.9254 | 0.0028 | 0.9577 | 0.9713 | 0.5185 | 0.9686 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0143 | 0.9393 | 0.9481 | 0.8163 | 0.9444 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8737 | 0.9980 |
| GnegativePseAAC | 0.6857 | 0.0518 | 0.6964 | 0.7017 | 0.3578 | 0.7734 | 0.1786 | 0.5643 | 0.1088 | 0.8817 | 0.8569 | 0.9853 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9231 | 0.9231 | 0.8680 | 0.9320 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1010 | 0.7308 | 0.7308 | 0.5946 | 0.7835 | 0.2500 | 0.5385 | 0.2500 | 0.8365 | 0.9841 | 0.9760 |
| HumanGO | 0.6656 | 0.0356 | 0.7229 | 0.7529 | 0.5504 | 0.7619 | 0.1672 | 0.7074 | 0.0526 | 0.8938 | 0.9823 | 0.9865 |
| HumanPseAAC | 0.0611 | 0.0838 | 0.0627 | 0.0635 | 0.0265 | 0.0988 | 0.5498 | 2.9839 | 0.3538 | 0.6013 | 0.9238 | 0.9247 |
| Image | 0.4350 | 0.1690 | 0.4742 | 0.4939 | 0.5294 | 0.5493 | 0.3050 | 0.9700 | 0.2525 | 0.8008 | 0.9179 | 0.9125 |
| IMDB-ECC-F10% | 0.0000 | 0.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8784 | 15.3354 | 0.9478 | 0.1978 | 0.9925 | 0.9938 |
| IMDB-F10% | 0.0000 | 0.0723 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6139 | 13.0737 | 0.7438 | 0.3669 | 0.9865 | 0.9752 |
| LLOG-F | 0.1311 | 0.0161 | 0.1441 | 0.1534 | 0.0361 | 0.2139 | 0.7377 | 28.7541 | 0.7794 | 0.2790 | 0.5969 | 0.9966 |
| mediamill10% | 0.0689 | 0.0321 | 0.4005 | 0.5544 | 0.0299 | 0.4987 | 0.2542 | 60.0143 | 0.4538 | 0.5311 | 0.8133 | 0.9940 |
| medical | 0.6429 | 0.0098 | 0.7483 | 0.7993 | 0.2827 | 0.8230 | 0.1429 | 4.9898 | 0.1324 | 0.8546 | 0.5527 | 0.9977 |
| Music | 0.2333 | 0.1861 | 0.4944 | 0.6018 | 0.6752 | 0.6825 | 0.3167 | 2.0000 | 0.2593 | 0.7918 | 0.9068 | 0.9004 |
| NUS-WIDE-bow10% | 0.1444 | 0.0276 | 0.3210 | 0.4113 | 0.0541 | 0.3934 | 0.5371 | 34.6709 | 0.6133 | 0.4212 | 0.8932 | 1.0000 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0383 | 0.2718 | 0.3972 | 0.0574 | 0.3905 | 0.5592 | 35.3104 | 0.6592 | 0.4068 | 0.8887 | 0.9867 |
| OHSUMED-F | 0.1141 | 0.0642 | 0.1675 | 0.1947 | 0.0949 | 0.2407 | 0.3776 | 6.7552 | 0.3461 | 0.6252 | 0.9512 | 0.9538 |
| PlantGO | 0.6562 | 0.0469 | 0.6719 | 0.6796 | 0.5671 | 0.7158 | 0.2292 | 1.0521 | 0.0992 | 0.8484 | 0.9901 | 0.9858 |
| PlantPseAAC | 0.0918 | 0.0884 | 0.1020 | 0.1069 | 0.0691 | 0.1746 | 0.5918 | 3.1837 | 0.4995 | 0.5483 | 0.9447 | 0.9379 |
| rcv1subset1 | 0.0000 | 0.9694 | 0.0306 | 0.0594 | 0.0562 | 0.0594 | 0.9750 | 64.5383 | 1.0000 | 0.0894 | 0.9406 | 1.0000 |
| REUTERS-K500-EX2 | 0.1890 | 0.0120 | 0.2187 | 0.2342 | 0.0950 | 0.3016 | 0.4880 | 27.0326 | 0.4576 | 0.5303 | 0.7806 | 0.9939 |
| scene | 0.5975 | 0.0858 | 0.6349 | 0.6530 | 0.7318 | 0.7232 | 0.2158 | 0.7137 | 0.1405 | 0.8532 | 0.9595 | 0.9649 |
| sider_CDK_ECFP4 | 0.0141 | 0.2405 | 0.6533 | 0.8005 | 0.6015 | 0.7972 | 0.2183 | 19.1690 | 0.1502 | 0.8010 | 0.5813 | 0.7866 |
| sider_MordredDesc | 0.0141 | 0.2543 | 0.6187 | 0.7796 | 0.5883 | 0.7820 | 0.2183 | 19.6690 | 0.1739 | 0.7874 | 0.5547 | 0.7626 |
| sider_RDKit_desc | 0.0141 | 0.2629 | 0.6370 | 0.7887 | 0.5868 | 0.7848 | 0.2113 | 19.8803 | 0.1948 | 0.7569 | 0.5746 | 0.7623 |
| SLASHDOT-F | 0.2725 | 0.0434 | 0.2959 | 0.3076 | 0.1910 | 0.4053 | 0.3889 | 4.1799 | 0.2715 | 0.6845 | 0.7446 | 0.9710 |
| solar_flare-L3 | 0.4000 | 0.2667 | 0.4000 | 0.4000 | 0.3333 | 0.5000 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.5556 | 0.9200 |
| Stackex_chemistry | 0.0043 | 0.0121 | 0.0116 | 0.0155 | 0.0023 | 0.0201 | 0.8069 | 105.9164 | 0.8739 | 0.1480 | 0.9161 | 0.9961 |
| Stackex_chess | 0.0060 | 0.0100 | 0.0699 | 0.1030 | 0.0192 | 0.1477 | 0.6548 | 135.4583 | 0.7830 | 0.2182 | 0.5482 | 0.9972 |
| Stackex_coffee | 0.0435 | 0.0187 | 0.0652 | 0.0843 | 0.0122 | 0.1017 | 0.8261 | 76.7391 | 0.8422 | 0.1512 | 0.2561 | 0.9876 |
| Stackex_cooking | 0.0657 | 0.0053 | 0.2022 | 0.2714 | 0.1105 | 0.3177 | 0.6379 | 225.9857 | 0.7597 | 0.2387 | 0.9216 | 0.9966 |
| Stackex_philosophy | 0.0000 | 0.1572 | 0.0108 | 0.0212 | 0.0151 | 0.0212 | 0.8543 | 147.1281 | 0.9156 | 0.0995 | 0.7505 | 0.9994 |
| tmc2007-500 | 0.2171 | 0.0692 | 0.4107 | 0.5086 | 0.2550 | 0.5289 | 0.2633 | 3.9615 | 0.1302 | 0.7746 | 0.9503 | 0.9633 |
| tox21_CDK_ECFP4 | 0.0548 | 0.1630 | 0.1031 | 0.1315 | 0.1653 | 0.1878 | 0.4795 | 4.9418 | 0.3816 | 0.5901 | 0.8725 | 0.8639 |
| tox21_RDKit_desc | 0.0205 | 0.1724 | 0.0445 | 0.0614 | 0.0684 | 0.0876 | 0.5103 | 5.2158 | 0.4268 | 0.5717 | 0.8700 | 0.8637 |
| VirusGO | 0.7143 | 0.0714 | 0.7937 | 0.8410 | 0.6273 | 0.8085 | 0.0952 | 0.5714 | 0.0874 | 0.9183 | 0.8050 | 0.9723 |
| VirusPseAAC | 0.3810 | 0.1270 | 0.3810 | 0.3810 | 0.2972 | 0.5000 | 0.2857 | 0.8095 | 0.1762 | 0.8032 | 0.7335 | 0.9202 |
| Water-quality | 0.0000 | 0.3336 | 0.1605 | 0.2604 | 0.1376 | 0.2795 | 0.3113 | 9.2830 | 0.3702 | 0.6809 | 0.7711 | 0.7630 |
| Yahoo_Arts | 0.0360 | 0.0628 | 0.0449 | 0.0504 | 0.0245 | 0.0657 | 0.5995 | 11.3017 | 0.7029 | 0.4352 | 0.9246 | 0.9641 |
| Yahoo_Business | 0.5205 | 0.0289 | 0.6692 | 0.7530 | 0.0465 | 0.6662 | 0.1292 | 3.3476 | 0.2399 | 0.8657 | 0.8495 | 0.9917 |
| Yahoo_Computers | 0.2948 | 0.0388 | 0.3557 | 0.3938 | 0.0396 | 0.4086 | 0.4104 | 6.8498 | 0.4464 | 0.5868 | 0.8788 | 0.9741 |
| Yahoo_Education | 0.0141 | 0.0430 | 0.0155 | 0.0164 | 0.0104 | 0.0284 | 0.7406 | 10.3633 | 0.8233 | 0.3895 | 0.8900 | 0.9819 |
| Yahoo_Entertainment | 0.1202 | 0.0618 | 0.1285 | 0.1336 | 0.0674 | 0.1766 | 0.5467 | 4.7416 | 0.5145 | 0.5544 | 0.9606 | 0.9548 |
| Yahoo_Health | 0.2736 | 0.0455 | 0.3368 | 0.3759 | 0.1052 | 0.3781 | 0.4419 | 7.8046 | 0.4211 | 0.6033 | 0.8165 | 0.9744 |
| Yahoo_Recreation | 0.0351 | 0.0615 | 0.0392 | 0.0415 | 0.0482 | 0.0687 | 0.6500 | 7.7631 | 0.7496 | 0.4518 | 0.9660 | 0.9659 |
| Yahoo_Reference | 0.2951 | 0.0295 | 0.3171 | 0.3282 | 0.0276 | 0.4115 | 0.4421 | 5.9465 | 0.4359 | 0.6104 | 0.8039 | 0.9842 |
| Yahoo_Science | 0.0109 | 0.0360 | 0.0132 | 0.0143 | 0.0048 | 0.0211 | 0.7698 | 15.6407 | 0.7789 | 0.3125 | 0.9449 | 0.9712 |
| Yahoo_Social | 0.2880 | 0.0259 | 0.3068 | 0.3172 | 0.0353 | 0.3937 | 0.4290 | 7.9587 | 0.4128 | 0.6098 | 0.9089 | 0.9854 |
| Yahoo_Society | 0.1384 | 0.0566 | 0.1624 | 0.1780 | 0.0210 | 0.2051 | 0.4683 | 9.3437 | 0.5708 | 0.5172 | 0.9468 | 0.9777 |
| yeast | 0.1694 | 0.1957 | 0.4899 | 0.6273 | 0.3075 | 0.6222 | 0.2314 | 6.2025 | 0.2083 | 0.7641 | 0.8157 | 0.8727 |
| Yelp | 0.2094 | 0.2520 | 0.3913 | 0.4798 | 0.3043 | 0.5179 | 0.2602 | 1.5324 | 0.2216 | 0.8186 | 0.8187 | 0.8501 |

Table 161: Detailed results for Massive (n = 10) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0000 | 0.1227 | 0.1912 | 0.2828 | 0.5361 | 0.3068 | 0.5057 | 4.7313 | 0.4930 | 0.5771 | 0.9957 | 0.9952 |
| 3s-bbc1000 | 0.1389 | 0.2685 | 0.2037 | 0.2385 | 0.1781 | 0.2564 | 0.7500 | 2.9722 | 0.7144 | 0.4472 | 0.8023 | 0.7552 |
| 3s-guardian1000 | 0.2581 | 0.2258 | 0.3226 | 0.3519 | 0.1426 | 0.3636 | 0.5806 | 2.4839 | 0.5621 | 0.5540 | 0.8446 | 0.8398 |
| 3s-inter3000 | 0.0588 | 0.3235 | 0.1176 | 0.1471 | 0.0684 | 0.1538 | 1.0000 | 2.2353 | 0.6941 | 0.3833 | 0.5764 | 0.7520 |
| 3s-reuters1000 | 0.0667 | 0.3167 | 0.0667 | 0.0667 | 0.0256 | 0.0656 | 0.9000 | 2.5333 | 0.7933 | 0.3856 | 0.8330 | 0.7563 |
| amphibians | 0.1111 | 0.2540 | 0.5640 | 0.7684 | 0.4953 | 0.6923 | 0.2222 | 2.3889 | 0.1361 | 0.8750 | 0.8100 | 0.8290 |
| bibtex | 0.0000 | 0.9179 | 0.0152 | 0.0300 | 0.0478 | 0.0300 | 0.9541 | 94.6081 | 0.9824 | 0.0605 | 0.9999 | 0.9998 |
| birds | 0.0000 | 0.1741 | 0.1434 | 0.2218 | 0.1846 | 0.2367 | 0.6154 | 8.9487 | 0.7835 | 0.4090 | 0.8827 | 0.9843 |
| bookmarks10% | 0.0000 | 0.8767 | 0.0103 | 0.0204 | 0.0303 | 0.0204 | 0.9032 | 127.3189 | 0.9213 | 0.1072 | 0.9856 | 1.0000 |
| CAL500 | 0.0000 | 0.7283 | 0.1462 | 0.2552 | 0.1923 | 0.2552 | 0.3725 | 151.5686 | 0.9655 | 0.2697 | 0.8858 | 0.9941 |
| corel16k001 | 0.0000 | 0.7662 | 0.0195 | 0.0382 | 0.0313 | 0.0382 | 0.9906 | 119.6906 | 0.9993 | 0.0355 | 1.0000 | 1.0000 |
| Corel5k | 0.0000 | 0.9455 | 0.0097 | 0.0192 | 0.0174 | 0.0192 | 0.9880 | 169.6220 | 1.0000 | 0.1096 | 0.6791 | 1.0000 |
| delicious | 0.0000 | 0.6038 | 0.0211 | 0.0418 | 0.0487 | 0.0409 | 0.6872 | 927.5842 | 0.9867 | 0.0575 | 0.9897 | 1.0000 |
| emotions | 0.2833 | 0.1889 | 0.5694 | 0.7000 | 0.6548 | 0.6909 | 0.2833 | 1.6500 | 0.2166 | 0.8151 | 0.8943 | 0.8893 |
| enron | 0.0000 | 0.4916 | 0.0788 | 0.1466 | 0.1108 | 0.1467 | 0.3626 | 32.7310 | 0.7578 | 0.3351 | 0.8428 | 0.9947 |
| EukaryoteGO | 0.0000 | 0.3532 | 0.1181 | 0.2094 | 0.4614 | 0.2099 | 0.5116 | 7.8634 | 0.5441 | 0.4979 | 0.9971 | 0.9939 |
| EukaryotePseAAC | 0.0000 | 0.5623 | 0.0689 | 0.1267 | 0.0740 | 0.1268 | 0.9910 | 11.0643 | 0.9961 | 0.1477 | 0.9999 | 0.9999 |
| flags | 0.3000 | 0.2286 | 0.6325 | 0.7419 | 0.5898 | 0.7500 | 0.2000 | 3.5000 | 0.3033 | 0.8090 | 0.8423 | 0.8725 |
| foodtruck | 0.0488 | 0.2276 | 0.3326 | 0.5091 | 0.1362 | 0.4766 | 0.2439 | 5.1220 | 1.0000 | 0.7000 | 0.9167 | 1.0000 |
| genbase | 0.0000 | 0.2886 | 0.1289 | 0.2292 | 0.4499 | 0.2301 | 0.2537 | 2.4627 | 0.2540 | 0.8190 | 0.6661 | 0.9994 |
| GnegativeGO | 0.9214 | 0.0143 | 0.9393 | 0.9481 | 0.8163 | 0.9444 | 0.0500 | 0.1357 | 0.0301 | 0.9696 | 0.8739 | 0.9987 |
| GnegativePseAAC | 0.7571 | 0.0545 | 0.7786 | 0.7891 | 0.4599 | 0.7860 | 0.2000 | 0.7286 | 0.2056 | 0.8526 | 0.8641 | 0.9910 |
| GpositiveGO | 0.9423 | 0.0288 | 0.9423 | 0.9423 | 0.9533 | 0.9423 | 0.0385 | 0.0962 | 0.0256 | 0.9760 | 0.9975 | 0.9974 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5662 | 0.7308 | 0.2692 | 0.5769 | 0.2692 | 0.8237 | 0.9707 | 0.9689 |
| HumanGO | 0.6785 | 0.0363 | 0.7535 | 0.7922 | 0.6789 | 0.7703 | 0.1801 | 1.4598 | 0.1631 | 0.8530 | 0.9883 | 0.9907 |
| HumanPseAAC | 0.0032 | 0.2074 | 0.1144 | 0.1681 | 0.0791 | 0.1723 | 0.7685 | 5.7460 | 0.8020 | 0.3788 | 0.9849 | 0.9847 |
| Image | 0.5500 | 0.1710 | 0.6142 | 0.6463 | 0.6211 | 0.6175 | 0.3250 | 1.1250 | 0.3383 | 0.7739 | 0.9397 | 0.9398 |
| IMDB-ECC-F10% | 0.0000 | 0.6499 | 0.0691 | 0.1287 | 0.0826 | 0.1288 | 0.9507 | 15.8836 | 0.9979 | 0.1555 | 0.9999 | 0.9999 |
| IMDB-F10% | 0.0000 | 0.3825 | 0.0980 | 0.1791 | 0.0700 | 0.1777 | 0.9619 | 16.1839 | 0.9996 | 0.1566 | 1.0000 | 1.0000 |
| LLOG-F | 0.0000 | 0.6069 | 0.0204 | 0.0397 | 0.0334 | 0.0398 | 0.9508 | 38.2623 | 0.9672 | 0.1016 | 0.5998 | 0.9998 |
| mediamill10% | 0.0000 | 0.7415 | 0.0489 | 0.0934 | 0.0611 | 0.0933 | 0.8812 | 76.7648 | 0.9514 | 0.1019 | 0.8213 | 0.9995 |
| medical | 0.0000 | 0.5404 | 0.0464 | 0.0884 | 0.1398 | 0.0887 | 0.5714 | 15.2959 | 0.7585 | 0.3980 | 0.5556 | 0.9991 |
| Music | 0.2333 | 0.1917 | 0.5569 | 0.6954 | 0.6878 | 0.7039 | 0.2167 | 2.0000 | 0.2526 | 0.8164 | 0.8981 | 0.8954 |
| NUS-WIDE-bow10% | 0.0000 | 0.7624 | 0.0277 | 0.0535 | 0.0447 | 0.0537 | 0.8406 | 42.9791 | 0.8777 | 0.2230 | 0.8881 | 0.9990 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.6099 | 0.0293 | 0.0570 | 0.0389 | 0.0571 | 0.8368 | 47.1898 | 0.9436 | 0.1568 | 0.8881 | 0.9987 |
| OHSUMED-F | 0.0000 | 0.3992 | 0.0946 | 0.1703 | 0.2124 | 0.1707 | 0.6813 | 12.1421 | 0.7965 | 0.3280 | 0.9959 | 0.9954 |
| PlantGO | 0.0000 | 0.1910 | 0.2842 | 0.4128 | 0.4735 | 0.4086 | 0.3750 | 3.0312 | 0.3683 | 0.6641 | 0.9951 | 0.9891 |
| PlantPseAAC | 0.2653 | 0.1012 | 0.3129 | 0.3401 | 0.1912 | 0.3770 | 0.6122 | 3.4796 | 0.6297 | 0.5129 | 0.9640 | 0.9580 |
| rcv1subset1 | 0.0000 | 0.5561 | 0.0286 | 0.0557 | 0.0584 | 0.0556 | 0.8017 | 64.0833 | 0.9296 | 0.1549 | 0.9394 | 0.9981 |
| REUTERS-K500-EX2 | 0.0000 | 0.7034 | 0.0149 | 0.0294 | 0.0647 | 0.0294 | 0.8505 | 51.7423 | 0.8803 | 0.1772 | 0.7860 | 0.9994 |
| scene | 0.6390 | 0.0871 | 0.7075 | 0.7416 | 0.7602 | 0.7480 | 0.2199 | 0.9046 | 0.1954 | 0.8324 | 0.9687 | 0.9724 |
| sider_CDK_ECFP4 | 0.0000 | 0.3813 | 0.5668 | 0.7274 | 0.6275 | 0.7274 | 0.4225 | 23.2746 | 0.3588 | 0.6881 | 0.8829 | 0.7764 |
| sider_MordredDesc | 0.0000 | 0.3878 | 0.5653 | 0.7246 | 0.6183 | 0.7245 | 0.0986 | 24.2746 | 0.4216 | 0.7524 | 0.8935 | 0.8404 |
| sider_RDKit_desc | 0.0141 | 0.4374 | 0.5455 | 0.7068 | 0.6411 | 0.7060 | 0.2254 | 24.8028 | 0.5106 | 0.6690 | 0.9865 | 0.7867 |
| SLASHDOT-F | 0.0000 | 0.6240 | 0.0601 | 0.1118 | 0.1428 | 0.1119 | 0.8122 | 11.6243 | 0.8590 | 0.2444 | 0.7699 | 0.9962 |
| solar_flare-L3 | 0.4000 | 0.3333 | 0.5000 | 0.5455 | 0.3571 | 0.5455 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.6667 | 0.8400 |
| Stackex_chemistry | 0.0000 | 0.7597 | 0.0121 | 0.0240 | 0.0301 | 0.0240 | 0.9078 | 113.3847 | 0.9701 | 0.0718 | 0.9199 | 0.9998 |
| Stackex_chess | 0.0000 | 0.8126 | 0.0108 | 0.0213 | 0.0258 | 0.0213 | 0.9524 | 155.2857 | 0.9811 | 0.0437 | 0.5506 | 0.9998 |
| Stackex_coffee | 0.0000 | 0.8006 | 0.0191 | 0.0374 | 0.0279 | 0.0374 | 1.0000 | 81.7391 | 1.0000 | 0.0364 | 0.2602 | 0.9996 |
| Stackex_cooking | 0.0000 | 0.9074 | 0.0060 | 0.0118 | 0.0142 | 0.0118 | 0.9729 | 259.5333 | 0.9907 | 0.0298 | 0.9250 | 1.0000 |
| Stackex_philosophy | 0.0000 | 0.9397 | 0.0098 | 0.0194 | 0.0202 | 0.0194 | 0.9899 | 153.5804 | 0.9979 | 0.0234 | 0.7511 | 1.0000 |
| tmc2007-500 | 0.0007 | 0.1407 | 0.3086 | 0.4653 | 0.4543 | 0.4654 | 0.3322 | 6.2077 | 0.3760 | 0.6588 | 0.9777 | 0.9814 |
| tox21_CDK_ECFP4 | 0.1233 | 0.1584 | 0.2747 | 0.3553 | 0.3279 | 0.4102 | 0.5411 | 6.2089 | 0.6937 | 0.4792 | 0.9627 | 0.9627 |
| tox21_RDKit_desc | 0.0171 | 0.2643 | 0.2125 | 0.3252 | 0.2357 | 0.3386 | 0.6062 | 6.3904 | 0.7441 | 0.4383 | 0.9661 | 0.9659 |
| VirusGO | 0.7143 | 0.0714 | 0.7937 | 0.8410 | 0.6273 | 0.8085 | 0.1905 | 0.8095 | 0.1271 | 0.8677 | 0.8127 | 0.9814 |
| VirusPseAAC | 0.5238 | 0.1270 | 0.5476 | 0.5593 | 0.3249 | 0.6000 | 0.3333 | 0.8095 | 0.1857 | 0.7873 | 0.7514 | 0.9337 |
| Water-quality | 0.0094 | 0.3214 | 0.2570 | 0.3968 | 0.2516 | 0.3924 | 0.3585 | 10.5000 | 0.5998 | 0.6242 | 0.8733 | 0.8782 |
| Yahoo_Arts | 0.0000 | 0.4984 | 0.0679 | 0.1260 | 0.1113 | 0.1261 | 0.7170 | 14.9680 | 0.9339 | 0.2962 | 0.9589 | 0.9973 |
| Yahoo_Business | 0.0000 | 0.4491 | 0.0761 | 0.1429 | 0.1369 | 0.1414 | 0.1212 | 3.8262 | 0.2995 | 0.8535 | 0.8634 | 0.9974 |
| Yahoo_Computers | 0.0000 | 0.2395 | 0.0911 | 0.1644 | 0.1574 | 0.1653 | 0.4233 | 7.8112 | 0.5415 | 0.5477 | 0.9053 | 0.9924 |
| Yahoo_Education | 0.0000 | 0.4346 | 0.0415 | 0.0779 | 0.0976 | 0.0786 | 0.7839 | 11.3799 | 0.9250 | 0.3428 | 0.9073 | 0.9983 |
| Yahoo_Entertainment | 0.0000 | 0.2800 | 0.0668 | 0.1175 | 0.1224 | 0.1232 | 0.7581 | 5.9544 | 0.7940 | 0.4017 | 0.9948 | 0.9950 |
| Yahoo_Health | 0.0000 | 0.2169 | 0.1090 | 0.1923 | 0.1628 | 0.1913 | 0.4343 | 8.5440 | 0.5477 | 0.5917 | 0.8372 | 0.9909 |
| Yahoo_Recreation | 0.0000 | 0.1952 | 0.1476 | 0.2422 | 0.2062 | 0.2406 | 0.6672 | 8.3733 | 0.8214 | 0.4271 | 0.9952 | 0.9951 |
| Yahoo_Reference | 0.0000 | 0.2900 | 0.0822 | 0.1497 | 0.0904 | 0.1492 | 0.9029 | 7.5131 | 0.9434 | 0.3050 | 0.8170 | 0.9986 |
| Yahoo_Science | 0.0000 | 0.4599 | 0.0337 | 0.0641 | 0.0840 | 0.0648 | 0.8196 | 16.7807 | 0.8623 | 0.2645 | 0.9721 | 0.9971 |
| Yahoo_Social | 0.0000 | 0.3240 | 0.0460 | 0.0859 | 0.0780 | 0.0868 | 0.4373 | 8.8317 | 0.4691 | 0.5876 | 0.9206 | 0.9941 |
| Yahoo_Society | 0.0000 | 0.1595 | 0.0864 | 0.1472 | 0.0873 | 0.1510 | 0.5517 | 10.3650 | 0.6503 | 0.4660 | 0.9557 | 0.9925 |
| yeast | 0.0372 | 0.2653 | 0.4592 | 0.6067 | 0.4036 | 0.6083 | 0.2893 | 6.3140 | 0.3594 | 0.7398 | 0.8791 | 0.9055 |
| Yelp | 0.4168 | 0.1964 | 0.6244 | 0.7213 | 0.6356 | 0.7061 | 0.2154 | 1.4337 | 0.2657 | 0.8491 | 0.8835 | 0.9027 |

Table 162: Detailed results for Massive (n = 100) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5062 | 0.0286 | 0.5578 | 0.5840 | 0.6781 | 0.6855 | 0.3387 | 3.0109 | 0.2952 | 0.7247 | 0.9879 | 0.9883 |
| 3s-bbc1000 | 0.1944 | 0.2222 | 0.2593 | 0.2960 | 0.2880 | 0.3333 | 0.6667 | 2.5833 | 0.6164 | 0.5023 | 0.8356 | 0.7895 |
| 3s-guardian1000 | 0.2258 | 0.2634 | 0.3253 | 0.3816 | 0.1757 | 0.3636 | 0.6129 | 2.2258 | 0.5040 | 0.5642 | 0.7747 | 0.7889 |
| 3s-inter3000 | 0.2941 | 0.2255 | 0.3235 | 0.3376 | 0.0870 | 0.3429 | 0.8824 | 2.1765 | 0.6015 | 0.4324 | 0.5209 | 0.6978 |
| 3s-reuters1000 | 0.0667 | 0.3000 | 0.1000 | 0.1143 | 0.0893 | 0.1290 | 0.9000 | 2.3667 | 0.7200 | 0.4067 | 0.8399 | 0.7656 |
| amphibians | 0.1111 | 0.3016 | 0.4685 | 0.6839 | 0.3810 | 0.5870 | 0.2222 | 2.5000 | 0.0889 | 0.8593 | 0.7679 | 0.8146 |
| bibtex | 0.0000 | 0.3978 | 0.0199 | 0.0392 | 0.1326 | 0.0392 | 0.6811 | 86.8486 | 0.7963 | 0.2355 | 0.9994 | 0.9992 |
| birds | 0.1795 | 0.0918 | 0.3531 | 0.4392 | 0.3172 | 0.4426 | 0.5128 | 7.8718 | 0.5539 | 0.5107 | 0.8594 | 0.9582 |
| bookmarks10% | 0.0000 | 0.1974 | 0.0143 | 0.0283 | 0.0503 | 0.0281 | 0.8178 | 113.5421 | 0.8417 | 0.1840 | 0.9852 | 0.9997 |
| CAL500 | 0.0000 | 0.6898 | 0.1436 | 0.2516 | 0.1780 | 0.2514 | 0.1373 | 151.5686 | 0.9572 | 0.3043 | 0.8876 | 0.9981 |
| corel16k001 | 0.0000 | 0.1575 | 0.0174 | 0.0334 | 0.0097 | 0.0336 | 0.9622 | 118.3871 | 0.9862 | 0.0484 | 0.9998 | 0.9998 |
| Corel5k | 0.0000 | 0.4763 | 0.0098 | 0.0194 | 0.0165 | 0.0194 | 0.9080 | 168.7060 | 0.9715 | 0.1330 | 0.6791 | 0.9999 |
| delicious | 0.0000 | 0.6076 | 0.0214 | 0.0412 | 0.0486 | 0.0415 | 0.6963 | 930.0621 | 0.9745 | 0.0573 | 0.9849 | 1.0000 |
| emotions | 0.2833 | 0.1917 | 0.5681 | 0.6965 | 0.6761 | 0.6960 | 0.2833 | 1.7833 | 0.2374 | 0.8056 | 0.8668 | 0.8804 |
| enron | 0.1520 | 0.0503 | 0.4335 | 0.5719 | 0.1325 | 0.5431 | 0.2339 | 26.8655 | 0.4048 | 0.5910 | 0.8294 | 0.9837 |
| EukaryoteGO | 0.6985 | 0.0186 | 0.7865 | 0.8299 | 0.6448 | 0.8257 | 0.1817 | 0.9781 | 0.0567 | 0.8835 | 0.9935 | 0.9949 |
| EukaryotePseAAC | 0.2484 | 0.0551 | 0.3192 | 0.3558 | 0.1242 | 0.3969 | 0.6126 | 7.2857 | 0.6079 | 0.4531 | 0.9797 | 0.9820 |
| flags | 0.2500 | 0.2429 | 0.6094 | 0.7261 | 0.5660 | 0.7344 | 0.3000 | 3.6000 | 0.2692 | 0.7916 | 0.7024 | 0.7952 |
| foodtruck | 0.3659 | 0.1443 | 0.4828 | 0.5991 | 0.1093 | 0.4892 | 0.2439 | 4.6829 | 0.4757 | 0.7187 | 0.8687 | 0.9654 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0149 | 0.2388 | 0.0012 | 0.9900 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0143 | 0.9429 | 0.9535 | 0.8142 | 0.9448 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8733 | 0.9974 |
| GnegativePseAAC | 0.7500 | 0.0536 | 0.7702 | 0.7803 | 0.4578 | 0.7872 | 0.2000 | 0.6214 | 0.1556 | 0.8661 | 0.8588 | 0.9875 |
| GpositiveGO | 0.9231 | 0.0288 | 0.9327 | 0.9375 | 0.9485 | 0.9423 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9959 | 0.9957 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5662 | 0.7308 | 0.2692 | 0.5385 | 0.2436 | 0.8301 | 0.9702 | 0.9645 |
| HumanGO | 0.6785 | 0.0365 | 0.7596 | 0.8027 | 0.6802 | 0.7712 | 0.1608 | 1.1511 | 0.1173 | 0.8777 | 0.9861 | 0.9894 |
| HumanPseAAC | 0.3248 | 0.0896 | 0.3741 | 0.4001 | 0.1655 | 0.4091 | 0.5723 | 4.1640 | 0.5924 | 0.5317 | 0.9720 | 0.9715 |
| Image | 0.5000 | 0.1760 | 0.6042 | 0.6571 | 0.6298 | 0.6239 | 0.3250 | 1.1050 | 0.3033 | 0.7767 | 0.9142 | 0.9130 |
| IMDB-ECC-F10% | 0.0566 | 0.0848 | 0.1414 | 0.1867 | 0.0206 | 0.1861 | 0.6352 | 12.6551 | 0.7601 | 0.3624 | 0.9947 | 0.9793 |
| IMDB-F10% | 0.0489 | 0.0909 | 0.1304 | 0.1759 | 0.0188 | 0.1734 | 0.9379 | 16.0539 | 0.9838 | 0.1705 | 0.9978 | 0.9983 |
| LLOG-F | 0.1639 | 0.0156 | 0.1892 | 0.2046 | 0.0514 | 0.2814 | 0.7705 | 29.2705 | 0.8068 | 0.2550 | 0.5994 | 0.9993 |
| mediamill10% | 0.0000 | 0.0575 | 0.2693 | 0.4239 | 0.0394 | 0.4066 | 0.2708 | 64.4869 | 0.5243 | 0.4609 | 0.8144 | 0.9943 |
| medical | 0.6122 | 0.0113 | 0.7287 | 0.7839 | 0.2908 | 0.8000 | 0.1633 | 5.7653 | 0.1665 | 0.8298 | 0.5535 | 0.9977 |
| Music | 0.2333 | 0.1833 | 0.5681 | 0.7115 | 0.6997 | 0.7155 | 0.3500 | 2.1333 | 0.2512 | 0.7612 | 0.8882 | 0.8849 |
| NUS-WIDE-bow10% | 0.1893 | 0.0305 | 0.2976 | 0.3576 | 0.0205 | 0.3212 | 0.6499 | 39.1161 | 0.7487 | 0.3369 | 0.8857 | 0.9962 |
| NUS-WIDE-cVLADplus10% | 0.1936 | 0.0300 | 0.3174 | 0.3833 | 0.0390 | 0.3472 | 0.5894 | 37.1142 | 0.6886 | 0.3835 | 0.8845 | 0.9953 |
| OHSUMED-F | 0.2233 | 0.0575 | 0.4066 | 0.5045 | 0.3962 | 0.5320 | 0.3805 | 8.1780 | 0.4544 | 0.5876 | 0.9795 | 0.9818 |
| PlantGO | 0.6979 | 0.0425 | 0.7118 | 0.7205 | 0.6240 | 0.7513 | 0.2500 | 1.1146 | 0.1115 | 0.8345 | 0.9910 | 0.9857 |
| PlantPseAAC | 0.2857 | 0.1114 | 0.3248 | 0.3461 | 0.1650 | 0.3547 | 0.6224 | 3.2551 | 0.5587 | 0.5253 | 0.9533 | 0.9447 |
| rcv1subset1 | 0.1137 | 0.0309 | 0.3263 | 0.4294 | 0.2358 | 0.4341 | 0.4119 | 38.6082 | 0.4101 | 0.5128 | 0.9271 | 0.9791 |
| REUTERS-K500-EX2 | 0.0000 | 0.0209 | 0.1874 | 0.2606 | 0.1906 | 0.2996 | 0.5687 | 36.9003 | 0.5975 | 0.4342 | 0.7849 | 0.9983 |
| scene | 0.6805 | 0.0864 | 0.7344 | 0.7610 | 0.7646 | 0.7525 | 0.2241 | 0.8631 | 0.1838 | 0.8340 | 0.9625 | 0.9683 |
| sider_CDK_ECFP4 | 0.0070 | 0.2517 | 0.6400 | 0.7917 | 0.6207 | 0.7885 | 0.3521 | 20.0704 | 0.2188 | 0.7336 | 0.6102 | 0.7549 |
| sider_MordredDesc | 0.0141 | 0.2793 | 0.6190 | 0.7731 | 0.6049 | 0.7744 | 0.3028 | 20.1479 | 0.2202 | 0.7434 | 0.6125 | 0.7545 |
| sider_RDKit_desc | 0.0141 | 0.2830 | 0.6268 | 0.7790 | 0.5822 | 0.7748 | 0.2676 | 20.4155 | 0.2292 | 0.7475 | 0.6550 | 0.7500 |
| SLASHDOT-F | 0.4021 | 0.0406 | 0.4904 | 0.5366 | 0.3518 | 0.5786 | 0.4444 | 6.4868 | 0.4352 | 0.5923 | 0.7622 | 0.9884 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0000 | 0.1723 | 0.0192 | 0.0372 | 0.0419 | 0.0373 | 0.8228 | 108.5720 | 0.9107 | 0.1281 | 0.9194 | 0.9994 |
| Stackex_chess | 0.0000 | 0.2177 | 0.0135 | 0.0264 | 0.0264 | 0.0265 | 0.7619 | 146.6607 | 0.8737 | 0.1458 | 0.5501 | 0.9993 |
| Stackex_coffee | 0.0000 | 0.0308 | 0.1152 | 0.1813 | 0.0260 | 0.1869 | 0.8696 | 75.3043 | 0.8919 | 0.1128 | 0.2588 | 0.9963 |
| Stackex_cooking | 0.0000 | 0.8936 | 0.0055 | 0.0109 | 0.0192 | 0.0109 | 0.9488 | 257.1440 | 0.9800 | 0.0399 | 0.9250 | 0.9999 |
| Stackex_philosophy | 0.0000 | 0.7564 | 0.0092 | 0.0182 | 0.0300 | 0.0182 | 0.8417 | 146.0050 | 0.9106 | 0.1108 | 0.7508 | 0.9997 |
| tmc2007-500 | 0.2808 | 0.0628 | 0.5479 | 0.6788 | 0.5618 | 0.6605 | 0.2514 | 4.8983 | 0.2094 | 0.7527 | 0.9657 | 0.9737 |
| tox21_CDK_ECFP4 | 0.1610 | 0.1652 | 0.3349 | 0.4242 | 0.3693 | 0.4427 | 0.4863 | 5.7397 | 0.5772 | 0.5368 | 0.9298 | 0.9317 |
| tox21_RDKit_desc | 0.1473 | 0.1801 | 0.2795 | 0.3656 | 0.2300 | 0.3581 | 0.5103 | 5.8219 | 0.6074 | 0.5186 | 0.9302 | 0.9324 |
| VirusGO | 0.7143 | 0.0635 | 0.8254 | 0.8651 | 0.6868 | 0.8400 | 0.1429 | 0.6190 | 0.0874 | 0.8944 | 0.8080 | 0.9683 |
| VirusPseAAC | 0.4762 | 0.1190 | 0.5238 | 0.5466 | 0.3307 | 0.6154 | 0.4286 | 1.0476 | 0.2333 | 0.7270 | 0.7259 | 0.9101 |
| Water-quality | 0.0000 | 0.3194 | 0.2805 | 0.4265 | 0.2562 | 0.4234 | 0.2453 | 9.6887 | 0.4293 | 0.6885 | 0.8107 | 0.8086 |
| Yahoo_Arts | 0.1389 | 0.0625 | 0.1943 | 0.2304 | 0.1665 | 0.2810 | 0.5794 | 12.0374 | 0.7600 | 0.4260 | 0.9491 | 0.9882 |
| Yahoo_Business | 0.5535 | 0.0271 | 0.7152 | 0.8044 | 0.2408 | 0.7138 | 0.1185 | 3.3503 | 0.2401 | 0.8684 | 0.8591 | 0.9957 |
| Yahoo_Computers | 0.3863 | 0.0415 | 0.4737 | 0.5404 | 0.2485 | 0.5061 | 0.3836 | 6.5490 | 0.4266 | 0.6074 | 0.8778 | 0.9764 |
| Yahoo_Education | 0.2544 | 0.0493 | 0.3147 | 0.3584 | 0.1447 | 0.3550 | 0.5885 | 9.8845 | 0.6282 | 0.4906 | 0.8952 | 0.9820 |
| Yahoo_Entertainment | 0.4123 | 0.0753 | 0.5327 | 0.5736 | 0.3508 | 0.5333 | 0.3918 | 3.9916 | 0.3948 | 0.6751 | 0.9663 | 0.9722 |
| Yahoo_Health | 0.4078 | 0.0395 | 0.5430 | 0.6216 | 0.2473 | 0.5874 | 0.3099 | 6.4425 | 0.3485 | 0.6896 | 0.8254 | 0.9821 |
| Yahoo_Recreation | 0.2389 | 0.0597 | 0.2924 | 0.3326 | 0.3077 | 0.3937 | 0.5204 | 6.4742 | 0.5531 | 0.5642 | 0.9603 | 0.9526 |
| Yahoo_Reference | 0.4334 | 0.0316 | 0.4955 | 0.5324 | 0.1306 | 0.5236 | 0.4234 | 6.0959 | 0.4579 | 0.6151 | 0.8118 | 0.9912 |
| Yahoo_Science | 0.1680 | 0.0381 | 0.2062 | 0.2377 | 0.1285 | 0.2771 | 0.7061 | 14.9984 | 0.7279 | 0.3602 | 0.9644 | 0.9897 |
| Yahoo_Social | 0.4737 | 0.0277 | 0.5308 | 0.5720 | 0.1628 | 0.5455 | 0.3679 | 7.4844 | 0.3850 | 0.6498 | 0.9041 | 0.9802 |
| Yahoo_Society | 0.3245 | 0.0839 | 0.4534 | 0.5465 | 0.2261 | 0.4612 | 0.3647 | 8.4296 | 0.4755 | 0.5804 | 0.9517 | 0.9815 |
| yeast | 0.2273 | 0.1921 | 0.5483 | 0.6739 | 0.4048 | 0.6684 | 0.2769 | 6.1777 | 0.2636 | 0.7490 | 0.8348 | 0.8892 |
| Yelp | 0.4207 | 0.1920 | 0.6299 | 0.7260 | 0.6605 | 0.7172 | 0.2173 | 1.4048 | 0.2463 | 0.8529 | 0.8788 | 0.9002 |

Table 163: Detailed results for Massive (n = 1000) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5628 | 0.0260 | 0.6010 | 0.6199 | 0.7099 | 0.7150 | 0.3268 | 2.8345 | 0.2742 | 0.7373 | 0.9922 | 0.9922 |
| 3s-bbc1000 | 0.1111 | 0.2963 | 0.1667 | 0.2037 | 0.1722 | 0.2195 | 0.7778 | 3.0000 | 0.7019 | 0.4241 | 0.7818 | 0.7305 |
| 3s-guardian1000 | 0.2903 | 0.2204 | 0.3978 | 0.4510 | 0.2865 | 0.4384 | 0.5161 | 2.2258 | 0.5290 | 0.5978 | 0.8749 | 0.8588 |
| 3s-inter3000 | 0.2941 | 0.2353 | 0.3235 | 0.3376 | 0.0870 | 0.3333 | 0.7647 | 2.7059 | 0.9529 | 0.4510 | 0.7734 | 0.9411 |
| 3s-reuters1000 | 0.1333 | 0.3111 | 0.1333 | 0.1333 | 0.0670 | 0.1250 | 0.8667 | 2.6667 | 0.8000 | 0.3833 | 0.8355 | 0.7542 |
| amphibians | 0.0556 | 0.3095 | 0.4452 | 0.6732 | 0.2792 | 0.5714 | 0.2222 | 2.5000 | 0.1167 | 0.8570 | 0.7364 | 0.8030 |
| bibtex | 0.1838 | 0.0120 | 0.3547 | 0.4451 | 0.3074 | 0.4724 | 0.4311 | 72.7608 | 0.5786 | 0.4289 | 0.9977 | 0.9977 |
| birds | 0.1795 | 0.0864 | 0.3226 | 0.3930 | 0.2697 | 0.4182 | 0.5128 | 7.8462 | 0.5060 | 0.5024 | 0.8441 | 0.9359 |
| bookmarks10% | 0.1834 | 0.0088 | 0.2150 | 0.2373 | 0.1118 | 0.2626 | 0.7255 | 105.0171 | 0.7631 | 0.2604 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1601 | 0.1562 | 0.2719 | 0.0430 | 0.2664 | 0.5098 | 151.0588 | 0.7115 | 0.3898 | 0.8475 | 0.9597 |
| corel16k001 | 0.0051 | 0.0189 | 0.0471 | 0.0699 | 0.0305 | 0.0893 | 0.8744 | 114.6253 | 0.9426 | 0.0895 | 0.9989 | 0.9989 |
| Corel5k | 0.0100 | 0.0091 | 0.0500 | 0.0713 | 0.0196 | 0.1003 | 0.8460 | 164.6020 | 0.9346 | 0.1630 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.6084 | 0.0213 | 0.0418 | 0.0488 | 0.0418 | 0.6967 | 920.1815 | 0.9614 | 0.0574 | 0.9945 | 0.9996 |
| emotions | 0.3167 | 0.1944 | 0.5847 | 0.7062 | 0.6785 | 0.6983 | 0.3000 | 1.7833 | 0.2448 | 0.7869 | 0.9006 | 0.8901 |
| enron | 0.1813 | 0.0522 | 0.4449 | 0.5669 | 0.1351 | 0.5439 | 0.2807 | 23.7895 | 0.3654 | 0.6072 | 0.8255 | 0.9809 |
| EukaryoteGO | 0.7101 | 0.0188 | 0.7889 | 0.8283 | 0.7341 | 0.8224 | 0.1701 | 0.8969 | 0.0525 | 0.8918 | 0.9933 | 0.9948 |
| EukaryotePseAAC | 0.2703 | 0.0558 | 0.3606 | 0.4072 | 0.1449 | 0.4358 | 0.5701 | 6.3990 | 0.5317 | 0.5026 | 0.9754 | 0.9782 |
| flags | 0.1500 | 0.2571 | 0.5750 | 0.7091 | 0.5478 | 0.7143 | 0.4000 | 3.4500 | 0.2817 | 0.7815 | 0.7472 | 0.8164 |
| foodtruck | 0.3659 | 0.1402 | 0.4917 | 0.6008 | 0.1075 | 0.4889 | 0.2439 | 4.6098 | 0.4729 | 0.7172 | 0.8604 | 0.9604 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0149 | 0.2985 | 0.0024 | 0.9885 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9357 | 0.0125 | 0.9500 | 0.9571 | 0.8192 | 0.9517 | 0.0357 | 0.1214 | 0.0245 | 0.9768 | 0.8740 | 0.9981 |
| GnegativePseAAC | 0.7714 | 0.0509 | 0.7952 | 0.8071 | 0.4683 | 0.8014 | 0.1714 | 0.6214 | 0.1515 | 0.8772 | 0.8629 | 0.9903 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8699 | 0.9333 | 0.0577 | 0.1538 | 0.0449 | 0.9615 | 0.9986 | 0.9983 |
| GpositivePseAAC | 0.7500 | 0.1250 | 0.7500 | 0.7500 | 0.5688 | 0.7500 | 0.2500 | 0.5385 | 0.2500 | 0.8365 | 0.9841 | 0.9760 |
| HumanGO | 0.7010 | 0.0358 | 0.7629 | 0.7959 | 0.7029 | 0.7726 | 0.1608 | 1.0643 | 0.0996 | 0.8818 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.3537 | 0.0914 | 0.4068 | 0.4347 | 0.1844 | 0.4265 | 0.5434 | 3.6109 | 0.5035 | 0.5704 | 0.9581 | 0.9589 |
| Image | 0.5450 | 0.1690 | 0.6175 | 0.6545 | 0.6308 | 0.6253 | 0.3050 | 1.0200 | 0.2850 | 0.7959 | 0.9347 | 0.9312 |
| IMDB-ECC-F10% | 0.0597 | 0.0844 | 0.1470 | 0.1947 | 0.0277 | 0.1938 | 0.6321 | 12.3386 | 0.7342 | 0.3751 | 0.9907 | 0.9763 |
| IMDB-F10% | 0.0522 | 0.0904 | 0.1408 | 0.1910 | 0.0279 | 0.1925 | 0.5857 | 12.7755 | 0.7197 | 0.3867 | 0.9855 | 0.9750 |
| LLOG-F | 0.1639 | 0.0158 | 0.1933 | 0.2109 | 0.0521 | 0.2857 | 0.7459 | 28.7049 | 0.7876 | 0.2752 | 0.5982 | 0.9978 |
| mediamill10% | 0.0879 | 0.0317 | 0.4129 | 0.5683 | 0.0370 | 0.5116 | 0.2399 | 57.9976 | 0.4335 | 0.5504 | 0.8123 | 0.9932 |
| medical | 0.6633 | 0.0100 | 0.7662 | 0.8162 | 0.3063 | 0.8240 | 0.1735 | 5.0510 | 0.1336 | 0.8325 | 0.5526 | 0.9975 |
| Music | 0.2833 | 0.1694 | 0.5861 | 0.7192 | 0.7288 | 0.7359 | 0.3167 | 2.0000 | 0.2543 | 0.7904 | 0.9088 | 0.8972 |
| NUS-WIDE-bow10% | 0.1836 | 0.0250 | 0.3109 | 0.3772 | 0.0418 | 0.3791 | 0.5219 | 34.2350 | 0.5868 | 0.4398 | 0.8803 | 0.9913 |
| NUS-WIDE-cVLADplus10% | 0.1970 | 0.0296 | 0.3220 | 0.3867 | 0.0416 | 0.3527 | 0.6327 | 38.3635 | 0.7183 | 0.3576 | 0.8856 | 0.9967 |
| OHSUMED-F | 0.2340 | 0.0569 | 0.4327 | 0.5372 | 0.4387 | 0.5582 | 0.3575 | 7.6382 | 0.4113 | 0.6145 | 0.9765 | 0.9795 |
| PlantGO | 0.6979 | 0.0443 | 0.7240 | 0.7370 | 0.6173 | 0.7463 | 0.2292 | 0.9479 | 0.0957 | 0.8527 | 0.9895 | 0.9843 |
| PlantPseAAC | 0.2653 | 0.1114 | 0.3197 | 0.3485 | 0.1915 | 0.3610 | 0.6020 | 3.2653 | 0.5468 | 0.5340 | 0.9503 | 0.9440 |
| rcv1subset1 | 0.1150 | 0.0306 | 0.3271 | 0.4323 | 0.2374 | 0.4350 | 0.4100 | 38.4417 | 0.4071 | 0.5133 | 0.9261 | 0.9867 |
| REUTERS-K500-EX2 | 0.3333 | 0.0117 | 0.4060 | 0.4497 | 0.2318 | 0.4924 | 0.5258 | 32.0979 | 0.5321 | 0.4838 | 0.7839 | 0.9972 |
| scene | 0.7012 | 0.0809 | 0.7531 | 0.7786 | 0.7795 | 0.7683 | 0.1992 | 0.9544 | 0.2000 | 0.8373 | 0.9774 | 0.9792 |
| sider_CDK_ECFP4 | 0.0141 | 0.2546 | 0.6488 | 0.7955 | 0.6205 | 0.7930 | 0.2324 | 19.0352 | 0.1617 | 0.7985 | 0.5797 | 0.7717 |
| sider_MordredDesc | 0.0141 | 0.2681 | 0.6151 | 0.7774 | 0.6106 | 0.7782 | 0.3169 | 19.4085 | 0.1817 | 0.7627 | 0.5686 | 0.7624 |
| sider_RDKit_desc | 0.0141 | 0.2848 | 0.6273 | 0.7796 | 0.5943 | 0.7745 | 0.2535 | 20.0141 | 0.2104 | 0.7390 | 0.5873 | 0.7505 |
| SLASHDOT-F | 0.3995 | 0.0420 | 0.5064 | 0.5638 | 0.3643 | 0.5880 | 0.4048 | 5.7910 | 0.3764 | 0.6339 | 0.7581 | 0.9849 |
| solar_flare-L3 | 0.8000 | 0.1333 | 0.8000 | 0.8000 | 0.5333 | 0.8000 | 0.2000 | 0.2000 | 0.2000 | 0.9000 | 0.6667 | 0.9800 |
| Stackex_chemistry | 0.0389 | 0.0120 | 0.0991 | 0.1347 | 0.0535 | 0.1684 | 0.7925 | 105.9726 | 0.8776 | 0.1538 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0298 | 0.0100 | 0.1373 | 0.1921 | 0.0497 | 0.2563 | 0.6548 | 137.7798 | 0.8088 | 0.2050 | 0.5490 | 0.9981 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0507 | 0.0732 | 0.0221 | 0.1159 | 0.7391 | 72.3043 | 0.8229 | 0.1898 | 0.2549 | 0.9871 |
| Stackex_cooking | 0.0589 | 0.0052 | 0.1915 | 0.2597 | 0.1002 | 0.3072 | 0.6406 | 223.4725 | 0.7720 | 0.2311 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0678 | 0.0092 | 0.1701 | 0.2285 | 0.0550 | 0.2685 | 0.6834 | 134.9121 | 0.7897 | 0.2140 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2930 | 0.0620 | 0.5604 | 0.6922 | 0.5671 | 0.6697 | 0.2517 | 4.1269 | 0.1467 | 0.7761 | 0.9583 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1575 | 0.1632 | 0.3243 | 0.4099 | 0.3492 | 0.4280 | 0.4726 | 5.4007 | 0.4838 | 0.5688 | 0.8987 | 0.8990 |
| tox21_RDKit_desc | 0.1575 | 0.1732 | 0.2887 | 0.3766 | 0.2566 | 0.3684 | 0.4966 | 5.4521 | 0.4993 | 0.5586 | 0.9004 | 0.9013 |
| VirusGO | 0.7143 | 0.0556 | 0.8175 | 0.8607 | 0.6894 | 0.8511 | 0.2381 | 0.6667 | 0.1135 | 0.8587 | 0.8176 | 0.9790 |
| VirusPseAAC | 0.5714 | 0.1032 | 0.5952 | 0.6069 | 0.3833 | 0.6829 | 0.3333 | 1.0476 | 0.2524 | 0.7667 | 0.7592 | 0.9337 |
| Water-quality | 0.0094 | 0.3255 | 0.2704 | 0.4183 | 0.2612 | 0.4117 | 0.2642 | 9.0377 | 0.3439 | 0.6913 | 0.7708 | 0.7588 |
| Yahoo_Arts | 0.2003 | 0.0637 | 0.2876 | 0.3439 | 0.2097 | 0.3680 | 0.5180 | 10.4152 | 0.6266 | 0.4939 | 0.9390 | 0.9785 |
| Yahoo_Business | 0.5793 | 0.0256 | 0.7334 | 0.8194 | 0.2952 | 0.7354 | 0.0882 | 3.1907 | 0.2239 | 0.8874 | 0.8569 | 0.9952 |
| Yahoo_Computers | 0.3920 | 0.0410 | 0.4780 | 0.5378 | 0.2522 | 0.5085 | 0.3831 | 6.5799 | 0.4260 | 0.6112 | 0.8897 | 0.9823 |
| Yahoo_Education | 0.1463 | 0.0457 | 0.2027 | 0.2431 | 0.1515 | 0.3118 | 0.6160 | 9.3067 | 0.6590 | 0.4864 | 0.8866 | 0.9795 |
| Yahoo_Entertainment | 0.4184 | 0.0743 | 0.5347 | 0.5793 | 0.3536 | 0.5342 | 0.3891 | 3.9963 | 0.3942 | 0.6735 | 0.9767 | 0.9757 |
| Yahoo_Health | 0.4104 | 0.0392 | 0.5493 | 0.6289 | 0.2476 | 0.5895 | 0.3105 | 6.4235 | 0.3456 | 0.6967 | 0.8294 | 0.9855 |
| Yahoo_Recreation | 0.2377 | 0.0599 | 0.2948 | 0.3333 | 0.3080 | 0.3954 | 0.5152 | 6.4973 | 0.5465 | 0.5640 | 0.9606 | 0.9621 |
| Yahoo_Reference | 0.4508 | 0.0308 | 0.5126 | 0.5513 | 0.1769 | 0.5411 | 0.4035 | 5.4707 | 0.4356 | 0.6373 | 0.8089 | 0.9906 |
| Yahoo_Science | 0.2053 | 0.0383 | 0.2613 | 0.3035 | 0.1578 | 0.3349 | 0.6407 | 13.8989 | 0.6690 | 0.4129 | 0.9578 | 0.9843 |
| Yahoo_Social | 0.4785 | 0.0274 | 0.5385 | 0.5760 | 0.1629 | 0.5440 | 0.3696 | 7.3960 | 0.3816 | 0.6518 | 0.9133 | 0.9898 |
| Yahoo_Society | 0.3238 | 0.0840 | 0.4556 | 0.5531 | 0.2266 | 0.4651 | 0.3610 | 8.3493 | 0.4732 | 0.5868 | 0.9487 | 0.9836 |
| yeast | 0.2273 | 0.1942 | 0.5444 | 0.6690 | 0.3953 | 0.6643 | 0.2562 | 6.2025 | 0.2344 | 0.7530 | 0.8266 | 0.8841 |
| Yelp | 0.4187 | 0.1886 | 0.6332 | 0.7290 | 0.6715 | 0.7239 | 0.1974 | 1.3689 | 0.2289 | 0.8636 | 0.8774 | 0.9012 |

Table 164: Detailed results for Massive (n = 10000) for Subset-accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5548 | 0.0263 | 0.5995 | 0.6111 | 0.7116 | 0.7137 | 0.3302 | 2.8075 | 0.2777 | 0.7419 | 0.9991 | 0.9982 |
| 3s-bbc1000 | 0.1389 | 0.2593 | 0.2130 | 0.2440 | 0.2365 | 0.2821 | 0.7500 | 2.9167 | 0.6787 | 0.4431 | 0.8503 | 0.7890 |
| 3s-guardian1000 | 0.2581 | 0.2688 | 0.3441 | 0.4005 | 0.2091 | 0.3750 | 0.5161 | 2.1613 | 0.4847 | 0.6035 | 0.7891 | 0.7985 |
| 3s-inter3000 | 0.2353 | 0.2451 | 0.2941 | 0.3235 | 0.0870 | 0.3243 | 0.9412 | 2.5882 | 0.7294 | 0.3657 | 0.5041 | 0.6554 |
| 3s-reuters1000 | 0.0333 | 0.3389 | 0.1056 | 0.1382 | 0.1665 | 0.1644 | 0.9000 | 2.2667 | 0.6533 | 0.4128 | 0.7862 | 0.7352 |
| amphibians | 0.0000 | 0.3175 | 0.4175 | 0.6609 | 0.2754 | 0.5652 | 0.2778 | 2.6111 | 0.1093 | 0.8385 | 0.7306 | 0.8009 |
| bibtex | 0.1816 | 0.0121 | 0.3552 | 0.4458 | 0.3071 | 0.4719 | 0.4311 | 73.0647 | 0.5752 | 0.4310 | 0.9926 | 0.9911 |
| birds | 0.2051 | 0.0850 | 0.3477 | 0.4071 | 0.2694 | 0.4220 | 0.4615 | 7.3077 | 0.4165 | 0.5430 | 0.8331 | 0.9236 |
| bookmarks10% | 0.1817 | 0.0088 | 0.2163 | 0.2366 | 0.1129 | 0.2643 | 0.7233 | 104.7966 | 0.7610 | 0.2591 | 0.9715 | 0.9967 |
| CAL500 | 0.0000 | 0.1371 | 0.1643 | 0.2814 | 0.0345 | 0.2760 | 0.2941 | 150.8431 | 0.4835 | 0.4628 | 0.7946 | 0.9140 |
| corel16k001 | 0.0051 | 0.0187 | 0.0470 | 0.0694 | 0.0301 | 0.0897 | 0.8857 | 115.2975 | 0.9368 | 0.0899 | 0.9891 | 0.9869 |
| Corel5k | 0.0100 | 0.0091 | 0.0500 | 0.0716 | 0.0197 | 0.0993 | 0.8408 | 163.1315 | 0.9311 | 0.1627 | 0.6856 | 0.9901 |
| delicious | 0.0000 | 0.6156 | 0.0213 | 0.0413 | 0.0483 | 0.0422 | 0.6937 | 913.5484 | 0.9556 | 0.0568 | 1.0000 | 1.0000 |
| emotions | 0.3000 | 0.2056 | 0.5375 | 0.6483 | 0.6271 | 0.6542 | 0.3000 | 1.8167 | 0.2390 | 0.7889 | 0.8626 | 0.8795 |
| enron | 0.1790 | 0.0529 | 0.4452 | 0.5687 | 0.1340 | 0.5463 | 0.2810 | 23.9725 | 0.3637 | 0.6017 | 0.8213 | 0.9818 |
| EukaryoteGO | 0.7005 | 0.0189 | 0.7840 | 0.8163 | 0.7342 | 0.8301 | 0.1711 | 0.8991 | 0.0527 | 0.8878 | 0.9858 | 1.0000 |
| EukaryotePseAAC | 0.2713 | 0.0557 | 0.3576 | 0.4093 | 0.1442 | 0.4301 | 0.5740 | 6.4518 | 0.5328 | 0.4983 | 0.9764 | 0.9828 |
| flags | 0.2500 | 0.2429 | 0.6033 | 0.7258 | 0.5469 | 0.7302 | 0.3500 | 3.5500 | 0.2292 | 0.7897 | 0.6873 | 0.7887 |
| foodtruck | 0.3659 | 0.1443 | 0.4877 | 0.5921 | 0.0903 | 0.4741 | 0.2439 | 4.3659 | 0.4408 | 0.7213 | 0.8508 | 0.9557 |
| genbase | 0.9598 | 0.0017 | 0.9671 | 0.9879 | 0.6186 | 0.9687 | 0.0148 | 0.3005 | 0.0024 | 0.9887 | 0.6568 | 1.0000 |
| GnegativeGO | 0.9286 | 0.0125 | 0.9500 | 0.9607 | 0.8218 | 0.9517 | 0.0357 | 0.1143 | 0.0209 | 0.9780 | 0.8737 | 0.9973 |
| GnegativePseAAC | 0.7357 | 0.0563 | 0.7560 | 0.7660 | 0.4166 | 0.7758 | 0.2000 | 0.6214 | 0.1454 | 0.8665 | 0.8573 | 0.9858 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9327 | 0.9375 | 0.8699 | 0.9333 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9970 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5662 | 0.7308 | 0.2692 | 0.5385 | 0.2436 | 0.8301 | 0.9682 | 0.9633 |
| HumanGO | 0.6918 | 0.0359 | 0.7575 | 0.7886 | 0.6996 | 0.7698 | 0.1599 | 1.0701 | 0.0987 | 0.8754 | 0.9936 | 0.9783 |
| HumanPseAAC | 0.3556 | 0.0921 | 0.4008 | 0.4348 | 0.1837 | 0.4207 | 0.5391 | 3.6026 | 0.5016 | 0.5738 | 0.9566 | 0.9682 |
| Image | 0.5400 | 0.1700 | 0.6100 | 0.6453 | 0.6235 | 0.6205 | 0.3150 | 1.1050 | 0.3079 | 0.7788 | 0.9268 | 0.9267 |
| IMDB-ECC-F10% | 0.0603 | 0.0851 | 0.1457 | 0.1927 | 0.0277 | 0.1938 | 0.6353 | 12.4023 | 0.7300 | 0.3728 | 0.9988 | 0.9758 |
| IMDB-F10% | 0.0519 | 0.0906 | 0.1406 | 0.1900 | 0.0278 | 0.1935 | 0.5890 | 12.7342 | 0.7231 | 0.3861 | 0.9776 | 0.9757 |
| LLOG-F | 0.1625 | 0.0158 | 0.1943 | 0.2113 | 0.0524 | 0.2876 | 0.7538 | 28.9077 | 0.7851 | 0.2743 | 0.6038 | 1.0000 |
| mediamill10% | 0.1045 | 0.0314 | 0.4278 | 0.5862 | 0.0468 | 0.5288 | 0.1758 | 57.0618 | 0.4194 | 0.5667 | 0.8115 | 0.9925 |
| medical | 0.6633 | 0.0100 | 0.7730 | 0.8263 | 0.3267 | 0.8268 | 0.1531 | 4.2041 | 0.1076 | 0.8608 | 0.5496 | 0.9928 |
| Music | 0.2667 | 0.1722 | 0.5833 | 0.7232 | 0.7272 | 0.7328 | 0.3333 | 2.1333 | 0.2685 | 0.7687 | 0.8919 | 0.8862 |
| NUS-WIDE-bow10% | 0.1815 | 0.0251 | 0.3066 | 0.3732 | 0.0418 | 0.3753 | 0.5184 | 34.2091 | 0.5937 | 0.4364 | 0.8768 | 1.0000 |
| NUS-WIDE-cVLADplus10% | 0.1969 | 0.0299 | 0.3191 | 0.3835 | 0.0413 | 0.3545 | 0.6270 | 38.0786 | 0.7280 | 0.3571 | 0.8833 | 1.0000 |
| OHSUMED-F | 0.2354 | 0.0568 | 0.4341 | 0.5337 | 0.4341 | 0.5582 | 0.3577 | 7.5707 | 0.4078 | 0.6089 | 0.9810 | 0.9715 |
| PlantGO | 0.6979 | 0.0434 | 0.7222 | 0.7360 | 0.6333 | 0.7475 | 0.2188 | 0.8958 | 0.0862 | 0.8584 | 0.9881 | 0.9819 |
| PlantPseAAC | 0.2667 | 0.1130 | 0.3153 | 0.3436 | 0.1901 | 0.3637 | 0.6032 | 3.2791 | 0.5532 | 0.5351 | 0.9420 | 0.9453 |
| rcv1subset1 | 0.1153 | 0.0303 | 0.3293 | 0.4319 | 0.2349 | 0.4390 | 0.4149 | 38.6989 | 0.4131 | 0.5105 | 0.9152 | 0.9930 |
| REUTERS-K500-EX2 | 0.3287 | 0.0116 | 0.4076 | 0.4482 | 0.2341 | 0.4928 | 0.5279 | 32.4927 | 0.5326 | 0.4767 | 0.7739 | 0.9835 |
| scene | 0.6929 | 0.0851 | 0.7427 | 0.7672 | 0.7684 | 0.7564 | 0.2075 | 0.8631 | 0.1772 | 0.8425 | 0.9652 | 0.9699 |
| sider_CDK_ECFP4 | 0.0142 | 0.2527 | 0.6505 | 0.7989 | 0.6160 | 0.7939 | 0.2315 | 18.8960 | 0.1630 | 0.7973 | 0.5848 | 0.7696 |
| sider_MordredDesc | 0.0142 | 0.2665 | 0.6195 | 0.7741 | 0.6104 | 0.7842 | 0.3214 | 19.5526 | 0.1813 | 0.7647 | 0.5631 | 0.7647 |
| sider_RDKit_desc | 0.0141 | 0.2827 | 0.6300 | 0.7826 | 0.5938 | 0.7692 | 0.2510 | 20.0343 | 0.2124 | 0.7370 | 0.5832 | 0.7463 |
| SLASHDOT-F | 0.4000 | 0.0421 | 0.5115 | 0.5685 | 0.3641 | 0.5826 | 0.4060 | 5.8417 | 0.3798 | 0.6384 | 0.7639 | 0.9776 |
| solar_flare-L3 | 0.4000 | 0.3333 | 0.5000 | 0.5455 | 0.3571 | 0.5455 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.6667 | 0.8400 |
| Stackex_chemistry | 0.0385 | 0.0120 | 0.0984 | 0.1349 | 0.0533 | 0.1672 | 0.7922 | 105.4480 | 0.8885 | 0.1539 | 0.9113 | 0.9915 |
| Stackex_chess | 0.0296 | 0.0102 | 0.1354 | 0.1925 | 0.0491 | 0.2574 | 0.6645 | 137.3512 | 0.8083 | 0.2065 | 0.5497 | 1.0000 |
| Stackex_coffee | 0.0435 | 0.0198 | 0.0823 | 0.1081 | 0.0210 | 0.1515 | 0.7391 | 71.0435 | 0.7386 | 0.2235 | 0.2509 | 0.9695 |
| Stackex_cooking | 0.0590 | 0.0051 | 0.1911 | 0.2585 | 0.1012 | 0.3082 | 0.6386 | 224.4216 | 0.7743 | 0.2331 | 0.9106 | 1.0000 |
| Stackex_philosophy | 0.0674 | 0.0091 | 0.1689 | 0.2261 | 0.0543 | 0.2673 | 0.6781 | 136.3591 | 0.7934 | 0.2143 | 0.7571 | 0.9844 |
| tmc2007-500 | 0.2892 | 0.0622 | 0.5641 | 0.6878 | 0.5726 | 0.6610 | 0.2496 | 4.1882 | 0.1468 | 0.7683 | 0.9601 | 0.9711 |
| tox21_CDK_ECFP4 | 0.1580 | 0.1647 | 0.3202 | 0.4094 | 0.3488 | 0.4238 | 0.4759 | 5.4039 | 0.4836 | 0.5708 | 0.8974 | 0.9080 |
| tox21_RDKit_desc | 0.1586 | 0.1724 | 0.2871 | 0.3782 | 0.2584 | 0.3718 | 0.5020 | 5.4671 | 0.5062 | 0.5527 | 0.9086 | 0.9052 |
| VirusGO | 0.6667 | 0.0794 | 0.7619 | 0.8015 | 0.6449 | 0.7917 | 0.0952 | 0.5238 | 0.0874 | 0.9206 | 0.7911 | 0.9632 |
| VirusPseAAC | 0.4286 | 0.1111 | 0.5000 | 0.5354 | 0.3370 | 0.6316 | 0.2857 | 0.8571 | 0.2048 | 0.8048 | 0.7181 | 0.9109 |
| Water-quality | 0.0000 | 0.3295 | 0.2620 | 0.4084 | 0.2682 | 0.4044 | 0.2736 | 9.0472 | 0.3158 | 0.6944 | 0.7387 | 0.7337 |
| Yahoo_Arts | 0.1973 | 0.0643 | 0.2897 | 0.3470 | 0.2099 | 0.3709 | 0.5134 | 10.3985 | 0.6317 | 0.4985 | 0.9302 | 0.9805 |
| Yahoo_Business | 0.5844 | 0.0259 | 0.7286 | 0.8227 | 0.2912 | 0.7294 | 0.0889 | 3.2099 | 0.2251 | 0.8828 | 0.8547 | 0.9887 |
| Yahoo_Computers | 0.3919 | 0.0416 | 0.4799 | 0.5321 | 0.2502 | 0.5034 | 0.3800 | 6.6245 | 0.4234 | 0.6027 | 0.8818 | 0.9770 |
| Yahoo_Education | 0.1453 | 0.0458 | 0.2003 | 0.2434 | 0.1496 | 0.3116 | 0.6206 | 9.2707 | 0.6602 | 0.4912 | 0.8863 | 0.9775 |
| Yahoo_Entertainment | 0.4132 | 0.0742 | 0.5355 | 0.5719 | 0.3508 | 0.5265 | 0.3948 | 3.9816 | 0.3946 | 0.6693 | 0.9789 | 0.9839 |
| Yahoo_Health | 0.4048 | 0.0390 | 0.5515 | 0.6336 | 0.2482 | 0.5861 | 0.3112 | 6.4020 | 0.3468 | 0.6950 | 0.8215 | 0.9792 |
| Yahoo_Recreation | 0.2357 | 0.0597 | 0.2975 | 0.3316 | 0.3050 | 0.3919 | 0.5144 | 6.4784 | 0.5526 | 0.5633 | 0.9472 | 0.9553 |
| Yahoo_Reference | 0.4492 | 0.0309 | 0.5087 | 0.5532 | 0.1770 | 0.5388 | 0.3996 | 5.5290 | 0.4341 | 0.6390 | 0.8112 | 0.9858 |
| Yahoo_Science | 0.2072 | 0.0387 | 0.2628 | 0.2993 | 0.1556 | 0.3373 | 0.6346 | 13.9185 | 0.6760 | 0.4153 | 0.9483 | 0.9875 |
| Yahoo_Social | 0.4778 | 0.0272 | 0.5332 | 0.5795 | 0.1631 | 0.5476 | 0.3709 | 7.4363 | 0.3863 | 0.6446 | 0.9154 | 0.9979 |
| Yahoo_Society | 0.3263 | 0.0839 | 0.4560 | 0.5484 | 0.2275 | 0.4611 | 0.3630 | 8.3814 | 0.4703 | 0.5815 | 0.9510 | 0.9774 |
| yeast | 0.2266 | 0.1938 | 0.5466 | 0.6672 | 0.3900 | 0.6609 | 0.2570 | 6.1899 | 0.2366 | 0.7432 | 0.8234 | 0.8793 |
| Yelp | 0.4257 | 0.1898 | 0.6332 | 0.7301 | 0.6530 | 0.7167 | 0.2104 | 1.4038 | 0.2326 | 0.8551 | 0.8781 | 0.8994 |

Table 165: Detailed results for Massive (n = 10) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0000 | 0.3035 | 0.1099 | 0.1908 | 0.4854 | 0.1936 | 0.5944 | 5.9663 | 0.6054 | 0.4936 | 0.9973 | 0.9961 |
| 3s-bbc1000 | 0.0833 | 0.2176 | 0.0833 | 0.0833 | 0.0846 | 0.1132 | 0.7778 | 3.0556 | 0.7657 | 0.4177 | 0.8358 | 0.7973 |
| 3s-guardian1000 | 0.0968 | 0.2473 | 0.1613 | 0.1922 | 0.1934 | 0.2333 | 0.7097 | 2.2581 | 0.5290 | 0.5266 | 0.7559 | 0.7708 |
| 3s-inter3000 | 0.0000 | 0.1961 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.7647 | 0.8588 | 0.3657 | 0.5752 | 0.7612 |
| 3s-reuters1000 | 0.0667 | 0.1778 | 0.0667 | 0.0667 | 0.1143 | 0.1111 | 0.8667 | 2.4000 | 0.7733 | 0.4161 | 0.9224 | 0.8207 |
| amphibians | 0.0000 | 0.2937 | 0.4907 | 0.7211 | 0.4235 | 0.6476 | 0.2778 | 2.6111 | 0.2880 | 0.8352 | 0.8076 | 0.8115 |
| bibtex | 0.0000 | 0.7761 | 0.0163 | 0.0321 | 0.0612 | 0.0321 | 0.9338 | 93.7054 | 0.9725 | 0.0704 | 0.9998 | 0.9997 |
| birds | 0.0769 | 0.1215 | 0.2248 | 0.3032 | 0.1599 | 0.3284 | 0.5897 | 9.2308 | 0.7225 | 0.4214 | 0.8866 | 0.9882 |
| bookmarks10% | 0.1860 | 0.0088 | 0.2182 | 0.2379 | 0.1108 | 0.2612 | 0.7279 | 104.8401 | 0.7726 | 0.2564 | 0.9973 | 1.0000 |
| CAL500 | 0.0000 | 0.6466 | 0.1649 | 0.2831 | 0.1928 | 0.2831 | 0.3529 | 151.5686 | 0.9741 | 0.2806 | 0.8908 | 0.9977 |
| corel16k001 | 0.0000 | 0.7919 | 0.0192 | 0.0375 | 0.0308 | 0.0375 | 0.9877 | 119.5585 | 0.9975 | 0.0373 | 1.0000 | 1.0000 |
| Corel5k | 0.0000 | 0.8848 | 0.0099 | 0.0197 | 0.0187 | 0.0197 | 0.9760 | 169.6220 | 0.9962 | 0.1124 | 0.6791 | 1.0000 |
| delicious | 0.0000 | 0.0251 | 0.0929 | 0.1612 | 0.0823 | 0.1699 | 0.5377 | 908.6602 | 0.8377 | 0.1500 | 1.0000 | 1.0000 |
| emotions | 0.3167 | 0.1889 | 0.5583 | 0.6718 | 0.6388 | 0.6792 | 0.3000 | 1.8333 | 0.2747 | 0.7925 | 0.8935 | 0.8945 |
| enron | 0.0000 | 0.4352 | 0.0949 | 0.1734 | 0.1010 | 0.1746 | 0.4737 | 31.3041 | 0.7681 | 0.3286 | 0.8438 | 0.9918 |
| EukaryoteGO | 0.7294 | 0.0191 | 0.7776 | 0.8216 | 0.6957 | 0.8227 | 0.1702 | 0.8587 | 0.0503 | 0.8883 | 0.9830 | 1.0000 |
| EukaryotePseAAC | 0.0000 | 0.1298 | 0.1084 | 0.1552 | 0.0629 | 0.1598 | 0.8726 | 9.6873 | 0.8863 | 0.2430 | 0.9950 | 0.9954 |
| flags | 0.2000 | 0.2500 | 0.6108 | 0.7360 | 0.5538 | 0.7287 | 0.2500 | 3.5500 | 0.3017 | 0.8058 | 0.7900 | 0.8322 |
| foodtruck | 0.0000 | 0.1870 | 0.3561 | 0.5574 | 0.1308 | 0.4889 | 0.2439 | 5.1220 | 0.5097 | 0.7000 | 0.8891 | 0.9737 |
| genbase | 0.0000 | 0.2559 | 0.1449 | 0.2533 | 0.5259 | 0.2568 | 0.0746 | 1.6418 | 0.0970 | 0.9139 | 0.6667 | 1.0000 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8262 | 0.9556 | 0.0500 | 0.1357 | 0.0301 | 0.9696 | 0.8736 | 0.9979 |
| GnegativePseAAC | 0.6929 | 0.0527 | 0.7179 | 0.7303 | 0.3781 | 0.7790 | 0.2357 | 0.7571 | 0.2255 | 0.8342 | 0.8616 | 0.9893 |
| GpositiveGO | 0.9231 | 0.0385 | 0.9231 | 0.9231 | 0.8601 | 0.9231 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9979 | 0.9970 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5662 | 0.7308 | 0.2692 | 0.5769 | 0.2692 | 0.8237 | 0.9803 | 0.9758 |
| HumanGO | 0.6942 | 0.0355 | 0.7590 | 0.8051 | 0.6989 | 0.7687 | 0.1594 | 1.0662 | 0.1023 | 0.8923 | 0.9761 | 1.0000 |
| HumanPseAAC | 0.0032 | 0.1858 | 0.1655 | 0.2452 | 0.1237 | 0.2544 | 0.7588 | 5.5820 | 0.7891 | 0.3915 | 0.9857 | 0.9850 |
| Image | 0.5600 | 0.1680 | 0.6183 | 0.6474 | 0.6242 | 0.6216 | 0.3200 | 1.1200 | 0.3246 | 0.7767 | 0.9314 | 0.9307 |
| IMDB-ECC-F10% | 0.0000 | 0.1663 | 0.0265 | 0.0463 | 0.0156 | 0.0492 | 0.9465 | 15.8512 | 0.9948 | 0.1584 | 0.9999 | 0.9999 |
| IMDB-F10% | 0.0000 | 0.3631 | 0.0417 | 0.0762 | 0.0310 | 0.0796 | 0.9544 | 16.1674 | 0.9953 | 0.1603 | 0.9992 | 0.9994 |
| LLOG-F | 0.0000 | 0.5049 | 0.0207 | 0.0403 | 0.0379 | 0.0403 | 0.9098 | 36.7131 | 0.9324 | 0.1354 | 0.5997 | 0.9996 |
| mediamill10% | 0.0000 | 0.7118 | 0.0505 | 0.0962 | 0.0622 | 0.0961 | 0.9549 | 78.4917 | 0.9861 | 0.0677 | 0.8216 | 0.9999 |
| medical | 0.0000 | 0.5039 | 0.0507 | 0.0963 | 0.1392 | 0.0967 | 0.5000 | 14.3367 | 0.5043 | 0.5116 | 0.5551 | 0.9980 |
| Music | 0.2667 | 0.1861 | 0.5611 | 0.6893 | 0.6977 | 0.7074 | 0.3500 | 2.2000 | 0.2884 | 0.7473 | 0.8994 | 0.8892 |
| NUS-WIDE-bow10% | 0.0000 | 0.5921 | 0.0252 | 0.0493 | 0.0332 | 0.0494 | 0.8035 | 44.0704 | 0.9269 | 0.1770 | 0.8875 | 0.9983 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.8415 | 0.0284 | 0.0553 | 0.0466 | 0.0553 | 0.9643 | 47.4986 | 0.9949 | 0.1115 | 0.8888 | 0.9999 |
| OHSUMED-F | 0.0000 | 0.2862 | 0.1194 | 0.2082 | 0.3124 | 0.2103 | 0.5887 | 10.8327 | 0.7216 | 0.3978 | 0.9918 | 0.9919 |
| PlantGO | 0.6458 | 0.0417 | 0.6997 | 0.7282 | 0.6000 | 0.7624 | 0.2292 | 1.4792 | 0.1891 | 0.8196 | 0.9944 | 0.9915 |
| PlantPseAAC | 0.2245 | 0.0944 | 0.2483 | 0.2616 | 0.1622 | 0.3273 | 0.6327 | 3.6224 | 0.6509 | 0.4924 | 0.9733 | 0.9658 |
| rcv1subset1 | 0.1225 | 0.0310 | 0.3239 | 0.4247 | 0.2551 | 0.4355 | 0.4366 | 37.7611 | 0.4231 | 0.4924 | 0.9279 | 0.9869 |
| REUTERS-K500-EX2 | 0.0000 | 0.6820 | 0.0171 | 0.0335 | 0.0907 | 0.0335 | 0.8385 | 52.0704 | 0.8546 | 0.1973 | 0.7860 | 0.9994 |
| scene | 0.6722 | 0.0823 | 0.7241 | 0.7496 | 0.7659 | 0.7586 | 0.2199 | 0.9295 | 0.1971 | 0.8299 | 0.9712 | 0.9740 |
| sider_CDK_ECFP4 | 0.0141 | 0.2452 | 0.6376 | 0.7885 | 0.6023 | 0.7907 | 0.3169 | 24.9014 | 0.4467 | 0.6721 | 0.7188 | 0.7354 |
| sider_MordredDesc | 0.0000 | 0.3683 | 0.5738 | 0.7325 | 0.6291 | 0.7340 | 0.1338 | 22.8662 | 0.3234 | 0.7359 | 0.7635 | 0.7513 |
| sider_RDKit_desc | 0.0141 | 0.2942 | 0.6250 | 0.7751 | 0.6007 | 0.7724 | 0.3662 | 24.9437 | 0.5112 | 0.6357 | 0.9049 | 0.7333 |
| SLASHDOT-F | 0.0000 | 0.1588 | 0.1544 | 0.2432 | 0.2688 | 0.2464 | 0.6799 | 9.9550 | 0.7387 | 0.3536 | 0.7684 | 0.9952 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.8400 |
| Stackex_chemistry | 0.0000 | 0.8428 | 0.0124 | 0.0245 | 0.0227 | 0.0245 | 0.9179 | 113.0101 | 0.9839 | 0.0686 | 0.9198 | 0.9998 |
| Stackex_chess | 0.0000 | 0.8392 | 0.0102 | 0.0203 | 0.0192 | 0.0203 | 0.9762 | 155.7738 | 0.9906 | 0.0342 | 0.5506 | 0.9999 |
| Stackex_coffee | 0.0000 | 0.8176 | 0.0141 | 0.0276 | 0.0230 | 0.0277 | 0.9565 | 81.6957 | 0.9855 | 0.0499 | 0.2594 | 0.9989 |
| Stackex_cooking | 0.0000 | 0.9101 | 0.0059 | 0.0116 | 0.0141 | 0.0116 | 0.9816 | 259.0802 | 0.9941 | 0.0265 | 0.9250 | 1.0000 |
| Stackex_philosophy | 0.0000 | 0.8133 | 0.0102 | 0.0201 | 0.0247 | 0.0201 | 0.9322 | 149.5578 | 0.9644 | 0.0575 | 0.7509 | 0.9998 |
| tmc2007-500 | 0.0010 | 0.1497 | 0.2976 | 0.4477 | 0.4646 | 0.4470 | 0.2941 | 6.6196 | 0.3367 | 0.6804 | 0.9748 | 0.9789 |
| tox21_CDK_ECFP4 | 0.1062 | 0.1584 | 0.2392 | 0.3092 | 0.3201 | 0.3840 | 0.5616 | 6.3253 | 0.7220 | 0.4637 | 0.9653 | 0.9663 |
| tox21_RDKit_desc | 0.0753 | 0.1624 | 0.1624 | 0.2165 | 0.1823 | 0.2733 | 0.6267 | 6.6096 | 0.7910 | 0.4171 | 0.9793 | 0.9779 |
| VirusGO | 0.7143 | 0.0794 | 0.7937 | 0.8410 | 0.6034 | 0.7917 | 0.0952 | 0.8095 | 0.1663 | 0.8968 | 0.8171 | 0.9865 |
| VirusPseAAC | 0.5714 | 0.1190 | 0.6429 | 0.6784 | 0.3889 | 0.6667 | 0.2857 | 1.1905 | 0.2952 | 0.7683 | 0.7734 | 0.9569 |
| Water-quality | 0.0094 | 0.3228 | 0.2973 | 0.4473 | 0.2576 | 0.4358 | 0.4434 | 10.2736 | 0.6169 | 0.6256 | 0.8839 | 0.8735 |
| Yahoo_Arts | 0.1807 | 0.0628 | 0.2587 | 0.3153 | 0.2133 | 0.3537 | 0.4989 | 10.5022 | 0.6032 | 0.5070 | 0.9258 | 0.9862 |
| Yahoo_Business | 0.5813 | 0.0266 | 0.7361 | 0.8303 | 0.3176 | 0.7219 | 0.0892 | 3.1307 | 0.2240 | 0.8955 | 0.8665 | 1.0000 |
| Yahoo_Computers | 0.3904 | 0.0375 | 0.4591 | 0.5059 | 0.2440 | 0.5169 | 0.3776 | 6.5218 | 0.4194 | 0.6125 | 0.8839 | 0.9922 |
| Yahoo_Education | 0.1376 | 0.0412 | 0.1843 | 0.2114 | 0.1542 | 0.2913 | 0.5538 | 9.0649 | 0.5556 | 0.5217 | 0.8939 | 0.9798 |
| Yahoo_Entertainment | 0.2755 | 0.0552 | 0.3258 | 0.3635 | 0.2459 | 0.4274 | 0.4321 | 4.1221 | 0.3878 | 0.6307 | 0.9808 | 0.9734 |
| Yahoo_Health | 0.4207 | 0.0384 | 0.5402 | 0.6017 | 0.2418 | 0.5903 | 0.3136 | 6.4791 | 0.3509 | 0.6892 | 0.8206 | 0.9889 |
| Yahoo_Recreation | 0.2743 | 0.0212 | 0.3986 | 0.4317 | 0.4102 | 0.5010 | 0.4832 | 6.0828 | 0.4823 | 0.6034 | 0.9650 | 0.9705 |
| Yahoo_Reference | 0.4097 | 0.0297 | 0.4537 | 0.4890 | 0.1699 | 0.5135 | 0.3931 | 5.3992 | 0.4243 | 0.6479 | 0.8086 | 1.0000 |
| Yahoo_Science | 0.2295 | 0.0398 | 0.2808 | 0.3243 | 0.1717 | 0.3473 | 0.6103 | 13.6332 | 0.6386 | 0.4301 | 0.9630 | 0.9777 |
| Yahoo_Social | 0.4383 | 0.0234 | 0.4918 | 0.5105 | 0.1618 | 0.5485 | 0.3738 | 7.6237 | 0.3871 | 0.6377 | 0.9235 | 0.9796 |
| Yahoo_Society | 0.3142 | 0.0813 | 0.4326 | 0.5596 | 0.2067 | 0.4592 | 0.3743 | 8.3744 | 0.4828 | 0.5815 | 0.9551 | 0.9800 |
| yeast | 0.0620 | 0.2261 | 0.4854 | 0.6337 | 0.3457 | 0.6285 | 0.2603 | 10.2190 | 0.5960 | 0.6333 | 0.9351 | 0.9428 |
| Yelp | 0.4327 | 0.1902 | 0.6429 | 0.7412 | 0.6590 | 0.7211 | 0.1984 | 1.4437 | 0.2607 | 0.8557 | 0.8845 | 0.9039 |

Table 166: Detailed results for Massive (n = 100) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5010 | 0.0280 | 0.5454 | 0.5676 | 0.6755 | 0.6824 | 0.3522 | 3.0270 | 0.2953 | 0.7167 | 0.9884 | 0.9887 |
| 3s-bbc1000 | 0.1111 | 0.2269 | 0.1759 | 0.2067 | 0.2576 | 0.2899 | 0.7500 | 2.8889 | 0.6738 | 0.4370 | 0.8558 | 0.7847 |
| 3s-guardian1000 | 0.2258 | 0.2527 | 0.2753 | 0.3019 | 0.2096 | 0.3188 | 0.5161 | 2.0645 | 0.4500 | 0.6062 | 0.8053 | 0.8044 |
| 3s-inter3000 | 0.0588 | 0.1863 | 0.0588 | 0.0588 | 0.0556 | 0.0952 | 0.8235 | 2.7647 | 0.7309 | 0.4098 | 0.5089 | 0.6832 |
| 3s-reuters1000 | 0.0667 | 0.2556 | 0.1361 | 0.1719 | 0.2255 | 0.2333 | 0.9000 | 2.5667 | 0.7400 | 0.3800 | 0.8240 | 0.7504 |
| amphibians | 0.0000 | 0.2698 | 0.5499 | 0.7628 | 0.5695 | 0.7167 | 0.2222 | 2.5556 | 0.1185 | 0.8556 | 0.7997 | 0.8295 |
| bibtex | 0.0000 | 0.1279 | 0.0464 | 0.0890 | 0.2643 | 0.0906 | 0.4838 | 78.0230 | 0.6496 | 0.3683 | 0.9988 | 0.9987 |
| birds | 0.2051 | 0.0850 | 0.3650 | 0.4378 | 0.3104 | 0.4522 | 0.4872 | 8.2564 | 0.6121 | 0.4974 | 0.8676 | 0.9699 |
| bookmarks10% | 0.0000 | 0.1788 | 0.0152 | 0.0300 | 0.0824 | 0.0300 | 0.8166 | 108.3986 | 0.8527 | 0.1760 | 0.9852 | 0.9996 |
| CAL500 | 0.0000 | 0.1966 | 0.1702 | 0.2926 | 0.0619 | 0.2875 | 0.3529 | 151.1961 | 0.8108 | 0.3677 | 0.8676 | 0.9769 |
| corel16k001 | 0.0000 | 0.0937 | 0.0243 | 0.0456 | 0.0144 | 0.0459 | 0.9223 | 116.7654 | 0.9678 | 0.0662 | 0.9995 | 0.9995 |
| Corel5k | 0.0000 | 0.3741 | 0.0099 | 0.0195 | 0.0172 | 0.0196 | 0.9000 | 167.7720 | 0.9667 | 0.1372 | 0.6790 | 0.9999 |
| delicious | 0.0000 | 0.0256 | 0.0925 | 0.1616 | 0.0831 | 0.1699 | 0.5346 | 900.6457 | 0.8449 | 0.1498 | 0.9859 | 1.0000 |
| emotions | 0.2833 | 0.1972 | 0.5431 | 0.6618 | 0.6255 | 0.6667 | 0.2667 | 1.7167 | 0.2278 | 0.8072 | 0.8869 | 0.8871 |
| enron | 0.1520 | 0.0502 | 0.4248 | 0.5576 | 0.1301 | 0.5445 | 0.3333 | 26.7076 | 0.4315 | 0.5665 | 0.8311 | 0.9845 |
| EukaryoteGO | 0.6997 | 0.0193 | 0.7844 | 0.8260 | 0.6854 | 0.8193 | 0.2010 | 0.9794 | 0.0594 | 0.8728 | 0.9930 | 0.9945 |
| EukaryotePseAAC | 0.1120 | 0.0511 | 0.1330 | 0.1434 | 0.0684 | 0.2156 | 0.7671 | 8.7490 | 0.7719 | 0.3300 | 0.9886 | 0.9900 |
| flags | 0.2000 | 0.2286 | 0.6386 | 0.7572 | 0.6162 | 0.7612 | 0.2500 | 3.6000 | 0.2683 | 0.7916 | 0.7429 | 0.8092 |
| foodtruck | 0.2683 | 0.1504 | 0.4592 | 0.5958 | 0.1233 | 0.4861 | 0.2439 | 5.1220 | 0.4739 | 0.7033 | 0.8748 | 0.9667 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0000 | 0.2239 | 0.0003 | 0.9975 | 0.6667 | 0.9999 |
| GnegativeGO | 0.9357 | 0.0116 | 0.9536 | 0.9625 | 0.8241 | 0.9556 | 0.0357 | 0.1214 | 0.0245 | 0.9768 | 0.8740 | 0.9983 |
| GnegativePseAAC | 0.7143 | 0.0527 | 0.7345 | 0.7446 | 0.4454 | 0.7823 | 0.1929 | 0.6286 | 0.1505 | 0.8682 | 0.8576 | 0.9863 |
| GpositiveGO | 0.8654 | 0.0433 | 0.9038 | 0.9230 | 0.8222 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9959 | 0.9959 |
| GpositivePseAAC | 0.6538 | 0.1346 | 0.6538 | 0.6538 | 0.5301 | 0.7083 | 0.2885 | 0.5385 | 0.2500 | 0.8221 | 0.9682 | 0.9650 |
| HumanGO | 0.6817 | 0.0354 | 0.7690 | 0.8148 | 0.6993 | 0.7867 | 0.1833 | 1.1672 | 0.1171 | 0.8656 | 0.9856 | 0.9887 |
| HumanPseAAC | 0.2154 | 0.0859 | 0.2422 | 0.2559 | 0.1403 | 0.3125 | 0.5884 | 4.0997 | 0.5825 | 0.5255 | 0.9684 | 0.9683 |
| Image | 0.5100 | 0.1610 | 0.5592 | 0.5839 | 0.5988 | 0.6044 | 0.3050 | 1.0900 | 0.2942 | 0.7873 | 0.9140 | 0.9093 |
| IMDB-ECC-F10% | 0.0210 | 0.0684 | 0.0357 | 0.0438 | 0.0209 | 0.0558 | 0.8836 | 15.2128 | 0.9470 | 0.1990 | 0.9942 | 0.9953 |
| IMDB-F10% | 0.0041 | 0.0724 | 0.0152 | 0.0204 | 0.0086 | 0.0293 | 0.9014 | 15.8053 | 0.9637 | 0.1885 | 0.9958 | 0.9968 |
| LLOG-F | 0.1639 | 0.0162 | 0.1892 | 0.2046 | 0.0499 | 0.2745 | 0.7623 | 29.2049 | 0.7986 | 0.2626 | 0.5991 | 0.9989 |
| mediamill10% | 0.0000 | 0.0540 | 0.2942 | 0.4588 | 0.0505 | 0.4350 | 0.1900 | 66.8670 | 0.5703 | 0.4603 | 0.8157 | 0.9953 |
| medical | 0.6531 | 0.0104 | 0.7500 | 0.7976 | 0.3373 | 0.8145 | 0.1633 | 5.4898 | 0.1528 | 0.8303 | 0.5534 | 0.9978 |
| Music | 0.2833 | 0.1806 | 0.5611 | 0.6835 | 0.7000 | 0.7111 | 0.1833 | 2.0833 | 0.2271 | 0.8256 | 0.8906 | 0.8901 |
| NUS-WIDE-bow10% | 0.1156 | 0.0244 | 0.2044 | 0.2491 | 0.0261 | 0.3080 | 0.6351 | 38.8259 | 0.7344 | 0.3447 | 0.8848 | 0.9956 |
| NUS-WIDE-cVLADplus10% | 0.1284 | 0.0237 | 0.2291 | 0.2793 | 0.0395 | 0.3452 | 0.5500 | 35.9648 | 0.6463 | 0.4101 | 0.8835 | 0.9943 |
| OHSUMED-F | 0.2211 | 0.0568 | 0.4057 | 0.5032 | 0.3901 | 0.5330 | 0.3841 | 8.2678 | 0.4625 | 0.5838 | 0.9804 | 0.9826 |
| PlantGO | 0.6771 | 0.0399 | 0.7344 | 0.7611 | 0.6505 | 0.7788 | 0.2292 | 1.2812 | 0.1456 | 0.8323 | 0.9906 | 0.9868 |
| PlantPseAAC | 0.2449 | 0.0978 | 0.2687 | 0.2823 | 0.1979 | 0.3353 | 0.5816 | 3.1837 | 0.5401 | 0.5458 | 0.9510 | 0.9447 |
| rcv1subset1 | 0.1216 | 0.0306 | 0.3194 | 0.4241 | 0.2534 | 0.4350 | 0.4367 | 37.9660 | 0.4312 | 0.4951 | 0.9210 | 0.9876 |
| REUTERS-K500-EX2 | 0.0000 | 0.0299 | 0.1522 | 0.2344 | 0.2102 | 0.2561 | 0.5636 | 36.0515 | 0.5925 | 0.4397 | 0.7848 | 0.9982 |
| scene | 0.6556 | 0.0830 | 0.7137 | 0.7425 | 0.7646 | 0.7561 | 0.2199 | 0.8174 | 0.1672 | 0.8410 | 0.9640 | 0.9689 |
| sider_CDK_ECFP4 | 0.0070 | 0.2418 | 0.6528 | 0.7982 | 0.6323 | 0.7981 | 0.3592 | 20.5423 | 0.2318 | 0.7232 | 0.5953 | 0.7399 |
| sider_MordredDesc | 0.0141 | 0.2546 | 0.6265 | 0.7832 | 0.5926 | 0.7833 | 0.4859 | 20.2465 | 0.2559 | 0.6985 | 0.5907 | 0.7305 |
| sider_RDKit_desc | 0.0141 | 0.2778 | 0.6310 | 0.7825 | 0.5961 | 0.7779 | 0.4296 | 21.2465 | 0.2919 | 0.6830 | 0.6696 | 0.7067 |
| SLASHDOT-F | 0.3942 | 0.0404 | 0.4672 | 0.5065 | 0.3312 | 0.5636 | 0.4630 | 6.9894 | 0.4734 | 0.5677 | 0.7636 | 0.9899 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.4000 | 0.4000 | 0.3000 | 0.8000 | 0.4444 | 0.8000 |
| Stackex_chemistry | 0.0000 | 0.1304 | 0.0133 | 0.0258 | 0.0423 | 0.0264 | 0.8285 | 107.2046 | 0.9034 | 0.1323 | 0.9191 | 0.9991 |
| Stackex_chess | 0.0000 | 0.1982 | 0.0190 | 0.0369 | 0.0465 | 0.0372 | 0.8869 | 151.1190 | 0.9420 | 0.0768 | 0.5501 | 0.9993 |
| Stackex_coffee | 0.0000 | 0.0353 | 0.0342 | 0.0557 | 0.0224 | 0.0741 | 0.8696 | 78.1304 | 0.9059 | 0.1177 | 0.2584 | 0.9963 |
| Stackex_cooking | 0.0000 | 0.3841 | 0.0069 | 0.0136 | 0.0643 | 0.0136 | 0.7536 | 242.4242 | 0.8619 | 0.1514 | 0.9247 | 0.9996 |
| Stackex_philosophy | 0.0000 | 0.2241 | 0.0146 | 0.0286 | 0.0489 | 0.0288 | 0.7513 | 139.8995 | 0.8401 | 0.1712 | 0.7504 | 0.9992 |
| tmc2007-500 | 0.2843 | 0.0622 | 0.5520 | 0.6844 | 0.5556 | 0.6630 | 0.2524 | 4.9308 | 0.2179 | 0.7504 | 0.9655 | 0.9748 |
| tox21_CDK_ECFP4 | 0.1301 | 0.1587 | 0.2755 | 0.3504 | 0.3534 | 0.4047 | 0.4692 | 5.6233 | 0.5459 | 0.5502 | 0.9166 | 0.9180 |
| tox21_RDKit_desc | 0.0993 | 0.1627 | 0.1973 | 0.2589 | 0.2292 | 0.3066 | 0.5308 | 5.8904 | 0.6373 | 0.5036 | 0.9407 | 0.9424 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.2381 | 0.7143 | 0.1135 | 0.8563 | 0.7864 | 0.9552 |
| VirusPseAAC | 0.4762 | 0.1270 | 0.5000 | 0.5116 | 0.2937 | 0.5789 | 0.2857 | 0.9524 | 0.2048 | 0.7944 | 0.7403 | 0.9156 |
| Water-quality | 0.0000 | 0.3012 | 0.3882 | 0.5677 | 0.4545 | 0.5622 | 0.2736 | 9.7358 | 0.4349 | 0.6843 | 0.8180 | 0.8078 |
| Yahoo_Arts | 0.1268 | 0.0618 | 0.1770 | 0.2099 | 0.1571 | 0.2623 | 0.5848 | 11.9866 | 0.7666 | 0.4261 | 0.9475 | 0.9866 |
| Yahoo_Business | 0.5481 | 0.0275 | 0.7104 | 0.8006 | 0.2050 | 0.7089 | 0.1150 | 3.3422 | 0.2392 | 0.8729 | 0.8584 | 0.9954 |
| Yahoo_Computers | 0.3853 | 0.0374 | 0.4538 | 0.5091 | 0.2416 | 0.5157 | 0.3814 | 6.5187 | 0.4178 | 0.6141 | 0.8833 | 0.9824 |
| Yahoo_Education | 0.1172 | 0.0422 | 0.1492 | 0.1736 | 0.1492 | 0.2576 | 0.6899 | 10.0765 | 0.7878 | 0.4256 | 0.8986 | 0.9905 |
| Yahoo_Entertainment | 0.2730 | 0.0565 | 0.3249 | 0.3583 | 0.2436 | 0.4271 | 0.4342 | 4.2181 | 0.3863 | 0.6375 | 0.9664 | 0.9506 |
| Yahoo_Health | 0.4154 | 0.0386 | 0.5373 | 0.6151 | 0.2423 | 0.5802 | 0.3101 | 6.4885 | 0.3505 | 0.6851 | 0.8308 | 0.9802 |
| Yahoo_Recreation | 0.2775 | 0.0212 | 0.3955 | 0.4242 | 0.4067 | 0.5028 | 0.4805 | 6.0927 | 0.4890 | 0.6051 | 0.9729 | 0.9619 |
| Yahoo_Reference | 0.3288 | 0.0291 | 0.3609 | 0.3821 | 0.1259 | 0.4579 | 0.4371 | 6.2316 | 0.4723 | 0.6067 | 0.8119 | 0.9911 |
| Yahoo_Science | 0.1431 | 0.0371 | 0.1770 | 0.2044 | 0.1443 | 0.2580 | 0.7527 | 15.3344 | 0.7699 | 0.3307 | 0.9652 | 0.9906 |
| Yahoo_Social | 0.4332 | 0.0237 | 0.4884 | 0.5150 | 0.1604 | 0.5466 | 0.3684 | 7.6457 | 0.3949 | 0.6393 | 0.9065 | 0.9835 |
| Yahoo_Society | 0.3158 | 0.0812 | 0.4354 | 0.5549 | 0.2061 | 0.4665 | 0.3739 | 8.3071 | 0.4867 | 0.5855 | 0.9359 | 0.9787 |
| yeast | 0.2025 | 0.1913 | 0.5237 | 0.6583 | 0.4005 | 0.6546 | 0.2355 | 6.1860 | 0.2662 | 0.7631 | 0.8504 | 0.8953 |
| Yelp | 0.4237 | 0.1880 | 0.6396 | 0.7372 | 0.6607 | 0.7234 | 0.2024 | 1.4247 | 0.2326 | 0.8533 | 0.8711 | 0.8945 |

Table 167: Detailed results for Massive (n = 1000) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5633 | 0.0254 | 0.5957 | 0.6118 | 0.7121 | 0.7161 | 0.2930 | 2.4015 | 0.2273 | 0.7693 | 0.9900 | 0.9904 |
| 3s-bbc1000 | 0.1667 | 0.2176 | 0.2315 | 0.2684 | 0.2801 | 0.3188 | 0.7222 | 2.6944 | 0.6935 | 0.4699 | 0.8773 | 0.8295 |
| 3s-guardian1000 | 0.1290 | 0.2527 | 0.2376 | 0.2980 | 0.2609 | 0.3380 | 0.5161 | 2.0323 | 0.4976 | 0.6183 | 0.8442 | 0.8419 |
| 3s-inter3000 | 0.0000 | 0.1961 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.5882 | 0.8118 | 0.3755 | 0.6110 | 0.7817 |
| 3s-reuters1000 | 0.0000 | 0.2389 | 0.0167 | 0.0222 | 0.0556 | 0.0444 | 0.9000 | 2.3667 | 0.7200 | 0.4083 | 0.8353 | 0.7627 |
| amphibians | 0.1111 | 0.2619 | 0.5757 | 0.7796 | 0.5485 | 0.7179 | 0.3333 | 2.6111 | 0.1148 | 0.8126 | 0.7674 | 0.8061 |
| bibtex | 0.1851 | 0.0120 | 0.3562 | 0.4465 | 0.3072 | 0.4744 | 0.4405 | 72.2851 | 0.5818 | 0.4259 | 0.9977 | 0.9978 |
| birds | 0.1795 | 0.0931 | 0.3391 | 0.4115 | 0.2703 | 0.4103 | 0.4872 | 7.7436 | 0.5208 | 0.5088 | 0.8404 | 0.9349 |
| bookmarks10% | 0.1879 | 0.0088 | 0.2175 | 0.2392 | 0.1100 | 0.2617 | 0.7244 | 105.2403 | 0.7626 | 0.2589 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.1398 | 0.2214 | 0.3660 | 0.0725 | 0.3573 | 0.3725 | 151.1176 | 0.5721 | 0.4383 | 0.8215 | 0.9334 |
| corel16k001 | 0.0087 | 0.0188 | 0.0439 | 0.0631 | 0.0327 | 0.0824 | 0.8824 | 115.2622 | 0.9461 | 0.0863 | 0.9990 | 0.9991 |
| Corel5k | 0.0060 | 0.0091 | 0.0567 | 0.0834 | 0.0235 | 0.1145 | 0.8460 | 163.4020 | 0.9382 | 0.1610 | 0.6789 | 0.9998 |
| delicious | 0.0000 | 0.0252 | 0.0929 | 0.1613 | 0.0835 | 0.1716 | 0.5357 | 906.4891 | 0.8490 | 0.1489 | 0.9934 | 0.9986 |
| emotions | 0.2833 | 0.1889 | 0.5667 | 0.6956 | 0.6557 | 0.6881 | 0.2833 | 1.7500 | 0.2454 | 0.8004 | 0.8866 | 0.8932 |
| enron | 0.1871 | 0.0487 | 0.4713 | 0.6055 | 0.1688 | 0.5859 | 0.3041 | 23.9825 | 0.3603 | 0.6047 | 0.8246 | 0.9802 |
| EukaryoteGO | 0.7242 | 0.0190 | 0.7848 | 0.8155 | 0.6970 | 0.8157 | 0.1701 | 0.8570 | 0.0500 | 0.8930 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.1892 | 0.0510 | 0.2192 | 0.2341 | 0.1125 | 0.3090 | 0.5380 | 6.2021 | 0.4996 | 0.5262 | 0.9741 | 0.9765 |
| flags | 0.2000 | 0.2357 | 0.6002 | 0.7259 | 0.5930 | 0.7402 | 0.2000 | 3.7000 | 0.2958 | 0.7894 | 0.6871 | 0.8111 |
| foodtruck | 0.2927 | 0.1545 | 0.4612 | 0.6031 | 0.1245 | 0.4933 | 0.2439 | 4.4390 | 0.4354 | 0.7207 | 0.8544 | 0.9573 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0000 | 0.2985 | 0.0018 | 0.9922 | 0.6667 | 0.9994 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8741 | 0.9981 |
| GnegativePseAAC | 0.7429 | 0.0482 | 0.7607 | 0.7695 | 0.4536 | 0.8015 | 0.1786 | 0.6214 | 0.1526 | 0.8742 | 0.8632 | 0.9902 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9967 |
| GpositivePseAAC | 0.6923 | 0.1154 | 0.6923 | 0.6923 | 0.5556 | 0.7500 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6881 | 0.0358 | 0.7663 | 0.8059 | 0.6960 | 0.7790 | 0.1576 | 1.0740 | 0.1010 | 0.8831 | 0.9846 | 0.9883 |
| HumanPseAAC | 0.2733 | 0.0852 | 0.3012 | 0.3160 | 0.1618 | 0.3592 | 0.5273 | 3.3794 | 0.4662 | 0.5885 | 0.9534 | 0.9539 |
| Image | 0.5500 | 0.1580 | 0.6083 | 0.6379 | 0.6349 | 0.6326 | 0.3000 | 1.0500 | 0.2917 | 0.7935 | 0.9339 | 0.9298 |
| IMDB-ECC-F10% | 0.0304 | 0.0690 | 0.0575 | 0.0730 | 0.0326 | 0.0962 | 0.6342 | 12.3197 | 0.7278 | 0.3762 | 0.9876 | 0.9750 |
| IMDB-F10% | 0.0199 | 0.0727 | 0.0499 | 0.0659 | 0.0315 | 0.0890 | 0.5899 | 12.7531 | 0.7194 | 0.3837 | 0.9868 | 0.9750 |
| LLOG-F | 0.1721 | 0.0161 | 0.2015 | 0.2187 | 0.0533 | 0.2899 | 0.7295 | 28.5984 | 0.7781 | 0.2847 | 0.5982 | 0.9978 |
| mediamill10% | 0.0879 | 0.0295 | 0.4653 | 0.6266 | 0.0881 | 0.5814 | 0.1615 | 59.6366 | 0.4481 | 0.5501 | 0.8131 | 0.9938 |
| medical | 0.6633 | 0.0104 | 0.7526 | 0.7993 | 0.2863 | 0.8130 | 0.1735 | 5.0306 | 0.1329 | 0.8368 | 0.5527 | 0.9974 |
| Music | 0.2500 | 0.1806 | 0.5583 | 0.6878 | 0.7045 | 0.7137 | 0.3000 | 1.9833 | 0.2712 | 0.7884 | 0.9207 | 0.9109 |
| NUS-WIDE-bow10% | 0.1180 | 0.0248 | 0.2243 | 0.2782 | 0.0452 | 0.3345 | 0.5442 | 35.1289 | 0.6004 | 0.4253 | 0.8806 | 0.9914 |
| NUS-WIDE-cVLADplus10% | 0.1418 | 0.0235 | 0.2496 | 0.3053 | 0.0536 | 0.3673 | 0.5485 | 35.4358 | 0.6363 | 0.4177 | 0.8835 | 0.9946 |
| OHSUMED-F | 0.2319 | 0.0567 | 0.4292 | 0.5327 | 0.4335 | 0.5556 | 0.3561 | 7.6698 | 0.4119 | 0.6159 | 0.9768 | 0.9797 |
| PlantGO | 0.7083 | 0.0408 | 0.7396 | 0.7535 | 0.6399 | 0.7707 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9884 | 0.9843 |
| PlantPseAAC | 0.2449 | 0.0901 | 0.2738 | 0.2898 | 0.2090 | 0.3614 | 0.6020 | 3.3469 | 0.5649 | 0.5273 | 0.9524 | 0.9445 |
| rcv1subset1 | 0.1217 | 0.0307 | 0.3238 | 0.4299 | 0.2556 | 0.4323 | 0.4317 | 38.0800 | 0.4266 | 0.4998 | 0.9262 | 0.9869 |
| REUTERS-K500-EX2 | 0.3076 | 0.0112 | 0.3766 | 0.4134 | 0.2349 | 0.4839 | 0.5069 | 32.3900 | 0.5342 | 0.4910 | 0.7839 | 0.9972 |
| scene | 0.6888 | 0.0809 | 0.7407 | 0.7662 | 0.7750 | 0.7655 | 0.2033 | 0.9046 | 0.1838 | 0.8403 | 0.9754 | 0.9780 |
| sider_CDK_ECFP4 | 0.0141 | 0.2431 | 0.6522 | 0.7977 | 0.6281 | 0.7978 | 0.0986 | 19.1056 | 0.1362 | 0.8306 | 0.5956 | 0.7950 |
| sider_MordredDesc | 0.0141 | 0.2564 | 0.6260 | 0.7841 | 0.6114 | 0.7842 | 0.1408 | 19.9085 | 0.1811 | 0.7867 | 0.5776 | 0.7692 |
| sider_RDKit_desc | 0.0141 | 0.2801 | 0.6300 | 0.7821 | 0.5951 | 0.7770 | 0.3239 | 20.2746 | 0.2339 | 0.7148 | 0.5848 | 0.7335 |
| SLASHDOT-F | 0.4021 | 0.0397 | 0.4852 | 0.5305 | 0.3868 | 0.5823 | 0.4021 | 5.5556 | 0.3668 | 0.6405 | 0.7571 | 0.9841 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0461 | 0.0120 | 0.1055 | 0.1416 | 0.0659 | 0.1787 | 0.7867 | 105.2104 | 0.8745 | 0.1573 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0298 | 0.0100 | 0.1309 | 0.1844 | 0.0554 | 0.2539 | 0.6726 | 137.4881 | 0.8052 | 0.2032 | 0.5493 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0533 | 0.0900 | 0.0172 | 0.1159 | 0.8261 | 73.8696 | 0.8247 | 0.1573 | 0.2564 | 0.9874 |
| Stackex_cooking | 0.0667 | 0.0052 | 0.2018 | 0.2710 | 0.1090 | 0.3157 | 0.6367 | 224.2184 | 0.7726 | 0.2322 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0553 | 0.0093 | 0.1705 | 0.2386 | 0.0650 | 0.2775 | 0.6809 | 134.6357 | 0.7823 | 0.2203 | 0.7498 | 0.9986 |
| tmc2007-500 | 0.2850 | 0.0614 | 0.5578 | 0.6908 | 0.5705 | 0.6695 | 0.2538 | 4.0867 | 0.1450 | 0.7759 | 0.9586 | 0.9698 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1572 | 0.2846 | 0.3570 | 0.3706 | 0.4132 | 0.4726 | 5.3527 | 0.4770 | 0.5724 | 0.8971 | 0.8969 |
| tox21_RDKit_desc | 0.0959 | 0.1621 | 0.1916 | 0.2526 | 0.2172 | 0.2918 | 0.5000 | 5.4932 | 0.4999 | 0.5574 | 0.8995 | 0.9004 |
| VirusGO | 0.7619 | 0.0476 | 0.8492 | 0.8768 | 0.7283 | 0.8800 | 0.0952 | 0.6190 | 0.1171 | 0.9143 | 0.8080 | 0.9814 |
| VirusPseAAC | 0.4762 | 0.1190 | 0.5238 | 0.5476 | 0.3295 | 0.6154 | 0.3333 | 0.9048 | 0.1952 | 0.7754 | 0.7121 | 0.9139 |
| Water-quality | 0.0094 | 0.3160 | 0.3636 | 0.5254 | 0.4177 | 0.5333 | 0.2925 | 9.1509 | 0.3542 | 0.6877 | 0.7696 | 0.7563 |
| Yahoo_Arts | 0.1802 | 0.0631 | 0.2615 | 0.3156 | 0.2136 | 0.3555 | 0.5020 | 10.3792 | 0.6090 | 0.5016 | 0.9374 | 0.9770 |
| Yahoo_Business | 0.5731 | 0.0265 | 0.7307 | 0.8194 | 0.3200 | 0.7298 | 0.0891 | 3.1604 | 0.2225 | 0.8873 | 0.8566 | 0.9951 |
| Yahoo_Computers | 0.3847 | 0.0371 | 0.4604 | 0.5108 | 0.2407 | 0.5137 | 0.3831 | 6.5839 | 0.4216 | 0.6125 | 0.8889 | 0.9817 |
| Yahoo_Education | 0.1397 | 0.0417 | 0.1825 | 0.2117 | 0.1536 | 0.2942 | 0.5495 | 9.1579 | 0.5635 | 0.5264 | 0.8887 | 0.9768 |
| Yahoo_Entertainment | 0.2765 | 0.0559 | 0.3293 | 0.3620 | 0.2424 | 0.4309 | 0.4368 | 4.1815 | 0.3822 | 0.6370 | 0.9667 | 0.9637 |
| Yahoo_Health | 0.4202 | 0.0382 | 0.5384 | 0.6098 | 0.2428 | 0.5848 | 0.3105 | 6.5190 | 0.3491 | 0.6932 | 0.8292 | 0.9853 |
| Yahoo_Recreation | 0.2778 | 0.0210 | 0.4000 | 0.4295 | 0.4058 | 0.5034 | 0.4776 | 6.1482 | 0.4855 | 0.6065 | 0.9655 | 0.9705 |
| Yahoo_Reference | 0.4134 | 0.0294 | 0.4590 | 0.4870 | 0.1711 | 0.5180 | 0.3923 | 5.4296 | 0.4257 | 0.6441 | 0.8090 | 0.9903 |
| Yahoo_Science | 0.2271 | 0.0394 | 0.2830 | 0.3277 | 0.1742 | 0.3433 | 0.6190 | 13.6796 | 0.6455 | 0.4273 | 0.9575 | 0.9840 |
| Yahoo_Social | 0.4398 | 0.0236 | 0.4848 | 0.5118 | 0.1596 | 0.5489 | 0.3721 | 7.5792 | 0.3928 | 0.6463 | 0.9132 | 0.9896 |
| Yahoo_Society | 0.3153 | 0.0802 | 0.4385 | 0.5541 | 0.2054 | 0.4627 | 0.3731 | 8.3514 | 0.4842 | 0.5898 | 0.9421 | 0.9714 |
| yeast | 0.2025 | 0.1898 | 0.5290 | 0.6629 | 0.3834 | 0.6571 | 0.2603 | 6.1901 | 0.2385 | 0.7566 | 0.8287 | 0.8854 |
| Yelp | 0.4317 | 0.1862 | 0.6527 | 0.7506 | 0.6708 | 0.7321 | 0.2014 | 1.3819 | 0.2495 | 0.8619 | 0.8926 | 0.9130 |

Table 168: Detailed results for Massive (n = 10000) for Hamming-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5620 | 0.0257 | 0.5905 | 0.6103 | 0.7016 | 0.7186 | 0.2965 | 2.3999 | 0.2286 | 0.7661 | 0.9799 | 0.9888 |
| 3s-bbc1000 | 0.1111 | 0.2500 | 0.1944 | 0.2454 | 0.2526 | 0.2895 | 0.7500 | 3.0000 | 0.6810 | 0.4347 | 0.8156 | 0.7641 |
| 3s-guardian1000 | 0.0000 | 0.2527 | 0.0790 | 0.1180 | 0.1837 | 0.2034 | 0.6129 | 2.2903 | 0.5040 | 0.5589 | 0.7886 | 0.8073 |
| 3s-inter3000 | 0.0588 | 0.1961 | 0.0588 | 0.0588 | 0.0476 | 0.0909 | 0.8235 | 2.1765 | 0.6132 | 0.4618 | 0.4976 | 0.6944 |
| 3s-reuters1000 | 0.0667 | 0.2722 | 0.1000 | 0.1143 | 0.1055 | 0.1404 | 0.8667 | 2.4667 | 0.7867 | 0.4078 | 0.8218 | 0.7701 |
| amphibians | 0.0556 | 0.3016 | 0.5112 | 0.7393 | 0.4631 | 0.6545 | 0.2222 | 2.3889 | 0.0991 | 0.8778 | 0.7508 | 0.8092 |
| bibtex | 0.1835 | 0.0121 | 0.3527 | 0.4432 | 0.3068 | 0.4713 | 0.4457 | 72.3610 | 0.5808 | 0.4263 | 0.9885 | 0.9876 |
| birds | 0.2051 | 0.0864 | 0.3556 | 0.4260 | 0.3110 | 0.4483 | 0.4872 | 7.2308 | 0.4202 | 0.5388 | 0.8300 | 0.9227 |
| bookmarks10% | 0.1859 | 0.0088 | 0.2144 | 0.2373 | 0.1090 | 0.2618 | 0.7321 | 106.3932 | 0.7688 | 0.2580 | 0.9813 | 0.9921 |
| CAL500 | 0.0000 | 0.1383 | 0.2197 | 0.3645 | 0.0767 | 0.3559 | 0.4314 | 151.2157 | 0.4947 | 0.4551 | 0.8050 | 0.9189 |
| corel16k001 | 0.0087 | 0.0189 | 0.0437 | 0.0633 | 0.0328 | 0.0822 | 0.8859 | 116.2467 | 0.9441 | 0.0865 | 0.9863 | 1.0000 |
| Corel5k | 0.0060 | 0.0091 | 0.0566 | 0.0822 | 0.0235 | 0.1139 | 0.8447 | 162.9051 | 0.9391 | 0.1588 | 0.6770 | 1.0000 |
| delicious | 0.0000 | 0.0254 | 0.0926 | 0.1596 | 0.0829 | 0.1695 | 0.5416 | 906.7618 | 0.8612 | 0.1481 | 0.9964 | 0.9970 |
| emotions | 0.3000 | 0.1917 | 0.5486 | 0.6644 | 0.6312 | 0.6699 | 0.3167 | 1.7000 | 0.2206 | 0.8008 | 0.8718 | 0.8841 |
| enron | 0.1853 | 0.0494 | 0.4714 | 0.5967 | 0.1681 | 0.5779 | 0.3070 | 24.3188 | 0.3593 | 0.5974 | 0.8232 | 0.9847 |
| EukaryoteGO | 0.6997 | 0.0187 | 0.7891 | 0.8329 | 0.7032 | 0.8263 | 0.1714 | 0.6430 | 0.0311 | 0.8974 | 0.9921 | 0.9943 |
| EukaryotePseAAC | 0.1883 | 0.0512 | 0.2191 | 0.2328 | 0.1119 | 0.3077 | 0.5456 | 6.2718 | 0.5067 | 0.5239 | 0.9769 | 0.9738 |
| flags | 0.2500 | 0.2143 | 0.6636 | 0.7785 | 0.6353 | 0.7761 | 0.2500 | 3.5500 | 0.2300 | 0.8031 | 0.7340 | 0.8156 |
| foodtruck | 0.3171 | 0.1565 | 0.4612 | 0.5849 | 0.1189 | 0.4832 | 0.2439 | 4.5366 | 0.4327 | 0.7179 | 0.8380 | 0.9485 |
| genbase | 0.9615 | 0.0011 | 0.9876 | 0.9795 | 0.6485 | 0.9885 | 0.0000 | 0.2975 | 0.0018 | 0.9900 | 0.6607 | 0.9892 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8262 | 0.9556 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8737 | 0.9979 |
| GnegativePseAAC | 0.7071 | 0.0536 | 0.7274 | 0.7375 | 0.4285 | 0.7778 | 0.2000 | 0.6143 | 0.1454 | 0.8667 | 0.8579 | 0.9862 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9231 | 0.9326 | 0.8658 | 0.9259 | 0.0769 | 0.1731 | 0.0513 | 0.9519 | 0.9956 | 0.9957 |
| GpositivePseAAC | 0.6538 | 0.1346 | 0.6538 | 0.6538 | 0.5301 | 0.7083 | 0.2692 | 0.5385 | 0.2436 | 0.8301 | 0.9697 | 0.9643 |
| HumanGO | 0.6898 | 0.0359 | 0.7649 | 0.7993 | 0.6981 | 0.7727 | 0.1588 | 1.0728 | 0.1010 | 0.8781 | 0.9708 | 0.9775 |
| HumanPseAAC | 0.2746 | 0.0861 | 0.3009 | 0.3122 | 0.1603 | 0.3609 | 0.5304 | 3.3776 | 0.4660 | 0.5853 | 0.9406 | 0.9399 |
| Image | 0.5350 | 0.1610 | 0.5883 | 0.6154 | 0.6191 | 0.6194 | 0.3000 | 1.0700 | 0.2913 | 0.7907 | 0.9146 | 0.9116 |
| IMDB-ECC-F10% | 0.0300 | 0.0697 | 0.0574 | 0.0728 | 0.0322 | 0.0959 | 0.6393 | 12.2834 | 0.7306 | 0.3728 | 0.9825 | 0.9695 |
| IMDB-F10% | 0.0197 | 0.0735 | 0.0497 | 0.0661 | 0.0314 | 0.0888 | 0.5966 | 12.7272 | 0.7162 | 0.3814 | 0.9916 | 0.9711 |
| LLOG-F | 0.1720 | 0.0161 | 0.2024 | 0.2169 | 0.0535 | 0.2894 | 0.7382 | 28.5749 | 0.7871 | 0.2820 | 0.5954 | 0.9912 |
| mediamill10% | 0.0903 | 0.0293 | 0.4658 | 0.6264 | 0.0827 | 0.5869 | 0.2518 | 55.3800 | 0.4003 | 0.5706 | 0.8106 | 0.9918 |
| medical | 0.6327 | 0.0111 | 0.7432 | 0.7990 | 0.3028 | 0.8063 | 0.1633 | 4.2449 | 0.1126 | 0.8557 | 0.5509 | 0.9962 |
| Music | 0.2833 | 0.1750 | 0.5750 | 0.7047 | 0.7166 | 0.7225 | 0.1667 | 2.1333 | 0.2323 | 0.8131 | 0.8815 | 0.8807 |
| NUS-WIDE-bow10% | 0.1171 | 0.0249 | 0.2226 | 0.2763 | 0.0446 | 0.3341 | 0.5471 | 35.4711 | 0.6048 | 0.4233 | 0.8832 | 0.9902 |
| NUS-WIDE-cVLADplus10% | 0.1406 | 0.0235 | 0.2487 | 0.3069 | 0.0531 | 0.3644 | 0.5467 | 35.6846 | 0.6400 | 0.4142 | 0.8755 | 0.9973 |
| OHSUMED-F | 0.2308 | 0.0569 | 0.4287 | 0.5333 | 0.4323 | 0.5486 | 0.3580 | 7.7472 | 0.4149 | 0.6131 | 0.9739 | 0.9757 |
| PlantGO | 0.6979 | 0.0443 | 0.7257 | 0.7413 | 0.6385 | 0.7488 | 0.2083 | 0.9167 | 0.0891 | 0.8628 | 0.9890 | 0.9815 |
| PlantPseAAC | 0.2414 | 0.0903 | 0.2743 | 0.2890 | 0.2089 | 0.3568 | 0.6006 | 3.3863 | 0.5732 | 0.5282 | 0.9568 | 0.9336 |
| rcv1subset1 | 0.1208 | 0.0308 | 0.3220 | 0.4302 | 0.2542 | 0.4340 | 0.4298 | 38.3384 | 0.4262 | 0.4982 | 0.9135 | 0.9901 |
| REUTERS-K500-EX2 | 0.3069 | 0.0113 | 0.3769 | 0.4129 | 0.2328 | 0.4795 | 0.5045 | 32.6659 | 0.5401 | 0.4861 | 0.7820 | 0.9971 |
| scene | 0.6515 | 0.0878 | 0.7158 | 0.7478 | 0.7628 | 0.7485 | 0.2116 | 0.8506 | 0.1780 | 0.8413 | 0.9642 | 0.9691 |
| sider_CDK_ECFP4 | 0.0139 | 0.2444 | 0.6494 | 0.7874 | 0.6239 | 0.7926 | 0.0983 | 19.0876 | 0.1376 | 0.8207 | 0.5919 | 0.7952 |
| sider_MordredDesc | 0.0140 | 0.2593 | 0.6221 | 0.7729 | 0.6032 | 0.7872 | 0.1424 | 19.9636 | 0.1827 | 0.7882 | 0.5726 | 0.7661 |
| sider_RDKit_desc | 0.0139 | 0.2838 | 0.6254 | 0.7810 | 0.5925 | 0.7729 | 0.3280 | 20.1867 | 0.2362 | 0.7157 | 0.5819 | 0.7348 |
| SLASHDOT-F | 0.4027 | 0.0403 | 0.4788 | 0.5280 | 0.3847 | 0.5818 | 0.4069 | 5.5760 | 0.3685 | 0.6408 | 0.7503 | 0.9769 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.5000 | 0.7000 | 0.5556 | 0.8600 |
| Stackex_chemistry | 0.0463 | 0.0121 | 0.1045 | 0.1400 | 0.0659 | 0.1781 | 0.7880 | 105.6055 | 0.8788 | 0.1560 | 0.9095 | 0.9944 |
| Stackex_chess | 0.0293 | 0.0101 | 0.1294 | 0.1835 | 0.0547 | 0.2511 | 0.6742 | 137.6383 | 0.8050 | 0.2029 | 0.5424 | 0.9977 |
| Stackex_coffee | 0.0000 | 0.0209 | 0.0543 | 0.0915 | 0.0156 | 0.1194 | 0.7391 | 72.3913 | 0.7666 | 0.1925 | 0.2490 | 0.9669 |
| Stackex_cooking | 0.0657 | 0.0052 | 0.2013 | 0.2712 | 0.1091 | 0.3127 | 0.6415 | 227.0337 | 0.7803 | 0.2318 | 0.9201 | 0.9952 |
| Stackex_philosophy | 0.0555 | 0.0093 | 0.1709 | 0.2380 | 0.0650 | 0.2787 | 0.6857 | 136.6397 | 0.7848 | 0.2179 | 0.7513 | 0.9876 |
| tmc2007-500 | 0.2846 | 0.0614 | 0.5529 | 0.6868 | 0.5707 | 0.6615 | 0.2534 | 4.1101 | 0.1446 | 0.7789 | 0.9523 | 0.9636 |
| tox21_CDK_ECFP4 | 0.1397 | 0.1575 | 0.2831 | 0.3528 | 0.3681 | 0.4092 | 0.4755 | 5.4081 | 0.4830 | 0.5685 | 0.8910 | 0.8847 |
| tox21_RDKit_desc | 0.0961 | 0.1617 | 0.1905 | 0.2532 | 0.2166 | 0.2899 | 0.5002 | 5.5557 | 0.5021 | 0.5555 | 0.8985 | 0.8959 |
| VirusGO | 0.7619 | 0.0635 | 0.8333 | 0.8611 | 0.6711 | 0.8400 | 0.1429 | 0.5714 | 0.0874 | 0.8968 | 0.7911 | 0.9683 |
| VirusPseAAC | 0.2857 | 0.1508 | 0.3810 | 0.4272 | 0.3056 | 0.5128 | 0.4286 | 1.0476 | 0.2298 | 0.7349 | 0.6859 | 0.8940 |
| Water-quality | 0.0094 | 0.3120 | 0.3567 | 0.5220 | 0.4141 | 0.5242 | 0.2925 | 9.0943 | 0.3213 | 0.6941 | 0.7437 | 0.7386 |
| Yahoo_Arts | 0.1789 | 0.0636 | 0.2603 | 0.3118 | 0.2114 | 0.3514 | 0.5043 | 10.4524 | 0.6060 | 0.5025 | 0.9363 | 0.9725 |
| Yahoo_Business | 0.5648 | 0.0264 | 0.7265 | 0.8091 | 0.3163 | 0.7195 | 0.0899 | 3.1596 | 0.2229 | 0.8856 | 0.8517 | 0.9912 |
| Yahoo_Computers | 0.3812 | 0.0375 | 0.4577 | 0.5117 | 0.2378 | 0.5153 | 0.3874 | 6.5674 | 0.4227 | 0.6134 | 0.8839 | 0.9774 |
| Yahoo_Education | 0.1397 | 0.0419 | 0.1815 | 0.2107 | 0.1533 | 0.2903 | 0.5475 | 9.1375 | 0.5701 | 0.5205 | 0.8825 | 0.9771 |
| Yahoo_Entertainment | 0.2733 | 0.0567 | 0.3291 | 0.3579 | 0.2411 | 0.4245 | 0.4371 | 4.2259 | 0.3811 | 0.6356 | 0.9593 | 0.9514 |
| Yahoo_Health | 0.4172 | 0.0380 | 0.5304 | 0.6057 | 0.2401 | 0.5827 | 0.3107 | 6.5797 | 0.3485 | 0.6965 | 0.8217 | 0.9760 |
| Yahoo_Recreation | 0.2757 | 0.0211 | 0.3953 | 0.4303 | 0.4076 | 0.5012 | 0.4818 | 6.2344 | 0.4882 | 0.6049 | 0.9537 | 0.9564 |
| Yahoo_Reference | 0.4138 | 0.0297 | 0.4582 | 0.4887 | 0.1707 | 0.5104 | 0.3969 | 5.4594 | 0.4243 | 0.6458 | 0.8049 | 0.9810 |
| Yahoo_Science | 0.2281 | 0.0395 | 0.2791 | 0.3270 | 0.1737 | 0.3422 | 0.6165 | 13.7075 | 0.6444 | 0.4230 | 0.9619 | 0.9772 |
| Yahoo_Social | 0.4343 | 0.0239 | 0.4775 | 0.5077 | 0.1601 | 0.5428 | 0.3750 | 7.6024 | 0.3941 | 0.6463 | 0.9017 | 0.9875 |
| Yahoo_Society | 0.3123 | 0.0807 | 0.4323 | 0.5504 | 0.2047 | 0.4574 | 0.3726 | 8.3098 | 0.4859 | 0.5831 | 0.9334 | 0.9605 |
| yeast | 0.2015 | 0.1898 | 0.5257 | 0.6645 | 0.3803 | 0.6500 | 0.2614 | 6.1976 | 0.2386 | 0.7472 | 0.8256 | 0.8886 |
| Yelp | 0.4068 | 0.1924 | 0.6275 | 0.7267 | 0.6674 | 0.7207 | 0.2183 | 1.3938 | 0.2216 | 0.8525 | 0.8614 | 0.8873 |

Table 169: Detailed results for Massive (n = 10) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4663 | 0.0309 | 0.5048 | 0.5243 | 0.6207 | 0.6403 | 0.4554 | 4.4673 | 0.4495 | 0.6148 | 0.9957 | 0.9954 |
| 3s-bbc1000 | 0.1389 | 0.3102 | 0.2269 | 0.2754 | 0.1918 | 0.2796 | 0.8056 | 2.9444 | 0.7275 | 0.4190 | 0.8389 | 0.7735 |
| 3s-guardian1000 | 0.2258 | 0.3011 | 0.2930 | 0.3276 | 0.1396 | 0.3000 | 0.5484 | 2.4516 | 0.5637 | 0.5739 | 0.8118 | 0.8177 |
| 3s-inter3000 | 0.2353 | 0.2451 | 0.3137 | 0.3505 | 0.1425 | 0.3590 | 1.0000 | 2.6471 | 0.8118 | 0.3578 | 0.5403 | 0.7302 |
| 3s-reuters1000 | 0.0333 | 0.3333 | 0.1000 | 0.1250 | 0.1120 | 0.1429 | 0.9333 | 2.6667 | 0.8333 | 0.3606 | 0.8058 | 0.7568 |
| amphibians | 0.0556 | 0.2540 | 0.5435 | 0.7570 | 0.3907 | 0.6923 | 0.3889 | 2.6667 | 0.1843 | 0.7981 | 0.8103 | 0.8176 |
| bibtex | 0.0000 | 0.8191 | 0.0161 | 0.0317 | 0.0653 | 0.0317 | 0.9000 | 91.9162 | 0.9543 | 0.0897 | 0.9998 | 0.9998 |
| birds | 0.0000 | 0.3225 | 0.1393 | 0.2399 | 0.1572 | 0.2364 | 0.7692 | 9.5897 | 0.8462 | 0.3261 | 0.8852 | 0.9894 |
| bookmarks10% | 0.0000 | 0.8619 | 0.0104 | 0.0207 | 0.0259 | 0.0207 | 0.8656 | 117.4191 | 0.8791 | 0.1491 | 0.9855 | 0.9999 |
| CAL500 | 0.0000 | 0.7625 | 0.1593 | 0.2747 | 0.2210 | 0.2748 | 0.8235 | 151.5686 | 0.9994 | 0.2516 | 0.8905 | 0.9997 |
| corel16k001 | 0.0000 | 0.7429 | 0.0225 | 0.0439 | 0.0333 | 0.0439 | 0.9775 | 119.1801 | 0.9940 | 0.0408 | 0.9999 | 0.9999 |
| Corel5k | 0.0000 | 0.9000 | 0.0102 | 0.0202 | 0.0174 | 0.0202 | 0.9860 | 169.6220 | 0.9995 | 0.1102 | 0.6791 | 1.0000 |
| delicious | 0.0147 | 0.0440 | 0.1303 | 0.2372 | 0.0985 | 0.2481 | 0.5336 | 905.3257 | 0.8518 | 0.1673 | 0.9954 | 0.9917 |
| emotions | 0.3167 | 0.1972 | 0.5958 | 0.7139 | 0.7015 | 0.7102 | 0.3667 | 1.8500 | 0.2624 | 0.7586 | 0.8819 | 0.8729 |
| enron | 0.0000 | 0.4715 | 0.1010 | 0.1829 | 0.1001 | 0.1835 | 0.5322 | 31.8304 | 0.8299 | 0.2818 | 0.8425 | 0.9944 |
| EukaryoteGO | 0.0000 | 0.2355 | 0.1736 | 0.2940 | 0.5613 | 0.2949 | 0.3144 | 2.5799 | 0.2369 | 0.7677 | 0.9950 | 0.9940 |
| EukaryotePseAAC | 0.0000 | 0.3313 | 0.1165 | 0.2048 | 0.0708 | 0.2047 | 0.8880 | 9.5534 | 0.9056 | 0.2320 | 0.9962 | 0.9961 |
| flags | 0.2500 | 0.2500 | 0.5961 | 0.7117 | 0.5834 | 0.7328 | 0.2500 | 3.7500 | 0.3375 | 0.7706 | 0.6756 | 0.8026 |
| foodtruck | 0.2683 | 0.1524 | 0.4543 | 0.5926 | 0.0995 | 0.4755 | 0.2927 | 5.1707 | 0.4863 | 0.6756 | 0.8812 | 0.9681 |
| genbase | 0.0000 | 0.5793 | 0.0717 | 0.1338 | 0.3194 | 0.1339 | 0.2090 | 3.9552 | 0.2621 | 0.7745 | 0.6666 | 0.9996 |
| GnegativeGO | 0.8786 | 0.0187 | 0.9250 | 0.9482 | 0.8144 | 0.9293 | 0.0214 | 0.1000 | 0.0260 | 0.9845 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7500 | 0.0563 | 0.7750 | 0.7875 | 0.4711 | 0.7805 | 0.1929 | 0.6714 | 0.1801 | 0.8628 | 0.8610 | 0.9898 |
| GpositiveGO | 0.9231 | 0.0385 | 0.9231 | 0.9231 | 0.8601 | 0.9231 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9986 | 0.9982 |
| GpositivePseAAC | 0.7308 | 0.1394 | 0.7308 | 0.7308 | 0.5611 | 0.7238 | 0.2692 | 0.5962 | 0.2692 | 0.8205 | 0.9691 | 0.9675 |
| HumanGO | 0.6849 | 0.0349 | 0.7738 | 0.8193 | 0.6999 | 0.7918 | 0.2187 | 1.3537 | 0.1501 | 0.8410 | 0.9860 | 0.9890 |
| HumanPseAAC | 0.2026 | 0.1123 | 0.3202 | 0.3819 | 0.1421 | 0.3755 | 0.6785 | 5.0836 | 0.7127 | 0.4441 | 0.9792 | 0.9803 |
| Image | 0.4900 | 0.1800 | 0.6142 | 0.6760 | 0.6375 | 0.6311 | 0.3100 | 1.0800 | 0.3079 | 0.7860 | 0.9346 | 0.9338 |
| IMDB-ECC-F10% | 0.0000 | 0.5596 | 0.0934 | 0.1710 | 0.1022 | 0.1707 | 0.9497 | 15.8721 | 0.9969 | 0.1564 | 0.9999 | 0.9999 |
| IMDB-F10% | 0.0000 | 0.3026 | 0.1338 | 0.2343 | 0.0734 | 0.2315 | 0.9611 | 16.1649 | 0.9981 | 0.1578 | 0.9999 | 0.9999 |
| LLOG-F | 0.0000 | 0.6142 | 0.0243 | 0.0475 | 0.0337 | 0.0475 | 0.8689 | 32.6148 | 0.8975 | 0.1746 | 0.5998 | 0.9998 |
| mediamill10% | 0.0000 | 0.7235 | 0.0542 | 0.1029 | 0.0636 | 0.1029 | 0.2185 | 72.0261 | 0.8011 | 0.2551 | 0.8217 | 0.9983 |
| medical | 0.0000 | 0.4644 | 0.0502 | 0.0950 | 0.1648 | 0.0954 | 0.3776 | 16.8367 | 0.4429 | 0.5730 | 0.5546 | 0.9982 |
| Music | 0.2833 | 0.2000 | 0.5847 | 0.7095 | 0.7106 | 0.7120 | 0.2500 | 2.1167 | 0.2712 | 0.7868 | 0.9082 | 0.8989 |
| NUS-WIDE-bow10% | 0.0000 | 0.8892 | 0.0277 | 0.0539 | 0.0441 | 0.0539 | 0.9748 | 47.6032 | 1.0000 | 0.1068 | 0.8889 | 1.0000 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.6337 | 0.0359 | 0.0694 | 0.0468 | 0.0693 | 0.6789 | 42.7826 | 0.8108 | 0.2791 | 0.8872 | 0.9974 |
| OHSUMED-F | 0.0000 | 0.1541 | 0.2088 | 0.3283 | 0.2989 | 0.3357 | 0.5348 | 11.0359 | 0.6686 | 0.4377 | 0.9951 | 0.9943 |
| PlantGO | 0.6562 | 0.0486 | 0.7014 | 0.7257 | 0.5891 | 0.7282 | 0.2708 | 1.6562 | 0.2242 | 0.7890 | 0.9924 | 0.9884 |
| PlantPseAAC | 0.0000 | 0.2092 | 0.1718 | 0.2377 | 0.0876 | 0.2360 | 0.7959 | 4.2347 | 0.8571 | 0.3780 | 0.9842 | 0.9838 |
| rcv1subset1 | 0.0000 | 0.7863 | 0.0350 | 0.0676 | 0.0832 | 0.0676 | 0.8100 | 63.0333 | 0.9291 | 0.1506 | 0.9393 | 0.9986 |
| REUTERS-K500-EX2 | 0.0000 | 0.7660 | 0.0165 | 0.0325 | 0.0546 | 0.0325 | 0.8883 | 54.9759 | 0.9164 | 0.1404 | 0.7861 | 0.9996 |
| scene | 0.6017 | 0.0947 | 0.7116 | 0.7661 | 0.7643 | 0.7468 | 0.2365 | 0.8921 | 0.2059 | 0.8270 | 0.9707 | 0.9727 |
| sider_CDK_ECFP4 | 0.0000 | 0.3112 | 0.6043 | 0.7605 | 0.6154 | 0.7586 | 0.0986 | 23.0423 | 0.3481 | 0.7495 | 0.7133 | 0.7884 |
| sider_MordredDesc | 0.0000 | 0.2997 | 0.6175 | 0.7697 | 0.6081 | 0.7689 | 0.3169 | 24.0986 | 0.5167 | 0.6800 | 0.8150 | 0.8233 |
| sider_RDKit_desc | 0.0000 | 0.3539 | 0.5895 | 0.7455 | 0.6185 | 0.7436 | 0.1761 | 22.9859 | 0.3891 | 0.7432 | 0.9807 | 0.8376 |
| SLASHDOT-F | 0.0000 | 0.2482 | 0.1025 | 0.1745 | 0.2520 | 0.1757 | 0.7196 | 10.4788 | 0.7650 | 0.3223 | 0.7684 | 0.9947 |
| solar_flare-L3 | 0.2000 | 0.2667 | 0.6000 | 0.7500 | 0.4722 | 0.7143 | 0.6000 | 0.6000 | 0.6000 | 0.7000 | 0.6667 | 0.8200 |
| Stackex_chemistry | 0.0000 | 0.9198 | 0.0128 | 0.0252 | 0.0226 | 0.0252 | 0.9467 | 113.9294 | 1.0000 | 0.0526 | 0.9200 | 1.0000 |
| Stackex_chess | 0.0000 | 0.8890 | 0.0113 | 0.0223 | 0.0192 | 0.0223 | 0.9464 | 156.9524 | 0.9840 | 0.0409 | 0.5506 | 0.9999 |
| Stackex_coffee | 0.0000 | 0.8544 | 0.0195 | 0.0382 | 0.0304 | 0.0382 | 1.0000 | 81.6957 | 1.0000 | 0.0364 | 0.2602 | 1.0000 |
| Stackex_cooking | 0.0000 | 0.9744 | 0.0058 | 0.0115 | 0.0129 | 0.0115 | 0.9923 | 259.7343 | 0.9993 | 0.0208 | 0.9250 | 1.0000 |
| Stackex_philosophy | 0.0000 | 0.9308 | 0.0101 | 0.0199 | 0.0246 | 0.0199 | 0.9296 | 152.0854 | 0.9649 | 0.0563 | 0.7510 | 0.9999 |
| tmc2007-500 | 0.0000 | 0.4744 | 0.1421 | 0.2490 | 0.3424 | 0.2487 | 0.4402 | 10.1608 | 0.5291 | 0.5331 | 0.9807 | 0.9813 |
| tox21_CDK_ECFP4 | 0.1712 | 0.1701 | 0.3332 | 0.4194 | 0.3466 | 0.4214 | 0.4726 | 6.0411 | 0.6414 | 0.5195 | 0.9481 | 0.9478 |
| tox21_RDKit_desc | 0.0000 | 0.4235 | 0.2350 | 0.3874 | 0.2875 | 0.3847 | 0.5925 | 6.5411 | 0.7757 | 0.4346 | 0.9742 | 0.9733 |
| VirusGO | 0.6667 | 0.0794 | 0.7778 | 0.8175 | 0.6782 | 0.8000 | 0.1429 | 0.5238 | 0.0726 | 0.9063 | 0.8168 | 0.9640 |
| VirusPseAAC | 0.2857 | 0.1825 | 0.5159 | 0.6128 | 0.3614 | 0.5965 | 0.4762 | 1.0476 | 0.2429 | 0.7095 | 0.7185 | 0.9109 |
| Water-quality | 0.0000 | 0.4609 | 0.3940 | 0.5676 | 0.4768 | 0.5660 | 0.3491 | 10.5755 | 0.7159 | 0.6003 | 0.8949 | 0.8906 |
| Yahoo_Arts | 0.0000 | 0.2071 | 0.1319 | 0.2256 | 0.1466 | 0.2186 | 0.6943 | 14.3912 | 0.8932 | 0.3212 | 0.9575 | 0.9959 |
| Yahoo_Business | 0.0000 | 0.4950 | 0.0871 | 0.1609 | 0.1741 | 0.1604 | 0.1390 | 3.8770 | 0.9555 | 0.8444 | 0.8645 | 0.9980 |
| Yahoo_Computers | 0.0000 | 0.2240 | 0.1326 | 0.2368 | 0.1809 | 0.2347 | 0.4257 | 7.7751 | 0.5485 | 0.5484 | 0.9048 | 0.9927 |
| Yahoo_Education | 0.0000 | 0.3957 | 0.0864 | 0.1582 | 0.1282 | 0.1579 | 0.7830 | 11.2253 | 0.9182 | 0.3494 | 0.9068 | 0.9976 |
| Yahoo_Entertainment | 0.0000 | 0.2018 | 0.1590 | 0.2615 | 0.2087 | 0.2598 | 0.7046 | 5.2255 | 0.7420 | 0.4554 | 0.9961 | 0.9962 |
| Yahoo_Health | 0.0000 | 0.4052 | 0.0971 | 0.1773 | 0.1482 | 0.1769 | 0.4832 | 9.6623 | 0.6356 | 0.5384 | 0.8388 | 0.9928 |
| Yahoo_Recreation | 0.0000 | 0.4013 | 0.0944 | 0.1699 | 0.2081 | 0.1693 | 0.6726 | 8.8636 | 0.8321 | 0.4134 | 0.9955 | 0.9954 |
| Yahoo_Reference | 0.0000 | 0.3201 | 0.0762 | 0.1398 | 0.0962 | 0.1396 | 0.4894 | 6.5978 | 0.5591 | 0.5648 | 0.8144 | 0.9933 |
| Yahoo_Science | 0.0000 | 0.5346 | 0.0482 | 0.0916 | 0.0882 | 0.0913 | 0.8740 | 17.5490 | 0.9122 | 0.2253 | 0.9733 | 0.9983 |
| Yahoo_Social | 0.0000 | 0.3661 | 0.0673 | 0.1257 | 0.0880 | 0.1251 | 0.9629 | 14.4323 | 0.9923 | 0.1361 | 0.9228 | 0.9997 |
| Yahoo_Society | 0.0000 | 0.3113 | 0.1244 | 0.2233 | 0.1219 | 0.2214 | 0.5558 | 10.7335 | 0.6736 | 0.4514 | 0.9555 | 0.9921 |
| yeast | 0.0702 | 0.2341 | 0.5059 | 0.6501 | 0.3824 | 0.6439 | 0.2975 | 6.4959 | 0.4085 | 0.7168 | 0.8927 | 0.9147 |
| Yelp | 0.4247 | 0.1890 | 0.6483 | 0.7491 | 0.6786 | 0.7304 | 0.2084 | 1.3669 | 0.2188 | 0.8606 | 0.8786 | 0.9011 |

Table 170: Detailed results for Massive (n = 100) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4959 | 0.0307 | 0.5736 | 0.6136 | 0.6821 | 0.6866 | 0.3496 | 2.9787 | 0.2885 | 0.7194 | 0.9881 | 0.9881 |
| 3s-bbc1000 | 0.1389 | 0.3287 | 0.2194 | 0.2696 | 0.2513 | 0.2680 | 0.7222 | 2.9444 | 0.6603 | 0.4588 | 0.7822 | 0.7354 |
| 3s-guardian1000 | 0.0968 | 0.2957 | 0.2661 | 0.3688 | 0.2657 | 0.3678 | 0.6129 | 2.1613 | 0.5984 | 0.5618 | 0.8210 | 0.8417 |
| 3s-inter3000 | 0.2353 | 0.2647 | 0.2941 | 0.3235 | 0.0870 | 0.3077 | 0.9412 | 2.8235 | 0.8353 | 0.3529 | 0.5626 | 0.7216 |
| 3s-reuters1000 | 0.1000 | 0.2833 | 0.1444 | 0.1677 | 0.1345 | 0.1905 | 0.8667 | 2.5000 | 0.7933 | 0.3983 | 0.8329 | 0.7618 |
| amphibians | 0.0556 | 0.2698 | 0.5480 | 0.7488 | 0.5844 | 0.7258 | 0.2222 | 2.5000 | 0.0889 | 0.8593 | 0.7797 | 0.8176 |
| bibtex | 0.0000 | 0.0972 | 0.0584 | 0.1101 | 0.2610 | 0.1129 | 0.4662 | 80.0784 | 0.6515 | 0.3707 | 0.9987 | 0.9986 |
| birds | 0.1795 | 0.0931 | 0.3566 | 0.4582 | 0.3350 | 0.4651 | 0.4615 | 8.0256 | 0.5391 | 0.5183 | 0.8705 | 0.9667 |
| bookmarks10% | 0.0000 | 0.1313 | 0.0195 | 0.0384 | 0.0823 | 0.0386 | 0.7585 | 110.4191 | 0.7988 | 0.2250 | 0.9852 | 0.9996 |
| CAL500 | 0.0000 | 0.3250 | 0.2532 | 0.4034 | 0.1599 | 0.4034 | 0.3333 | 151.0392 | 0.7407 | 0.4015 | 0.8610 | 0.9702 |
| corel16k001 | 0.0000 | 0.1999 | 0.0521 | 0.0979 | 0.0264 | 0.0979 | 0.9463 | 117.9390 | 0.9806 | 0.0539 | 0.9996 | 0.9996 |
| Corel5k | 0.0000 | 0.4625 | 0.0159 | 0.0312 | 0.0172 | 0.0312 | 0.9220 | 169.4040 | 0.9791 | 0.1254 | 0.6791 | 0.9999 |
| delicious | 0.0000 | 0.0511 | 0.1327 | 0.2308 | 0.0884 | 0.2339 | 0.5306 | 917.4190 | 0.8547 | 0.1537 | 0.9882 | 0.9893 |
| emotions | 0.3000 | 0.2056 | 0.5764 | 0.6971 | 0.6838 | 0.6917 | 0.3000 | 1.7333 | 0.2265 | 0.7895 | 0.8665 | 0.8792 |
| enron | 0.1637 | 0.0495 | 0.4459 | 0.5730 | 0.1411 | 0.5720 | 0.3509 | 26.4094 | 0.4809 | 0.5295 | 0.8323 | 0.9869 |
| EukaryoteGO | 0.7075 | 0.0190 | 0.7985 | 0.8432 | 0.7234 | 0.8256 | 0.1817 | 0.9330 | 0.0563 | 0.8838 | 0.9933 | 0.9948 |
| EukaryotePseAAC | 0.2548 | 0.0546 | 0.3297 | 0.3697 | 0.1287 | 0.4118 | 0.6203 | 7.5676 | 0.6317 | 0.4415 | 0.9824 | 0.9843 |
| flags | 0.2500 | 0.2643 | 0.6318 | 0.7486 | 0.5928 | 0.7299 | 0.2500 | 3.6000 | 0.2600 | 0.8058 | 0.7196 | 0.8121 |
| foodtruck | 0.2927 | 0.1545 | 0.4682 | 0.6075 | 0.1498 | 0.5065 | 0.2439 | 4.3902 | 0.4423 | 0.7253 | 0.8580 | 0.9591 |
| genbase | 0.9552 | 0.0022 | 0.9726 | 0.9789 | 0.6153 | 0.9753 | 0.0149 | 0.5075 | 0.0080 | 0.9858 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0125 | 0.9500 | 0.9643 | 0.8247 | 0.9524 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9981 |
| GnegativePseAAC | 0.7500 | 0.0545 | 0.7810 | 0.7964 | 0.4701 | 0.7904 | 0.2000 | 0.6214 | 0.1566 | 0.8661 | 0.8581 | 0.9872 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0577 | 0.1538 | 0.0449 | 0.9615 | 0.9963 | 0.9960 |
| GpositivePseAAC | 0.7308 | 0.1394 | 0.7308 | 0.7308 | 0.5611 | 0.7238 | 0.2692 | 0.5577 | 0.2436 | 0.8269 | 0.9662 | 0.9615 |
| HumanGO | 0.6945 | 0.0354 | 0.7765 | 0.8180 | 0.7011 | 0.7885 | 0.1833 | 1.1511 | 0.1158 | 0.8680 | 0.9858 | 0.9889 |
| HumanPseAAC | 0.3087 | 0.0914 | 0.3859 | 0.4270 | 0.1950 | 0.4314 | 0.5723 | 3.9550 | 0.5662 | 0.5417 | 0.9689 | 0.9688 |
| Image | 0.4700 | 0.1840 | 0.6042 | 0.6717 | 0.6283 | 0.6245 | 0.3150 | 1.0950 | 0.2938 | 0.7820 | 0.9128 | 0.9093 |
| IMDB-ECC-F10% | 0.0000 | 0.2681 | 0.1409 | 0.2425 | 0.0837 | 0.2426 | 0.8637 | 15.0618 | 0.9365 | 0.2095 | 0.9934 | 0.9943 |
| IMDB-F10% | 0.0041 | 0.1147 | 0.2473 | 0.3706 | 0.0517 | 0.3612 | 0.9461 | 16.1251 | 0.9908 | 0.1646 | 0.9991 | 0.9993 |
| LLOG-F | 0.1721 | 0.0157 | 0.1974 | 0.2128 | 0.0533 | 0.2871 | 0.7541 | 29.1721 | 0.7985 | 0.2660 | 0.5992 | 0.9991 |
| mediamill10% | 0.0000 | 0.0556 | 0.2968 | 0.4630 | 0.0579 | 0.4377 | 0.3302 | 61.8147 | 0.5067 | 0.4712 | 0.8144 | 0.9944 |
| medical | 0.6531 | 0.0104 | 0.7415 | 0.7840 | 0.2807 | 0.8099 | 0.1939 | 5.8980 | 0.1738 | 0.8110 | 0.5532 | 0.9972 |
| Music | 0.2667 | 0.1917 | 0.5778 | 0.7110 | 0.7132 | 0.7160 | 0.1833 | 2.0333 | 0.2227 | 0.8195 | 0.8945 | 0.8918 |
| NUS-WIDE-bow10% | 0.0000 | 0.0560 | 0.1827 | 0.3094 | 0.0364 | 0.2990 | 0.6632 | 38.4068 | 0.7276 | 0.3468 | 0.8849 | 0.9955 |
| NUS-WIDE-cVLADplus10% | 0.1827 | 0.0305 | 0.3222 | 0.3966 | 0.0408 | 0.3648 | 0.6156 | 37.3121 | 0.6873 | 0.3801 | 0.8846 | 0.9951 |
| OHSUMED-F | 0.2075 | 0.0608 | 0.4282 | 0.5411 | 0.4182 | 0.5580 | 0.3711 | 8.0668 | 0.4486 | 0.5971 | 0.9797 | 0.9820 |
| PlantGO | 0.6771 | 0.0434 | 0.7309 | 0.7559 | 0.6312 | 0.7619 | 0.2292 | 1.2396 | 0.1370 | 0.8334 | 0.9913 | 0.9868 |
| PlantPseAAC | 0.2857 | 0.1131 | 0.3571 | 0.3921 | 0.2117 | 0.3982 | 0.6327 | 3.2347 | 0.5707 | 0.5168 | 0.9512 | 0.9398 |
| rcv1subset1 | 0.0994 | 0.0320 | 0.3512 | 0.4723 | 0.2658 | 0.4655 | 0.3968 | 38.0407 | 0.4156 | 0.5127 | 0.9198 | 0.9894 |
| REUTERS-K500-EX2 | 0.0000 | 0.0302 | 0.1515 | 0.2326 | 0.2212 | 0.2574 | 0.5670 | 35.9742 | 0.5971 | 0.4376 | 0.7849 | 0.9984 |
| scene | 0.6432 | 0.0920 | 0.7296 | 0.7728 | 0.7655 | 0.7495 | 0.2199 | 0.8838 | 0.1863 | 0.8353 | 0.9670 | 0.9707 |
| sider_CDK_ECFP4 | 0.0141 | 0.2384 | 0.6482 | 0.7952 | 0.6350 | 0.7984 | 0.2606 | 19.9366 | 0.2328 | 0.7296 | 0.6088 | 0.7448 |
| sider_MordredDesc | 0.0141 | 0.2655 | 0.6337 | 0.7835 | 0.6176 | 0.7843 | 0.3944 | 20.3310 | 0.2336 | 0.7328 | 0.6097 | 0.7530 |
| sider_RDKit_desc | 0.0141 | 0.2783 | 0.6318 | 0.7833 | 0.6047 | 0.7785 | 0.1479 | 20.2535 | 0.2083 | 0.7573 | 0.6095 | 0.7625 |
| SLASHDOT-F | 0.3995 | 0.0400 | 0.4881 | 0.5341 | 0.3723 | 0.5832 | 0.4550 | 6.9021 | 0.4616 | 0.5764 | 0.7632 | 0.9896 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0000 | 0.1665 | 0.0354 | 0.0681 | 0.0494 | 0.0680 | 0.8127 | 107.4121 | 0.8984 | 0.1377 | 0.9193 | 0.9993 |
| Stackex_chess | 0.0000 | 0.1895 | 0.0293 | 0.0569 | 0.0505 | 0.0569 | 0.6964 | 138.7083 | 0.8383 | 0.1808 | 0.5500 | 0.9991 |
| Stackex_coffee | 0.0000 | 0.0848 | 0.0563 | 0.1044 | 0.0180 | 0.1045 | 0.9130 | 78.1304 | 0.9208 | 0.0996 | 0.2582 | 0.9962 |
| Stackex_cooking | 0.0000 | 0.5003 | 0.0083 | 0.0165 | 0.0465 | 0.0165 | 0.8068 | 243.4058 | 0.8983 | 0.1170 | 0.9247 | 0.9997 |
| Stackex_philosophy | 0.0000 | 0.3189 | 0.0203 | 0.0398 | 0.0404 | 0.0398 | 0.7462 | 141.5226 | 0.8446 | 0.1678 | 0.7505 | 0.9994 |
| tmc2007-500 | 0.2524 | 0.0677 | 0.5678 | 0.7136 | 0.5907 | 0.6784 | 0.2713 | 4.8108 | 0.2066 | 0.7496 | 0.9661 | 0.9743 |
| tox21_CDK_ECFP4 | 0.1644 | 0.1744 | 0.3482 | 0.4506 | 0.3777 | 0.4540 | 0.4863 | 5.6952 | 0.5860 | 0.5415 | 0.9336 | 0.9361 |
| tox21_RDKit_desc | 0.1370 | 0.1826 | 0.3212 | 0.4291 | 0.2929 | 0.4150 | 0.4932 | 5.8767 | 0.6129 | 0.5232 | 0.9294 | 0.9317 |
| VirusGO | 0.7619 | 0.0476 | 0.8492 | 0.8768 | 0.7283 | 0.8800 | 0.1429 | 0.4762 | 0.0839 | 0.9167 | 0.8080 | 0.9798 |
| VirusPseAAC | 0.3333 | 0.1429 | 0.5238 | 0.6108 | 0.3862 | 0.6400 | 0.4762 | 1.0000 | 0.2048 | 0.7198 | 0.7450 | 0.9059 |
| Water-quality | 0.0094 | 0.3302 | 0.4274 | 0.6023 | 0.4989 | 0.5957 | 0.3113 | 9.4623 | 0.4089 | 0.6818 | 0.8010 | 0.7998 |
| Yahoo_Arts | 0.1202 | 0.0873 | 0.2601 | 0.3466 | 0.1671 | 0.3210 | 0.5754 | 11.8638 | 0.7482 | 0.4308 | 0.9468 | 0.9860 |
| Yahoo_Business | 0.5517 | 0.0280 | 0.7155 | 0.8073 | 0.2499 | 0.7123 | 0.1105 | 3.4037 | 0.2399 | 0.8716 | 0.8584 | 0.9955 |
| Yahoo_Computers | 0.3865 | 0.0455 | 0.4937 | 0.5642 | 0.2471 | 0.4965 | 0.3837 | 6.5092 | 0.4147 | 0.6106 | 0.8758 | 0.9843 |
| Yahoo_Education | 0.2045 | 0.0539 | 0.3012 | 0.3560 | 0.1421 | 0.3382 | 0.7689 | 10.9086 | 0.9010 | 0.3629 | 0.9061 | 0.9969 |
| Yahoo_Entertainment | 0.3446 | 0.0695 | 0.4484 | 0.5164 | 0.2872 | 0.4795 | 0.4443 | 4.2987 | 0.4089 | 0.6300 | 0.9610 | 0.9687 |
| Yahoo_Health | 0.4118 | 0.0407 | 0.5563 | 0.6378 | 0.2422 | 0.5888 | 0.3093 | 6.4823 | 0.3484 | 0.6948 | 0.8196 | 0.9791 |
| Yahoo_Recreation | 0.2259 | 0.0690 | 0.3082 | 0.3624 | 0.3168 | 0.3929 | 0.5105 | 6.5323 | 0.5461 | 0.5621 | 0.9512 | 0.9604 |
| Yahoo_Reference | 0.4346 | 0.0318 | 0.4998 | 0.5389 | 0.1662 | 0.5275 | 0.4247 | 6.1432 | 0.4582 | 0.6149 | 0.8124 | 0.9911 |
| Yahoo_Science | 0.1617 | 0.0533 | 0.2602 | 0.3213 | 0.1373 | 0.2878 | 0.7309 | 15.0171 | 0.7496 | 0.3481 | 0.9641 | 0.9898 |
| Yahoo_Social | 0.4593 | 0.0296 | 0.5318 | 0.5799 | 0.1729 | 0.5305 | 0.3753 | 7.6525 | 0.3886 | 0.6417 | 0.9023 | 0.9799 |
| Yahoo_Society | 0.3263 | 0.0808 | 0.4340 | 0.5552 | 0.2069 | 0.4595 | 0.3839 | 8.3678 | 0.4865 | 0.5975 | 0.9310 | 0.9610 |
| yeast | 0.1901 | 0.2025 | 0.5534 | 0.6855 | 0.4337 | 0.6733 | 0.2645 | 6.1736 | 0.2568 | 0.7507 | 0.8367 | 0.8857 |
| Yelp | 0.4168 | 0.1934 | 0.6411 | 0.7426 | 0.6665 | 0.7241 | 0.2144 | 1.4217 | 0.2418 | 0.8513 | 0.8746 | 0.8961 |

Table 171: Detailed results for Massive (n = 1000) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5368 | 0.0306 | 0.6222 | 0.6662 | 0.7034 | 0.7049 | 0.3019 | 2.5057 | 0.2421 | 0.7604 | 0.9901 | 0.9904 |
| 3s-bbc1000 | 0.1111 | 0.3519 | 0.2162 | 0.2745 | 0.2328 | 0.2692 | 0.7222 | 2.7500 | 0.6324 | 0.4675 | 0.7753 | 0.7300 |
| 3s-guardian1000 | 0.1290 | 0.2957 | 0.2554 | 0.3254 | 0.2543 | 0.3373 | 0.5161 | 2.1290 | 0.5008 | 0.6118 | 0.8080 | 0.8266 |
| 3s-inter3000 | 0.0000 | 0.3137 | 0.3039 | 0.4287 | 0.2103 | 0.4286 | 0.8824 | 2.5294 | 0.6956 | 0.3951 | 0.4825 | 0.6700 |
| 3s-reuters1000 | 0.1333 | 0.2889 | 0.1833 | 0.2053 | 0.1758 | 0.2121 | 0.9333 | 2.5667 | 0.7733 | 0.3689 | 0.8342 | 0.7614 |
| amphibians | 0.0000 | 0.2619 | 0.5540 | 0.7626 | 0.5638 | 0.7227 | 0.3333 | 2.6111 | 0.1259 | 0.8126 | 0.7689 | 0.8187 |
| bibtex | 0.1919 | 0.0120 | 0.3673 | 0.4610 | 0.3257 | 0.4853 | 0.4324 | 72.3973 | 0.5751 | 0.4301 | 0.9977 | 0.9978 |
| birds | 0.1795 | 0.1012 | 0.3528 | 0.4478 | 0.3480 | 0.4444 | 0.4615 | 6.6410 | 0.3973 | 0.5683 | 0.8327 | 0.9241 |
| bookmarks10% | 0.1902 | 0.0089 | 0.2223 | 0.2449 | 0.1186 | 0.2680 | 0.7312 | 105.0444 | 0.7597 | 0.2599 | 0.9849 | 0.9993 |
| CAL500 | 0.0000 | 0.2121 | 0.3160 | 0.4776 | 0.1442 | 0.4781 | 0.3529 | 151.0588 | 0.6057 | 0.4346 | 0.8233 | 0.9410 |
| corel16k001 | 0.0000 | 0.0630 | 0.1124 | 0.1946 | 0.0408 | 0.1944 | 0.8751 | 115.1089 | 0.9440 | 0.0885 | 0.9989 | 0.9989 |
| Corel5k | 0.0000 | 0.0138 | 0.1438 | 0.2289 | 0.0265 | 0.2362 | 0.8500 | 163.3540 | 0.9344 | 0.1641 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0509 | 0.1333 | 0.2340 | 0.0893 | 0.2351 | 0.5239 | 905.3257 | 0.8448 | 0.1531 | 0.9928 | 0.9978 |
| emotions | 0.3333 | 0.1778 | 0.6097 | 0.7359 | 0.7134 | 0.7265 | 0.2833 | 1.7167 | 0.2209 | 0.8100 | 0.8949 | 0.8973 |
| enron | 0.1871 | 0.0516 | 0.4874 | 0.6162 | 0.1837 | 0.5952 | 0.2924 | 23.5848 | 0.3608 | 0.6091 | 0.8256 | 0.9809 |
| EukaryoteGO | 0.7139 | 0.0190 | 0.7912 | 0.8293 | 0.7279 | 0.8204 | 0.1637 | 0.8673 | 0.0510 | 0.8948 | 0.9933 | 0.9949 |
| EukaryotePseAAC | 0.3063 | 0.0563 | 0.4008 | 0.4503 | 0.1481 | 0.4587 | 0.5380 | 6.1094 | 0.4983 | 0.5282 | 0.9744 | 0.9770 |
| flags | 0.2500 | 0.2286 | 0.6533 | 0.7664 | 0.6261 | 0.7647 | 0.3000 | 3.5000 | 0.2642 | 0.7969 | 0.7058 | 0.8092 |
| foodtruck | 0.2927 | 0.1565 | 0.4621 | 0.6010 | 0.1431 | 0.4967 | 0.2439 | 4.4146 | 0.4435 | 0.7212 | 0.8553 | 0.9573 |
| genbase | 0.9552 | 0.0017 | 0.9801 | 0.9900 | 0.6173 | 0.9816 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6369 | 0.9989 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8264 | 0.9559 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8739 | 0.9980 |
| GnegativePseAAC | 0.7643 | 0.0500 | 0.8060 | 0.8268 | 0.4948 | 0.8095 | 0.1857 | 0.6143 | 0.1470 | 0.8736 | 0.8626 | 0.9901 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9231 | 0.9326 | 0.8658 | 0.9259 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9963 | 0.9968 |
| GpositivePseAAC | 0.7500 | 0.1202 | 0.7596 | 0.7644 | 0.5833 | 0.7619 | 0.2500 | 0.5000 | 0.2372 | 0.8413 | 0.9841 | 0.9760 |
| HumanGO | 0.6785 | 0.0388 | 0.7666 | 0.8139 | 0.6950 | 0.7744 | 0.1704 | 1.0900 | 0.1057 | 0.8758 | 0.9848 | 0.9883 |
| HumanPseAAC | 0.3087 | 0.0978 | 0.4070 | 0.4568 | 0.1915 | 0.4380 | 0.5370 | 3.3505 | 0.4701 | 0.5840 | 0.9527 | 0.9534 |
| Image | 0.5250 | 0.1740 | 0.6258 | 0.6779 | 0.6433 | 0.6345 | 0.2900 | 1.0050 | 0.2838 | 0.8026 | 0.9344 | 0.9316 |
| IMDB-ECC-F10% | 0.0000 | 0.2376 | 0.1474 | 0.2504 | 0.0847 | 0.2502 | 0.6331 | 12.3941 | 0.7320 | 0.3750 | 0.9883 | 0.9755 |
| IMDB-F10% | 0.0000 | 0.2656 | 0.1549 | 0.2640 | 0.0967 | 0.2638 | 0.5866 | 12.6819 | 0.7149 | 0.3875 | 0.9845 | 0.9741 |
| LLOG-F | 0.1721 | 0.0166 | 0.2001 | 0.2173 | 0.0526 | 0.2897 | 0.7377 | 28.5820 | 0.7822 | 0.2814 | 0.5984 | 0.9981 |
| mediamill10% | 0.0760 | 0.0302 | 0.4709 | 0.6365 | 0.0942 | 0.5882 | 0.1686 | 59.1829 | 0.4511 | 0.5468 | 0.8136 | 0.9940 |
| medical | 0.6735 | 0.0104 | 0.7747 | 0.8288 | 0.3108 | 0.8203 | 0.1735 | 4.9388 | 0.1278 | 0.8427 | 0.5527 | 0.9976 |
| Music | 0.2833 | 0.1889 | 0.5792 | 0.7041 | 0.7057 | 0.7143 | 0.2333 | 2.0667 | 0.2549 | 0.8015 | 0.9072 | 0.8981 |
| NUS-WIDE-bow10% | 0.1384 | 0.0280 | 0.3170 | 0.4179 | 0.0479 | 0.4050 | 0.5300 | 34.0528 | 0.5909 | 0.4330 | 0.8800 | 0.9911 |
| NUS-WIDE-cVLADplus10% | 0.1774 | 0.0303 | 0.3401 | 0.4261 | 0.0563 | 0.3943 | 0.5637 | 35.5676 | 0.6490 | 0.4094 | 0.8835 | 0.9948 |
| OHSUMED-F | 0.2261 | 0.0592 | 0.4444 | 0.5574 | 0.4408 | 0.5686 | 0.3546 | 7.6497 | 0.4158 | 0.6150 | 0.9770 | 0.9800 |
| PlantGO | 0.7292 | 0.0365 | 0.7865 | 0.8133 | 0.6773 | 0.8037 | 0.2292 | 0.9688 | 0.0966 | 0.8493 | 0.9888 | 0.9836 |
| PlantPseAAC | 0.2551 | 0.1190 | 0.3503 | 0.4049 | 0.2145 | 0.3966 | 0.6224 | 3.1633 | 0.4977 | 0.5348 | 0.9382 | 0.9327 |
| rcv1subset1 | 0.1000 | 0.0316 | 0.3562 | 0.4783 | 0.2658 | 0.4708 | 0.3933 | 37.5533 | 0.4104 | 0.5188 | 0.9255 | 0.9864 |
| REUTERS-K500-EX2 | 0.3402 | 0.0116 | 0.4244 | 0.4731 | 0.2553 | 0.5133 | 0.5052 | 31.1787 | 0.5163 | 0.5018 | 0.7839 | 0.9972 |
| scene | 0.6722 | 0.0858 | 0.7448 | 0.7811 | 0.7711 | 0.7615 | 0.1992 | 0.9004 | 0.1913 | 0.8426 | 0.9784 | 0.9802 |
| sider_CDK_ECFP4 | 0.0141 | 0.2415 | 0.6503 | 0.7981 | 0.6298 | 0.7976 | 0.2676 | 19.1620 | 0.1673 | 0.7814 | 0.5891 | 0.7700 |
| sider_MordredDesc | 0.0141 | 0.2713 | 0.6279 | 0.7815 | 0.6128 | 0.7799 | 0.3099 | 19.8803 | 0.2231 | 0.7418 | 0.5733 | 0.7340 |
| sider_RDKit_desc | 0.0141 | 0.2817 | 0.6302 | 0.7816 | 0.6048 | 0.7770 | 0.4366 | 20.1901 | 0.2124 | 0.7188 | 0.5680 | 0.7430 |
| SLASHDOT-F | 0.4048 | 0.0416 | 0.5226 | 0.5858 | 0.4132 | 0.6023 | 0.3942 | 5.5026 | 0.3613 | 0.6456 | 0.7563 | 0.9834 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.4000 | 0.7000 | 0.5556 | 0.8000 |
| Stackex_chemistry | 0.0447 | 0.0159 | 0.1454 | 0.2070 | 0.0565 | 0.2017 | 0.7983 | 105.5317 | 0.8778 | 0.1525 | 0.9187 | 0.9987 |
| Stackex_chess | 0.0357 | 0.0102 | 0.1546 | 0.2204 | 0.0545 | 0.2788 | 0.6667 | 137.8571 | 0.8081 | 0.2036 | 0.5493 | 0.9983 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0543 | 0.0915 | 0.0156 | 0.1159 | 0.8261 | 75.4348 | 0.8596 | 0.1437 | 0.2562 | 0.9893 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2053 | 0.2781 | 0.1120 | 0.3232 | 0.6300 | 223.1449 | 0.7687 | 0.2356 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0094 | 0.1649 | 0.2302 | 0.0616 | 0.2718 | 0.6910 | 135.1181 | 0.7947 | 0.2115 | 0.7498 | 0.9987 |
| tmc2007-500 | 0.2584 | 0.0671 | 0.5720 | 0.7166 | 0.5985 | 0.6812 | 0.2559 | 4.1045 | 0.1458 | 0.7757 | 0.9585 | 0.9699 |
| tox21_CDK_ECFP4 | 0.1404 | 0.1744 | 0.3474 | 0.4547 | 0.3847 | 0.4530 | 0.4726 | 5.3014 | 0.4819 | 0.5704 | 0.8999 | 0.8998 |
| tox21_RDKit_desc | 0.1062 | 0.1915 | 0.3377 | 0.4665 | 0.3235 | 0.4468 | 0.5103 | 5.5103 | 0.5054 | 0.5515 | 0.9005 | 0.9011 |
| VirusGO | 0.7619 | 0.0556 | 0.8413 | 0.8686 | 0.7005 | 0.8627 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.8034 | 0.9699 |
| VirusPseAAC | 0.5238 | 0.1190 | 0.6349 | 0.6897 | 0.3892 | 0.6809 | 0.2857 | 0.9048 | 0.2333 | 0.7968 | 0.7556 | 0.9379 |
| Water-quality | 0.0000 | 0.3336 | 0.4263 | 0.6046 | 0.4911 | 0.5953 | 0.2736 | 9.2170 | 0.3555 | 0.6840 | 0.7591 | 0.7537 |
| Yahoo_Arts | 0.2043 | 0.0686 | 0.3003 | 0.3653 | 0.2145 | 0.3734 | 0.4993 | 10.2163 | 0.5747 | 0.5043 | 0.9355 | 0.9738 |
| Yahoo_Business | 0.5668 | 0.0271 | 0.7273 | 0.8170 | 0.2977 | 0.7250 | 0.0873 | 3.1800 | 0.2237 | 0.8880 | 0.8567 | 0.9951 |
| Yahoo_Computers | 0.3880 | 0.0449 | 0.4924 | 0.5656 | 0.2507 | 0.5023 | 0.3823 | 6.4546 | 0.4167 | 0.6149 | 0.8884 | 0.9812 |
| Yahoo_Education | 0.2569 | 0.0449 | 0.3369 | 0.3917 | 0.1897 | 0.4136 | 0.5137 | 8.8462 | 0.5529 | 0.5484 | 0.8935 | 0.9830 |
| Yahoo_Entertainment | 0.3449 | 0.0698 | 0.4517 | 0.5211 | 0.2863 | 0.4854 | 0.4399 | 4.2459 | 0.4064 | 0.6312 | 0.9680 | 0.9651 |
| Yahoo_Health | 0.4115 | 0.0409 | 0.5584 | 0.6439 | 0.2423 | 0.5905 | 0.3084 | 6.4636 | 0.3482 | 0.6964 | 0.8295 | 0.9855 |
| Yahoo_Recreation | 0.2268 | 0.0690 | 0.3096 | 0.3672 | 0.3155 | 0.3967 | 0.5082 | 6.4778 | 0.5427 | 0.5683 | 0.9642 | 0.9651 |
| Yahoo_Reference | 0.4620 | 0.0320 | 0.5295 | 0.5728 | 0.1795 | 0.5429 | 0.3848 | 5.4135 | 0.4200 | 0.6495 | 0.8091 | 0.9904 |
| Yahoo_Science | 0.1991 | 0.0414 | 0.2534 | 0.2972 | 0.1613 | 0.3167 | 0.6361 | 13.8725 | 0.6633 | 0.4148 | 0.9549 | 0.9817 |
| Yahoo_Social | 0.4645 | 0.0293 | 0.5394 | 0.5869 | 0.1753 | 0.5366 | 0.3738 | 7.5817 | 0.3896 | 0.6456 | 0.9131 | 0.9895 |
| Yahoo_Society | 0.3273 | 0.0799 | 0.4367 | 0.5573 | 0.2094 | 0.4662 | 0.3858 | 8.3675 | 0.4859 | 0.6041 | 0.9382 | 0.9707 |
| yeast | 0.1942 | 0.2081 | 0.5549 | 0.6878 | 0.4481 | 0.6756 | 0.2521 | 6.2025 | 0.2346 | 0.7556 | 0.8250 | 0.8836 |
| Yelp | 0.4566 | 0.1819 | 0.6612 | 0.7560 | 0.6758 | 0.7338 | 0.1795 | 1.4008 | 0.2710 | 0.8672 | 0.9082 | 0.9253 |

Table 172: Detailed results for Massive (n = 10000) for Accuracy metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5328 | 0.0309 | 0.6199 | 0.6601 | 0.7095 | 0.7035 | 0.3046 | 2.5055 | 0.2444 | 0.7684 | 1.0000 | 0.9845 |
| 3s-bbc1000 | 0.0833 | 0.3194 | 0.2315 | 0.3044 | 0.2712 | 0.3030 | 0.7500 | 3.0556 | 0.6988 | 0.4241 | 0.8311 | 0.7724 |
| 3s-guardian1000 | 0.0968 | 0.2634 | 0.2016 | 0.2540 | 0.1806 | 0.2899 | 0.5484 | 2.2903 | 0.5339 | 0.5839 | 0.8802 | 0.8693 |
| 3s-inter3000 | 0.2941 | 0.2647 | 0.3137 | 0.3322 | 0.1425 | 0.3415 | 0.9412 | 2.6471 | 0.7544 | 0.3637 | 0.4871 | 0.6660 |
| 3s-reuters1000 | 0.0667 | 0.3278 | 0.1333 | 0.1600 | 0.1541 | 0.1690 | 0.9000 | 2.6000 | 0.8000 | 0.3828 | 0.8395 | 0.7665 |
| amphibians | 0.1111 | 0.2857 | 0.5540 | 0.7505 | 0.5400 | 0.7097 | 0.3889 | 2.6111 | 0.1148 | 0.8009 | 0.7346 | 0.8007 |
| bibtex | 0.1943 | 0.0118 | 0.3640 | 0.4622 | 0.3215 | 0.4790 | 0.4316 | 72.1943 | 0.5784 | 0.4293 | 1.0000 | 1.0000 |
| birds | 0.1282 | 0.1053 | 0.3331 | 0.4491 | 0.3283 | 0.4429 | 0.4103 | 6.8462 | 0.3739 | 0.5751 | 0.8333 | 0.9226 |
| bookmarks10% | 0.1893 | 0.0087 | 0.2198 | 0.2432 | 0.1192 | 0.2674 | 0.7345 | 105.6715 | 0.7637 | 0.2614 | 0.9931 | 0.9875 |
| CAL500 | 0.0000 | 0.2033 | 0.3169 | 0.4796 | 0.1477 | 0.4798 | 0.1373 | 151.0784 | 0.5031 | 0.4585 | 0.7994 | 0.9180 |
| corel16k001 | 0.0000 | 0.0626 | 0.1141 | 0.1921 | 0.0404 | 0.1952 | 0.8844 | 115.7220 | 0.9502 | 0.0895 | 1.0000 | 0.9916 |
| Corel5k | 0.0000 | 0.0137 | 0.1422 | 0.2285 | 0.0268 | 0.2391 | 0.8412 | 163.7384 | 0.9259 | 0.1662 | 0.6873 | 1.0000 |
| delicious | 0.0000 | 0.0502 | 0.1345 | 0.2328 | 0.0889 | 0.2346 | 0.5311 | 906.9832 | 0.8323 | 0.1549 | 0.9944 | 1.0000 |
| emotions | 0.3000 | 0.2028 | 0.5778 | 0.7008 | 0.6807 | 0.6920 | 0.2500 | 1.8000 | 0.2271 | 0.8084 | 0.8696 | 0.8802 |
| enron | 0.1888 | 0.0517 | 0.4892 | 0.6109 | 0.1814 | 0.6037 | 0.2956 | 23.6687 | 0.3613 | 0.6106 | 0.8139 | 0.9842 |
| EukaryoteGO | 0.7222 | 0.0191 | 0.7817 | 0.8283 | 0.7375 | 0.8124 | 0.1650 | 0.8717 | 0.0513 | 0.8864 | 0.9985 | 1.0000 |
| EukaryotePseAAC | 0.3106 | 0.0570 | 0.3958 | 0.4522 | 0.1479 | 0.4528 | 0.5349 | 6.0206 | 0.4994 | 0.5231 | 0.9653 | 0.9722 |
| flags | 0.2000 | 0.2500 | 0.6194 | 0.7379 | 0.5938 | 0.7445 | 0.2000 | 3.6000 | 0.2217 | 0.8142 | 0.7003 | 0.7938 |
| foodtruck | 0.3171 | 0.1545 | 0.4661 | 0.5879 | 0.1374 | 0.4933 | 0.2439 | 4.4634 | 0.4354 | 0.7205 | 0.8402 | 0.9498 |
| genbase | 0.9600 | 0.0017 | 0.9932 | 0.9923 | 0.6144 | 0.9912 | 0.0147 | 0.2409 | 0.0009 | 0.9768 | 0.6326 | 1.0000 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8262 | 0.9556 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8740 | 0.9978 |
| GnegativePseAAC | 0.7571 | 0.0527 | 0.7881 | 0.8036 | 0.4863 | 0.7973 | 0.1929 | 0.6143 | 0.1444 | 0.8701 | 0.8588 | 0.9863 |
| GpositiveGO | 0.8846 | 0.0385 | 0.9135 | 0.9279 | 0.8639 | 0.9245 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9959 | 0.9967 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5662 | 0.7308 | 0.2692 | 0.5385 | 0.2436 | 0.8301 | 0.9692 | 0.9638 |
| HumanGO | 0.6836 | 0.0384 | 0.7731 | 0.8065 | 0.6962 | 0.7811 | 0.1716 | 1.0985 | 0.1053 | 0.8765 | 0.9882 | 0.9824 |
| HumanPseAAC | 0.3063 | 0.0981 | 0.4040 | 0.4614 | 0.1933 | 0.4409 | 0.5423 | 3.3858 | 0.4746 | 0.5851 | 0.9662 | 0.9439 |
| Image | 0.4800 | 0.1830 | 0.6000 | 0.6598 | 0.6236 | 0.6195 | 0.3300 | 1.1300 | 0.3063 | 0.7722 | 0.9262 | 0.9242 |
| IMDB-ECC-F10% | 0.0000 | 0.2371 | 0.1454 | 0.2505 | 0.0844 | 0.2503 | 0.6298 | 12.4563 | 0.7237 | 0.3771 | 0.9818 | 0.9673 |
| IMDB-F10% | 0.0000 | 0.2627 | 0.1529 | 0.2660 | 0.0959 | 0.2633 | 0.5918 | 12.8035 | 0.7131 | 0.3836 | 0.9707 | 0.9802 |
| LLOG-F | 0.1723 | 0.0169 | 0.2001 | 0.2165 | 0.0527 | 0.2862 | 0.7373 | 28.5442 | 0.7720 | 0.2796 | 0.6030 | 1.0000 |
| mediamill10% | 0.0831 | 0.0306 | 0.4682 | 0.6296 | 0.0834 | 0.5806 | 0.1663 | 56.2209 | 0.4027 | 0.5777 | 0.8106 | 0.9919 |
| medical | 0.6224 | 0.0116 | 0.7517 | 0.8180 | 0.3024 | 0.8046 | 0.1531 | 4.4490 | 0.0988 | 0.8579 | 0.5481 | 0.9904 |
| Music | 0.2667 | 0.1778 | 0.5931 | 0.7360 | 0.7293 | 0.7333 | 0.2167 | 2.0333 | 0.2244 | 0.8161 | 0.8922 | 0.8910 |
| NUS-WIDE-bow10% | 0.1385 | 0.0282 | 0.3136 | 0.4231 | 0.0482 | 0.3997 | 0.5312 | 34.2527 | 0.5838 | 0.4299 | 0.8766 | 0.9777 |
| NUS-WIDE-cVLADplus10% | 0.1761 | 0.0299 | 0.3438 | 0.4271 | 0.0570 | 0.3908 | 0.5713 | 35.8874 | 0.6443 | 0.4067 | 0.8925 | 0.9848 |
| OHSUMED-F | 0.2283 | 0.0593 | 0.4384 | 0.5570 | 0.4388 | 0.5719 | 0.3563 | 7.7612 | 0.4197 | 0.6164 | 0.9897 | 0.9889 |
| PlantGO | 0.6979 | 0.0425 | 0.7361 | 0.7569 | 0.6496 | 0.7610 | 0.2188 | 0.8646 | 0.0806 | 0.8615 | 0.9890 | 0.9819 |
| PlantPseAAC | 0.2578 | 0.1181 | 0.3516 | 0.4100 | 0.2149 | 0.4010 | 0.6194 | 3.1864 | 0.4974 | 0.5303 | 0.9440 | 0.9401 |
| rcv1subset1 | 0.1008 | 0.0321 | 0.3567 | 0.4850 | 0.2675 | 0.4644 | 0.3897 | 37.8422 | 0.4076 | 0.5258 | 0.9261 | 0.9887 |
| REUTERS-K500-EX2 | 0.3452 | 0.0117 | 0.4245 | 0.4795 | 0.2589 | 0.5178 | 0.5013 | 31.1043 | 0.5105 | 0.5026 | 0.7771 | 1.0000 |
| scene | 0.6598 | 0.0871 | 0.7379 | 0.7770 | 0.7728 | 0.7595 | 0.2158 | 0.8465 | 0.1797 | 0.8392 | 0.9636 | 0.9686 |
| sider_CDK_ECFP4 | 0.0140 | 0.2392 | 0.6496 | 0.8004 | 0.6382 | 0.8031 | 0.2665 | 18.9166 | 0.1678 | 0.7727 | 0.5828 | 0.7631 |
| sider_MordredDesc | 0.0140 | 0.2720 | 0.6224 | 0.7926 | 0.6044 | 0.7699 | 0.3074 | 20.0776 | 0.2258 | 0.7493 | 0.5702 | 0.7408 |
| sider_RDKit_desc | 0.0139 | 0.2848 | 0.6377 | 0.7833 | 0.6069 | 0.7854 | 0.4344 | 20.2179 | 0.2139 | 0.7203 | 0.5691 | 0.7458 |
| SLASHDOT-F | 0.4006 | 0.0420 | 0.5257 | 0.5908 | 0.4099 | 0.6097 | 0.3939 | 5.4977 | 0.3593 | 0.6551 | 0.7663 | 0.9786 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.5000 | 0.7000 | 0.2222 | 0.6600 |
| Stackex_chemistry | 0.0450 | 0.0158 | 0.1476 | 0.2089 | 0.0567 | 0.2044 | 0.8017 | 106.2509 | 0.8779 | 0.1533 | 0.9097 | 0.9949 |
| Stackex_chess | 0.0360 | 0.0102 | 0.1527 | 0.2227 | 0.0541 | 0.2786 | 0.6630 | 137.2818 | 0.8061 | 0.2048 | 0.5515 | 1.0000 |
| Stackex_coffee | 0.0000 | 0.0216 | 0.0609 | 0.0996 | 0.0224 | 0.1408 | 0.7391 | 74.2174 | 0.7806 | 0.1966 | 0.2497 | 0.9700 |
| Stackex_cooking | 0.0638 | 0.0052 | 0.2047 | 0.2789 | 0.1130 | 0.3271 | 0.6300 | 222.8674 | 0.7798 | 0.2358 | 0.9135 | 1.0000 |
| Stackex_philosophy | 0.0531 | 0.0092 | 0.1666 | 0.2297 | 0.0615 | 0.2744 | 0.6855 | 134.6340 | 0.7847 | 0.2097 | 0.7497 | 1.0000 |
| tmc2007-500 | 0.2617 | 0.0671 | 0.5758 | 0.7241 | 0.5959 | 0.6857 | 0.2593 | 4.1571 | 0.1474 | 0.7845 | 0.9539 | 0.9691 |
| tox21_CDK_ECFP4 | 0.1400 | 0.1731 | 0.3467 | 0.4483 | 0.3876 | 0.4576 | 0.4740 | 5.2373 | 0.4852 | 0.5786 | 0.8947 | 0.8973 |
| tox21_RDKit_desc | 0.1056 | 0.1919 | 0.3395 | 0.4679 | 0.3242 | 0.4477 | 0.5034 | 5.4776 | 0.4992 | 0.5456 | 0.8910 | 0.8891 |
| VirusGO | 0.7143 | 0.0794 | 0.8095 | 0.8489 | 0.6433 | 0.8077 | 0.1905 | 0.6667 | 0.0970 | 0.8706 | 0.7957 | 0.9588 |
| VirusPseAAC | 0.5714 | 0.1190 | 0.5952 | 0.6069 | 0.3846 | 0.6512 | 0.3333 | 1.0476 | 0.2143 | 0.7690 | 0.7306 | 0.9105 |
| Water-quality | 0.0094 | 0.3309 | 0.4308 | 0.6062 | 0.5023 | 0.6011 | 0.2830 | 9.0189 | 0.3237 | 0.6945 | 0.7405 | 0.7387 |
| Yahoo_Arts | 0.2039 | 0.0682 | 0.2964 | 0.3618 | 0.2176 | 0.3690 | 0.4975 | 10.1042 | 0.5819 | 0.5116 | 0.9469 | 0.9834 |
| Yahoo_Business | 0.5605 | 0.0267 | 0.7336 | 0.8245 | 0.2997 | 0.7304 | 0.0863 | 3.1679 | 0.2232 | 0.8758 | 0.8530 | 0.9939 |
| Yahoo_Computers | 0.3880 | 0.0453 | 0.4939 | 0.5610 | 0.2491 | 0.4986 | 0.3836 | 6.4578 | 0.4141 | 0.6207 | 0.8846 | 0.9834 |
| Yahoo_Education | 0.2577 | 0.0450 | 0.3332 | 0.3937 | 0.1905 | 0.4176 | 0.5140 | 8.7652 | 0.5466 | 0.5406 | 0.8911 | 0.9889 |
| Yahoo_Entertainment | 0.3468 | 0.0703 | 0.4552 | 0.5268 | 0.2868 | 0.4826 | 0.4450 | 4.2349 | 0.4056 | 0.6223 | 0.9572 | 0.9524 |
| Yahoo_Health | 0.4122 | 0.0410 | 0.5656 | 0.6465 | 0.2422 | 0.5843 | 0.3081 | 6.5319 | 0.3443 | 0.6936 | 0.8333 | 0.9819 |
| Yahoo_Recreation | 0.2240 | 0.0689 | 0.3075 | 0.3712 | 0.3185 | 0.3935 | 0.5096 | 6.4841 | 0.5455 | 0.5636 | 0.9687 | 0.9625 |
| Yahoo_Reference | 0.4589 | 0.0320 | 0.5259 | 0.5749 | 0.1817 | 0.5374 | 0.3837 | 5.3621 | 0.4182 | 0.6548 | 0.8063 | 0.9953 |
| Yahoo_Science | 0.2012 | 0.0418 | 0.2505 | 0.2954 | 0.1600 | 0.3141 | 0.6288 | 13.7488 | 0.6577 | 0.4089 | 0.9432 | 0.9847 |
| Yahoo_Social | 0.4582 | 0.0296 | 0.5449 | 0.5839 | 0.1745 | 0.5435 | 0.3718 | 7.4742 | 0.3944 | 0.6362 | 0.8996 | 0.9897 |
| Yahoo_Society | 0.3228 | 0.0787 | 0.4338 | 0.5632 | 0.2117 | 0.4725 | 0.3837 | 8.3281 | 0.4794 | 0.6040 | 0.9383 | 0.9784 |
| yeast | 0.1929 | 0.2094 | 0.5606 | 0.6799 | 0.4421 | 0.6838 | 0.2549 | 6.2481 | 0.2366 | 0.7633 | 0.8271 | 0.8940 |
| Yelp | 0.3938 | 0.1944 | 0.6392 | 0.7473 | 0.6775 | 0.7300 | 0.2283 | 1.3998 | 0.2399 | 0.8495 | 0.8758 | 0.8987 |

Table 173: Detailed results for Massive (n = 10) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0000 | 0.1245 | 0.2168 | 0.3232 | 0.5836 | 0.3407 | 0.5202 | 4.6966 | 0.4794 | 0.5677 | 0.9953 | 0.9940 |
| 3s-bbc1000 | 0.0000 | 0.4815 | 0.1968 | 0.2922 | 0.2211 | 0.2973 | 0.7778 | 2.9722 | 0.6966 | 0.4258 | 0.8285 | 0.7552 |
| 3s-guardian1000 | 0.0968 | 0.2796 | 0.3226 | 0.4219 | 0.2236 | 0.4222 | 0.5161 | 2.0645 | 0.4653 | 0.6207 | 0.8523 | 0.8341 |
| 3s-inter3000 | 0.0000 | 0.6569 | 0.2118 | 0.3495 | 0.2829 | 0.3495 | 0.9412 | 2.4706 | 0.7647 | 0.3882 | 0.5254 | 0.7235 |
| 3s-reuters1000 | 0.1000 | 0.3389 | 0.1333 | 0.1481 | 0.1074 | 0.1408 | 0.9000 | 2.6333 | 0.8467 | 0.3756 | 0.8903 | 0.7872 |
| amphibians | 0.0556 | 0.2460 | 0.5528 | 0.7712 | 0.4252 | 0.7103 | 0.3333 | 2.5000 | 0.1361 | 0.8194 | 0.7703 | 0.7966 |
| bibtex | 0.0000 | 0.8073 | 0.0160 | 0.0315 | 0.0643 | 0.0315 | 0.9068 | 94.1081 | 0.9631 | 0.0784 | 0.9997 | 0.9996 |
| birds | 0.0000 | 0.1606 | 0.1973 | 0.3125 | 0.1824 | 0.3121 | 0.6667 | 9.0256 | 0.7372 | 0.3936 | 0.8834 | 0.9844 |
| bookmarks10% | 0.0000 | 0.8378 | 0.0108 | 0.0213 | 0.0321 | 0.0213 | 0.9920 | 129.2346 | 0.9978 | 0.0334 | 0.9855 | 1.0000 |
| CAL500 | 0.0000 | 0.7476 | 0.1610 | 0.2771 | 0.2192 | 0.2772 | 0.3922 | 151.5686 | 0.9757 | 0.2776 | 0.8897 | 0.9966 |
| corel16k001 | 0.0000 | 0.8327 | 0.0211 | 0.0412 | 0.0389 | 0.0413 | 0.9898 | 119.6906 | 0.9991 | 0.0357 | 1.0000 | 1.0000 |
| Corel5k | 0.0000 | 0.9585 | 0.0097 | 0.0193 | 0.0177 | 0.0193 | 0.9880 | 169.6220 | 1.0000 | 0.1096 | 0.6791 | 1.0000 |
| delicious | 0.0062 | 0.0472 | 0.1297 | 0.2356 | 0.0941 | 0.2376 | 0.5523 | 906.3327 | 0.8480 | 0.1609 | 0.9928 | 1.0000 |
| emotions | 0.3167 | 0.2194 | 0.5742 | 0.6821 | 0.6727 | 0.6776 | 0.4167 | 1.7833 | 0.2842 | 0.7569 | 0.8787 | 0.8815 |
| enron | 0.0000 | 0.5557 | 0.0868 | 0.1603 | 0.1121 | 0.1598 | 0.6140 | 31.0994 | 0.8093 | 0.3040 | 0.8467 | 0.9953 |
| EukaryoteGO | 0.0000 | 0.1955 | 0.1968 | 0.3254 | 0.5436 | 0.3260 | 0.2642 | 2.8827 | 0.1935 | 0.7834 | 0.9962 | 0.9950 |
| EukaryotePseAAC | 0.0000 | 0.2191 | 0.1385 | 0.2254 | 0.0835 | 0.2267 | 0.9459 | 10.6602 | 0.9505 | 0.1867 | 0.9991 | 0.9991 |
| flags | 0.2000 | 0.2500 | 0.6117 | 0.7297 | 0.5709 | 0.7368 | 0.3500 | 3.5500 | 0.3358 | 0.7774 | 0.7902 | 0.8252 |
| foodtruck | 0.0244 | 0.1850 | 0.3723 | 0.5487 | 0.1341 | 0.5027 | 0.2439 | 5.1220 | 0.5009 | 0.7000 | 0.8830 | 0.9690 |
| genbase | 0.0000 | 0.2167 | 0.1655 | 0.2841 | 0.5171 | 0.2873 | 0.1791 | 1.6567 | 0.2018 | 0.8387 | 0.6667 | 0.9995 |
| GnegativeGO | 0.9214 | 0.0134 | 0.9464 | 0.9589 | 0.8194 | 0.9492 | 0.0357 | 0.1500 | 0.0403 | 0.9732 | 0.8741 | 0.9985 |
| GnegativePseAAC | 0.7500 | 0.0509 | 0.7917 | 0.8125 | 0.5110 | 0.8041 | 0.1857 | 0.6571 | 0.1801 | 0.8670 | 0.8679 | 0.9922 |
| GpositiveGO | 0.9038 | 0.0385 | 0.9231 | 0.9327 | 0.8322 | 0.9245 | 0.0769 | 0.1731 | 0.0513 | 0.9519 | 0.9986 | 0.9971 |
| GpositivePseAAC | 0.6923 | 0.1490 | 0.7115 | 0.7210 | 0.5482 | 0.7103 | 0.2692 | 0.5962 | 0.2692 | 0.8205 | 0.9691 | 0.9675 |
| HumanGO | 0.0000 | 0.2797 | 0.2098 | 0.3423 | 0.5262 | 0.3409 | 0.4212 | 2.9871 | 0.4599 | 0.6611 | 0.9965 | 0.9940 |
| HumanPseAAC | 0.0675 | 0.1229 | 0.2945 | 0.3920 | 0.1670 | 0.3982 | 0.6688 | 4.6977 | 0.6837 | 0.4675 | 0.9774 | 0.9771 |
| Image | 0.5000 | 0.1780 | 0.6167 | 0.6766 | 0.6369 | 0.6322 | 0.3250 | 1.1100 | 0.3354 | 0.7762 | 0.9434 | 0.9437 |
| IMDB-ECC-F10% | 0.0000 | 0.3988 | 0.1096 | 0.1975 | 0.0809 | 0.1958 | 0.9528 | 15.9067 | 1.0000 | 0.1535 | 1.0000 | 1.0000 |
| IMDB-F10% | 0.0000 | 0.2787 | 0.1292 | 0.2258 | 0.0625 | 0.2214 | 0.9627 | 16.1839 | 1.0000 | 0.1562 | 1.0000 | 1.0000 |
| LLOG-F | 0.0000 | 0.6191 | 0.0212 | 0.0413 | 0.0356 | 0.0413 | 0.9180 | 36.8361 | 0.9460 | 0.1229 | 0.5995 | 0.9995 |
| mediamill10% | 0.0000 | 0.8104 | 0.0499 | 0.0951 | 0.0658 | 0.0951 | 0.9810 | 78.9976 | 0.9987 | 0.0551 | 0.8218 | 1.0000 |
| medical | 0.0000 | 0.5803 | 0.0451 | 0.0864 | 0.1588 | 0.0864 | 0.7653 | 18.4898 | 0.8164 | 0.2740 | 0.5554 | 0.9992 |
| Music | 0.2333 | 0.1861 | 0.5847 | 0.7408 | 0.7163 | 0.7243 | 0.3667 | 2.1333 | 0.2760 | 0.7516 | 0.9056 | 0.8872 |
| NUS-WIDE-bow10% | 0.0000 | 0.6096 | 0.0366 | 0.0708 | 0.0399 | 0.0707 | 0.8235 | 45.1194 | 0.9395 | 0.1668 | 0.8881 | 0.9989 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.8651 | 0.0281 | 0.0548 | 0.0435 | 0.0548 | 0.9743 | 47.6032 | 0.9998 | 0.1069 | 0.8889 | 1.0000 |
| OHSUMED-F | 0.0000 | 0.2390 | 0.1476 | 0.2497 | 0.3190 | 0.2562 | 0.4860 | 9.8658 | 0.6035 | 0.4868 | 0.9914 | 0.9919 |
| PlantGO | 0.0833 | 0.1146 | 0.4418 | 0.5805 | 0.5914 | 0.5658 | 0.3125 | 2.1146 | 0.2757 | 0.7448 | 0.9927 | 0.9877 |
| PlantPseAAC | 0.0000 | 0.2100 | 0.1718 | 0.2377 | 0.1080 | 0.2353 | 0.7755 | 4.0714 | 0.8571 | 0.3936 | 0.9933 | 0.9903 |
| rcv1subset1 | 0.0000 | 0.7493 | 0.0350 | 0.0678 | 0.0639 | 0.0677 | 0.7867 | 64.2233 | 0.9174 | 0.1586 | 0.9396 | 0.9988 |
| REUTERS-K500-EX2 | 0.0000 | 0.6903 | 0.0174 | 0.0342 | 0.0863 | 0.0342 | 0.7904 | 49.3935 | 0.8229 | 0.2318 | 0.7861 | 0.9996 |
| scene | 0.6846 | 0.0885 | 0.7344 | 0.7589 | 0.7602 | 0.7470 | 0.2199 | 1.1494 | 0.2618 | 0.8105 | 0.9839 | 0.9866 |
| sider_CDK_ECFP4 | 0.0141 | 0.2939 | 0.6235 | 0.7724 | 0.6313 | 0.7740 | 0.1761 | 23.8873 | 0.4508 | 0.6936 | 0.7406 | 0.7411 |
| sider_MordredDesc | 0.0000 | 0.3099 | 0.6101 | 0.7649 | 0.6084 | 0.7618 | 0.1479 | 23.0282 | 0.4119 | 0.7297 | 0.8628 | 0.8295 |
| sider_RDKit_desc | 0.0000 | 0.3539 | 0.5891 | 0.7455 | 0.6183 | 0.7434 | 0.3099 | 24.2746 | 0.4730 | 0.6706 | 0.9668 | 0.7666 |
| SLASHDOT-F | 0.0344 | 0.0815 | 0.2648 | 0.3584 | 0.3185 | 0.3814 | 0.5265 | 8.2328 | 0.5538 | 0.5061 | 0.7670 | 0.9927 |
| solar_flare-L3 | 0.0000 | 0.4000 | 0.4000 | 0.5333 | 0.3810 | 0.5714 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.3333 | 0.7000 |
| Stackex_chemistry | 0.0000 | 0.8290 | 0.0138 | 0.0272 | 0.0221 | 0.0272 | 0.8775 | 110.4798 | 0.9575 | 0.0941 | 0.9197 | 0.9996 |
| Stackex_chess | 0.0000 | 0.8410 | 0.0116 | 0.0230 | 0.0216 | 0.0230 | 0.9762 | 155.5655 | 0.9879 | 0.0367 | 0.5506 | 0.9999 |
| Stackex_coffee | 0.0000 | 0.7614 | 0.0205 | 0.0401 | 0.0366 | 0.0401 | 0.9130 | 78.4783 | 0.9277 | 0.0964 | 0.2596 | 0.9976 |
| Stackex_cooking | 0.0000 | 0.9245 | 0.0060 | 0.0120 | 0.0161 | 0.0120 | 0.9623 | 254.9894 | 0.9873 | 0.0336 | 0.9250 | 1.0000 |
| Stackex_philosophy | 0.0000 | 0.8840 | 0.0103 | 0.0205 | 0.0225 | 0.0205 | 0.9673 | 153.6055 | 0.9914 | 0.0307 | 0.7510 | 0.9999 |
| tmc2007-500 | 0.0000 | 0.3480 | 0.1795 | 0.3046 | 0.4192 | 0.3043 | 0.4640 | 7.4143 | 0.6634 | 0.5629 | 0.9936 | 0.9909 |
| tox21_CDK_ECFP4 | 0.1336 | 0.1689 | 0.3006 | 0.3875 | 0.3402 | 0.4104 | 0.5205 | 6.1027 | 0.6696 | 0.4958 | 0.9500 | 0.9512 |
| tox21_RDKit_desc | 0.0034 | 0.3039 | 0.2690 | 0.4259 | 0.2497 | 0.4171 | 0.6370 | 6.6370 | 0.8089 | 0.4094 | 0.9826 | 0.9801 |
| VirusGO | 0.7143 | 0.0794 | 0.7937 | 0.8410 | 0.6034 | 0.7917 | 0.0952 | 0.9524 | 0.1841 | 0.8825 | 0.8215 | 0.9834 |
| VirusPseAAC | 0.4286 | 0.1667 | 0.5000 | 0.5354 | 0.2760 | 0.5333 | 0.3333 | 1.2381 | 0.3190 | 0.7444 | 0.7395 | 0.9249 |
| Water-quality | 0.0000 | 0.4845 | 0.3967 | 0.5678 | 0.4879 | 0.5676 | 0.4151 | 10.7264 | 0.7104 | 0.5814 | 0.9031 | 0.8913 |
| Yahoo_Arts | 0.0000 | 0.5279 | 0.0985 | 0.1797 | 0.1293 | 0.1793 | 0.6636 | 13.6903 | 0.9002 | 0.3479 | 0.9586 | 0.9971 |
| Yahoo_Business | 0.0000 | 0.3007 | 0.1301 | 0.2320 | 0.1678 | 0.2299 | 0.1159 | 3.7736 | 0.2733 | 0.8584 | 0.8618 | 0.9968 |
| Yahoo_Computers | 0.0000 | 0.4039 | 0.0794 | 0.1490 | 0.1733 | 0.1484 | 0.4241 | 7.8956 | 0.5445 | 0.5464 | 0.9048 | 0.9923 |
| Yahoo_Education | 0.0000 | 0.5103 | 0.0724 | 0.1351 | 0.0945 | 0.1349 | 0.7606 | 11.0848 | 0.8913 | 0.3676 | 0.9071 | 0.9980 |
| Yahoo_Entertainment | 0.0000 | 0.2359 | 0.1511 | 0.2598 | 0.1922 | 0.2599 | 0.7738 | 5.4179 | 0.8135 | 0.4060 | 0.9963 | 0.9964 |
| Yahoo_Health | 0.0000 | 0.5241 | 0.0805 | 0.1493 | 0.1186 | 0.1490 | 0.4321 | 8.7003 | 0.5389 | 0.5705 | 0.8367 | 0.9894 |
| Yahoo_Recreation | 0.0000 | 0.2773 | 0.1193 | 0.2069 | 0.2008 | 0.2053 | 0.6586 | 8.6235 | 0.7955 | 0.4278 | 0.9935 | 0.9937 |
| Yahoo_Reference | 0.0000 | 0.2033 | 0.1102 | 0.1941 | 0.1204 | 0.1935 | 0.4894 | 6.8854 | 0.5371 | 0.5660 | 0.8140 | 0.9942 |
| Yahoo_Science | 0.0000 | 0.4830 | 0.0544 | 0.1028 | 0.0811 | 0.1024 | 0.8802 | 16.8631 | 0.9280 | 0.2291 | 0.9730 | 0.9979 |
| Yahoo_Social | 0.0000 | 0.3150 | 0.0771 | 0.1428 | 0.0849 | 0.1420 | 0.7781 | 11.8548 | 0.8189 | 0.2947 | 0.9224 | 0.9990 |
| Yahoo_Society | 0.0000 | 0.4545 | 0.0924 | 0.1696 | 0.1151 | 0.1688 | 0.5110 | 10.1136 | 0.6278 | 0.4871 | 0.9558 | 0.9911 |
| yeast | 0.0950 | 0.2258 | 0.5132 | 0.6562 | 0.3771 | 0.6450 | 0.2975 | 6.5083 | 0.4370 | 0.7296 | 0.8980 | 0.9199 |
| Yelp | 0.1984 | 0.2668 | 0.5426 | 0.6792 | 0.6380 | 0.6796 | 0.2981 | 1.7149 | 0.4752 | 0.7810 | 0.9177 | 0.9236 |

Table 174: Detailed results for Massive (n = 100) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.4227 | 0.0369 | 0.5400 | 0.6005 | 0.6535 | 0.6525 | 0.3470 | 3.0586 | 0.2959 | 0.7197 | 0.9879 | 0.9881 |
| 3s-bbc1000 | 0.0556 | 0.3657 | 0.2157 | 0.3197 | 0.2809 | 0.3130 | 0.7500 | 2.9167 | 0.6789 | 0.4363 | 0.7907 | 0.7402 |
| 3s-guardian1000 | 0.0968 | 0.2742 | 0.2177 | 0.2867 | 0.2352 | 0.3200 | 0.4839 | 2.0645 | 0.4734 | 0.6245 | 0.7752 | 0.7966 |
| 3s-inter3000 | 0.0000 | 0.5588 | 0.2353 | 0.3765 | 0.3162 | 0.3736 | 0.9412 | 2.4118 | 0.7647 | 0.3775 | 0.5705 | 0.7401 |
| 3s-reuters1000 | 0.0667 | 0.3389 | 0.1361 | 0.1719 | 0.1952 | 0.1867 | 0.9000 | 2.7000 | 0.8067 | 0.3683 | 0.8374 | 0.7614 |
| amphibians | 0.1111 | 0.3016 | 0.5462 | 0.7494 | 0.6242 | 0.6984 | 0.3333 | 2.5556 | 0.1417 | 0.8176 | 0.7291 | 0.7912 |
| bibtex | 0.0000 | 0.0853 | 0.0621 | 0.1160 | 0.2647 | 0.1201 | 0.4703 | 79.2878 | 0.6467 | 0.3720 | 0.9987 | 0.9987 |
| birds | 0.1538 | 0.0904 | 0.3477 | 0.4439 | 0.3433 | 0.4724 | 0.5128 | 7.9231 | 0.5622 | 0.5131 | 0.8679 | 0.9664 |
| bookmarks10% | 0.0000 | 0.2099 | 0.0184 | 0.0365 | 0.0692 | 0.0364 | 0.8394 | 120.1503 | 0.8640 | 0.1586 | 0.9852 | 0.9996 |
| CAL500 | 0.0000 | 0.3538 | 0.2429 | 0.3905 | 0.1684 | 0.3905 | 0.3922 | 151.0588 | 0.7223 | 0.3863 | 0.8552 | 0.9634 |
| corel16k001 | 0.0000 | 0.2308 | 0.0486 | 0.0920 | 0.0273 | 0.0919 | 0.9651 | 118.8388 | 0.9872 | 0.0475 | 0.9998 | 0.9998 |
| Corel5k | 0.0000 | 0.4412 | 0.0167 | 0.0328 | 0.0193 | 0.0328 | 0.9040 | 168.3040 | 0.9711 | 0.1336 | 0.6791 | 0.9999 |
| delicious | 0.0000 | 0.0461 | 0.1388 | 0.2396 | 0.0889 | 0.2443 | 0.5465 | 907.7559 | 0.8430 | 0.1508 | 0.9820 | 0.9845 |
| emotions | 0.2167 | 0.2306 | 0.5458 | 0.6868 | 0.6625 | 0.6719 | 0.2833 | 1.8000 | 0.2357 | 0.8042 | 0.8622 | 0.8799 |
| enron | 0.1871 | 0.0500 | 0.4731 | 0.5994 | 0.1373 | 0.5794 | 0.2515 | 27.3216 | 0.4446 | 0.5707 | 0.8320 | 0.9853 |
| EukaryoteGO | 0.6637 | 0.0206 | 0.7927 | 0.8550 | 0.7250 | 0.8220 | 0.1843 | 1.0490 | 0.0678 | 0.8790 | 0.9931 | 0.9947 |
| EukaryotePseAAC | 0.1120 | 0.0748 | 0.3032 | 0.3956 | 0.1173 | 0.4043 | 0.6692 | 7.6692 | 0.6666 | 0.4124 | 0.9829 | 0.9848 |
| flags | 0.2500 | 0.2429 | 0.6402 | 0.7547 | 0.6074 | 0.7536 | 0.2500 | 3.7000 | 0.2600 | 0.7788 | 0.7030 | 0.7991 |
| foodtruck | 0.2683 | 0.1585 | 0.4499 | 0.5959 | 0.1416 | 0.4935 | 0.2439 | 4.6098 | 0.4507 | 0.7172 | 0.8552 | 0.9574 |
| genbase | 0.9701 | 0.0017 | 0.9851 | 0.9925 | 0.6515 | 0.9818 | 0.0149 | 0.2537 | 0.0012 | 0.9876 | 0.6667 | 0.9997 |
| GnegativeGO | 0.9286 | 0.0116 | 0.9536 | 0.9661 | 0.8262 | 0.9556 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8737 | 0.9980 |
| GnegativePseAAC | 0.7357 | 0.0571 | 0.7810 | 0.8035 | 0.4807 | 0.7852 | 0.2000 | 0.6286 | 0.1566 | 0.8650 | 0.8582 | 0.9864 |
| GpositiveGO | 0.9038 | 0.0288 | 0.9423 | 0.9612 | 0.8836 | 0.9455 | 0.0577 | 0.1154 | 0.0321 | 0.9663 | 0.9979 | 0.9977 |
| GpositivePseAAC | 0.7308 | 0.1346 | 0.7308 | 0.7308 | 0.5662 | 0.7308 | 0.2692 | 0.5385 | 0.2436 | 0.8301 | 0.9697 | 0.9643 |
| HumanGO | 0.6367 | 0.0388 | 0.7663 | 0.8286 | 0.7031 | 0.7847 | 0.1736 | 1.1833 | 0.1231 | 0.8713 | 0.9862 | 0.9894 |
| HumanPseAAC | 0.3023 | 0.0981 | 0.4196 | 0.4763 | 0.2008 | 0.4574 | 0.5498 | 3.8006 | 0.5018 | 0.5608 | 0.9582 | 0.9601 |
| Image | 0.3750 | 0.2090 | 0.5700 | 0.6658 | 0.6147 | 0.6079 | 0.3350 | 1.1350 | 0.2988 | 0.7691 | 0.9138 | 0.9125 |
| IMDB-ECC-F10% | 0.0000 | 0.2679 | 0.1411 | 0.2428 | 0.0861 | 0.2430 | 0.8396 | 14.7568 | 0.9167 | 0.2271 | 0.9923 | 0.9929 |
| IMDB-F10% | 0.0041 | 0.1146 | 0.2481 | 0.3722 | 0.0568 | 0.3627 | 0.9561 | 16.1466 | 0.9952 | 0.1603 | 0.9997 | 0.9997 |
| LLOG-F | 0.1721 | 0.0158 | 0.2015 | 0.2187 | 0.0543 | 0.2927 | 0.7459 | 29.1885 | 0.7944 | 0.2699 | 0.5990 | 0.9989 |
| mediamill10% | 0.0000 | 0.0561 | 0.2999 | 0.4662 | 0.0486 | 0.4416 | 0.2708 | 60.8860 | 0.4824 | 0.5088 | 0.8117 | 0.9937 |
| medical | 0.6429 | 0.0102 | 0.7509 | 0.8017 | 0.3399 | 0.8207 | 0.1837 | 5.5000 | 0.1638 | 0.8210 | 0.5530 | 0.9976 |
| Music | 0.2500 | 0.1917 | 0.5861 | 0.7361 | 0.7229 | 0.7229 | 0.3333 | 2.1833 | 0.2759 | 0.7598 | 0.8941 | 0.8919 |
| NUS-WIDE-bow10% | 0.0000 | 0.0991 | 0.0871 | 0.1591 | 0.0445 | 0.1594 | 0.5467 | 34.7292 | 0.5971 | 0.4359 | 0.8851 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.0627 | 0.1792 | 0.3062 | 0.0348 | 0.2968 | 0.6284 | 38.2526 | 0.7062 | 0.3598 | 0.8846 | 0.9955 |
| OHSUMED-F | 0.2154 | 0.0606 | 0.4254 | 0.5374 | 0.4168 | 0.5542 | 0.3877 | 8.3424 | 0.4620 | 0.5806 | 0.9807 | 0.9828 |
| PlantGO | 0.6979 | 0.0391 | 0.7708 | 0.8051 | 0.6709 | 0.7945 | 0.2083 | 0.9583 | 0.1019 | 0.8623 | 0.9917 | 0.9885 |
| PlantPseAAC | 0.2755 | 0.1131 | 0.3818 | 0.4412 | 0.2248 | 0.4340 | 0.6020 | 3.1633 | 0.5313 | 0.5419 | 0.9519 | 0.9449 |
| rcv1subset1 | 0.1004 | 0.0319 | 0.3561 | 0.4861 | 0.2593 | 0.4792 | 0.4409 | 37.8414 | 0.4268 | 0.4996 | 0.9204 | 0.9826 |
| REUTERS-K500-EX2 | 0.0000 | 0.0297 | 0.1576 | 0.2397 | 0.2202 | 0.2624 | 0.5893 | 37.2990 | 0.6163 | 0.4182 | 0.7851 | 0.9985 |
| scene | 0.5602 | 0.1024 | 0.7033 | 0.7741 | 0.7579 | 0.7394 | 0.2199 | 0.8382 | 0.1722 | 0.8392 | 0.9625 | 0.9674 |
| sider_CDK_ECFP4 | 0.0211 | 0.2410 | 0.6487 | 0.7971 | 0.6236 | 0.7964 | 0.3099 | 19.6338 | 0.2159 | 0.7439 | 0.6043 | 0.7570 |
| sider_MordredDesc | 0.0211 | 0.2647 | 0.6371 | 0.7879 | 0.6137 | 0.7862 | 0.2817 | 19.9155 | 0.2078 | 0.7740 | 0.6258 | 0.7676 |
| sider_RDKit_desc | 0.0141 | 0.2788 | 0.6312 | 0.7825 | 0.6017 | 0.7784 | 0.1127 | 19.6338 | 0.1867 | 0.7947 | 0.6096 | 0.7729 |
| SLASHDOT-F | 0.3836 | 0.0417 | 0.4741 | 0.5227 | 0.3452 | 0.5700 | 0.4630 | 7.0450 | 0.4732 | 0.5689 | 0.7620 | 0.9885 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.6667 | 0.8200 |
| Stackex_chemistry | 0.0000 | 0.1556 | 0.0364 | 0.0699 | 0.0472 | 0.0698 | 0.8689 | 110.8444 | 0.9406 | 0.0992 | 0.9194 | 0.9994 |
| Stackex_chess | 0.0000 | 0.2333 | 0.0244 | 0.0475 | 0.0445 | 0.0475 | 0.7381 | 143.8690 | 0.8489 | 0.1607 | 0.5499 | 0.9990 |
| Stackex_coffee | 0.0000 | 0.0961 | 0.0331 | 0.0623 | 0.0178 | 0.0621 | 0.9130 | 81.3478 | 0.9638 | 0.0712 | 0.2594 | 0.9969 |
| Stackex_cooking | 0.0000 | 0.4184 | 0.0093 | 0.0184 | 0.0479 | 0.0184 | 0.8174 | 245.1372 | 0.8975 | 0.1185 | 0.9248 | 0.9997 |
| Stackex_philosophy | 0.0000 | 0.2639 | 0.0231 | 0.0451 | 0.0397 | 0.0450 | 0.7462 | 138.3894 | 0.8311 | 0.1787 | 0.7503 | 0.9992 |
| tmc2007-500 | 0.2531 | 0.0689 | 0.5685 | 0.7137 | 0.5883 | 0.6786 | 0.2650 | 4.9643 | 0.2217 | 0.7460 | 0.9657 | 0.9747 |
| tox21_CDK_ECFP4 | 0.1301 | 0.1849 | 0.3489 | 0.4626 | 0.3832 | 0.4600 | 0.4692 | 5.6164 | 0.5511 | 0.5527 | 0.9208 | 0.9229 |
| tox21_RDKit_desc | 0.0171 | 0.2420 | 0.2897 | 0.4429 | 0.3068 | 0.4301 | 0.4966 | 5.7637 | 0.5885 | 0.5323 | 0.9216 | 0.9252 |
| VirusGO | 0.7619 | 0.0635 | 0.8333 | 0.8611 | 0.6711 | 0.8400 | 0.1905 | 0.6190 | 0.0934 | 0.8825 | 0.8003 | 0.9576 |
| VirusPseAAC | 0.2381 | 0.1429 | 0.5159 | 0.6399 | 0.3939 | 0.6667 | 0.3333 | 1.0000 | 0.2238 | 0.7706 | 0.7484 | 0.9202 |
| Water-quality | 0.0000 | 0.3383 | 0.4280 | 0.6015 | 0.4880 | 0.5952 | 0.2453 | 9.5849 | 0.4220 | 0.6916 | 0.8159 | 0.8141 |
| Yahoo_Arts | 0.1242 | 0.0875 | 0.2564 | 0.3405 | 0.1697 | 0.3151 | 0.5861 | 12.1015 | 0.7705 | 0.4212 | 0.9478 | 0.9868 |
| Yahoo_Business | 0.5526 | 0.0279 | 0.7168 | 0.8096 | 0.3150 | 0.7139 | 0.1132 | 3.3431 | 0.2390 | 0.8720 | 0.8583 | 0.9955 |
| Yahoo_Computers | 0.3768 | 0.0465 | 0.4905 | 0.5771 | 0.2355 | 0.4925 | 0.3789 | 6.5257 | 0.4168 | 0.6171 | 0.8791 | 0.9704 |
| Yahoo_Education | 0.0000 | 0.1524 | 0.1239 | 0.2071 | 0.1461 | 0.2043 | 0.9426 | 8.9241 | 0.2222 | 0.3113 | 0.5572 | 0.7335 |
| Yahoo_Entertainment | 0.3253 | 0.0794 | 0.4488 | 0.5247 | 0.2796 | 0.4607 | 0.4325 | 4.2743 | 0.4082 | 0.6299 | 0.9563 | 0.9655 |
| Yahoo_Health | 0.3969 | 0.0418 | 0.5578 | 0.6465 | 0.2397 | 0.5856 | 0.3148 | 6.4604 | 0.3505 | 0.6871 | 0.8233 | 0.9865 |
| Yahoo_Recreation | 0.2154 | 0.0743 | 0.2961 | 0.3603 | 0.3013 | 0.3780 | 0.5148 | 6.5606 | 0.5600 | 0.5575 | 0.9666 | 0.9557 |
| Yahoo_Reference | 0.0025 | 0.1085 | 0.1242 | 0.1997 | 0.1314 | 0.2016 | 0.7614 | 9.6286 | 0.2699 | 0.3753 | 0.6103 | 0.7271 |
| Yahoo_Science | 0.1336 | 0.0551 | 0.3104 | 0.4155 | 0.2404 | 0.3731 | 0.5981 | 6.1451 | 0.1147 | 0.5286 | 0.7459 | 0.8758 |
| Yahoo_Social | 0.4563 | 0.0304 | 0.5406 | 0.5941 | 0.1791 | 0.5315 | 0.3743 | 7.5557 | 0.3859 | 0.6411 | 0.9056 | 0.9882 |
| Yahoo_Society | 0.3256 | 0.0700 | 0.4440 | 0.5489 | 0.2216 | 0.4698 | 0.3820 | 8.3482 | 0.4648 | 0.5987 | 0.9324 | 0.9941 |
| yeast | 0.1240 | 0.2267 | 0.5458 | 0.6897 | 0.4452 | 0.6724 | 0.2603 | 6.1653 | 0.2550 | 0.7493 | 0.8394 | 0.8905 |
| Yelp | 0.3639 | 0.2082 | 0.6311 | 0.7521 | 0.6719 | 0.7251 | 0.2014 | 1.3988 | 0.2372 | 0.8603 | 0.8816 | 0.9026 |

Table 175: Detailed results for Massive (n = 1000) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5073 | 0.0343 | 0.6156 | 0.6735 | 0.6889 | 0.6882 | 0.3013 | 2.4969 | 0.2422 | 0.7602 | 0.9904 | 0.9906 |
| 3s-bbc1000 | 0.1389 | 0.3380 | 0.2713 | 0.3648 | 0.3118 | 0.3423 | 0.6667 | 2.5833 | 0.6088 | 0.5056 | 0.8222 | 0.7771 |
| 3s-guardian1000 | 0.1935 | 0.2957 | 0.3086 | 0.3780 | 0.2560 | 0.3529 | 0.4839 | 2.0968 | 0.4790 | 0.6263 | 0.8581 | 0.8556 |
| 3s-inter3000 | 0.0000 | 0.5490 | 0.2382 | 0.3802 | 0.3281 | 0.3778 | 0.8824 | 2.1765 | 0.5662 | 0.4343 | 0.5299 | 0.7070 |
| 3s-reuters1000 | 0.0667 | 0.3667 | 0.0944 | 0.1106 | 0.1006 | 0.1081 | 0.9333 | 2.6667 | 0.7800 | 0.3594 | 0.7991 | 0.7331 |
| amphibians | 0.1111 | 0.2460 | 0.6054 | 0.7847 | 0.6087 | 0.7520 | 0.2222 | 2.5000 | 0.1111 | 0.8593 | 0.7629 | 0.8205 |
| bibtex | 0.1878 | 0.0120 | 0.3724 | 0.4665 | 0.3332 | 0.4902 | 0.4392 | 72.0892 | 0.5734 | 0.4287 | 0.9977 | 0.9977 |
| birds | 0.1282 | 0.1147 | 0.3319 | 0.4455 | 0.3492 | 0.4295 | 0.5385 | 7.3846 | 0.5038 | 0.4965 | 0.8445 | 0.9413 |
| bookmarks10% | 0.1891 | 0.0088 | 0.2195 | 0.2428 | 0.1118 | 0.2655 | 0.7369 | 105.1412 | 0.7645 | 0.2550 | 0.9850 | 0.9994 |
| CAL500 | 0.0000 | 0.2107 | 0.3182 | 0.4805 | 0.1465 | 0.4806 | 0.3333 | 151.1176 | 0.5655 | 0.4423 | 0.8160 | 0.9335 |
| corel16k001 | 0.0000 | 0.0457 | 0.1311 | 0.2193 | 0.0336 | 0.2188 | 0.9477 | 117.8010 | 0.9764 | 0.0577 | 0.9996 | 0.9996 |
| Corel5k | 0.0000 | 0.0180 | 0.1384 | 0.2248 | 0.0274 | 0.2291 | 0.8480 | 163.0860 | 0.9351 | 0.1636 | 0.6789 | 0.9997 |
| delicious | 0.0000 | 0.0454 | 0.1387 | 0.2427 | 0.0890 | 0.2440 | 0.5482 | 906.3238 | 0.8450 | 0.1516 | 0.9927 | 0.9977 |
| emotions | 0.3500 | 0.1944 | 0.6083 | 0.7347 | 0.7020 | 0.7107 | 0.2667 | 1.8833 | 0.2536 | 0.7939 | 0.8879 | 0.8955 |
| enron | 0.1462 | 0.0521 | 0.4796 | 0.6192 | 0.1782 | 0.5931 | 0.3216 | 24.1345 | 0.3680 | 0.6036 | 0.8249 | 0.9804 |
| EukaryoteGO | 0.6611 | 0.0203 | 0.7960 | 0.8596 | 0.7575 | 0.8256 | 0.1688 | 0.8789 | 0.0524 | 0.8922 | 0.9933 | 0.9950 |
| EukaryotePseAAC | 0.1197 | 0.0737 | 0.3373 | 0.4379 | 0.1469 | 0.4392 | 0.5393 | 6.2780 | 0.5101 | 0.5224 | 0.9749 | 0.9775 |
| flags | 0.3000 | 0.2214 | 0.6652 | 0.7813 | 0.6339 | 0.7737 | 0.3500 | 3.7000 | 0.3083 | 0.7649 | 0.7336 | 0.8218 |
| foodtruck | 0.2927 | 0.1585 | 0.4539 | 0.5830 | 0.1349 | 0.4868 | 0.2439 | 4.4390 | 0.4435 | 0.7207 | 0.8560 | 0.9574 |
| genbase | 0.9701 | 0.0011 | 0.9876 | 0.9937 | 0.6543 | 0.9878 | 0.0149 | 0.2388 | 0.0009 | 0.9913 | 0.6667 | 0.9998 |
| GnegativeGO | 0.9214 | 0.0116 | 0.9536 | 0.9696 | 0.8268 | 0.9562 | 0.0357 | 0.1071 | 0.0209 | 0.9786 | 0.8738 | 0.9980 |
| GnegativePseAAC | 0.7714 | 0.0500 | 0.8131 | 0.8339 | 0.5033 | 0.8121 | 0.1857 | 0.6143 | 0.1470 | 0.8736 | 0.8635 | 0.9905 |
| GpositiveGO | 0.8846 | 0.0433 | 0.9135 | 0.9279 | 0.8559 | 0.9159 | 0.0962 | 0.1538 | 0.0449 | 0.9471 | 0.9956 | 0.9948 |
| GpositivePseAAC | 0.7308 | 0.1202 | 0.7500 | 0.7595 | 0.5833 | 0.7619 | 0.2692 | 0.5192 | 0.2436 | 0.8317 | 0.9841 | 0.9758 |
| HumanGO | 0.6431 | 0.0395 | 0.7618 | 0.8213 | 0.6965 | 0.7795 | 0.1576 | 1.0772 | 0.1016 | 0.8830 | 0.9848 | 0.9884 |
| HumanPseAAC | 0.2990 | 0.0994 | 0.4113 | 0.4678 | 0.1923 | 0.4470 | 0.5338 | 3.3859 | 0.4777 | 0.5839 | 0.9532 | 0.9541 |
| Image | 0.4300 | 0.1890 | 0.6025 | 0.6876 | 0.6468 | 0.6358 | 0.3100 | 1.0150 | 0.2821 | 0.7955 | 0.9331 | 0.9294 |
| IMDB-ECC-F10% | 0.0000 | 0.2672 | 0.1409 | 0.2428 | 0.0922 | 0.2429 | 0.6331 | 12.3302 | 0.7315 | 0.3754 | 0.9885 | 0.9751 |
| IMDB-F10% | 0.0000 | 0.2650 | 0.1544 | 0.2628 | 0.0951 | 0.2629 | 0.5915 | 12.6819 | 0.7184 | 0.3855 | 0.9861 | 0.9746 |
| LLOG-F | 0.1639 | 0.0168 | 0.1960 | 0.2166 | 0.0521 | 0.2870 | 0.7459 | 28.7131 | 0.7876 | 0.2742 | 0.5981 | 0.9978 |
| mediamill10% | 0.0736 | 0.0303 | 0.4723 | 0.6362 | 0.0895 | 0.5932 | 0.2518 | 58.7981 | 0.4434 | 0.5418 | 0.8127 | 0.9937 |
| medical | 0.6633 | 0.0107 | 0.7772 | 0.8345 | 0.3051 | 0.8185 | 0.1837 | 5.0204 | 0.1331 | 0.8342 | 0.5526 | 0.9976 |
| Music | 0.2833 | 0.1833 | 0.6069 | 0.7414 | 0.7343 | 0.7360 | 0.1667 | 2.0167 | 0.2562 | 0.8273 | 0.9145 | 0.9069 |
| NUS-WIDE-bow10% | 0.1461 | 0.0278 | 0.3165 | 0.4124 | 0.0537 | 0.3977 | 0.5352 | 34.7835 | 0.6043 | 0.4269 | 0.8803 | 0.9915 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0379 | 0.2690 | 0.4005 | 0.0571 | 0.3850 | 0.5595 | 35.5385 | 0.6571 | 0.4051 | 0.8836 | 0.9950 |
| OHSUMED-F | 0.2283 | 0.0584 | 0.4432 | 0.5542 | 0.4509 | 0.5682 | 0.3553 | 7.6892 | 0.4133 | 0.6154 | 0.9768 | 0.9798 |
| PlantGO | 0.6979 | 0.0399 | 0.7708 | 0.8051 | 0.6695 | 0.7909 | 0.2188 | 1.0833 | 0.1077 | 0.8501 | 0.9884 | 0.9843 |
| PlantPseAAC | 0.2449 | 0.1190 | 0.3520 | 0.4103 | 0.2173 | 0.4017 | 0.6122 | 3.1939 | 0.4989 | 0.5367 | 0.9410 | 0.9333 |
| rcv1subset1 | 0.1017 | 0.0315 | 0.3605 | 0.4876 | 0.2623 | 0.4817 | 0.4417 | 37.7800 | 0.4218 | 0.5022 | 0.9263 | 0.9868 |
| REUTERS-K500-EX2 | 0.3299 | 0.0119 | 0.4133 | 0.4631 | 0.2446 | 0.5007 | 0.5069 | 32.3299 | 0.5319 | 0.4912 | 0.7839 | 0.9972 |
| scene | 0.6017 | 0.0927 | 0.7358 | 0.8025 | 0.7777 | 0.7633 | 0.2033 | 0.8008 | 0.1622 | 0.8503 | 0.9707 | 0.9737 |
| sider_CDK_ECFP4 | 0.0070 | 0.2483 | 0.6479 | 0.7960 | 0.6241 | 0.7941 | 0.2746 | 19.3592 | 0.1585 | 0.7977 | 0.5827 | 0.7843 |
| sider_MordredDesc | 0.0141 | 0.2640 | 0.6275 | 0.7821 | 0.6158 | 0.7825 | 0.3169 | 19.7042 | 0.2028 | 0.7524 | 0.5873 | 0.7476 |
| sider_RDKit_desc | 0.0141 | 0.2799 | 0.6305 | 0.7822 | 0.6049 | 0.7774 | 0.2676 | 20.0986 | 0.2221 | 0.7267 | 0.5809 | 0.7340 |
| SLASHDOT-F | 0.4101 | 0.0417 | 0.5202 | 0.5802 | 0.3992 | 0.5988 | 0.3968 | 5.3624 | 0.3521 | 0.6489 | 0.7560 | 0.9830 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.5000 | 0.6154 | 0.4127 | 0.6154 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0115 | 0.0200 | 0.1366 | 0.2100 | 0.0677 | 0.2109 | 0.7896 | 105.6110 | 0.8749 | 0.1556 | 0.9188 | 0.9988 |
| Stackex_chess | 0.0357 | 0.0105 | 0.1515 | 0.2163 | 0.0532 | 0.2701 | 0.6786 | 137.8869 | 0.8103 | 0.2021 | 0.5491 | 0.9981 |
| Stackex_coffee | 0.0000 | 0.0212 | 0.0543 | 0.0915 | 0.0159 | 0.1176 | 0.7826 | 73.7826 | 0.8377 | 0.1619 | 0.2559 | 0.9893 |
| Stackex_cooking | 0.0647 | 0.0052 | 0.2029 | 0.2744 | 0.1115 | 0.3209 | 0.6357 | 222.6213 | 0.7694 | 0.2353 | 0.9244 | 0.9993 |
| Stackex_philosophy | 0.0528 | 0.0123 | 0.1935 | 0.2790 | 0.0607 | 0.2690 | 0.6809 | 134.8744 | 0.7895 | 0.2165 | 0.7497 | 0.9986 |
| tmc2007-500 | 0.2469 | 0.0692 | 0.5718 | 0.7214 | 0.6052 | 0.6811 | 0.2339 | 4.0486 | 0.1445 | 0.7875 | 0.9592 | 0.9703 |
| tox21_CDK_ECFP4 | 0.1233 | 0.1889 | 0.3505 | 0.4726 | 0.3904 | 0.4635 | 0.4658 | 5.3493 | 0.4885 | 0.5701 | 0.8999 | 0.9008 |
| tox21_RDKit_desc | 0.1164 | 0.1924 | 0.3413 | 0.4716 | 0.3280 | 0.4484 | 0.5000 | 5.5137 | 0.5053 | 0.5543 | 0.9018 | 0.9030 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7045 | 0.8627 | 0.0952 | 0.5714 | 0.0779 | 0.9183 | 0.7926 | 0.9632 |
| VirusPseAAC | 0.3810 | 0.1429 | 0.5635 | 0.6494 | 0.3709 | 0.6400 | 0.2857 | 0.8571 | 0.2048 | 0.8048 | 0.7459 | 0.9253 |
| Water-quality | 0.0000 | 0.4104 | 0.4111 | 0.5865 | 0.5203 | 0.5866 | 0.3113 | 9.1698 | 0.3628 | 0.6839 | 0.7621 | 0.7582 |
| Yahoo_Arts | 0.1909 | 0.0682 | 0.2891 | 0.3548 | 0.2100 | 0.3668 | 0.4993 | 10.0895 | 0.5572 | 0.5099 | 0.9341 | 0.9702 |
| Yahoo_Business | 0.5695 | 0.0271 | 0.7277 | 0.8179 | 0.3221 | 0.7253 | 0.0918 | 3.1720 | 0.2226 | 0.8869 | 0.8570 | 0.9953 |
| Yahoo_Computers | 0.3775 | 0.0467 | 0.4941 | 0.5761 | 0.2375 | 0.4996 | 0.3807 | 6.5020 | 0.4156 | 0.6160 | 0.8885 | 0.9814 |
| Yahoo_Education | 0.0066 | 0.0841 | 0.2406 | 0.3543 | 0.1876 | 0.3351 | 0.5619 | 9.2111 | 0.5852 | 0.5191 | 0.8868 | 0.9777 |
| Yahoo_Entertainment | 0.3244 | 0.0784 | 0.4481 | 0.5291 | 0.2814 | 0.4676 | 0.4336 | 4.2600 | 0.4063 | 0.6311 | 0.9676 | 0.9642 |
| Yahoo_Health | 0.4017 | 0.0416 | 0.5562 | 0.6456 | 0.2427 | 0.5888 | 0.3138 | 6.4365 | 0.3454 | 0.6951 | 0.8285 | 0.9848 |
| Yahoo_Recreation | 0.2167 | 0.0740 | 0.2997 | 0.3606 | 0.3024 | 0.3820 | 0.5144 | 6.4677 | 0.5596 | 0.5631 | 0.9637 | 0.9652 |
| Yahoo_Reference | 0.4545 | 0.0335 | 0.5272 | 0.5735 | 0.1715 | 0.5324 | 0.3885 | 5.3699 | 0.4202 | 0.6469 | 0.8087 | 0.9901 |
| Yahoo_Science | 0.1586 | 0.0565 | 0.2823 | 0.3568 | 0.1641 | 0.3117 | 0.6361 | 13.8460 | 0.6671 | 0.4140 | 0.9573 | 0.9838 |
| Yahoo_Social | 0.4571 | 0.0305 | 0.5434 | 0.5978 | 0.1791 | 0.5365 | 0.3746 | 7.4992 | 0.3855 | 0.6471 | 0.9133 | 0.9895 |
| Yahoo_Society | 0.3290 | 0.0691 | 0.4477 | 0.5546 | 0.2241 | 0.4694 | 0.3810 | 8.3713 | 0.4636 | 0.6005 | 0.9304 | 0.9898 |
| yeast | 0.1570 | 0.2196 | 0.5548 | 0.7002 | 0.4597 | 0.6776 | 0.2521 | 6.1818 | 0.2340 | 0.7549 | 0.8234 | 0.8832 |
| Yelp | 0.4008 | 0.1898 | 0.6485 | 0.7569 | 0.6858 | 0.7387 | 0.2004 | 1.3659 | 0.2260 | 0.8633 | 0.8806 | 0.9033 |

Table 176: Detailed results for Massive (n = 10000) for F1 metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.5123 | 0.0348 | 0.6201 | 0.6656 | 0.6808 | 0.6860 | 0.3024 | 2.4600 | 0.2428 | 0.7553 | 0.9814 | 0.9884 |
| 3s-bbc1000 | 0.1667 | 0.3565 | 0.2454 | 0.3011 | 0.2331 | 0.2804 | 0.6944 | 2.8611 | 0.6498 | 0.4640 | 0.7823 | 0.7329 |
| 3s-guardian1000 | 0.1290 | 0.3172 | 0.3263 | 0.4378 | 0.2678 | 0.3918 | 0.5806 | 2.3226 | 0.5218 | 0.5651 | 0.7859 | 0.7978 |
| 3s-inter3000 | 0.0000 | 0.5588 | 0.2176 | 0.3443 | 0.2329 | 0.3448 | 0.8824 | 3.0588 | 1.0000 | 0.3569 | 0.6189 | 0.7976 |
| 3s-reuters1000 | 0.0667 | 0.3444 | 0.1500 | 0.1918 | 0.2214 | 0.2051 | 0.9333 | 2.6667 | 0.7475 | 0.3661 | 0.8097 | 0.7375 |
| amphibians | 0.0556 | 0.2619 | 0.5563 | 0.7632 | 0.6028 | 0.7317 | 0.3333 | 2.6111 | 0.1370 | 0.8126 | 0.7523 | 0.8043 |
| bibtex | 0.1857 | 0.0119 | 0.3712 | 0.4735 | 0.3311 | 0.4889 | 0.4410 | 72.7012 | 0.5782 | 0.4235 | 0.9889 | 1.0000 |
| birds | 0.1282 | 0.1120 | 0.3308 | 0.4467 | 0.3088 | 0.4276 | 0.4615 | 7.3077 | 0.4248 | 0.5368 | 0.8324 | 0.9201 |
| bookmarks10% | 0.1870 | 0.0090 | 0.2225 | 0.2418 | 0.1122 | 0.2649 | 0.7444 | 104.0942 | 0.7746 | 0.2551 | 0.9894 | 1.0000 |
| CAL500 | 0.0000 | 0.2088 | 0.3159 | 0.4780 | 0.1461 | 0.4782 | 0.2941 | 150.8627 | 0.5011 | 0.4518 | 0.7998 | 0.9167 |
| corel16k001 | 0.0000 | 0.0458 | 0.1301 | 0.2211 | 0.0333 | 0.2206 | 0.9601 | 118.7792 | 0.9748 | 0.0576 | 1.0000 | 1.0000 |
| Corel5k | 0.0000 | 0.0182 | 0.1369 | 0.2221 | 0.0273 | 0.2316 | 0.8473 | 162.7626 | 0.9360 | 0.1633 | 0.6757 | 0.9903 |
| delicious | 0.0000 | 0.0461 | 0.1406 | 0.2401 | 0.0886 | 0.2433 | 0.5509 | 904.6833 | 0.8573 | 0.1522 | 0.9812 | 1.0000 |
| emotions | 0.2667 | 0.2139 | 0.5681 | 0.7048 | 0.6780 | 0.6908 | 0.3000 | 1.7500 | 0.2249 | 0.7956 | 0.8734 | 0.8827 |
| enron | 0.1449 | 0.0515 | 0.4846 | 0.6195 | 0.1761 | 0.5906 | 0.3203 | 24.3348 | 0.3656 | 0.5978 | 0.8356 | 0.9704 |
| EukaryoteGO | 0.6535 | 0.0200 | 0.8062 | 0.8507 | 0.7569 | 0.8175 | 0.1675 | 0.8747 | 0.0521 | 0.8793 | 1.0000 | 0.9909 |
| EukaryotePseAAC | 0.1205 | 0.0735 | 0.3333 | 0.4419 | 0.1466 | 0.4370 | 0.5355 | 6.3618 | 0.5038 | 0.5164 | 0.9789 | 0.9726 |
| flags | 0.2000 | 0.2357 | 0.6449 | 0.7650 | 0.7086 | 0.7660 | 0.3000 | 3.6000 | 0.2475 | 0.8000 | 0.7000 | 0.7893 |
| foodtruck | 0.3171 | 0.1545 | 0.4661 | 0.5879 | 0.1374 | 0.4933 | 0.2439 | 4.4634 | 0.4354 | 0.7205 | 0.8467 | 0.9515 |
| genbase | 0.9751 | 0.0011 | 0.9750 | 0.9824 | 0.6479 | 0.9914 | 0.0149 | 0.2421 | 0.0009 | 0.9911 | 0.6619 | 0.9992 |
| GnegativeGO | 0.9214 | 0.0125 | 0.9500 | 0.9643 | 0.8247 | 0.9524 | 0.0357 | 0.1143 | 0.0209 | 0.9780 | 0.8740 | 0.9974 |
| GnegativePseAAC | 0.7429 | 0.0554 | 0.7810 | 0.7999 | 0.4917 | 0.7905 | 0.2000 | 0.6286 | 0.1556 | 0.8659 | 0.8580 | 0.9864 |
| GpositiveGO | 0.9038 | 0.0337 | 0.9327 | 0.9469 | 0.8750 | 0.9358 | 0.0385 | 0.0962 | 0.0256 | 0.9760 | 0.9968 | 0.9966 |
| GpositivePseAAC | 0.6731 | 0.1490 | 0.7212 | 0.7444 | 0.5542 | 0.7207 | 0.2692 | 0.5385 | 0.2436 | 0.8301 | 0.9688 | 0.9639 |
| HumanGO | 0.6335 | 0.0395 | 0.7642 | 0.8236 | 0.6983 | 0.7763 | 0.1591 | 1.0807 | 0.1023 | 0.8834 | 0.9741 | 0.9738 |
| HumanPseAAC | 0.3001 | 0.0981 | 0.4090 | 0.4638 | 0.1915 | 0.4469 | 0.5370 | 3.3588 | 0.4833 | 0.5812 | 0.9401 | 0.9502 |
| Image | 0.3400 | 0.2150 | 0.5558 | 0.6590 | 0.6113 | 0.6041 | 0.3250 | 1.1200 | 0.2917 | 0.7754 | 0.9049 | 0.9013 |
| IMDB-ECC-F10% | 0.0000 | 0.2707 | 0.1422 | 0.2464 | 0.0919 | 0.2457 | 0.6424 | 12.2330 | 0.7315 | 0.3799 | 0.9952 | 0.9737 |
| IMDB-F10% | 0.0000 | 0.2660 | 0.1530 | 0.2609 | 0.0948 | 0.2612 | 0.5997 | 12.7101 | 0.7269 | 0.3853 | 0.9857 | 0.9724 |
| LLOG-F | 0.1628 | 0.0169 | 0.1988 | 0.2156 | 0.0522 | 0.2829 | 0.7471 | 29.0528 | 0.7787 | 0.2733 | 0.5999 | 0.9852 |
| mediamill10% | 0.0808 | 0.0302 | 0.4718 | 0.6366 | 0.0790 | 0.5894 | 0.1758 | 56.6390 | 0.4059 | 0.5750 | 0.8112 | 0.9922 |
| medical | 0.6327 | 0.0118 | 0.7517 | 0.8120 | 0.3085 | 0.8015 | 0.1531 | 4.8673 | 0.1226 | 0.8499 | 0.5483 | 0.9911 |
| Music | 0.2500 | 0.1778 | 0.5944 | 0.7514 | 0.7219 | 0.7311 | 0.3167 | 2.2000 | 0.2622 | 0.7648 | 0.8983 | 0.8862 |
| NUS-WIDE-bow10% | 0.1453 | 0.0279 | 0.3198 | 0.4179 | 0.0545 | 0.3983 | 0.5356 | 34.9683 | 0.6020 | 0.4282 | 0.8923 | 0.9993 |
| NUS-WIDE-cVLADplus10% | 0.0005 | 0.0382 | 0.2681 | 0.4002 | 0.0564 | 0.3821 | 0.5580 | 35.8496 | 0.6608 | 0.4020 | 0.8838 | 0.9815 |
| OHSUMED-F | 0.2266 | 0.0578 | 0.4373 | 0.5562 | 0.4496 | 0.5743 | 0.3598 | 7.7206 | 0.4160 | 0.6123 | 0.9865 | 0.9890 |
| PlantGO | 0.7292 | 0.0373 | 0.7899 | 0.8182 | 0.6761 | 0.8037 | 0.2188 | 0.9271 | 0.0901 | 0.8576 | 0.9889 | 0.9817 |
| PlantPseAAC | 0.2420 | 0.1185 | 0.3504 | 0.4078 | 0.2157 | 0.4004 | 0.6109 | 3.1493 | 0.4979 | 0.5404 | 0.9505 | 0.9223 |
| rcv1subset1 | 0.1029 | 0.0311 | 0.3630 | 0.4872 | 0.2657 | 0.4886 | 0.4461 | 37.7455 | 0.4244 | 0.5025 | 0.9388 | 0.9776 |
| REUTERS-K500-EX2 | 0.3280 | 0.0121 | 0.4125 | 0.4666 | 0.2427 | 0.5019 | 0.5103 | 32.5279 | 0.5311 | 0.4919 | 0.7875 | 1.0000 |
| scene | 0.5145 | 0.1127 | 0.6791 | 0.7595 | 0.7381 | 0.7223 | 0.2241 | 0.8589 | 0.1772 | 0.8352 | 0.9597 | 0.9645 |
| sider_CDK_ECFP4 | 0.0070 | 0.2448 | 0.6501 | 0.7879 | 0.6219 | 0.7859 | 0.2747 | 19.5690 | 0.1565 | 0.7939 | 0.5806 | 0.7911 |
| sider_MordredDesc | 0.0139 | 0.2663 | 0.6200 | 0.7734 | 0.6093 | 0.7797 | 0.3159 | 19.6334 | 0.2027 | 0.7473 | 0.5853 | 0.7485 |
| sider_RDKit_desc | 0.0142 | 0.2797 | 0.6284 | 0.7923 | 0.5995 | 0.7759 | 0.2652 | 20.0260 | 0.2220 | 0.7257 | 0.5801 | 0.7307 |
| SLASHDOT-F | 0.4073 | 0.0418 | 0.5257 | 0.5751 | 0.3979 | 0.5995 | 0.4001 | 5.2903 | 0.3524 | 0.6534 | 0.7483 | 0.9775 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.5000 | 0.6667 | 0.4405 | 0.6667 | 0.6000 | 0.6000 | 0.6000 | 0.7000 | 0.6667 | 0.8200 |
| Stackex_chemistry | 0.0115 | 0.0198 | 0.1384 | 0.2121 | 0.0677 | 0.2098 | 0.7887 | 106.5595 | 0.8826 | 0.1553 | 0.9277 | 1.0000 |
| Stackex_chess | 0.0360 | 0.0106 | 0.1530 | 0.2151 | 0.0529 | 0.2720 | 0.6823 | 135.8678 | 0.8139 | 0.1996 | 0.5498 | 0.9987 |
| Stackex_coffee | 0.0000 | 0.0223 | 0.0598 | 0.0978 | 0.0221 | 0.1370 | 0.7826 | 72.5652 | 0.7530 | 0.1969 | 0.2525 | 0.9699 |
| Stackex_cooking | 0.0650 | 0.0053 | 0.2029 | 0.2746 | 0.1108 | 0.3248 | 0.6276 | 221.3425 | 0.7710 | 0.2374 | 0.9172 | 0.9846 |
| Stackex_philosophy | 0.0531 | 0.0123 | 0.1939 | 0.2780 | 0.0602 | 0.2666 | 0.6859 | 136.2045 | 0.7856 | 0.2148 | 0.7509 | 0.9849 |
| tmc2007-500 | 0.2490 | 0.0696 | 0.5783 | 0.7290 | 0.5992 | 0.6814 | 0.2352 | 4.0010 | 0.1465 | 0.7932 | 0.9538 | 0.9707 |
| tox21_CDK_ECFP4 | 0.1230 | 0.1902 | 0.3524 | 0.4716 | 0.3879 | 0.4703 | 0.4611 | 5.4244 | 0.4860 | 0.5771 | 0.8989 | 0.9120 |
| tox21_RDKit_desc | 0.1162 | 0.1932 | 0.3448 | 0.4714 | 0.3273 | 0.4471 | 0.4959 | 5.4922 | 0.5106 | 0.5523 | 0.9064 | 0.8980 |
| VirusGO | 0.7619 | 0.0556 | 0.8492 | 0.8768 | 0.7005 | 0.8627 | 0.0952 | 0.5238 | 0.0726 | 0.9222 | 0.8019 | 0.9707 |
| VirusPseAAC | 0.2857 | 0.1349 | 0.5238 | 0.6287 | 0.3864 | 0.6667 | 0.4762 | 1.0476 | 0.2333 | 0.7095 | 0.7270 | 0.9050 |
| Water-quality | 0.0094 | 0.3369 | 0.4312 | 0.6095 | 0.5019 | 0.6000 | 0.2642 | 9.0849 | 0.3257 | 0.6963 | 0.7451 | 0.7407 |
| Yahoo_Arts | 0.1928 | 0.0682 | 0.2891 | 0.3513 | 0.2108 | 0.3659 | 0.4937 | 9.9468 | 0.5590 | 0.5116 | 0.9419 | 0.9755 |
| Yahoo_Business | 0.5729 | 0.0270 | 0.7201 | 0.8189 | 0.3226 | 0.7358 | 0.0912 | 3.2014 | 0.2227 | 0.8827 | 0.8674 | 1.0000 |
| Yahoo_Computers | 0.3797 | 0.0465 | 0.4907 | 0.5728 | 0.2363 | 0.4943 | 0.3823 | 6.5559 | 0.4121 | 0.6076 | 0.8866 | 0.9740 |
| Yahoo_Education | 0.0067 | 0.0841 | 0.2384 | 0.3582 | 0.1871 | 0.3383 | 0.5701 | 9.1735 | 0.5936 | 0.5232 | 0.8928 | 0.9877 |
| Yahoo_Entertainment | 0.3268 | 0.0777 | 0.4518 | 0.5295 | 0.2836 | 0.4735 | 0.4395 | 4.2101 | 0.4053 | 0.6303 | 0.9636 | 0.9511 |
| Yahoo_Health | 0.4000 | 0.0411 | 0.5611 | 0.6446 | 0.2445 | 0.5920 | 0.3161 | 6.5076 | 0.3502 | 0.6873 | 0.8347 | 0.9888 |
| Yahoo_Recreation | 0.2190 | 0.0738 | 0.3004 | 0.3577 | 0.3042 | 0.3792 | 0.5180 | 6.5421 | 0.5666 | 0.5586 | 0.9530 | 0.9680 |
| Yahoo_Reference | 0.4574 | 0.0337 | 0.5276 | 0.5763 | 0.1714 | 0.5256 | 0.3883 | 5.3221 | 0.4232 | 0.6402 | 0.8131 | 0.9755 |
| Yahoo_Science | 0.1567 | 0.0557 | 0.2824 | 0.3533 | 0.1636 | 0.3072 | 0.6445 | 14.0174 | 0.6622 | 0.4198 | 0.9548 | 0.9700 |
| Yahoo_Social | 0.4558 | 0.0301 | 0.5455 | 0.6032 | 0.1783 | 0.5402 | 0.3763 | 7.5230 | 0.3887 | 0.6530 | 0.9160 | 0.9764 |
| Yahoo_Society | 0.3274 | 0.0682 | 0.4484 | 0.5566 | 0.2213 | 0.4671 | 0.3828 | 8.2740 | 0.4572 | 0.6045 | 0.9187 | 0.9881 |
| yeast | 0.1552 | 0.2194 | 0.5524 | 0.7103 | 0.4633 | 0.6838 | 0.2508 | 6.1831 | 0.2310 | 0.7598 | 0.8266 | 0.8964 |
| Yelp | 0.3509 | 0.2058 | 0.6326 | 0.7562 | 0.6817 | 0.7312 | 0.2193 | 1.3709 | 0.2233 | 0.8559 | 0.8772 | 0.8975 |

Table 177: Detailed results for Massive (n = 10) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0000 | 0.2759 | 0.0785 | 0.1331 | 0.1984 | 0.1363 | 0.7150 | 6.7560 | 0.3781 | 0.4191 | 0.8784 | 0.6765 |
| 3s-bbc1000 | 0.0278 | 0.3472 | 0.2454 | 0.3502 | 0.2406 | 0.3363 | 0.7500 | 2.6389 | 0.4546 | 0.4648 | 0.7318 | 0.5795 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5806 | 2.1613 | 0.3774 | 0.5656 | 0.6881 | 0.6469 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6471 | 2.0000 | 0.3706 | 0.5392 | 0.4002 | 0.6283 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7667 | 2.4667 | 0.4758 | 0.4422 | 0.6383 | 0.5283 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4444 | 3.2778 | 0.2074 | 0.6817 | 0.6253 | 0.6893 |
| bibtex | 0.0000 | 0.8531 | 0.0162 | 0.0318 | 0.0419 | 0.0318 | 0.9486 | 96.9649 | 0.8561 | 0.0781 | 0.9663 | 0.8555 |
| birds | 0.0000 | 0.7004 | 0.1125 | 0.2011 | 0.2253 | 0.2028 | 0.9487 | 11.2564 | 0.8078 | 0.2097 | 0.8484 | 0.7284 |
| bookmarks10% | 0.0509 | 0.0143 | 0.1055 | 0.1446 | 0.0370 | 0.1264 | 0.8962 | 62.0654 | 0.2020 | 0.1802 | 0.5719 | 0.6140 |
| CAL500 | 0.0000 | 0.7743 | 0.1494 | 0.2601 | 0.2089 | 0.2600 | 0.8039 | 152.2745 | 0.9168 | 0.2044 | 0.8430 | 0.8997 |
| corel16k001 | 0.0000 | 0.8575 | 0.0187 | 0.0367 | 0.0336 | 0.0367 | 0.9789 | 112.8228 | 0.8166 | 0.0679 | 0.9440 | 0.8721 |
| Corel5k | 0.0000 | 0.9182 | 0.0092 | 0.0183 | 0.0185 | 0.0182 | 0.9540 | 178.2200 | 0.8515 | 0.0777 | 0.6589 | 0.9327 |
| delicious | 0.0000 | 0.0830 | 0.0437 | 0.0854 | 0.0434 | 0.0850 | 0.9421 | 933.6809 | 0.3382 | 0.0650 | 0.6589 | 0.6542 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 2.3833 | 0.2525 | 0.7050 | 0.8421 | 0.7895 |
| enron | 0.0000 | 0.6126 | 0.0803 | 0.1493 | 0.0955 | 0.1487 | 0.3509 | 32.5029 | 0.5346 | 0.4048 | 0.7264 | 0.7748 |
| EukaryoteGO | 0.6681 | 0.0212 | 0.7558 | 0.8068 | 0.5376 | 0.7953 | 0.2291 | 0.8039 | 0.0278 | 0.8607 | 0.9590 | 0.9643 |
| EukaryotePseAAC | 0.0000 | 0.6939 | 0.0667 | 0.1247 | 0.0904 | 0.1247 | 0.8610 | 10.9562 | 0.7702 | 0.2326 | 0.8681 | 0.7335 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5000 | 4.0500 | 0.3408 | 0.7018 | 0.5416 | 0.6412 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.2683 | 0.1506 | 0.7636 | 0.5242 | 0.7675 |
| genbase | 0.0000 | 0.4201 | 0.0674 | 0.1245 | 0.2752 | 0.1264 | 0.8507 | 4.3731 | 0.1490 | 0.3553 | 0.6358 | 0.8653 |
| GnegativeGO | 0.6500 | 0.0545 | 0.6536 | 0.6554 | 0.3906 | 0.7510 | 0.2571 | 0.4071 | 0.0498 | 0.8619 | 0.8362 | 0.9426 |
| GnegativePseAAC | 0.1143 | 0.1652 | 0.3643 | 0.4592 | 0.2247 | 0.4818 | 0.2929 | 1.2929 | 0.1745 | 0.7809 | 0.7513 | 0.8485 |
| GpositiveGO | 0.6154 | 0.1250 | 0.6154 | 0.6154 | 0.6856 | 0.7111 | 0.2500 | 0.4808 | 0.1522 | 0.8446 | 0.9213 | 0.8666 |
| GpositivePseAAC | 0.3846 | 0.1683 | 0.3846 | 0.3846 | 0.3838 | 0.5333 | 0.2692 | 0.4423 | 0.1474 | 0.8397 | 0.9297 | 0.9177 |
| HumanGO | 0.6190 | 0.0399 | 0.6677 | 0.6949 | 0.4111 | 0.7202 | 0.1696 | 0.5149 | 0.0229 | 0.8879 | 0.9767 | 0.9855 |
| HumanPseAAC | 0.0000 | 0.2253 | 0.0070 | 0.0108 | 0.0068 | 0.0121 | 0.6945 | 4.2219 | 0.2859 | 0.4482 | 0.6963 | 0.7142 |
| Image | 0.0250 | 0.2340 | 0.0250 | 0.0250 | 0.0333 | 0.0410 | 0.3350 | 1.1300 | 0.2150 | 0.7595 | 0.8389 | 0.7967 |
| IMDB-ECC-F10% | 0.0000 | 0.2773 | 0.0330 | 0.0611 | 0.0370 | 0.0637 | 0.8312 | 11.5052 | 0.3117 | 0.2975 | 0.6465 | 0.6941 |
| IMDB-F10% | 0.0000 | 0.2915 | 0.0961 | 0.1710 | 0.0582 | 0.1705 | 0.7287 | 17.5633 | 0.4877 | 0.3158 | 0.6504 | 0.5593 |
| LLOG-F | 0.0000 | 0.8092 | 0.0204 | 0.0399 | 0.0341 | 0.0399 | 1.0000 | 41.5738 | 0.8686 | 0.0736 | 0.5760 | 0.8175 |
| mediamill10% | 0.0000 | 0.7007 | 0.0532 | 0.1012 | 0.0650 | 0.1012 | 0.2114 | 75.1781 | 0.6503 | 0.3124 | 0.7805 | 0.8473 |
| medical | 0.0000 | 0.5413 | 0.0444 | 0.0848 | 0.0959 | 0.0851 | 0.6735 | 16.6939 | 0.4187 | 0.4312 | 0.5437 | 0.8119 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5500 | 2.9500 | 0.3662 | 0.6290 | 0.8586 | 0.6970 |
| NUS-WIDE-bow10% | 0.0000 | 0.6649 | 0.0269 | 0.0525 | 0.0404 | 0.0525 | 0.9629 | 36.1598 | 0.4070 | 0.2360 | 0.7181 | 0.7183 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.6432 | 0.0302 | 0.0585 | 0.0455 | 0.0587 | 0.7531 | 48.7883 | 0.6484 | 0.2477 | 0.7304 | 0.6961 |
| OHSUMED-F | 0.0000 | 0.3135 | 0.0913 | 0.1609 | 0.1852 | 0.1620 | 0.6805 | 9.0115 | 0.3401 | 0.4013 | 0.7624 | 0.7038 |
| PlantGO | 0.2551 | 0.0757 | 0.2704 | 0.2780 | 0.1472 | 0.4027 | 0.5102 | 1.2653 | 0.0988 | 0.6748 | 0.9404 | 0.9131 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7245 | 2.9490 | 0.2537 | 0.4820 | 0.7622 | 0.7618 |
| rcv1subset1 | 0.0396 | 0.0320 | 0.3121 | 0.4654 | 0.1740 | 0.4394 | 0.6069 | 14.5260 | 0.0607 | 0.4929 | 0.8453 | 0.9389 |
| REUTERS-K500-EX2 | 0.0000 | 0.6586 | 0.0158 | 0.0311 | 0.0778 | 0.0311 | 0.9200 | 50.9500 | 0.6265 | 0.1554 | 0.7340 | 0.7707 |
| scene | 0.3859 | 0.1189 | 0.4025 | 0.4106 | 0.5439 | 0.5401 | 0.3402 | 0.6432 | 0.1080 | 0.8006 | 0.9281 | 0.9108 |
| sider_CDK_ECFP4 | 0.0000 | 0.5250 | 0.3650 | 0.5478 | 0.3927 | 0.5465 | 0.1761 | 24.9014 | 0.6267 | 0.6583 | 0.8276 | 0.7616 |
| sider_MordredDesc | 0.0000 | 0.4651 | 0.2235 | 0.3689 | 0.1713 | 0.3803 | 0.3662 | 24.5563 | 0.3983 | 0.6692 | 0.6318 | 0.6134 |
| sider_RDKit_desc | 0.0000 | 0.4864 | 0.2053 | 0.3434 | 0.1585 | 0.3518 | 0.3732 | 24.7465 | 0.4442 | 0.6152 | 0.6258 | 0.5566 |
| SLASHDOT-F | 0.0000 | 0.2096 | 0.1167 | 0.1949 | 0.2189 | 0.2011 | 0.5884 | 4.9050 | 0.2015 | 0.5345 | 0.6631 | 0.8107 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0000 | 0.8643 | 0.0115 | 0.0226 | 0.0304 | 0.0226 | 0.8779 | 98.6379 | 0.6978 | 0.1804 | 0.8607 | 0.8579 |
| Stackex_chess | 0.0000 | 0.8530 | 0.0111 | 0.0220 | 0.0243 | 0.0219 | 0.9881 | 152.1607 | 0.8132 | 0.0632 | 0.5260 | 0.8749 |
| Stackex_coffee | 0.0000 | 0.7367 | 0.0198 | 0.0387 | 0.0270 | 0.0387 | 0.7826 | 81.7391 | 0.7145 | 0.1963 | 0.2472 | 0.8110 |
| Stackex_cooking | 0.0000 | 0.9202 | 0.0059 | 0.0118 | 0.0153 | 0.0118 | 0.9585 | 263.9826 | 0.9409 | 0.0357 | 0.9091 | 0.9265 |
| Stackex_philosophy | 0.0000 | 0.9429 | 0.0098 | 0.0194 | 0.0207 | 0.0194 | 1.0000 | 154.4271 | 0.9472 | 0.0320 | 0.7398 | 0.9466 |
| tmc2007-500 | 0.0000 | 0.2955 | 0.0966 | 0.1717 | 0.1810 | 0.1759 | 0.6825 | 8.9552 | 0.2773 | 0.4575 | 0.8356 | 0.7414 |
| tox21_CDK_ECFP4 | 0.0000 | 0.4686 | 0.1892 | 0.3249 | 0.2292 | 0.3187 | 0.7055 | 7.4007 | 0.5904 | 0.3876 | 0.8089 | 0.6156 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6027 | 5.0240 | 0.2948 | 0.5183 | 0.6622 | 0.6860 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.8095 | 0.1213 | 0.8161 | 0.7398 | 0.8792 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3810 | 0.8571 | 0.1476 | 0.7659 | 0.5878 | 0.8637 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3679 | 10.9057 | 0.3980 | 0.5835 | 0.6428 | 0.6020 |
| Yahoo_Arts | 0.0798 | 0.0661 | 0.1097 | 0.1282 | 0.0603 | 0.1570 | 0.5758 | 6.5237 | 0.1776 | 0.5195 | 0.6309 | 0.7604 |
| Yahoo_Business | 0.2575 | 0.0442 | 0.5489 | 0.6752 | 0.0920 | 0.6176 | 0.4512 | 3.7837 | 0.0696 | 0.7089 | 0.6239 | 0.8983 |
| Yahoo_Computers | 0.2769 | 0.0485 | 0.3590 | 0.4502 | 0.0940 | 0.4024 | 0.4673 | 7.5293 | 0.1694 | 0.6043 | 0.5893 | 0.6789 |
| Yahoo_Education | 0.0594 | 0.0526 | 0.1093 | 0.1367 | 0.0546 | 0.1751 | 0.7180 | 11.3792 | 0.2636 | 0.4215 | 0.6100 | 0.7191 |
| Yahoo_Entertainment | 0.1452 | 0.0651 | 0.1688 | 0.1807 | 0.0933 | 0.2209 | 0.5351 | 5.2585 | 0.1941 | 0.5779 | 0.6055 | 0.6975 |
| Yahoo_Health | 0.1777 | 0.0501 | 0.2399 | 0.2845 | 0.0607 | 0.2930 | 0.4272 | 6.0924 | 0.1350 | 0.6596 | 0.6498 | 0.8554 |
| Yahoo_Recreation | 0.0289 | 0.0737 | 0.0506 | 0.0632 | 0.0656 | 0.0896 | 0.7210 | 7.2991 | 0.2928 | 0.4706 | 0.5210 | 0.5526 |
| Yahoo_Reference | 0.0320 | 0.0672 | 0.2427 | 0.3396 | 0.1122 | 0.3354 | 0.9460 | 5.1220 | 0.1357 | 0.3827 | 0.4320 | 0.6811 |
| Yahoo_Science | 0.1240 | 0.0373 | 0.1565 | 0.1799 | 0.0616 | 0.2300 | 0.5771 | 7.2637 | 0.1373 | 0.5236 | 0.6814 | 0.7648 |
| Yahoo_Social | 0.2368 | 0.0410 | 0.3762 | 0.4382 | 0.0635 | 0.4146 | 0.4710 | 7.5656 | 0.1583 | 0.6092 | 0.5166 | 0.7043 |
| Yahoo_Society | 0.1512 | 0.0684 | 0.2123 | 0.2528 | 0.0512 | 0.2544 | 0.5489 | 9.3540 | 0.2451 | 0.4996 | 0.5321 | 0.7055 |
| yeast | 0.0000 | 0.2733 | 0.3170 | 0.4522 | 0.1479 | 0.4709 | 0.4628 | 11.0496 | 0.5092 | 0.5030 | 0.7790 | 0.5168 |
| Yelp | 0.0030 | 0.3587 | 0.0030 | 0.0030 | 0.0028 | 0.0033 | 0.5813 | 1.6520 | 0.2379 | 0.7028 | 0.8222 | 0.7775 |

Table 178: Detailed results for Massive (n = 100) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3563 | 0.0373 | 0.3696 | 0.3763 | 0.4890 | 0.5109 | 0.3082 | 1.3830 | 0.0711 | 0.7784 | 0.9209 | 0.9013 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4167 | 1.3611 | 0.2163 | 0.7174 | 0.8004 | 0.7921 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5806 | 1.8065 | 0.3048 | 0.6105 | 0.6683 | 0.6540 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7059 | 1.6471 | 0.3206 | 0.5314 | 0.4595 | 0.6607 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 1.9333 | 0.3767 | 0.4781 | 0.6832 | 0.6301 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1667 | 2.4444 | 0.0639 | 0.9098 | 0.6696 | 0.7855 |
| bibtex | 0.1228 | 0.0160 | 0.2780 | 0.3769 | 0.2058 | 0.3577 | 0.6284 | 29.5487 | 0.1016 | 0.4338 | 0.8819 | 0.8756 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4359 | 4.7436 | 0.1478 | 0.6316 | 0.7381 | 0.8494 |
| bookmarks10% | 0.0511 | 0.0143 | 0.1064 | 0.1435 | 0.0376 | 0.1275 | 0.8889 | 61.0496 | 0.2022 | 0.1809 | 0.5635 | 0.6034 |
| CAL500 | 0.0000 | 0.1889 | 0.0015 | 0.0031 | 0.0004 | 0.0024 | 0.1373 | 134.7255 | 0.1968 | 0.4715 | 0.5120 | 0.8040 |
| corel16k001 | 0.0000 | 0.1071 | 0.0342 | 0.0642 | 0.0204 | 0.0659 | 0.8228 | 86.3907 | 0.3097 | 0.1772 | 0.6324 | 0.6550 |
| Corel5k | 0.0000 | 0.4353 | 0.0136 | 0.0269 | 0.0241 | 0.0269 | 0.9640 | 246.3080 | 0.5200 | 0.0709 | 0.5578 | 0.6681 |
| delicious | 0.0000 | 0.0832 | 0.0438 | 0.0840 | 0.0437 | 0.0841 | 0.9255 | 920.1924 | 0.3391 | 0.0648 | 0.6717 | 0.6597 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.6667 | 0.1404 | 0.8045 | 0.8445 | 0.8727 |
| enron | 0.1462 | 0.0581 | 0.2853 | 0.3844 | 0.0488 | 0.3502 | 0.4269 | 16.6784 | 0.1147 | 0.5389 | 0.6303 | 0.8718 |
| EukaryoteGO | 0.6600 | 0.0217 | 0.7652 | 0.8081 | 0.5286 | 0.7986 | 0.2258 | 0.8136 | 0.0282 | 0.8688 | 0.9536 | 0.9474 |
| EukaryotePseAAC | 0.1441 | 0.0510 | 0.1662 | 0.1776 | 0.0619 | 0.2572 | 0.6396 | 2.8327 | 0.1191 | 0.5541 | 0.7370 | 0.8855 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 3.7500 | 0.2258 | 0.7982 | 0.5786 | 0.7566 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.0244 | 0.1276 | 0.7729 | 0.5479 | 0.7936 |
| genbase | 0.7761 | 0.0133 | 0.8184 | 0.8462 | 0.3119 | 0.8310 | 0.0299 | 0.4627 | 0.0056 | 0.9700 | 0.6408 | 0.9906 |
| GnegativeGO | 0.7500 | 0.0429 | 0.7571 | 0.7607 | 0.5652 | 0.8168 | 0.1000 | 0.1714 | 0.0173 | 0.9464 | 0.8642 | 0.9880 |
| GnegativePseAAC | 0.5143 | 0.0679 | 0.5143 | 0.5143 | 0.2148 | 0.6545 | 0.1714 | 0.5143 | 0.0652 | 0.8833 | 0.7403 | 0.9465 |
| GpositiveGO | 0.7308 | 0.1106 | 0.7404 | 0.7452 | 0.7189 | 0.7723 | 0.1731 | 0.2115 | 0.0641 | 0.9103 | 0.9508 | 0.9488 |
| GpositivePseAAC | 0.5385 | 0.1298 | 0.5385 | 0.5385 | 0.5147 | 0.6747 | 0.2692 | 0.4423 | 0.1474 | 0.8397 | 0.8930 | 0.9048 |
| HumanGO | 0.6133 | 0.0402 | 0.6731 | 0.6891 | 0.4119 | 0.7258 | 0.1710 | 0.5134 | 0.0223 | 0.8976 | 0.9664 | 0.9770 |
| HumanPseAAC | 0.0418 | 0.0841 | 0.0418 | 0.0418 | 0.0305 | 0.0663 | 0.5884 | 2.3473 | 0.1550 | 0.5982 | 0.6934 | 0.8410 |
| Image | 0.1400 | 0.2080 | 0.1500 | 0.1548 | 0.2145 | 0.2353 | 0.3300 | 0.9100 | 0.1713 | 0.7884 | 0.8357 | 0.8302 |
| IMDB-ECC-F10% | 0.0052 | 0.1161 | 0.2221 | 0.3447 | 0.0567 | 0.3346 | 0.6553 | 11.0550 | 0.2525 | 0.4430 | 0.5192 | 0.7112 |
| IMDB-F10% | 0.0148 | 0.1052 | 0.0223 | 0.0285 | 0.0040 | 0.0251 | 0.9624 | 18.7381 | 0.5726 | 0.1333 | 0.5669 | 0.4193 |
| LLOG-F | 0.0000 | 0.0298 | 0.0635 | 0.0928 | 0.0352 | 0.1222 | 0.6721 | 12.7705 | 0.1343 | 0.4000 | 0.4627 | 0.8624 |
| mediamill10% | 0.0000 | 0.0870 | 0.2148 | 0.3547 | 0.0464 | 0.3464 | 0.7933 | 47.1615 | 0.1994 | 0.2759 | 0.6038 | 0.7958 |
| medical | 0.3469 | 0.0206 | 0.5425 | 0.6315 | 0.1901 | 0.6540 | 0.3367 | 3.2449 | 0.0469 | 0.7550 | 0.5428 | 0.9431 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 1.9333 | 0.1531 | 0.8175 | 0.8460 | 0.8595 |
| NUS-WIDE-bow10% | 0.0485 | 0.0347 | 0.2377 | 0.3599 | 0.0248 | 0.3162 | 0.8321 | 32.8254 | 0.2860 | 0.2165 | 0.6012 | 0.7406 |
| NUS-WIDE-cVLADplus10% | 0.0371 | 0.0336 | 0.1773 | 0.2852 | 0.0337 | 0.2570 | 0.6789 | 18.2046 | 0.1243 | 0.4111 | 0.6018 | 0.8569 |
| OHSUMED-F | 0.1273 | 0.0663 | 0.1974 | 0.2365 | 0.1387 | 0.2830 | 0.4683 | 6.7388 | 0.2008 | 0.5759 | 0.7896 | 0.7949 |
| PlantGO | 0.3265 | 0.0723 | 0.3520 | 0.3644 | 0.1864 | 0.4654 | 0.3878 | 0.8367 | 0.0603 | 0.7767 | 0.9414 | 0.9396 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.5714 | 2.1224 | 0.1746 | 0.6001 | 0.7786 | 0.8381 |
| rcv1subset1 | 0.0400 | 0.0315 | 0.3115 | 0.4553 | 0.1743 | 0.4425 | 0.5990 | 14.5286 | 0.0590 | 0.4889 | 0.8555 | 0.9420 |
| REUTERS-K500-EX2 | 0.0000 | 0.0425 | 0.1377 | 0.2253 | 0.1812 | 0.2326 | 0.9250 | 18.7783 | 0.1460 | 0.2185 | 0.6810 | 0.8421 |
| scene | 0.4689 | 0.1072 | 0.4896 | 0.4998 | 0.6176 | 0.6135 | 0.2199 | 0.4315 | 0.0655 | 0.8715 | 0.9362 | 0.9453 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 20.2183 | 0.1682 | 0.7867 | 0.5712 | 0.7714 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1479 | 19.6761 | 0.1586 | 0.7966 | 0.5185 | 0.7773 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1127 | 19.2958 | 0.1197 | 0.8531 | 0.5621 | 0.8041 |
| SLASHDOT-F | 0.3852 | 0.0380 | 0.4362 | 0.4620 | 0.2980 | 0.5439 | 0.4222 | 2.1610 | 0.0803 | 0.6991 | 0.6770 | 0.9231 |
| solar_flare-L3 | 0.2000 | 0.3333 | 0.2000 | 0.2000 | 0.1667 | 0.2857 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.6800 |
| Stackex_chemistry | 0.0000 | 0.1572 | 0.0307 | 0.0591 | 0.0677 | 0.0594 | 0.9195 | 83.0704 | 0.3095 | 0.1303 | 0.6324 | 0.6140 |
| Stackex_chess | 0.0000 | 0.2130 | 0.0269 | 0.0521 | 0.0410 | 0.0523 | 0.9762 | 129.6071 | 0.3648 | 0.1253 | 0.4595 | 0.6682 |
| Stackex_coffee | 0.0000 | 0.1478 | 0.0283 | 0.0538 | 0.0114 | 0.0543 | 0.7826 | 47.6957 | 0.2404 | 0.2613 | 0.1926 | 0.7282 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1733 | 0.2559 | 0.0706 | 0.2667 | 0.7737 | 133.5134 | 0.1833 | 0.2129 | 0.7436 | 0.8044 |
| Stackex_philosophy | 0.0000 | 0.2333 | 0.0203 | 0.0396 | 0.0395 | 0.0397 | 0.8794 | 105.7111 | 0.2826 | 0.1540 | 0.6160 | 0.7393 |
| tmc2007-500 | 0.0389 | 0.0930 | 0.0939 | 0.1227 | 0.1354 | 0.1532 | 0.3794 | 9.5951 | 0.2768 | 0.5673 | 0.8477 | 0.7118 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5137 | 4.2295 | 0.2329 | 0.5901 | 0.6896 | 0.7514 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.2021 | 0.2242 | 0.6006 | 0.6747 | 0.7522 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 0.8571 | 0.1361 | 0.8034 | 0.7313 | 0.8784 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4286 | 0.8571 | 0.1548 | 0.7476 | 0.6130 | 0.8755 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3774 | 9.1226 | 0.2862 | 0.6593 | 0.6633 | 0.6950 |
| Yahoo_Arts | 0.0801 | 0.0669 | 0.1100 | 0.1300 | 0.0609 | 0.1548 | 0.5624 | 6.6698 | 0.1766 | 0.5229 | 0.6366 | 0.7580 |
| Yahoo_Business | 0.2598 | 0.0441 | 0.5409 | 0.6792 | 0.0919 | 0.6271 | 0.4441 | 3.7448 | 0.0683 | 0.7210 | 0.6250 | 0.8911 |
| Yahoo_Computers | 0.2730 | 0.0488 | 0.3629 | 0.4504 | 0.0948 | 0.4062 | 0.4721 | 7.5926 | 0.1712 | 0.6024 | 0.5765 | 0.6867 |
| Yahoo_Education | 0.0594 | 0.0513 | 0.1087 | 0.1388 | 0.0550 | 0.1751 | 0.7222 | 11.1689 | 0.2590 | 0.4201 | 0.6274 | 0.7286 |
| Yahoo_Entertainment | 0.1447 | 0.0653 | 0.1705 | 0.1828 | 0.0927 | 0.2248 | 0.5419 | 5.3257 | 0.1958 | 0.5749 | 0.6057 | 0.7080 |
| Yahoo_Health | 0.1804 | 0.0505 | 0.2420 | 0.2850 | 0.0621 | 0.2971 | 0.4325 | 5.9761 | 0.1319 | 0.6679 | 0.6634 | 0.8633 |
| Yahoo_Recreation | 0.0293 | 0.0734 | 0.0499 | 0.0631 | 0.0657 | 0.0897 | 0.7223 | 7.3509 | 0.2906 | 0.4714 | 0.5230 | 0.5411 |
| Yahoo_Reference | 0.0325 | 0.0670 | 0.2439 | 0.3417 | 0.1131 | 0.3346 | 0.9410 | 5.0572 | 0.1345 | 0.3856 | 0.4354 | 0.6870 |
| Yahoo_Science | 0.1226 | 0.0364 | 0.1572 | 0.1814 | 0.0614 | 0.2287 | 0.5902 | 7.3041 | 0.1364 | 0.5193 | 0.6897 | 0.7633 |
| Yahoo_Social | 0.2415 | 0.0417 | 0.3757 | 0.4427 | 0.0622 | 0.4058 | 0.4736 | 7.6270 | 0.1570 | 0.6121 | 0.5247 | 0.7124 |
| Yahoo_Society | 0.1515 | 0.0680 | 0.2109 | 0.2489 | 0.0515 | 0.2558 | 0.5446 | 9.1752 | 0.2480 | 0.4996 | 0.5392 | 0.6952 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2107 | 6.3306 | 0.1600 | 0.7637 | 0.7021 | 0.8383 |
| Yelp | 0.0120 | 0.3573 | 0.0120 | 0.0120 | 0.0111 | 0.0132 | 0.2054 | 1.3190 | 0.1255 | 0.8649 | 0.8140 | 0.8591 |

Table 179: Detailed results for Massive (n = 1000) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3549 | 0.0370 | 0.3711 | 0.3800 | 0.4846 | 0.5126 | 0.3119 | 1.3870 | 0.0707 | 0.7853 | 0.9111 | 0.9085 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4444 | 1.4722 | 0.2389 | 0.7030 | 0.7974 | 0.7834 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4516 | 1.7742 | 0.2968 | 0.6645 | 0.6684 | 0.7038 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6471 | 1.5294 | 0.2882 | 0.5941 | 0.3783 | 0.6726 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8000 | 2.0333 | 0.3950 | 0.4656 | 0.6991 | 0.5957 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1667 | 2.3889 | 0.0648 | 0.9006 | 0.6850 | 0.7904 |
| bibtex | 0.1216 | 0.0161 | 0.2745 | 0.3749 | 0.2044 | 0.3566 | 0.6270 | 29.7676 | 0.1018 | 0.4366 | 0.8749 | 0.8713 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4615 | 4.2821 | 0.1405 | 0.6434 | 0.7556 | 0.8634 |
| bookmarks10% | 0.0513 | 0.0144 | 0.1060 | 0.1433 | 0.0373 | 0.1270 | 0.8941 | 61.3144 | 0.2012 | 0.1814 | 0.5657 | 0.6055 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1765 | 135.0392 | 0.1908 | 0.4868 | 0.5077 | 0.8104 |
| corel16k001 | 0.0000 | 0.0372 | 0.0567 | 0.0997 | 0.0178 | 0.0992 | 0.9659 | 70.2745 | 0.2370 | 0.1410 | 0.5798 | 0.6651 |
| Corel5k | 0.0000 | 0.0148 | 0.1580 | 0.2500 | 0.0368 | 0.2580 | 0.8340 | 125.8460 | 0.1468 | 0.1771 | 0.4739 | 0.8551 |
| delicious | 0.0000 | 0.0832 | 0.0442 | 0.0848 | 0.0431 | 0.0841 | 0.9378 | 925.9086 | 0.3396 | 0.0654 | 0.6644 | 0.6612 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 1.7333 | 0.1541 | 0.7781 | 0.8428 | 0.8647 |
| enron | 0.0877 | 0.0578 | 0.2133 | 0.3012 | 0.0440 | 0.2722 | 0.2924 | 11.8889 | 0.0762 | 0.6865 | 0.6403 | 0.9120 |
| EukaryoteGO | 0.6585 | 0.0215 | 0.7601 | 0.8104 | 0.5303 | 0.7993 | 0.2281 | 0.8131 | 0.0280 | 0.8638 | 0.9516 | 0.9542 |
| EukaryotePseAAC | 0.1004 | 0.0956 | 0.1849 | 0.2384 | 0.0877 | 0.2427 | 0.7503 | 3.8842 | 0.1689 | 0.4556 | 0.6009 | 0.7559 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 3.7000 | 0.1958 | 0.8125 | 0.5832 | 0.7736 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.1220 | 0.1340 | 0.7721 | 0.5276 | 0.7835 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3116 | 0.8592 | 0.0000 | 0.4776 | 0.0054 | 0.9933 | 0.6291 | 0.9905 |
| GnegativeGO | 0.7857 | 0.0366 | 0.8000 | 0.8071 | 0.6161 | 0.8476 | 0.1000 | 0.1643 | 0.0163 | 0.9476 | 0.8642 | 0.9910 |
| GnegativePseAAC | 0.5571 | 0.0625 | 0.5643 | 0.5678 | 0.2284 | 0.6957 | 0.1714 | 0.5071 | 0.0638 | 0.8854 | 0.7350 | 0.9443 |
| GpositiveGO | 0.7308 | 0.1154 | 0.7404 | 0.7452 | 0.7098 | 0.7647 | 0.2308 | 0.2885 | 0.0897 | 0.8782 | 0.9439 | 0.9447 |
| GpositivePseAAC | 0.6538 | 0.1250 | 0.6538 | 0.6538 | 0.5411 | 0.7234 | 0.2692 | 0.4231 | 0.1410 | 0.8413 | 0.8838 | 0.8771 |
| HumanGO | 0.6174 | 0.0404 | 0.6688 | 0.6956 | 0.4147 | 0.7309 | 0.1704 | 0.5145 | 0.0227 | 0.9000 | 0.9750 | 0.9812 |
| HumanPseAAC | 0.0225 | 0.0850 | 0.0225 | 0.0225 | 0.0153 | 0.0365 | 0.5627 | 2.2283 | 0.1451 | 0.6152 | 0.7032 | 0.8517 |
| Image | 0.1450 | 0.2080 | 0.1525 | 0.1562 | 0.2133 | 0.2353 | 0.3300 | 0.9050 | 0.1725 | 0.7905 | 0.8343 | 0.8274 |
| IMDB-ECC-F10% | 0.0052 | 0.1173 | 0.2233 | 0.3437 | 0.0568 | 0.3305 | 0.6583 | 11.0168 | 0.2537 | 0.4412 | 0.5208 | 0.7106 |
| IMDB-F10% | 0.0149 | 0.1065 | 0.0225 | 0.0283 | 0.0040 | 0.0249 | 0.9652 | 18.6860 | 0.5753 | 0.1344 | 0.5657 | 0.4179 |
| LLOG-F | 0.1393 | 0.0162 | 0.1776 | 0.1979 | 0.0398 | 0.2673 | 0.5984 | 11.1721 | 0.1142 | 0.4659 | 0.4682 | 0.8827 |
| mediamill10% | 0.0618 | 0.0326 | 0.4003 | 0.5651 | 0.0268 | 0.5053 | 0.2090 | 17.2043 | 0.0505 | 0.6667 | 0.7214 | 0.9409 |
| medical | 0.4796 | 0.0152 | 0.6361 | 0.7096 | 0.1997 | 0.7287 | 0.2857 | 1.7143 | 0.0219 | 0.8134 | 0.5384 | 0.9736 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.9667 | 0.1631 | 0.7970 | 0.8516 | 0.8597 |
| NUS-WIDE-bow10% | 0.0147 | 0.0540 | 0.0697 | 0.1146 | 0.0236 | 0.1062 | 0.8725 | 44.0304 | 0.3873 | 0.2011 | 0.4955 | 0.5349 |
| NUS-WIDE-cVLADplus10% | 0.0262 | 0.0374 | 0.1383 | 0.2213 | 0.0388 | 0.2217 | 0.8121 | 28.7507 | 0.2199 | 0.2794 | 0.5848 | 0.7504 |
| OHSUMED-F | 0.1278 | 0.0672 | 0.1975 | 0.2374 | 0.1400 | 0.2830 | 0.4681 | 6.6949 | 0.2024 | 0.5770 | 0.7858 | 0.7894 |
| PlantGO | 0.2449 | 0.0774 | 0.2602 | 0.2676 | 0.1444 | 0.3724 | 0.3571 | 0.8061 | 0.0579 | 0.7833 | 0.9465 | 0.9407 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.5408 | 2.1735 | 0.1792 | 0.6119 | 0.7811 | 0.8405 |
| rcv1subset1 | 0.0400 | 0.0318 | 0.3120 | 0.4591 | 0.1757 | 0.4384 | 0.6050 | 14.5567 | 0.0599 | 0.4933 | 0.8481 | 0.9304 |
| REUTERS-K500-EX2 | 0.2285 | 0.0156 | 0.4019 | 0.4996 | 0.2199 | 0.4777 | 0.5859 | 7.2818 | 0.0498 | 0.5414 | 0.7082 | 0.9418 |
| scene | 0.4523 | 0.1086 | 0.4751 | 0.4862 | 0.6068 | 0.6045 | 0.2241 | 0.4398 | 0.0668 | 0.8687 | 0.9356 | 0.9457 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1197 | 19.2394 | 0.1339 | 0.8305 | 0.5614 | 0.7910 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1549 | 19.6268 | 0.1540 | 0.7929 | 0.5225 | 0.7796 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.2817 | 0.1247 | 0.8320 | 0.5546 | 0.8027 |
| SLASHDOT-F | 0.3694 | 0.0383 | 0.4081 | 0.4275 | 0.2863 | 0.5174 | 0.3430 | 1.9393 | 0.0696 | 0.7455 | 0.6810 | 0.9325 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0129 | 0.0221 | 0.1491 | 0.2361 | 0.0458 | 0.2225 | 0.7356 | 40.1911 | 0.1377 | 0.3048 | 0.7391 | 0.8566 |
| Stackex_chess | 0.0179 | 0.0124 | 0.1938 | 0.3006 | 0.0385 | 0.3034 | 0.6726 | 58.6071 | 0.1355 | 0.3112 | 0.4478 | 0.8626 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7391 | 63.2609 | 0.2931 | 0.2740 | 0.1692 | 0.6545 |
| Stackex_cooking | 0.0261 | 0.0071 | 0.1708 | 0.2570 | 0.0712 | 0.2640 | 0.7720 | 132.2454 | 0.1857 | 0.2113 | 0.7473 | 0.8059 |
| Stackex_philosophy | 0.0402 | 0.0133 | 0.2236 | 0.3308 | 0.0461 | 0.3065 | 0.7965 | 48.7412 | 0.1147 | 0.2894 | 0.5919 | 0.8771 |
| tmc2007-500 | 0.0385 | 0.0928 | 0.0930 | 0.1211 | 0.1361 | 0.1511 | 0.3804 | 9.5580 | 0.2754 | 0.5731 | 0.8551 | 0.7094 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4932 | 4.0959 | 0.2183 | 0.6120 | 0.6843 | 0.7590 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4966 | 4.1438 | 0.2239 | 0.6027 | 0.6758 | 0.7487 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.9048 | 0.1414 | 0.8233 | 0.7489 | 0.8859 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2857 | 0.6667 | 0.1107 | 0.8230 | 0.6286 | 0.8915 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2642 | 8.9340 | 0.2661 | 0.6925 | 0.6660 | 0.7122 |
| Yahoo_Arts | 0.0801 | 0.0667 | 0.1090 | 0.1281 | 0.0602 | 0.1548 | 0.5674 | 6.6088 | 0.1774 | 0.5215 | 0.6372 | 0.7572 |
| Yahoo_Business | 0.2585 | 0.0444 | 0.5409 | 0.6828 | 0.0907 | 0.6256 | 0.4456 | 3.7647 | 0.0693 | 0.7120 | 0.6229 | 0.8892 |
| Yahoo_Computers | 0.2738 | 0.0492 | 0.3600 | 0.4459 | 0.0940 | 0.4045 | 0.4717 | 7.5412 | 0.1713 | 0.6028 | 0.5822 | 0.6844 |
| Yahoo_Education | 0.0599 | 0.0520 | 0.1089 | 0.1377 | 0.0545 | 0.1730 | 0.7257 | 11.2569 | 0.2617 | 0.4218 | 0.6190 | 0.7236 |
| Yahoo_Entertainment | 0.1453 | 0.0653 | 0.1687 | 0.1818 | 0.0929 | 0.2241 | 0.5397 | 5.3001 | 0.1963 | 0.5800 | 0.6018 | 0.7018 |
| Yahoo_Health | 0.1781 | 0.0508 | 0.2435 | 0.2843 | 0.0612 | 0.2962 | 0.4300 | 6.0087 | 0.1334 | 0.6622 | 0.6576 | 0.8637 |
| Yahoo_Recreation | 0.0288 | 0.0739 | 0.0503 | 0.0627 | 0.0658 | 0.0898 | 0.7171 | 7.3390 | 0.2901 | 0.4729 | 0.5281 | 0.5457 |
| Yahoo_Reference | 0.0324 | 0.0668 | 0.2432 | 0.3437 | 0.1119 | 0.3365 | 0.9440 | 5.1333 | 0.1354 | 0.3843 | 0.4302 | 0.6769 |
| Yahoo_Science | 0.1229 | 0.0368 | 0.1580 | 0.1800 | 0.0615 | 0.2271 | 0.5848 | 7.3219 | 0.1377 | 0.5232 | 0.6905 | 0.7564 |
| Yahoo_Social | 0.2393 | 0.0415 | 0.3707 | 0.4440 | 0.0627 | 0.4094 | 0.4728 | 7.6337 | 0.1570 | 0.6123 | 0.5211 | 0.7092 |
| Yahoo_Society | 0.1529 | 0.0678 | 0.2093 | 0.2507 | 0.0519 | 0.2549 | 0.5523 | 9.3072 | 0.2471 | 0.5017 | 0.5400 | 0.7011 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1983 | 6.1694 | 0.1573 | 0.7724 | 0.7015 | 0.8398 |
| Yelp | 0.0050 | 0.3585 | 0.0050 | 0.0050 | 0.0047 | 0.0055 | 0.2024 | 1.3200 | 0.1238 | 0.8651 | 0.8153 | 0.8612 |

Table 180: Detailed results for Massive (n = 10000) for Ranking-loss metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.3500 | 0.0370 | 0.3729 | 0.3779 | 0.4827 | 0.5110 | 0.3146 | 1.3716 | 0.0715 | 0.7899 | 0.9070 | 0.8968 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4722 | 1.4167 | 0.2221 | 0.6830 | 0.7958 | 0.7818 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6129 | 2.1290 | 0.3613 | 0.5672 | 0.6369 | 0.6270 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7059 | 2.1176 | 0.4132 | 0.5020 | 0.4812 | 0.6032 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6667 | 1.8333 | 0.3467 | 0.5389 | 0.7222 | 0.6299 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3889 | 2.6111 | 0.0981 | 0.7972 | 0.6835 | 0.7693 |
| bibtex | 0.1221 | 0.0161 | 0.2730 | 0.3796 | 0.2052 | 0.3593 | 0.6349 | 30.1657 | 0.1023 | 0.4332 | 0.8852 | 0.8591 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5128 | 4.9487 | 0.1725 | 0.5991 | 0.7506 | 0.8371 |
| bookmarks10% | 0.0520 | 0.0144 | 0.1051 | 0.1419 | 0.0373 | 0.1258 | 0.8986 | 61.3685 | 0.2001 | 0.1830 | 0.5667 | 0.6132 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1373 | 131.3725 | 0.1894 | 0.4754 | 0.5248 | 0.8121 |
| corel16k001 | 0.0000 | 0.0370 | 0.0575 | 0.1001 | 0.0178 | 0.0994 | 0.9634 | 69.5566 | 0.2383 | 0.1427 | 0.5752 | 0.6594 |
| Corel5k | 0.0000 | 0.0146 | 0.1582 | 0.2511 | 0.0362 | 0.2582 | 0.8396 | 125.5937 | 0.1472 | 0.1785 | 0.4789 | 0.8528 |
| delicious | 0.0000 | 0.0821 | 0.0439 | 0.0842 | 0.0428 | 0.0840 | 0.9512 | 937.0223 | 0.3440 | 0.0650 | 0.6687 | 0.6538 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 1.7833 | 0.1616 | 0.7740 | 0.8456 | 0.8632 |
| enron | 0.0869 | 0.0578 | 0.2115 | 0.3003 | 0.0434 | 0.2747 | 0.2907 | 12.0646 | 0.0769 | 0.6891 | 0.6318 | 0.9105 |
| EukaryoteGO | 0.6496 | 0.0214 | 0.7545 | 0.8030 | 0.5355 | 0.7906 | 0.2292 | 0.8056 | 0.0283 | 0.8588 | 0.9423 | 0.9440 |
| EukaryotePseAAC | 0.0998 | 0.0953 | 0.1844 | 0.2381 | 0.0889 | 0.2445 | 0.7445 | 3.8619 | 0.1690 | 0.4568 | 0.6025 | 0.7607 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 3.6000 | 0.2133 | 0.7991 | 0.5668 | 0.7693 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.0976 | 0.1493 | 0.7623 | 0.5272 | 0.7768 |
| genbase | 0.8266 | 0.0111 | 0.8725 | 0.8992 | 0.3101 | 0.8609 | 0.0000 | 0.4809 | 0.0054 | 0.9866 | 0.6245 | 0.9770 |
| GnegativeGO | 0.7857 | 0.0375 | 0.7964 | 0.8017 | 0.5992 | 0.8433 | 0.1000 | 0.1571 | 0.0153 | 0.9488 | 0.8659 | 0.9913 |
| GnegativePseAAC | 0.5500 | 0.0634 | 0.5536 | 0.5554 | 0.2255 | 0.6872 | 0.1857 | 0.5071 | 0.0642 | 0.8786 | 0.7389 | 0.9446 |
| GpositiveGO | 0.6731 | 0.1154 | 0.6827 | 0.6875 | 0.7119 | 0.7500 | 0.2500 | 0.3269 | 0.1026 | 0.8654 | 0.9502 | 0.9321 |
| GpositivePseAAC | 0.6154 | 0.1202 | 0.6154 | 0.6154 | 0.5407 | 0.7191 | 0.2885 | 0.4423 | 0.1474 | 0.8317 | 0.8808 | 0.8985 |
| HumanGO | 0.6159 | 0.0399 | 0.6711 | 0.6906 | 0.4123 | 0.7224 | 0.1704 | 0.5172 | 0.0227 | 0.8942 | 0.9850 | 0.9851 |
| HumanPseAAC | 0.0222 | 0.0842 | 0.0227 | 0.0227 | 0.0153 | 0.0363 | 0.5582 | 2.2236 | 0.1470 | 0.6188 | 0.7006 | 0.8623 |
| Image | 0.2000 | 0.1970 | 0.2150 | 0.2222 | 0.2851 | 0.3183 | 0.3700 | 0.9400 | 0.1817 | 0.7705 | 0.8335 | 0.8319 |
| IMDB-ECC-F10% | 0.0052 | 0.1177 | 0.2209 | 0.3487 | 0.0571 | 0.3304 | 0.6510 | 11.1159 | 0.2528 | 0.4433 | 0.5273 | 0.7044 |
| IMDB-F10% | 0.0149 | 0.1056 | 0.0226 | 0.0283 | 0.0040 | 0.0251 | 0.9537 | 18.7547 | 0.5770 | 0.1342 | 0.5579 | 0.4183 |
| LLOG-F | 0.1414 | 0.0163 | 0.1798 | 0.1950 | 0.0393 | 0.2663 | 0.5939 | 11.1082 | 0.1149 | 0.4692 | 0.4706 | 0.8831 |
| mediamill10% | 0.0625 | 0.0327 | 0.4013 | 0.5662 | 0.0270 | 0.5049 | 0.2077 | 17.1710 | 0.0502 | 0.6765 | 0.7181 | 0.9487 |
| medical | 0.4810 | 0.0152 | 0.6399 | 0.7156 | 0.1995 | 0.7394 | 0.2886 | 1.7292 | 0.0222 | 0.8240 | 0.5376 | 0.9697 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2333 | 1.9500 | 0.1629 | 0.8059 | 0.8471 | 0.8562 |
| NUS-WIDE-bow10% | 0.0149 | 0.0539 | 0.0691 | 0.1152 | 0.0237 | 0.1077 | 0.8696 | 44.1688 | 0.3885 | 0.2005 | 0.4947 | 0.5400 |
| NUS-WIDE-cVLADplus10% | 0.0264 | 0.0370 | 0.1379 | 0.2232 | 0.0392 | 0.2230 | 0.8045 | 28.9135 | 0.2177 | 0.2772 | 0.5907 | 0.7533 |
| OHSUMED-F | 0.1282 | 0.0670 | 0.1961 | 0.2376 | 0.1406 | 0.2795 | 0.4749 | 6.7759 | 0.2013 | 0.5750 | 0.7903 | 0.7800 |
| PlantGO | 0.2454 | 0.0769 | 0.2620 | 0.2658 | 0.1460 | 0.3680 | 0.3579 | 0.8089 | 0.0578 | 0.7830 | 0.9553 | 0.9459 |
| PlantPseAAC | 0.0000 | 0.0927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5918 | 2.2449 | 0.1867 | 0.5853 | 0.7849 | 0.8377 |
| rcv1subset1 | 0.0405 | 0.0316 | 0.3083 | 0.4562 | 0.1757 | 0.4449 | 0.5961 | 14.6413 | 0.0606 | 0.4930 | 0.8483 | 0.9255 |
| REUTERS-K500-EX2 | 0.2253 | 0.0156 | 0.3976 | 0.5052 | 0.2221 | 0.4786 | 0.5795 | 7.3192 | 0.0501 | 0.5400 | 0.6981 | 0.9501 |
| scene | 0.4440 | 0.1093 | 0.4647 | 0.4749 | 0.5989 | 0.5969 | 0.2199 | 0.4398 | 0.0668 | 0.8701 | 0.9358 | 0.9461 |
| sider_CDK_ECFP4 | 0.0000 | 0.5216 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1206 | 19.3018 | 0.1354 | 0.8233 | 0.5633 | 0.7914 |
| sider_MordredDesc | 0.0000 | 0.5208 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1553 | 19.4014 | 0.1530 | 0.7863 | 0.5228 | 0.7868 |
| sider_RDKit_desc | 0.0000 | 0.5331 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1335 | 19.5680 | 0.1247 | 0.8433 | 0.5608 | 0.7929 |
| SLASHDOT-F | 0.3701 | 0.0377 | 0.4032 | 0.4336 | 0.2843 | 0.5147 | 0.3404 | 1.9621 | 0.0694 | 0.7531 | 0.6829 | 0.9453 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4000 | 0.4000 | 0.2000 | 0.8000 | 0.3889 | 0.8200 |
| Stackex_chemistry | 0.0129 | 0.0224 | 0.1497 | 0.2377 | 0.0453 | 0.2210 | 0.7370 | 39.8372 | 0.1363 | 0.3038 | 0.7453 | 0.8535 |
| Stackex_chess | 0.0176 | 0.0125 | 0.1949 | 0.2989 | 0.0380 | 0.3056 | 0.6642 | 58.2567 | 0.1340 | 0.3139 | 0.4412 | 0.8686 |
| Stackex_coffee | 0.0000 | 0.0181 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7313 | 63.6188 | 0.2916 | 0.2763 | 0.1682 | 0.6584 |
| Stackex_cooking | 0.0264 | 0.0071 | 0.1719 | 0.2561 | 0.0710 | 0.2652 | 0.7709 | 132.6714 | 0.1856 | 0.2083 | 0.7519 | 0.8162 |
| Stackex_philosophy | 0.0405 | 0.0135 | 0.2250 | 0.3331 | 0.0465 | 0.3082 | 0.7860 | 49.1868 | 0.1150 | 0.2896 | 0.5979 | 0.8811 |
| tmc2007-500 | 0.0389 | 0.0934 | 0.0925 | 0.1221 | 0.1378 | 0.1499 | 0.3859 | 9.5404 | 0.2738 | 0.5721 | 0.8613 | 0.7018 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1785 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4904 | 4.1563 | 0.2173 | 0.6177 | 0.6938 | 0.7651 |
| tox21_RDKit_desc | 0.0000 | 0.1800 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4942 | 4.1932 | 0.2232 | 0.5998 | 0.6823 | 0.7433 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5238 | 1.1905 | 0.1992 | 0.6923 | 0.7605 | 0.8531 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4286 | 0.9048 | 0.1607 | 0.7397 | 0.6134 | 0.8810 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2830 | 9.1604 | 0.2764 | 0.6816 | 0.6643 | 0.7003 |
| Yahoo_Arts | 0.0810 | 0.0660 | 0.1098 | 0.1289 | 0.0598 | 0.1571 | 0.5688 | 6.6175 | 0.1754 | 0.5282 | 0.6366 | 0.7501 |
| Yahoo_Business | 0.2566 | 0.0447 | 0.5411 | 0.6804 | 0.0911 | 0.6312 | 0.4417 | 3.7888 | 0.0683 | 0.7103 | 0.6276 | 0.8830 |
| Yahoo_Computers | 0.2732 | 0.0493 | 0.3616 | 0.4514 | 0.0928 | 0.4009 | 0.4750 | 7.6278 | 0.1732 | 0.5960 | 0.5866 | 0.6942 |
| Yahoo_Education | 0.0592 | 0.0516 | 0.1080 | 0.1395 | 0.0545 | 0.1728 | 0.7332 | 11.3015 | 0.2653 | 0.4248 | 0.6257 | 0.7145 |
| Yahoo_Entertainment | 0.1471 | 0.0654 | 0.1676 | 0.1816 | 0.0918 | 0.2220 | 0.5419 | 5.3265 | 0.1990 | 0.5870 | 0.6030 | 0.7115 |
| Yahoo_Health | 0.1803 | 0.0511 | 0.2421 | 0.2801 | 0.0617 | 0.2976 | 0.4349 | 6.0657 | 0.1329 | 0.6635 | 0.6530 | 0.8758 |
| Yahoo_Recreation | 0.0292 | 0.0735 | 0.0504 | 0.0625 | 0.0657 | 0.0895 | 0.7150 | 7.3502 | 0.2876 | 0.4668 | 0.5317 | 0.5437 |
| Yahoo_Reference | 0.0320 | 0.0661 | 0.2404 | 0.3448 | 0.1132 | 0.3322 | 0.9456 | 5.1121 | 0.1348 | 0.3886 | 0.4262 | 0.6687 |
| Yahoo_Science | 0.1227 | 0.0372 | 0.1573 | 0.1811 | 0.0621 | 0.2273 | 0.5925 | 7.2163 | 0.1366 | 0.5245 | 0.6857 | 0.7563 |
| Yahoo_Social | 0.2378 | 0.0412 | 0.3755 | 0.4483 | 0.0629 | 0.4118 | 0.4793 | 7.5208 | 0.1562 | 0.6192 | 0.5163 | 0.7073 |
| Yahoo_Society | 0.1551 | 0.0672 | 0.2105 | 0.2491 | 0.0516 | 0.2517 | 0.5506 | 9.3284 | 0.2461 | 0.5066 | 0.5460 | 0.7010 |
| yeast | 0.0000 | 0.3063 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1968 | 6.2188 | 0.1564 | 0.7643 | 0.6998 | 0.8511 |
| Yelp | 0.0160 | 0.3563 | 0.0163 | 0.0166 | 0.0183 | 0.0187 | 0.2144 | 1.3958 | 0.1412 | 0.8483 | 0.8103 | 0.8413 |

Table 181: Detailed results for Massive (n = 10) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0000 | 0.1887 | 0.0502 | 0.0761 | 0.0255 | 0.0767 | 0.7692 | 6.6561 | 0.3542 | 0.3651 | 0.8553 | 0.6702 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7500 | 2.7222 | 0.4904 | 0.4583 | 0.5708 | 0.5394 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8387 | 2.5484 | 0.4435 | 0.4489 | 0.5101 | 0.5473 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9412 | 2.9412 | 0.5750 | 0.3422 | 0.3218 | 0.4074 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.3667 | 0.4567 | 0.4142 | 0.4686 | 0.5074 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5556 | 0.0824 | 0.8556 | 0.6897 | 0.7785 |
| bibtex | 0.0000 | 0.7707 | 0.0167 | 0.0329 | 0.0585 | 0.0330 | 0.9608 | 96.2324 | 0.7545 | 0.0942 | 0.9536 | 0.8100 |
| birds | 0.0000 | 0.1970 | 0.0885 | 0.1384 | 0.0386 | 0.1310 | 0.9231 | 8.3333 | 0.3651 | 0.2352 | 0.6743 | 0.6578 |
| bookmarks10% | 0.0000 | 0.8190 | 0.0100 | 0.0198 | 0.0165 | 0.0198 | 0.9841 | 127.9829 | 0.8487 | 0.0446 | 0.9280 | 0.8423 |
| CAL500 | 0.0000 | 0.7289 | 0.1396 | 0.2447 | 0.1836 | 0.2449 | 0.4118 | 152.7255 | 0.8007 | 0.2281 | 0.8113 | 0.8446 |
| corel16k001 | 0.0000 | 0.8141 | 0.0176 | 0.0346 | 0.0297 | 0.0346 | 0.9317 | 114.1808 | 0.7512 | 0.0957 | 0.9130 | 0.7988 |
| Corel5k | 0.0000 | 0.8971 | 0.0097 | 0.0192 | 0.0183 | 0.0192 | 0.8460 | 182.4960 | 0.8915 | 0.0807 | 0.6592 | 0.9129 |
| delicious | 0.0000 | 0.9622 | 0.0196 | 0.0385 | 0.0368 | 0.0385 | 0.9385 | 924.0099 | 0.9847 | 0.0400 | 0.9852 | 0.9765 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6333 | 2.0833 | 0.2498 | 0.6374 | 0.8455 | 0.7618 |
| enron | 0.0000 | 0.4699 | 0.0887 | 0.1625 | 0.0834 | 0.1628 | 0.6082 | 31.2749 | 0.3788 | 0.3652 | 0.7262 | 0.7918 |
| EukaryoteGO | 0.0000 | 0.1498 | 0.2487 | 0.3915 | 0.3016 | 0.3845 | 0.8918 | 5.5606 | 0.2534 | 0.4272 | 0.9639 | 0.7809 |
| EukaryotePseAAC | 0.0000 | 0.5615 | 0.0591 | 0.1092 | 0.1056 | 0.1103 | 0.9125 | 7.6512 | 0.4665 | 0.3030 | 0.9027 | 0.7552 |
| flags | 0.0000 | 0.5143 | 0.0808 | 0.1274 | 0.0659 | 0.1429 | 0.3000 | 4.0500 | 0.3142 | 0.7430 | 0.5861 | 0.6865 |
| foodtruck | 0.3415 | 0.1443 | 0.4747 | 0.5885 | 0.0718 | 0.4662 | 0.8049 | 9.2195 | 0.6291 | 0.3121 | 0.5462 | 0.4566 |
| genbase | 0.0000 | 0.2698 | 0.0983 | 0.1749 | 0.1496 | 0.1785 | 0.4478 | 4.8209 | 0.1505 | 0.6871 | 0.6537 | 0.8467 |
| GnegativeGO | 0.8214 | 0.0286 | 0.8321 | 0.8375 | 0.4801 | 0.8806 | 0.0429 | 0.1429 | 0.0124 | 0.9729 | 0.8510 | 0.9866 |
| GnegativePseAAC | 0.5286 | 0.0679 | 0.5321 | 0.5339 | 0.2285 | 0.6637 | 0.3429 | 0.8143 | 0.1065 | 0.7826 | 0.7433 | 0.9130 |
| GpositiveGO | 0.8654 | 0.0433 | 0.8654 | 0.8654 | 0.9265 | 0.9091 | 0.0577 | 0.0962 | 0.0256 | 0.9679 | 0.9969 | 0.9892 |
| GpositivePseAAC | 0.4423 | 0.1538 | 0.4423 | 0.4423 | 0.4500 | 0.5897 | 0.2500 | 0.4231 | 0.1410 | 0.8478 | 0.9001 | 0.9067 |
| HumanGO | 0.0064 | 0.1187 | 0.3039 | 0.4119 | 0.3182 | 0.4337 | 0.3183 | 1.7395 | 0.1052 | 0.7510 | 0.9612 | 0.8954 |
| HumanPseAAC | 0.1415 | 0.0838 | 0.1431 | 0.1439 | 0.0620 | 0.1978 | 0.6913 | 4.1543 | 0.2894 | 0.4445 | 0.6863 | 0.7191 |
| Image | 0.0250 | 0.2340 | 0.0250 | 0.0250 | 0.0333 | 0.0410 | 0.3600 | 1.0500 | 0.2054 | 0.7635 | 0.8357 | 0.8150 |
| IMDB-ECC-F10% | 0.0000 | 0.4422 | 0.0668 | 0.1219 | 0.0649 | 0.1240 | 0.6415 | 13.6709 | 0.4485 | 0.3500 | 0.7346 | 0.6402 |
| IMDB-F10% | 0.0000 | 0.7067 | 0.0823 | 0.1523 | 0.1104 | 0.1520 | 0.9147 | 17.8500 | 0.8837 | 0.1483 | 0.9207 | 0.7794 |
| LLOG-F | 0.0000 | 0.6380 | 0.0197 | 0.0386 | 0.0312 | 0.0385 | 0.9426 | 38.7377 | 0.6414 | 0.1213 | 0.5052 | 0.7285 |
| mediamill10% | 0.0000 | 0.8430 | 0.0469 | 0.0896 | 0.0679 | 0.0896 | 0.2114 | 75.2684 | 0.7434 | 0.2749 | 0.7889 | 0.9050 |
| medical | 0.0000 | 0.5569 | 0.0456 | 0.0870 | 0.1262 | 0.0870 | 0.8367 | 26.5714 | 0.8050 | 0.1843 | 0.5287 | 0.5854 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3667 | 2.2000 | 0.2262 | 0.7309 | 0.8449 | 0.7987 |
| NUS-WIDE-bow10% | 0.0000 | 0.7601 | 0.0294 | 0.0570 | 0.0434 | 0.0570 | 0.8354 | 43.5628 | 0.6783 | 0.1957 | 0.7920 | 0.8400 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.7563 | 0.0310 | 0.0601 | 0.0448 | 0.0601 | 0.9001 | 48.6461 | 0.6847 | 0.1268 | 0.7737 | 0.7925 |
| OHSUMED-F | 0.0000 | 0.4355 | 0.1058 | 0.1888 | 0.1665 | 0.1890 | 0.8026 | 13.7545 | 0.6135 | 0.2496 | 0.7648 | 0.5776 |
| PlantGO | 0.1146 | 0.1198 | 0.3941 | 0.5038 | 0.3663 | 0.5071 | 0.5312 | 2.7292 | 0.2168 | 0.6180 | 0.9635 | 0.7988 |
| PlantPseAAC | 0.0306 | 0.1675 | 0.0544 | 0.0673 | 0.0346 | 0.0751 | 0.7041 | 2.7449 | 0.2256 | 0.4853 | 0.8089 | 0.7817 |
| rcv1subset1 | 0.0000 | 0.7719 | 0.0328 | 0.0634 | 0.0689 | 0.0635 | 0.8567 | 67.2217 | 0.7385 | 0.1424 | 0.9146 | 0.8231 |
| REUTERS-K500-EX2 | 0.0000 | 0.8444 | 0.0158 | 0.0311 | 0.0475 | 0.0311 | 0.9055 | 57.6959 | 0.8858 | 0.1193 | 0.7582 | 0.8677 |
| scene | 0.3278 | 0.1266 | 0.3465 | 0.3556 | 0.4843 | 0.4903 | 0.3237 | 0.6639 | 0.1107 | 0.8050 | 0.9349 | 0.8990 |
| sider_CDK_ECFP4 | 0.0000 | 0.4953 | 0.1842 | 0.3344 | 0.1277 | 0.3057 | 0.2606 | 25.0000 | 0.3623 | 0.7045 | 0.6408 | 0.6483 |
| sider_MordredDesc | 0.0000 | 0.4906 | 0.2980 | 0.4607 | 0.2744 | 0.4756 | 0.1127 | 24.2535 | 0.4611 | 0.7014 | 0.7192 | 0.6647 |
| sider_RDKit_desc | 0.0000 | 0.4395 | 0.3298 | 0.5061 | 0.2722 | 0.5109 | 0.5282 | 24.0211 | 0.5279 | 0.6184 | 0.7090 | 0.5827 |
| SLASHDOT-F | 0.0000 | 0.3027 | 0.0585 | 0.1016 | 0.1504 | 0.1052 | 0.6376 | 5.2857 | 0.2398 | 0.5188 | 0.6966 | 0.8189 |
| solar_flare-L3 | 0.2000 | 0.2667 | 0.2000 | 0.2000 | 0.1667 | 0.3333 | 0.4000 | 0.8000 | 0.4000 | 0.7333 | 0.4444 | 0.6400 |
| Stackex_chemistry | 0.0000 | 0.7784 | 0.0121 | 0.0239 | 0.0300 | 0.0239 | 0.9308 | 116.1254 | 0.8028 | 0.0715 | 0.8554 | 0.7853 |
| Stackex_chess | 0.0000 | 0.8524 | 0.0112 | 0.0221 | 0.0276 | 0.0221 | 1.0000 | 151.2679 | 0.8103 | 0.0554 | 0.5246 | 0.8717 |
| Stackex_coffee | 0.0000 | 0.8271 | 0.0188 | 0.0370 | 0.0307 | 0.0370 | 0.9130 | 83.0000 | 0.8506 | 0.0871 | 0.2540 | 0.8660 |
| Stackex_cooking | 0.0000 | 0.8822 | 0.0054 | 0.0108 | 0.0155 | 0.0108 | 0.9623 | 260.3285 | 0.8379 | 0.0495 | 0.8997 | 0.8993 |
| Stackex_philosophy | 0.0000 | 0.8933 | 0.0102 | 0.0202 | 0.0243 | 0.0202 | 0.9950 | 156.2915 | 0.9301 | 0.0366 | 0.7315 | 0.9026 |
| tmc2007-500 | 0.0000 | 0.1817 | 0.0342 | 0.0558 | 0.0796 | 0.0594 | 0.4584 | 9.3276 | 0.2700 | 0.5297 | 0.7171 | 0.6979 |
| tox21_CDK_ECFP4 | 0.0034 | 0.1784 | 0.0063 | 0.0078 | 0.0179 | 0.0095 | 0.6130 | 4.5719 | 0.2589 | 0.5300 | 0.6812 | 0.7206 |
| tox21_RDKit_desc | 0.0000 | 0.3910 | 0.1554 | 0.2626 | 0.1515 | 0.2767 | 0.6575 | 6.5616 | 0.4395 | 0.4196 | 0.7809 | 0.5996 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5238 | 1.0952 | 0.1802 | 0.7026 | 0.7067 | 0.8285 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5714 | 1.1429 | 0.2060 | 0.6524 | 0.6488 | 0.8442 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6604 | 10.8679 | 0.4596 | 0.5226 | 0.6569 | 0.5414 |
| Yahoo_Arts | 0.0000 | 0.3393 | 0.0581 | 0.1051 | 0.0679 | 0.1049 | 0.9186 | 13.4606 | 0.4642 | 0.2282 | 0.7117 | 0.6321 |
| Yahoo_Business | 0.0000 | 0.5697 | 0.0822 | 0.1521 | 0.1167 | 0.1522 | 0.9287 | 14.2415 | 0.9051 | 0.1392 | 0.7936 | 0.6042 |
| Yahoo_Computers | 0.0000 | 0.5471 | 0.0513 | 0.0975 | 0.0754 | 0.0976 | 0.8369 | 13.2538 | 0.5986 | 0.2463 | 0.7189 | 0.6732 |
| Yahoo_Education | 0.0000 | 0.3290 | 0.0209 | 0.0378 | 0.0382 | 0.0391 | 0.9726 | 15.9443 | 0.4233 | 0.1779 | 0.6303 | 0.5664 |
| Yahoo_Entertainment | 0.0000 | 0.3790 | 0.0918 | 0.1604 | 0.1251 | 0.1625 | 0.9505 | 9.0463 | 0.4678 | 0.2320 | 0.7708 | 0.6268 |
| Yahoo_Health | 0.0000 | 0.2800 | 0.0972 | 0.1765 | 0.1337 | 0.1745 | 0.5179 | 11.8979 | 0.3236 | 0.4788 | 0.6834 | 0.7262 |
| Yahoo_Recreation | 0.0000 | 0.3115 | 0.0661 | 0.1156 | 0.1187 | 0.1208 | 0.9065 | 9.1917 | 0.3933 | 0.2436 | 0.7430 | 0.6425 |
| Yahoo_Reference | 0.0000 | 0.3866 | 0.0592 | 0.1101 | 0.0432 | 0.1098 | 0.9963 | 17.0486 | 0.7178 | 0.1052 | 0.6421 | 0.5377 |
| Yahoo_Science | 0.0000 | 0.4175 | 0.0586 | 0.1105 | 0.0773 | 0.1104 | 0.9207 | 25.8569 | 0.7212 | 0.1239 | 0.7919 | 0.5448 |
| Yahoo_Social | 0.0000 | 0.4212 | 0.0552 | 0.1036 | 0.0466 | 0.1035 | 0.9802 | 22.3185 | 0.7725 | 0.0864 | 0.7141 | 0.5450 |
| Yahoo_Society | 0.0000 | 0.4721 | 0.0518 | 0.0977 | 0.0645 | 0.0981 | 0.8960 | 10.5227 | 0.3570 | 0.2702 | 0.6938 | 0.7056 |
| yeast | 0.0000 | 0.4038 | 0.0490 | 0.0854 | 0.0361 | 0.0928 | 0.4339 | 7.0868 | 0.2177 | 0.6807 | 0.7315 | 0.7780 |
| Yelp | 0.0020 | 0.3591 | 0.0020 | 0.0020 | 0.0019 | 0.0022 | 0.2273 | 1.6062 | 0.1892 | 0.8269 | 0.7779 | 0.7896 |

Table 182: Detailed results for Massive (n = 100) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0223 | 0.0522 | 0.0233 | 0.0239 | 0.0337 | 0.0446 | 0.6452 | 5.8387 | 0.3002 | 0.4918 | 0.8892 | 0.7100 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6667 | 2.3333 | 0.3978 | 0.5201 | 0.6504 | 0.6110 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5806 | 2.0645 | 0.3532 | 0.5952 | 0.5631 | 0.5948 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5882 | 1.9412 | 0.3721 | 0.5598 | 0.3717 | 0.6217 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9000 | 2.2667 | 0.4417 | 0.4103 | 0.5856 | 0.5598 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1667 | 2.3889 | 0.0593 | 0.9037 | 0.6546 | 0.7840 |
| bibtex | 0.0000 | 0.1286 | 0.0401 | 0.0772 | 0.0886 | 0.0784 | 0.7014 | 67.9770 | 0.2783 | 0.2288 | 0.8963 | 0.7335 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3846 | 4.0513 | 0.1396 | 0.6472 | 0.7252 | 0.8560 |
| bookmarks10% | 0.0000 | 0.1781 | 0.0130 | 0.0258 | 0.0275 | 0.0261 | 0.8030 | 87.2506 | 0.3210 | 0.2050 | 0.7998 | 0.6807 |
| CAL500 | 0.0000 | 0.2760 | 0.0834 | 0.1541 | 0.0391 | 0.1541 | 0.5294 | 161.8627 | 0.3251 | 0.3558 | 0.5411 | 0.7016 |
| corel16k001 | 0.0000 | 0.1293 | 0.0385 | 0.0724 | 0.0212 | 0.0726 | 0.8119 | 85.8068 | 0.3149 | 0.1855 | 0.6946 | 0.6907 |
| Corel5k | 0.0000 | 0.4683 | 0.0117 | 0.0230 | 0.0221 | 0.0230 | 0.9840 | 217.1240 | 0.4378 | 0.0712 | 0.5498 | 0.7245 |
| delicious | 0.0129 | 0.5102 | 0.0146 | 0.0539 | 0.0416 | 0.0531 | 0.9005 | 908.9592 | 0.5246 | 0.0626 | 0.8218 | 0.6883 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3333 | 1.5667 | 0.1408 | 0.7998 | 0.8468 | 0.8691 |
| enron | 0.0526 | 0.0650 | 0.0536 | 0.0559 | 0.0083 | 0.0328 | 0.3450 | 13.3567 | 0.0862 | 0.6587 | 0.6342 | 0.8988 |
| EukaryoteGO | 0.5838 | 0.0255 | 0.6478 | 0.6796 | 0.3078 | 0.7195 | 0.2487 | 0.6198 | 0.0214 | 0.8528 | 0.9896 | 0.9846 |
| EukaryotePseAAC | 0.0296 | 0.0531 | 0.0322 | 0.0335 | 0.0278 | 0.0562 | 0.7104 | 2.8970 | 0.1220 | 0.5119 | 0.6959 | 0.8825 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3000 | 3.7500 | 0.2242 | 0.7991 | 0.6094 | 0.7576 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2927 | 2.8293 | 0.1334 | 0.7460 | 0.5299 | 0.7871 |
| genbase | 0.7463 | 0.0127 | 0.7836 | 0.8089 | 0.3431 | 0.8345 | 0.0000 | 0.2388 | 0.0006 | 0.9950 | 0.6352 | 0.9971 |
| GnegativeGO | 0.9000 | 0.0187 | 0.9107 | 0.9160 | 0.6643 | 0.9247 | 0.0357 | 0.1143 | 0.0083 | 0.9780 | 0.8590 | 0.9922 |
| GnegativePseAAC | 0.5214 | 0.0670 | 0.5214 | 0.5214 | 0.2170 | 0.6606 | 0.2000 | 0.5500 | 0.0707 | 0.8656 | 0.7533 | 0.9457 |
| GpositiveGO | 0.9231 | 0.0337 | 0.9231 | 0.9231 | 0.8699 | 0.9333 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9956 | 0.9691 |
| GpositivePseAAC | 0.5577 | 0.1250 | 0.5577 | 0.5577 | 0.5243 | 0.6905 | 0.2692 | 0.4423 | 0.1474 | 0.8365 | 0.8920 | 0.8840 |
| HumanGO | 0.6077 | 0.0411 | 0.6533 | 0.6764 | 0.4308 | 0.7089 | 0.1672 | 0.5080 | 0.0229 | 0.9022 | 0.9716 | 0.9793 |
| HumanPseAAC | 0.0193 | 0.0845 | 0.0193 | 0.0193 | 0.0142 | 0.0316 | 0.5531 | 2.2540 | 0.1480 | 0.6134 | 0.7008 | 0.8530 |
| Image | 0.1850 | 0.2000 | 0.2000 | 0.2072 | 0.2668 | 0.3007 | 0.3850 | 0.9700 | 0.1850 | 0.7615 | 0.8324 | 0.8102 |
| IMDB-ECC-F10% | 0.0000 | 0.1190 | 0.0292 | 0.0510 | 0.0222 | 0.0868 | 0.7358 | 10.8008 | 0.2629 | 0.3709 | 0.5406 | 0.6075 |
| IMDB-F10% | 0.0050 | 0.1038 | 0.0327 | 0.0480 | 0.0077 | 0.0570 | 0.9163 | 15.6404 | 0.4076 | 0.2229 | 0.6012 | 0.6035 |
| LLOG-F | 0.0164 | 0.0319 | 0.1113 | 0.1624 | 0.0250 | 0.1751 | 0.8033 | 22.7869 | 0.2620 | 0.2763 | 0.4326 | 0.7485 |
| mediamill10% | 0.0000 | 0.0666 | 0.2574 | 0.4181 | 0.0462 | 0.3972 | 0.2304 | 40.2494 | 0.1391 | 0.5076 | 0.5924 | 0.8430 |
| medical | 0.4898 | 0.0150 | 0.5697 | 0.6097 | 0.1972 | 0.6916 | 0.2143 | 1.7143 | 0.0201 | 0.8459 | 0.5404 | 0.9736 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2500 | 1.9500 | 0.1618 | 0.8012 | 0.8541 | 0.8634 |
| NUS-WIDE-bow10% | 0.0951 | 0.0319 | 0.1929 | 0.2637 | 0.0260 | 0.2348 | 0.8116 | 21.2931 | 0.1492 | 0.5340 | 0.4624 | 0.6142 |
| NUS-WIDE-cVLADplus10% | 0.0000 | 0.1039 | 0.0838 | 0.1552 | 0.0320 | 0.1490 | 0.9990 | 28.7165 | 0.2270 | 0.2027 | 0.6201 | 0.7432 |
| OHSUMED-F | 0.0854 | 0.0681 | 0.1246 | 0.1454 | 0.0641 | 0.1827 | 0.4128 | 4.9203 | 0.1392 | 0.6318 | 0.8356 | 0.8525 |
| PlantGO | 0.4688 | 0.0556 | 0.5087 | 0.5286 | 0.2683 | 0.6364 | 0.2292 | 0.5104 | 0.0331 | 0.8674 | 0.9702 | 0.9718 |
| PlantPseAAC | 0.0102 | 0.0918 | 0.0102 | 0.0102 | 0.0060 | 0.0182 | 0.5510 | 2.3265 | 0.1935 | 0.6016 | 0.7897 | 0.8310 |
| rcv1subset1 | 0.0480 | 0.0292 | 0.1805 | 0.2529 | 0.0842 | 0.2459 | 0.4692 | 12.1037 | 0.0470 | 0.5944 | 0.8637 | 0.9430 |
| REUTERS-K500-EX2 | 0.0000 | 0.0651 | 0.0857 | 0.1509 | 0.1609 | 0.1550 | 0.6546 | 14.2268 | 0.1023 | 0.4552 | 0.6926 | 0.8926 |
| scene | 0.4564 | 0.1086 | 0.4772 | 0.4873 | 0.6079 | 0.6045 | 0.2241 | 0.4398 | 0.0668 | 0.8687 | 0.9358 | 0.9457 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0775 | 19.2606 | 0.1259 | 0.8405 | 0.5675 | 0.7997 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.7958 | 0.1317 | 0.8340 | 0.5265 | 0.7960 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0986 | 19.1972 | 0.1278 | 0.8413 | 0.5665 | 0.7983 |
| SLASHDOT-F | 0.2407 | 0.0455 | 0.2579 | 0.2663 | 0.1519 | 0.3549 | 0.3915 | 2.3201 | 0.0863 | 0.7081 | 0.6706 | 0.9116 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6000 | 0.6000 | 0.3000 | 0.7000 | 0.4444 | 0.7400 |
| Stackex_chemistry | 0.0000 | 0.1613 | 0.0136 | 0.0265 | 0.0365 | 0.0269 | 0.8804 | 65.7666 | 0.2324 | 0.2058 | 0.7189 | 0.7660 |
| Stackex_chess | 0.0000 | 0.2346 | 0.0220 | 0.0429 | 0.0319 | 0.0428 | 0.9583 | 121.1429 | 0.3599 | 0.1192 | 0.4257 | 0.6809 |
| Stackex_coffee | 0.0000 | 0.0785 | 0.0079 | 0.0146 | 0.0036 | 0.0177 | 0.9130 | 61.9565 | 0.3054 | 0.1875 | 0.2021 | 0.6641 |
| Stackex_cooking | 0.0000 | 0.4278 | 0.0069 | 0.0137 | 0.0283 | 0.0137 | 0.9710 | 246.0541 | 0.5104 | 0.0579 | 0.7803 | 0.6516 |
| Stackex_philosophy | 0.0000 | 0.2222 | 0.0212 | 0.0415 | 0.0363 | 0.0414 | 0.8769 | 136.7211 | 0.4105 | 0.1154 | 0.5933 | 0.6540 |
| tmc2007-500 | 0.0014 | 0.0966 | 0.0052 | 0.0067 | 0.0227 | 0.0088 | 0.5738 | 5.0374 | 0.1246 | 0.5714 | 0.8973 | 0.8654 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4829 | 4.1336 | 0.2191 | 0.6124 | 0.6838 | 0.7556 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5342 | 4.4658 | 0.2558 | 0.5661 | 0.6857 | 0.7289 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1905 | 0.7143 | 0.1029 | 0.8762 | 0.7607 | 0.9085 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5714 | 9.0048 | 0.1583 | 0.6841 | 0.6129 | 0.8797 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2736 | 9.2547 | 0.2830 | 0.6843 | 0.6627 | 0.7002 |
| Yahoo_Arts | 0.0000 | 0.1311 | 0.0424 | 0.0646 | 0.0098 | 0.0659 | 0.8838 | 11.3712 | 0.3521 | 0.2528 | 0.6548 | 0.6362 |
| Yahoo_Business | 0.1631 | 0.0482 | 0.1799 | 0.1906 | 0.0125 | 0.2186 | 0.5321 | 3.1916 | 0.0592 | 0.6683 | 0.6761 | 0.9196 |
| Yahoo_Computers | 0.0000 | 0.0470 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4278 | 4.0942 | 0.0830 | 0.6469 | 0.7131 | 0.9008 |
| Yahoo_Education | 0.0623 | 0.0481 | 0.0859 | 0.1002 | 0.0503 | 0.1342 | 0.6575 | 5.3234 | 0.1289 | 0.4610 | 0.6604 | 0.8687 |
| Yahoo_Entertainment | 0.0631 | 0.0687 | 0.0701 | 0.0740 | 0.0479 | 0.1009 | 0.8720 | 6.8718 | 0.2845 | 0.3663 | 0.6326 | 0.7075 |
| Yahoo_Health | 0.0097 | 0.0515 | 0.0157 | 0.0187 | 0.0130 | 0.0271 | 0.3656 | 3.4678 | 0.0620 | 0.6862 | 0.6653 | 0.9151 |
| Yahoo_Recreation | 0.0023 | 0.0646 | 0.0027 | 0.0029 | 0.0034 | 0.0044 | 0.5751 | 5.6730 | 0.2102 | 0.5147 | 0.7567 | 0.7451 |
| Yahoo_Reference | 0.0000 | 0.0358 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7933 | 4.8481 | 0.1278 | 0.4509 | 0.6153 | 0.8644 |
| Yahoo_Science | 0.0544 | 0.0348 | 0.0643 | 0.0703 | 0.0257 | 0.1004 | 0.7138 | 9.7869 | 0.2004 | 0.3916 | 0.7525 | 0.7777 |
| Yahoo_Social | 0.0747 | 0.0494 | 0.1018 | 0.1154 | 0.0502 | 0.1234 | 0.7829 | 8.1450 | 0.1664 | 0.3947 | 0.5353 | 0.7558 |
| Yahoo_Society | 0.0123 | 0.0647 | 0.0182 | 0.0217 | 0.0151 | 0.0307 | 0.8041 | 16.1350 | 0.5086 | 0.2544 | 0.6099 | 0.4958 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2149 | 6.3595 | 0.1682 | 0.7593 | 0.6961 | 0.8273 |
| Yelp | 0.0070 | 0.3583 | 0.0070 | 0.0070 | 0.0062 | 0.0077 | 0.2104 | 1.3440 | 0.1298 | 0.8571 | 0.8009 | 0.8542 |

Table 183: Detailed results for Massive (n = 1000) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0520 | 0.0041 | 0.0047 | 0.0113 | 0.0118 | 0.4082 | 1.4710 | 0.0755 | 0.7285 | 0.9348 | 0.9235 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5833 | 2.0833 | 0.3631 | 0.5849 | 0.6181 | 0.6157 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8065 | 2.8387 | 0.5250 | 0.4258 | 0.5726 | 0.4852 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7059 | 2.0000 | 0.3794 | 0.4961 | 0.2939 | 0.5966 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8667 | 2.9667 | 0.5717 | 0.3706 | 0.6111 | 0.4614 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5556 | 0.0824 | 0.8630 | 0.6766 | 0.7860 |
| bibtex | 0.0824 | 0.0179 | 0.1896 | 0.2626 | 0.0937 | 0.2625 | 0.6392 | 34.4068 | 0.1161 | 0.4162 | 0.6494 | 0.6646 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4615 | 5.5385 | 0.1941 | 0.5943 | 0.7172 | 0.8150 |
| bookmarks10% | 0.0011 | 0.0320 | 0.0252 | 0.0537 | 0.0248 | 0.0463 | 0.9487 | 62.0706 | 0.2054 | 0.1331 | 0.6909 | 0.7154 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2941 | 133.6275 | 0.2022 | 0.4546 | 0.5194 | 0.7988 |
| corel16k001 | 0.0007 | 0.0232 | 0.0269 | 0.0443 | 0.0110 | 0.0517 | 0.8475 | 81.9913 | 0.2820 | 0.1906 | 0.6918 | 0.7087 |
| Corel5k | 0.0000 | 0.0135 | 0.1639 | 0.2610 | 0.0267 | 0.2655 | 0.7500 | 108.4880 | 0.1265 | 0.2308 | 0.4850 | 0.8744 |
| delicious | 0.0130 | 0.5052 | 0.0148 | 0.0538 | 0.0419 | 0.0533 | 0.8914 | 902.8774 | 0.5175 | 0.0631 | 0.8342 | 0.6862 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.5667 | 0.1316 | 0.8104 | 0.8482 | 0.8714 |
| enron | 0.1170 | 0.0569 | 0.2569 | 0.3468 | 0.0497 | 0.3138 | 0.2573 | 12.5029 | 0.0820 | 0.6800 | 0.6480 | 0.9093 |
| EukaryoteGO | 0.6314 | 0.0233 | 0.6992 | 0.7336 | 0.3826 | 0.7608 | 0.2049 | 0.4897 | 0.0150 | 0.8861 | 0.9857 | 0.9856 |
| EukaryotePseAAC | 0.1634 | 0.0606 | 0.2443 | 0.2870 | 0.0933 | 0.3509 | 0.6049 | 3.1763 | 0.1343 | 0.5774 | 0.6225 | 0.8354 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1000 | 3.6000 | 0.1900 | 0.8371 | 0.6227 | 0.7802 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2927 | 3.0000 | 0.1422 | 0.7434 | 0.5521 | 0.7901 |
| genbase | 0.8209 | 0.0111 | 0.8657 | 0.8875 | 0.3206 | 0.8592 | 0.0000 | 0.5373 | 0.0066 | 0.9907 | 0.6291 | 0.9896 |
| GnegativeGO | 0.9071 | 0.0179 | 0.9179 | 0.9232 | 0.6779 | 0.9286 | 0.0357 | 0.1214 | 0.0089 | 0.9776 | 0.8521 | 0.9899 |
| GnegativePseAAC | 0.5643 | 0.0625 | 0.5679 | 0.5696 | 0.2276 | 0.6957 | 0.1786 | 0.4786 | 0.0607 | 0.8839 | 0.7386 | 0.9453 |
| GpositiveGO | 0.8654 | 0.0481 | 0.8654 | 0.8654 | 0.8406 | 0.9000 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9968 | 0.9923 |
| GpositivePseAAC | 0.5962 | 0.1154 | 0.5962 | 0.5962 | 0.5437 | 0.7209 | 0.2692 | 0.4231 | 0.1410 | 0.8413 | 0.9060 | 0.9100 |
| HumanGO | 0.5498 | 0.0459 | 0.5718 | 0.5831 | 0.3252 | 0.6491 | 0.1543 | 0.4920 | 0.0220 | 0.9083 | 0.9723 | 0.9792 |
| HumanPseAAC | 0.0096 | 0.0838 | 0.0096 | 0.0096 | 0.0064 | 0.0162 | 0.5498 | 2.1768 | 0.1415 | 0.6213 | 0.7146 | 0.8572 |
| Image | 0.1900 | 0.2020 | 0.2000 | 0.2049 | 0.2683 | 0.2937 | 0.2950 | 0.8550 | 0.1592 | 0.8105 | 0.8487 | 0.8405 |
| IMDB-ECC-F10% | 0.0168 | 0.1174 | 0.1287 | 0.1953 | 0.0338 | 0.1967 | 0.7358 | 9.1866 | 0.2391 | 0.3592 | 0.5525 | 0.7518 |
| IMDB-F10% | 0.0066 | 0.0792 | 0.0223 | 0.0320 | 0.0149 | 0.0470 | 0.7523 | 9.2568 | 0.2185 | 0.4176 | 0.5699 | 0.7623 |
| LLOG-F | 0.0492 | 0.0174 | 0.0574 | 0.0612 | 0.0126 | 0.0914 | 0.6803 | 13.2213 | 0.1425 | 0.4156 | 0.4463 | 0.8565 |
| mediamill10% | 0.0689 | 0.0326 | 0.3942 | 0.5429 | 0.0273 | 0.4921 | 0.2090 | 19.9691 | 0.0628 | 0.5811 | 0.7289 | 0.9277 |
| medical | 0.6122 | 0.0116 | 0.7160 | 0.7668 | 0.2361 | 0.7901 | 0.1429 | 1.4592 | 0.0176 | 0.8921 | 0.5447 | 0.9777 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2167 | 1.9167 | 0.1543 | 0.8142 | 0.8613 | 0.8666 |
| NUS-WIDE-bow10% | 0.0909 | 0.0337 | 0.1504 | 0.1938 | 0.0169 | 0.1629 | 0.8525 | 30.7184 | 0.2593 | 0.2078 | 0.5139 | 0.6912 |
| NUS-WIDE-cVLADplus10% | 0.0390 | 0.0363 | 0.1928 | 0.2935 | 0.0394 | 0.2841 | 0.7041 | 27.6889 | 0.2006 | 0.3803 | 0.5622 | 0.7702 |
| OHSUMED-F | 0.0215 | 0.0802 | 0.0452 | 0.0603 | 0.0509 | 0.0848 | 0.4724 | 5.5047 | 0.1622 | 0.5927 | 0.7127 | 0.7718 |
| PlantGO | 0.3542 | 0.0668 | 0.3594 | 0.3620 | 0.1958 | 0.4762 | 0.2083 | 0.4062 | 0.0254 | 0.8860 | 0.9736 | 0.9762 |
| PlantPseAAC | 0.0306 | 0.0910 | 0.0357 | 0.0381 | 0.0354 | 0.0696 | 0.5714 | 2.1837 | 0.1808 | 0.6000 | 0.7766 | 0.8330 |
| rcv1subset1 | 0.0483 | 0.0291 | 0.1809 | 0.2548 | 0.0842 | 0.2485 | 0.4650 | 12.1667 | 0.0470 | 0.5936 | 0.8650 | 0.9439 |
| REUTERS-K500-EX2 | 0.3144 | 0.0121 | 0.4145 | 0.4733 | 0.1777 | 0.4941 | 0.4725 | 6.2302 | 0.0417 | 0.6266 | 0.7165 | 0.9519 |
| scene | 0.5187 | 0.0968 | 0.5394 | 0.5496 | 0.6641 | 0.6585 | 0.2116 | 0.3900 | 0.0581 | 0.8800 | 0.9445 | 0.9526 |
| sider_CDK_ECFP4 | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0845 | 19.1127 | 0.1195 | 0.8555 | 0.5679 | 0.8049 |
| sider_MordredDesc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1268 | 19.2606 | 0.1237 | 0.8378 | 0.5363 | 0.8029 |
| sider_RDKit_desc | 0.0000 | 0.5282 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1338 | 19.2746 | 0.1226 | 0.8318 | 0.5642 | 0.8038 |
| SLASHDOT-F | 0.2937 | 0.0437 | 0.3223 | 0.3365 | 0.2095 | 0.4229 | 0.3624 | 2.0688 | 0.0765 | 0.7297 | 0.6794 | 0.9209 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.4444 | 0.8200 |
| Stackex_chemistry | 0.0115 | 0.0214 | 0.0720 | 0.1145 | 0.0185 | 0.1102 | 0.9107 | 45.0043 | 0.1577 | 0.2125 | 0.5317 | 0.6461 |
| Stackex_chess | 0.0298 | 0.0110 | 0.1645 | 0.2424 | 0.0176 | 0.2584 | 0.6012 | 57.5060 | 0.1360 | 0.3392 | 0.4258 | 0.8628 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7391 | 48.9565 | 0.2154 | 0.3043 | 0.1987 | 0.7405 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0945 | 0.1342 | 0.0280 | 0.1458 | 0.8367 | 123.4309 | 0.1720 | 0.2093 | 0.7335 | 0.8228 |
| Stackex_philosophy | 0.0804 | 0.0103 | 0.2140 | 0.2941 | 0.0253 | 0.2840 | 0.6181 | 49.5050 | 0.1158 | 0.3587 | 0.5784 | 0.8732 |
| tmc2007-500 | 0.0147 | 0.0948 | 0.0483 | 0.0653 | 0.0752 | 0.0878 | 0.3098 | 5.6955 | 0.1308 | 0.7092 | 0.7336 | 0.7635 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4726 | 4.0719 | 0.2180 | 0.6174 | 0.6850 | 0.7560 |
| tox21_RDKit_desc | 0.0000 | 0.1789 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5068 | 4.0993 | 0.2235 | 0.6028 | 0.6777 | 0.7491 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1429 | 0.6190 | 0.0815 | 0.9008 | 0.7227 | 0.9117 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3810 | 0.8571 | 0.1548 | 0.7675 | 0.6263 | 0.8898 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2358 | 9.3208 | 0.2901 | 0.6818 | 0.6625 | 0.6834 |
| Yahoo_Arts | 0.0134 | 0.0672 | 0.0330 | 0.0441 | 0.0391 | 0.0643 | 0.7330 | 14.9039 | 0.4790 | 0.2867 | 0.6157 | 0.5325 |
| Yahoo_Business | 0.1381 | 0.0496 | 0.1912 | 0.2246 | 0.0175 | 0.2670 | 0.1818 | 2.7977 | 0.0483 | 0.8236 | 0.6823 | 0.9260 |
| Yahoo_Computers | 0.0000 | 0.0467 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4289 | 4.1076 | 0.0821 | 0.6556 | 0.7079 | 0.8939 |
| Yahoo_Education | 0.0382 | 0.0461 | 0.0575 | 0.0694 | 0.0320 | 0.1011 | 0.7182 | 12.3433 | 0.3027 | 0.3934 | 0.6140 | 0.6895 |
| Yahoo_Entertainment | 0.0628 | 0.0685 | 0.0703 | 0.0750 | 0.0485 | 0.1020 | 0.8759 | 6.9309 | 0.2851 | 0.3718 | 0.6398 | 0.7038 |
| Yahoo_Health | 0.0098 | 0.0515 | 0.0158 | 0.0186 | 0.0130 | 0.0269 | 0.3648 | 3.4311 | 0.0625 | 0.6954 | 0.6712 | 0.9244 |
| Yahoo_Recreation | 0.0023 | 0.0640 | 0.0027 | 0.0029 | 0.0033 | 0.0044 | 0.5713 | 5.6337 | 0.2098 | 0.5190 | 0.7515 | 0.7532 |
| Yahoo_Reference | 0.0859 | 0.0385 | 0.1099 | 0.1225 | 0.0449 | 0.1789 | 0.4757 | 6.9303 | 0.1824 | 0.5736 | 0.5691 | 0.8008 |
| Yahoo_Science | 0.1431 | 0.0365 | 0.1822 | 0.2071 | 0.0613 | 0.2506 | 0.6376 | 7.5459 | 0.1382 | 0.5016 | 0.6906 | 0.8299 |
| Yahoo_Social | 0.0751 | 0.0499 | 0.1011 | 0.1169 | 0.0497 | 0.1241 | 0.7805 | 8.0726 | 0.1664 | 0.3930 | 0.5388 | 0.7591 |
| Yahoo_Society | 0.0124 | 0.0648 | 0.0185 | 0.0217 | 0.0151 | 0.0305 | 0.8037 | 16.0744 | 0.5099 | 0.2567 | 0.6123 | 0.5020 |
| yeast | 0.0000 | 0.3022 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2190 | 6.2149 | 0.1590 | 0.7689 | 0.7163 | 0.8440 |
| Yelp | 0.0080 | 0.3583 | 0.0080 | 0.0080 | 0.0074 | 0.0088 | 0.2104 | 1.3539 | 0.1303 | 0.8566 | 0.8012 | 0.8537 |

Table 184: Detailed results for Massive (n = 10000) for Average-precision metric

| Dataset | SA | HL | A | F1 | F1-mac | F1-mic | OE | C | RL | AP | AUC-mac | AUC-mic |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20NG-F | 0.0026 | 0.0522 | 0.0041 | 0.0048 | 0.0114 | 0.0119 | 0.4026 | 1.4504 | 0.0757 | 0.7348 | 0.9350 | 0.9169 |
| 3s-bbc1000 | 0.0000 | 0.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7222 | 2.7222 | 0.4697 | 0.4594 | 0.6114 | 0.5750 |
| 3s-guardian1000 | 0.0000 | 0.2043 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5806 | 2.1613 | 0.3629 | 0.5815 | 0.4925 | 0.5926 |
| 3s-inter3000 | 0.0000 | 0.1765 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7647 | 2.0000 | 0.3824 | 0.4931 | 0.2736 | 0.5886 |
| 3s-reuters1000 | 0.0000 | 0.1778 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7667 | 2.1333 | 0.4233 | 0.4850 | 0.5972 | 0.5895 |
| amphibians | 0.0000 | 0.4286 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2222 | 2.5556 | 0.0833 | 0.8574 | 0.6822 | 0.7798 |
| bibtex | 0.0828 | 0.0177 | 0.1895 | 0.2613 | 0.0930 | 0.2605 | 0.6299 | 34.1287 | 0.1171 | 0.4202 | 0.6490 | 0.6704 |
| birds | 0.0000 | 0.0958 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5385 | 5.3333 | 0.1882 | 0.5651 | 0.7226 | 0.8165 |
| bookmarks10% | 0.0011 | 0.0322 | 0.0252 | 0.0531 | 0.0244 | 0.0456 | 0.9446 | 62.0663 | 0.2063 | 0.1335 | 0.6811 | 0.7215 |
| CAL500 | 0.0000 | 0.1491 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4118 | 131.4510 | 0.1901 | 0.4714 | 0.5186 | 0.8116 |
| corel16k001 | 0.0007 | 0.0228 | 0.0271 | 0.0438 | 0.0111 | 0.0519 | 0.8585 | 82.0226 | 0.2855 | 0.1902 | 0.6988 | 0.7170 |
| Corel5k | 0.0000 | 0.0137 | 0.1654 | 0.2635 | 0.0267 | 0.2680 | 0.7560 | 108.4628 | 0.1257 | 0.2289 | 0.4834 | 0.8647 |
| delicious | 0.0128 | 0.5072 | 0.0150 | 0.0530 | 0.0416 | 0.0533 | 0.8809 | 900.7233 | 0.5186 | 0.0628 | 0.8361 | 0.6943 |
| emotions | 0.0000 | 0.3056 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2833 | 1.6000 | 0.1368 | 0.8048 | 0.8430 | 0.8623 |
| enron | 0.1172 | 0.0566 | 0.2583 | 0.3490 | 0.0503 | 0.3108 | 0.2561 | 12.6163 | 0.0816 | 0.6718 | 0.6396 | 0.9108 |
| EukaryoteGO | 0.4742 | 0.0314 | 0.6934 | 0.7972 | 0.6367 | 0.7512 | 0.2680 | 1.3737 | 0.0507 | 0.8320 | 0.9129 | 0.9489 |
| EukaryotePseAAC | 0.1655 | 0.0600 | 0.2417 | 0.2858 | 0.0940 | 0.3549 | 0.5992 | 3.2128 | 0.1353 | 0.5801 | 0.6224 | 0.8232 |
| flags | 0.0000 | 0.4571 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1000 | 3.6000 | 0.1958 | 0.8310 | 0.5981 | 0.7823 |
| foodtruck | 0.0000 | 0.1850 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2439 | 3.0244 | 0.1479 | 0.7610 | 0.5020 | 0.7841 |
| genbase | 0.8280 | 0.0111 | 0.8783 | 0.8803 | 0.3199 | 0.8699 | 0.0000 | 0.5347 | 0.0066 | 0.9789 | 0.6302 | 0.9981 |
| GnegativeGO | 0.9071 | 0.0179 | 0.9179 | 0.9232 | 0.6779 | 0.9286 | 0.0357 | 0.1286 | 0.0104 | 0.9768 | 0.8515 | 0.9909 |
| GnegativePseAAC | 0.5571 | 0.0607 | 0.5643 | 0.5678 | 0.2308 | 0.7018 | 0.1857 | 0.5143 | 0.0652 | 0.8771 | 0.7386 | 0.9460 |
| GpositiveGO | 0.9038 | 0.0433 | 0.9038 | 0.9038 | 0.8548 | 0.9126 | 0.0769 | 0.0962 | 0.0256 | 0.9615 | 0.9946 | 0.9926 |
| GpositivePseAAC | 0.6346 | 0.1250 | 0.6346 | 0.6346 | 0.5463 | 0.7174 | 0.2308 | 0.3846 | 0.1282 | 0.8606 | 0.8697 | 0.8892 |
| HumanGO | 0.5423 | 0.0457 | 0.5700 | 0.5911 | 0.3208 | 0.6412 | 0.1538 | 0.4873 | 0.0222 | 0.9004 | 0.9655 | 0.9831 |
| HumanPseAAC | 0.0097 | 0.0827 | 0.0096 | 0.0096 | 0.0064 | 0.0160 | 0.5477 | 2.1577 | 0.1417 | 0.6272 | 0.7203 | 0.8521 |
| Image | 0.0300 | 0.2330 | 0.0300 | 0.0300 | 0.0420 | 0.0490 | 0.4400 | 1.4250 | 0.3071 | 0.6963 | 0.8228 | 0.7425 |
| IMDB-ECC-F10% | 0.0168 | 0.1158 | 0.1296 | 0.1976 | 0.0339 | 0.1961 | 0.7465 | 9.2490 | 0.2381 | 0.3570 | 0.5581 | 0.7419 |
| IMDB-F10% | 0.0065 | 0.0786 | 0.0223 | 0.0323 | 0.0150 | 0.0470 | 0.7461 | 9.1454 | 0.2158 | 0.4228 | 0.5726 | 0.7630 |
| LLOG-F | 0.0495 | 0.0172 | 0.0580 | 0.0612 | 0.0127 | 0.0907 | 0.6785 | 13.3650 | 0.1426 | 0.4185 | 0.4471 | 0.8540 |
| mediamill10% | 0.0713 | 0.0324 | 0.3970 | 0.5518 | 0.0260 | 0.4938 | 0.2565 | 16.9169 | 0.0494 | 0.6819 | 0.7275 | 0.9430 |
| medical | 0.6224 | 0.0113 | 0.7330 | 0.7872 | 0.2381 | 0.7967 | 0.1122 | 2.0102 | 0.0259 | 0.9012 | 0.5234 | 0.9688 |
| Music | 0.0000 | 0.3278 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2667 | 1.9167 | 0.1635 | 0.8012 | 0.8474 | 0.8548 |
| NUS-WIDE-bow10% | 0.0901 | 0.0335 | 0.1495 | 0.1945 | 0.0169 | 0.1622 | 0.8408 | 30.4424 | 0.2631 | 0.2079 | 0.5192 | 0.6819 |
| NUS-WIDE-cVLADplus10% | 0.0392 | 0.0359 | 0.1956 | 0.2913 | 0.0391 | 0.2860 | 0.7062 | 27.3068 | 0.2003 | 0.3808 | 0.5611 | 0.7734 |
| OHSUMED-F | 0.0216 | 0.0791 | 0.0454 | 0.0602 | 0.0507 | 0.0860 | 0.4774 | 5.5532 | 0.1632 | 0.5888 | 0.7085 | 0.7813 |
| PlantGO | 0.1875 | 0.0799 | 0.1927 | 0.1953 | 0.0770 | 0.2923 | 0.2188 | 0.4271 | 0.0273 | 0.8791 | 0.9697 | 0.9762 |
| PlantPseAAC | 0.0306 | 0.0904 | 0.0361 | 0.0385 | 0.0354 | 0.0701 | 0.5693 | 2.1935 | 0.1812 | 0.6050 | 0.7877 | 0.8361 |
| rcv1subset1 | 0.0490 | 0.0296 | 0.1801 | 0.2531 | 0.0847 | 0.2482 | 0.4628 | 12.1922 | 0.0466 | 0.5983 | 0.8677 | 0.9560 |
| REUTERS-K500-EX2 | 0.3187 | 0.0121 | 0.4145 | 0.4696 | 0.1782 | 0.4972 | 0.4747 | 6.2175 | 0.0413 | 0.6312 | 0.7152 | 0.9583 |
| scene | 0.4440 | 0.1120 | 0.4627 | 0.4718 | 0.5917 | 0.5888 | 0.2241 | 0.4315 | 0.0648 | 0.8694 | 0.9357 | 0.9432 |
| sider_CDK_ECFP4 | 0.0000 | 0.5235 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0836 | 19.3872 | 0.1190 | 0.8676 | 0.5708 | 0.7983 |
| sider_MordredDesc | 0.0000 | 0.5338 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1260 | 19.2482 | 0.1219 | 0.8328 | 0.5343 | 0.8028 |
| sider_RDKit_desc | 0.0000 | 0.5305 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.1347 | 19.1902 | 0.1214 | 0.8414 | 0.5559 | 0.8056 |
| SLASHDOT-F | 0.2957 | 0.0440 | 0.3271 | 0.3353 | 0.2102 | 0.4264 | 0.3626 | 2.0426 | 0.0774 | 0.7351 | 0.6809 | 0.9333 |
| solar_flare-L3 | 0.0000 | 0.3333 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2000 | 0.2000 | 0.1000 | 0.9000 | 0.3889 | 0.8000 |
| Stackex_chemistry | 0.0117 | 0.0216 | 0.0717 | 0.1149 | 0.0185 | 0.1087 | 0.9230 | 45.4066 | 0.1558 | 0.2124 | 0.5278 | 0.6474 |
| Stackex_chess | 0.0301 | 0.0110 | 0.1630 | 0.2400 | 0.0173 | 0.2567 | 0.6096 | 57.9517 | 0.1378 | 0.3418 | 0.4235 | 0.8702 |
| Stackex_coffee | 0.0000 | 0.0184 | 0.0471 | 0.0692 | 0.0044 | 0.1034 | 0.7391 | 47.4348 | 0.2156 | 0.2873 | 0.2151 | 0.7373 |
| Stackex_cooking | 0.0280 | 0.0068 | 0.0940 | 0.1353 | 0.0283 | 0.1440 | 0.8404 | 122.6668 | 0.1737 | 0.2120 | 0.7445 | 0.8155 |
| Stackex_philosophy | 0.0807 | 0.0104 | 0.2154 | 0.2978 | 0.0252 | 0.2867 | 0.6119 | 48.8074 | 0.1172 | 0.3612 | 0.5847 | 0.8601 |
| tmc2007-500 | 0.0146 | 0.0938 | 0.0488 | 0.0653 | 0.0749 | 0.0881 | 0.3084 | 5.6619 | 0.1304 | 0.7143 | 0.7375 | 0.7543 |
| tox21_CDK_ECFP4 | 0.0000 | 0.1783 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4750 | 4.0842 | 0.2152 | 0.6260 | 0.6776 | 0.7491 |
| tox21_RDKit_desc | 0.0000 | 0.1774 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5010 | 4.0667 | 0.2250 | 0.6052 | 0.6820 | 0.7480 |
| VirusGO | 0.0000 | 0.1984 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0952 | 0.6667 | 0.0874 | 0.9127 | 0.7524 | 0.9248 |
| VirusPseAAC | 0.0000 | 0.1825 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4286 | 0.7619 | 0.1357 | 0.7595 | 0.6106 | 0.8953 |
| Water-quality | 0.0000 | 0.3780 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.3208 | 9.1604 | 0.2741 | 0.6843 | 0.6635 | 0.7030 |
| Yahoo_Arts | 0.0135 | 0.0682 | 0.0329 | 0.0436 | 0.0395 | 0.0647 | 0.7259 | 14.8565 | 0.4820 | 0.2906 | 0.6129 | 0.5368 |
| Yahoo_Business | 0.1378 | 0.0499 | 0.1899 | 0.2267 | 0.0175 | 0.2679 | 0.1815 | 2.8358 | 0.0487 | 0.8282 | 0.6735 | 0.9358 |
| Yahoo_Computers | 0.0000 | 0.0474 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.4245 | 4.1217 | 0.0826 | 0.6582 | 0.6973 | 0.8971 |
| Yahoo_Education | 0.0386 | 0.0464 | 0.0568 | 0.0699 | 0.0324 | 0.1009 | 0.7112 | 12.4666 | 0.2986 | 0.3978 | 0.6126 | 0.6836 |
| Yahoo_Entertainment | 0.0621 | 0.0679 | 0.0700 | 0.0759 | 0.0491 | 0.1031 | 0.8825 | 7.0036 | 0.2885 | 0.3673 | 0.6308 | 0.7043 |
| Yahoo_Health | 0.0097 | 0.0515 | 0.0159 | 0.0185 | 0.0131 | 0.0269 | 0.3688 | 3.4359 | 0.0624 | 0.7048 | 0.6743 | 0.9277 |
| Yahoo_Recreation | 0.0023 | 0.0649 | 0.0027 | 0.0029 | 0.0034 | 0.0043 | 0.5667 | 5.6538 | 0.2073 | 0.5255 | 0.7553 | 0.7586 |
| Yahoo_Reference | 0.0866 | 0.0385 | 0.1098 | 0.1221 | 0.0452 | 0.1786 | 0.4805 | 6.9113 | 0.1805 | 0.5694 | 0.5758 | 0.8042 |
| Yahoo_Science | 0.1451 | 0.0363 | 0.1838 | 0.2045 | 0.0621 | 0.2531 | 0.6345 | 7.4988 | 0.1390 | 0.4992 | 0.6958 | 0.8358 |
| Yahoo_Social | 0.0760 | 0.0493 | 0.1010 | 0.1181 | 0.0500 | 0.1238 | 0.7848 | 8.0904 | 0.1640 | 0.3925 | 0.5468 | 0.7704 |
| Yahoo_Society | 0.0125 | 0.0656 | 0.0182 | 0.0219 | 0.0151 | 0.0305 | 0.8075 | 16.2677 | 0.5169 | 0.2545 | 0.6174 | 0.5031 |
| yeast | 0.0000 | 0.3063 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.2162 | 6.2549 | 0.1601 | 0.7651 | 0.7201 | 0.8429 |
| Yelp | 0.0090 | 0.3577 | 0.0090 | 0.0090 | 0.0081 | 0.0099 | 0.1984 | 1.3480 | 0.1290 | 0.8611 | 0.8002 | 0.8543 |

## References