

Dataset	kNN (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
<i>glass4</i>	0.797 ± 0.167	0.875 ± 0.195	0.873 ± 0.193	0.783 ± 0.167	0.806 ± 0.183	0.816 ± 0.178	0.839 ± 0.197
<i>ecoli-0-2-3-4-vs-5</i>	0.872 ± 0.005	0.909 ± 0.066	0.906 ± 0.061	0.886 ± 0.060	0.886 ± 0.060	0.886 ± 0.060	0.886 ± 0.060
<i>glass-0-1-6-vs-2</i>	0.516 ± 0.062	0.690 ± 0.049	0.650 ± 0.049	0.728 ± 0.058	0.696 ± 0.065	0.752 ± 0.020	0.749 ± 0.066
<i>ecoli-0-1-vs-5</i>	0.873 ± 0.109	0.918 ± 0.057	0.914 ± 0.056	0.923 ± 0.058	0.923 ± 0.058	0.923 ± 0.058	0.923 ± 0.058
<i>yeast-1-4-5-8-vs-7</i>	0.498 ± 0.001	0.586 ± 0.044	0.579 ± 0.042	0.634 ± 0.100	0.653 ± 0.075	0.670 ± 0.097	0.678 ± 0.047
<i>ecoli4</i>	0.898 ± 0.091	0.912 ± 0.100	0.914 ± 0.101	0.922 ± 0.101	0.916 ± 0.102	0.919 ± 0.103	0.914 ± 0.101
<i>led7digit-0-2-4-5-6-7-8-9-vs-1</i>	0.621 ± 0.073	0.908 ± 0.059	0.907 ± 0.059	0.565 ± 0.110	0.638 ± 0.085	0.851 ± 0.088	0.821 ± 0.143
<i>glass5</i>	0.593 ± 0.123	0.783 ± 0.195	0.783 ± 0.195	0.776 ± 0.249	0.873 ± 0.204	0.776 ± 0.249	0.876 ± 0.206
<i>ecoli-0-3-4-6-vs-5</i>	0.875 ± 0.000	0.917 ± 0.051	0.911 ± 0.056	0.886 ± 0.057	0.881 ± 0.060	0.884 ± 0.059	0.881 ± 0.060
<i>yeast-0-5-6-7-9-vs-4</i>	0.679 ± 0.056	0.782 ± 0.075	0.765 ± 0.064	0.754 ± 0.039	0.781 ± 0.051	0.759 ± 0.064	0.780 ± 0.052
<i>yeast6</i>	0.754 ± 0.058	0.814 ± 0.033	0.799 ± 0.037	0.805 ± 0.055	0.815 ± 0.031	0.829 ± 0.052	0.812 ± 0.031
<i>ecoli-0-6-7-vs-5</i>	0.847 ± 0.143	0.882 ± 0.143	0.877 ± 0.142	0.890 ± 0.151	0.885 ± 0.157	0.890 ± 0.151	0.882 ± 0.161
<i>glass-0-1-6-vs-5</i>	0.586 ± 0.116	0.927 ± 0.096	0.927 ± 0.096	0.783 ± 0.188	0.927 ± 0.096	0.783 ± 0.188	0.924 ± 0.095
<i>ecoli-0-1-3-7-vs-2-6</i>	0.900 ± 0.122	0.884 ± 0.110	0.891 ± 0.115	0.898 ± 0.121	0.898 ± 0.121	0.898 ± 0.121	0.893 ± 0.116
<i>yeast-0-2-5-6-vs-3-7-8-9</i>	0.765 ± 0.020	0.802 ± 0.021	0.800 ± 0.033	0.757 ± 0.033	0.802 ± 0.023	0.745 ± 0.041	0.777 ± 0.029
<i>ecoli-0-1-4-7-vs-5-6</i>	0.880 ± 0.097	0.904 ± 0.086	0.922 ± 0.054	0.857 ± 0.078	0.893 ± 0.068	0.892 ± 0.063	0.892 ± 0.068
<i>yeast5</i>	0.839 ± 0.026	0.947 ± 0.018	0.958 ± 0.027	0.925 ± 0.040	0.935 ± 0.035	0.934 ± 0.049	0.933 ± 0.049
<i>shuttle-c2-vs-c4</i>	0.550 ± 0.099	1.000 ± 0.000	1.000 ± 0.000	0.650 ± 0.200	1.000 ± 0.000	0.650 ± 0.200	1.000 ± 0.000
<i>ecoli-0-1-4-7-vs-2-3-5-6</i>	0.840 ± 0.084	0.831 ± 0.081	0.826 ± 0.085	0.837 ± 0.085	0.849 ± 0.088	0.852 ± 0.093	0.847 ± 0.087
<i>yeast-0-3-5-9-vs-7-8</i>	0.639 ± 0.055	0.730 ± 0.053	0.706 ± 0.055	0.639 ± 0.036	0.671 ± 0.058	0.612 ± 0.032	0.689 ± 0.068
<i>yeast-1-vs-7</i>	0.532 ± 0.041	0.643 ± 0.097	0.634 ± 0.098	0.689 ± 0.079	0.634 ± 0.106	0.692 ± 0.077	0.667 ± 0.145
<i>yeast-1-2-8-9-vs-7</i>	0.499 ± 0.001	0.628 ± 0.059	0.643 ± 0.072	0.559 ± 0.050	0.633 ± 0.052	0.597 ± 0.074	0.659 ± 0.035
<i>ecoli-0-1-4-6-vs-5</i>	0.898 ± 0.091	0.919 ± 0.058	0.917 ± 0.059	0.919 ± 0.058	0.915 ± 0.053	0.894 ± 0.092	0.915 ± 0.053
<i>glass-0-1-5-vs-2</i>	0.557 ± 0.071	0.620 ± 0.134	0.613 ± 0.134	0.673 ± 0.090	0.727 ± 0.048	0.703 ± 0.066	0.727 ± 0.056
<i>yeast-2-vs-4</i>	0.821 ± 0.069	0.884 ± 0.085	0.882 ± 0.083	0.835 ± 0.058	0.862 ± 0.076	0.843 ± 0.071	0.862 ± 0.075
<i>glass-0-6-vs-5</i>	0.795 ± 0.195	0.935 ± 0.094	0.935 ± 0.094	0.745 ± 0.166	0.890 ± 0.135	0.745 ± 0.166	0.890 ± 0.135
<i>glass2</i>	0.579 ± 0.080	0.614 ± 0.108	0.643 ± 0.079	0.667 ± 0.164	0.739 ± 0.128	0.772 ± 0.090	0.709 ± 0.152
<i>yeast-2-vs-8</i>	0.774 ± 0.092	0.782 ± 0.093	0.804 ± 0.056	0.774 ± 0.092	0.769 ± 0.090	0.774 ± 0.092	0.767 ± 0.091
<i>vowel0</i>	0.988 ± 0.013	0.999 ± 0.001	0.999 ± 0.001	0.822 ± 0.051	0.972 ± 0.031	0.909 ± 0.053	0.975 ± 0.031
<i>glass-0-4-vs-5</i>	0.800 ± 0.187	0.882 ± 0.192	0.888 ± 0.194	0.888 ± 0.113	0.969 ± 0.027	0.832 ± 0.186	0.964 ± 0.022
<i>glass-0-1-4-6-vs-2</i>	0.525 ± 0.064	0.708 ± 0.187	0.698 ± 0.188	0.727 ± 0.115	0.731 ± 0.140	0.686 ± 0.136	0.681 ± 0.131
<i>yeast4</i>	0.553 ± 0.050	0.747 ± 0.038	0.745 ± 0.021	0.745 ± 0.050	0.776 ± 0.040	0.775 ± 0.045	0.768 ± 0.037
<i>ecoli-0-4-6-vs-5</i>	0.872 ± 0.005	0.906 ± 0.067	0.906 ± 0.068	0.892 ± 0.055	0.886 ± 0.057	0.892 ± 0.055	0.886 ± 0.057
<i>page-blocks-1-3-vs-4</i>	0.784 ± 0.092	0.906 ± 0.084	0.873 ± 0.132	0.749 ± 0.138	0.823 ± 0.109	0.788 ± 0.135	0.823 ± 0.139
<i>yeast-0-2-5-7-9-vs-3-6-8</i>	0.892 ± 0.039	0.903 ± 0.035	0.908 ± 0.024	0.891 ± 0.042	0.901 ± 0.035	0.890 ± 0.043	0.906 ± 0.033
<i>ecoli-0-1-vs-2-3-5</i>	0.840 ± 0.101	0.904 ± 0.073	0.904 ± 0.073	0.860 ± 0.079	0.853 ± 0.077	0.858 ± 0.081	0.851 ± 0.079
<i>ecoli-0-6-7-vs-3-5</i>	0.778 ± 0.127	0.863 ± 0.068	0.863 ± 0.068	0.823 ± 0.109	0.820 ± 0.107	0.817 ± 0.105	0.845 ± 0.099
<i>ecoli-0-3-4-7-vs-5-6</i>	0.876 ± 0.038	0.901 ± 0.077	0.898 ± 0.080	0.874 ± 0.042	0.909 ± 0.080	0.894 ± 0.066	0.911 ± 0.077
<i>ecoli-0-2-6-7-vs-3-5</i>	0.785 ± 0.122	0.860 ± 0.100	0.858 ± 0.102	0.820 ± 0.105	0.815 ± 0.097	0.840 ± 0.086	0.815 ± 0.097
<i>shuttle-c0-vs-c4</i>	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008
<i>ecoli-0-3-4-vs-5</i>	0.869 ± 0.011	0.906 ± 0.061	0.900 ± 0.061	0.894 ± 0.053	0.911 ± 0.063	0.892 ± 0.048	0.911 ± 0.063

Table 1: Results for BAC metric

	kNN (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
<i>Mean rank</i>	1.805	5.073	4.671	3.366	4.695	3.890	4.500
	—	1,3,4,6	1,4	1	1,4	1	1,4

Table 2: Results for mean ranks according to BAC metric

Dataset	kNN (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
<i>glass4</i>	0.680 ± 0.348	0.595 ± 0.343	0.556 ± 0.296	0.553 ± 0.297	0.508 ± 0.287	0.560 ± 0.284	0.546 ± 0.317
<i>ecoli-0-2-3-4-vs-5</i>	0.836 ± 0.042	0.808 ± 0.131	0.779 ± 0.101	0.802 ± 0.150	0.802 ± 0.150	0.802 ± 0.150	0.802 ± 0.150
<i>glass-0-1-6-vs-2</i>	0.067 ± 0.133	0.336 ± 0.049	0.291 ± 0.058	0.344 ± 0.033	0.292 ± 0.027	0.350 ± 0.054	0.334 ± 0.044
<i>ecoli-0-1-vs-5</i>	0.816 ± 0.130	0.848 ± 0.051	0.809 ± 0.056	0.892 ± 0.055 ^{1,5}	0.892 ± 0.055	0.892 ± 0.055	0.892 ± 0.055
<i>yeast-1-4-5-8-vs-7</i>	0.000 ± 0.000	0.183 ± 0.070	0.161 ± 0.055	0.206 ± 0.112	0.176 ± 0.041	0.218 ± 0.081	0.194 ± 0.020
<i>ecoli4</i>	0.854 ± 0.107	0.761 ± 0.173 ¹	0.773 ± 0.168 ¹	0.863 ± 0.157 ¹	0.788 ± 0.167 ¹	0.831 ± 0.183 ¹	0.773 ± 0.168 ¹
<i>led7digit-0-2-4-5-6-7-8-9-vs-1</i>	0.360 ± 0.175	0.711 ± 0.075	0.704 ± 0.074	0.178 ± 0.259	0.358 ± 0.163	0.701 ± 0.057	0.584 ± 0.208
<i>glass5</i>	0.233 ± 0.290	0.533 ± 0.304 ^{4,5}	0.533 ± 0.304 ^{4,5}	0.427 ± 0.351	0.533 ± 0.266	0.427 ± 0.351 ^{4,5}	0.560 ± 0.284
<i>ecoli-0-3-4-6-vs-5</i>	0.857 ± 0.000	0.852 ± 0.028	0.814 ± 0.079	0.788 ± 0.126	0.758 ± 0.148	0.771 ± 0.136	0.758 ± 0.148
<i>yeast-0-5-6-7-9-vs-4</i>	0.486 ± 0.117	0.522 ± 0.071	0.489 ± 0.053	0.547 ± 0.104	0.543 ± 0.112	0.500 ± 0.105	0.507 ± 0.077
<i>yeast6</i>	0.571 ± 0.123	0.481 ± 0.104	0.452 ± 0.110	0.519 ± 0.070	0.481 ± 0.050	0.487 ± 0.060	0.444 ± 0.046
<i>ecoli-0-6-7-vs-5</i>	0.763 ± 0.210	0.728 ± 0.227	0.701 ± 0.231	0.784 ± 0.253	0.756 ± 0.264	0.784 ± 0.253	0.750 ± 0.275
<i>glass-0-1-6-vs-5</i>	0.180 ± 0.222	0.648 ± 0.186	0.648 ± 0.186	0.513 ± 0.327	0.647 ± 0.203	0.513 ± 0.327	0.628 ± 0.205
<i>ecoli-0-1-3-7-vs-2-6</i>	0.867 ± 0.163	0.590 ± 0.260	0.647 ± 0.203	0.800 ± 0.163	0.800 ± 0.163	0.800 ± 0.163	0.680 ± 0.190
<i>yeast-0-2-5-6-vs-3-7-8-9</i>	0.652 ± 0.059	0.578 ± 0.030	0.553 ± 0.051	0.620 ± 0.064	0.640 ± 0.059	0.616 ± 0.099	0.622 ± 0.061
<i>ecoli-0-1-4-7-vs-5-6</i>	0.848 ± 0.144 ^{2,3,4}	0.764 ± 0.175	0.768 ± 0.114	0.793 ± 0.092	0.824 ± 0.139	0.798 ± 0.092	0.806 ± 0.135
<i>yeast5</i>	0.761 ± 0.071 ³	0.740 ± 0.068	0.757 ± 0.080	0.716 ± 0.080	0.714 ± 0.073	0.699 ± 0.105	0.684 ± 0.094
<i>shuttle-c2-vs-c4</i>	0.133 ± 0.266	1.000 ± 0.000	1.000 ± 0.000 ⁷	0.333 ± 0.421	1.000 ± 0.000	0.333 ± 0.421	1.000 ± 0.000
<i>ecoli-0-1-4-7-vs-2-3-5-6</i>	0.777 ± 0.122	0.625 ± 0.105 ¹	0.594 ± 0.105 ¹	0.758 ± 0.143	0.738 ± 0.134 ¹	0.766 ± 0.167	0.722 ± 0.117 ¹
<i>yeast-0-3-5-9-vs-7-8</i>	0.393 ± 0.112 ³	0.452 ± 0.070	0.420 ± 0.082	0.402 ± 0.090 ³	0.415 ± 0.102 ³	0.335 ± 0.083 ³	0.435 ± 0.110 ³
<i>yeast-1-vs-7</i>	0.114 ± 0.139	0.310 ± 0.153	0.284 ± 0.143	0.369 ± 0.141	0.290 ± 0.156	0.281 ± 0.077	0.274 ± 0.140
<i>yeast-1-2-8-9-vs-7</i>	0.000 ± 0.000	0.230 ± 0.080 ³	0.246 ± 0.113	0.119 ± 0.075 ¹	0.161 ± 0.036	0.126 ± 0.052	0.177 ± 0.033
<i>ecoli-0-1-4-6-vs-5</i>	0.854 ± 0.107	0.848 ± 0.051 ¹	0.827 ± 0.063 ¹	0.848 ± 0.051	0.816 ± 0.064 ¹	0.813 ± 0.121 ¹	0.816 ± 0.064 ¹
<i>glass-0-1-5-vs-2</i>	0.157 ± 0.204	0.265 ± 0.163	0.257 ± 0.162	0.321 ± 0.118	0.325 ± 0.026	0.325 ± 0.072	0.325 ± 0.028
<i>yeast-2-vs-4</i>	0.758 ± 0.117	0.813 ± 0.114	0.805 ± 0.102	0.754 ± 0.077	0.774 ± 0.110	0.755 ± 0.095	0.775 ± 0.104
<i>glass-0-6-vs-5</i>	0.667 ± 0.365	0.800 ± 0.163	0.800 ± 0.163	0.600 ± 0.326	0.813 ± 0.243	0.600 ± 0.326	0.813 ± 0.243
<i>glass2</i>	0.250 ± 0.223	0.254 ± 0.150	0.292 ± 0.092	0.265 ± 0.161	0.309 ± 0.087	0.339 ± 0.063	0.277 ± 0.106
<i>yeast-2-vs-8</i>	0.668 ± 0.151	0.476 ± 0.087	0.508 ± 0.084	0.668 ± 0.151	0.578 ± 0.122	0.668 ± 0.151	0.563 ± 0.126
<i>vowel0</i>	0.983 ± 0.013 ²	0.989 ± 0.013	0.995 ± 0.010	0.734 ± 0.066 ²	0.920 ± 0.039	0.840 ± 0.054 ²	0.949 ± 0.034
<i>glass-0-4-vs-5</i>	0.667 ± 0.365 ^{4,6}	0.693 ± 0.369 ^{4,6}	0.720 ± 0.370 ^{4,6}	0.787 ± 0.122	0.800 ± 0.163 ⁴	0.613 ± 0.310 ⁴	0.760 ± 0.130 ^{4,6}
<i>glass-0-1-4-6-vs-2</i>	0.080 ± 0.160	0.367 ± 0.235	0.345 ± 0.227	0.327 ± 0.113	0.318 ± 0.118	0.292 ± 0.118	0.283 ± 0.104
<i>yeast4</i>	0.145 ± 0.127	0.450 ± 0.102	0.426 ± 0.066	0.493 ± 0.095	0.441 ± 0.061	0.453 ± 0.062	0.377 ± 0.029
<i>ecoli-0-4-6-vs-5</i>	0.836 ± 0.042	0.780 ± 0.122 ¹	0.786 ± 0.130 ¹	0.826 ± 0.112 ^{1,5,7}	0.788 ± 0.126 ^{1,7}	0.826 ± 0.112 ^{1,7}	0.788 ± 0.126 ¹
<i>page-blocks-1-3-vs-4</i>	0.594 ± 0.115	0.687 ± 0.110	0.666 ± 0.165	0.547 ± 0.252	0.660 ± 0.155	0.611 ± 0.197	0.678 ± 0.188
<i>yeast-0-2-5-7-9-vs-3-6-8</i>	0.826 ± 0.043	0.761 ± 0.043	0.764 ± 0.031	0.818 ± 0.052	0.800 ± 0.044	0.816 ± 0.066	0.802 ± 0.034 ⁴
<i>ecoli-0-1-vs-2-3-5</i>	0.792 ± 0.144 ^{2,7}	0.789 ± 0.106	0.789 ± 0.106	0.828 ± 0.101 ^{2,5}	0.783 ± 0.113 ²	0.811 ± 0.118	0.767 ± 0.122 ²
<i>ecoli-0-6-7-vs-3-5</i>	0.650 ± 0.226	0.737 ± 0.071	0.737 ± 0.071	0.725 ± 0.189	0.708 ± 0.177	0.693 ± 0.172	0.743 ± 0.163
<i>ecoli-0-3-4-7-vs-5-6</i>	0.826 ± 0.054	0.759 ± 0.105	0.748 ± 0.122	0.809 ± 0.081	0.822 ± 0.133	0.831 ± 0.110	0.835 ± 0.112
<i>ecoli-0-2-6-7-vs-3-5</i>	0.697 ± 0.192	0.750 ± 0.129	0.730 ± 0.140	0.707 ± 0.165	0.679 ± 0.138	0.713 ± 0.108	0.679 ± 0.138
<i>shuttle-c0-vs-c4</i>	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008
<i>ecoli-0-3-4-vs-5</i>	0.819 ± 0.076	0.779 ± 0.101	0.751 ± 0.107	0.848 ± 0.106	0.818 ± 0.110	0.825 ± 0.080	0.818 ± 0.110

Table 3: Results for F1 metric

	kNN (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
<i>Mean rank</i>	3.854	4.232	3.598	4.329	3.963	4.122	3.902
	–	3	–	–	–	–	–

Table 4: Results for mean ranks according to F1 metric

Dataset	kNN (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
<i>glass4</i>	0.800 ± 0.400	0.505 ± 0.342	0.436 ± 0.251	0.547 ± 0.333	0.430 ± 0.265	0.500 ± 0.258	0.447 ± 0.282
<i>ecoli-0-2-3-4-vs-5</i>	0.950 ± 0.099	0.806 ± 0.208	0.743 ± 0.163	0.836 ± 0.225	0.836 ± 0.225	0.836 ± 0.225	0.836 ± 0.225
<i>glass-0-1-6-vs-2</i>	0.067 ± 0.133	0.251 ± 0.045	0.216 ± 0.048	0.241 ± 0.038	0.191 ± 0.021	0.232 ± 0.048	0.218 ± 0.029
<i>ecoli-0-1-vs-5</i>	0.960 ± 0.079	0.870 ± 0.107	0.793 ± 0.111	0.960 ± 0.079	0.960 ± 0.079	0.960 ± 0.079	0.960 ± 0.079
<i>yeast-1-4-5-8-vs-7</i>	0.000 ± 0.000	0.151 ± 0.063	0.123 ± 0.042	0.144 ± 0.080	0.110 ± 0.019	0.143 ± 0.052	0.119 ± 0.009
<i>ecoli4</i>	0.960 ± 0.079	0.710 ± 0.190	0.724 ± 0.176	0.893 ± 0.137	0.743 ± 0.163	0.833 ± 0.210	0.724 ± 0.176
<i>led7digit-0-2-4-5-6-7-8-9-vs-1</i>	0.817 ± 0.260	0.608 ± 0.076	0.598 ± 0.075	0.360 ± 0.445	0.467 ± 0.124	0.747 ± 0.149	0.538 ± 0.118
<i>glass5</i>	0.300 ± 0.399	0.533 ± 0.339	0.533 ± 0.339	0.333 ± 0.278	0.400 ± 0.200	0.333 ± 0.278	0.433 ± 0.226
<i>ecoli-0-3-4-6-vs-5</i>	1.000 ± 0.000	0.893 ± 0.137	0.813 ± 0.165	0.790 ± 0.180	0.740 ± 0.215	0.760 ± 0.195	0.740 ± 0.215
<i>yeast-0-5-6-7-9-vs-4</i>	0.754 ± 0.148	0.448 ± 0.053	0.412 ± 0.056	0.542 ± 0.158	0.480 ± 0.139	0.428 ± 0.101	0.417 ± 0.080
<i>yeast6</i>	0.648 ± 0.150	0.406 ± 0.156	0.371 ± 0.139	0.459 ± 0.107	0.393 ± 0.092	0.383 ± 0.058	0.344 ± 0.064
<i>ecoli-0-6-7-vs-5</i>	0.960 ± 0.079	0.710 ± 0.190	0.669 ± 0.205	0.787 ± 0.243	0.720 ± 0.250	0.787 ± 0.243	0.710 ± 0.269
<i>glass-0-1-6-vs-5</i>	0.167 ± 0.210	0.547 ± 0.235	0.547 ± 0.235	0.467 ± 0.323	0.550 ± 0.244	0.467 ± 0.323	0.530 ± 0.252
<i>ecoli-0-1-3-7-vs-2-6</i>	1.000 ± 0.000	0.673 ± 0.400	0.717 ± 0.348	0.900 ± 0.200	0.900 ± 0.200	0.900 ± 0.200	0.750 ± 0.316
<i>yeast-0-2-5-6-vs-3-7-8-9</i>	0.816 ± 0.119	0.509 ± 0.047	0.465 ± 0.052	0.750 ± 0.126	0.647 ± 0.122	0.794 ± 0.161	0.670 ± 0.103
<i>ecoli-0-1-4-7-vs-5-6</i>	1.000 ± 0.000	0.711 ± 0.203	0.692 ± 0.137	0.917 ± 0.105	0.867 ± 0.194	0.810 ± 0.110	0.827 ± 0.183
<i>yeast5</i>	0.871 ± 0.123	0.635 ± 0.109	0.645 ± 0.107	0.621 ± 0.112	0.602 ± 0.092	0.587 ± 0.124	0.565 ± 0.111
<i>shuttle-c2-vs-c4</i>	0.200 ± 0.400	1.000 ± 0.000	1.000 ± 0.000	0.400 ± 0.489	1.000 ± 0.000	0.400 ± 0.489	1.000 ± 0.000
<i>ecoli-0-1-4-7-vs-2-3-5-6</i>	0.933 ± 0.133	0.600 ± 0.207	0.529 ± 0.132	0.900 ± 0.200	0.800 ± 0.187	0.850 ± 0.200	0.767 ± 0.161
<i>yeast-0-3-5-9-vs-7-8</i>	0.606 ± 0.134	0.389 ± 0.069	0.364 ± 0.084	0.617 ± 0.162	0.434 ± 0.100	0.484 ± 0.180	0.438 ± 0.097
<i>yeast-1-vs-7</i>	0.400 ± 0.489	0.274 ± 0.144	0.235 ± 0.125	0.324 ± 0.167	0.287 ± 0.219	0.189 ± 0.058	0.194 ± 0.104
<i>yeast-1-2-8-9-vs-7</i>	0.000 ± 0.000	0.198 ± 0.079	0.207 ± 0.106	0.093 ± 0.059	0.104 ± 0.022	0.080 ± 0.030	0.113 ± 0.024
<i>ecoli-0-1-4-6-vs-5</i>	0.960 ± 0.079	0.870 ± 0.107	0.820 ± 0.092	0.870 ± 0.107	0.824 ± 0.162	0.853 ± 0.129	0.824 ± 0.162
<i>glass-0-1-5-vs-2</i>	0.250 ± 0.387	0.200 ± 0.137	0.193 ± 0.137	0.239 ± 0.095	0.213 ± 0.039	0.227 ± 0.090	0.213 ± 0.039
<i>yeast-2-vs-4</i>	0.938 ± 0.081	0.871 ± 0.075	0.861 ± 0.081	0.862 ± 0.080	0.819 ± 0.069	0.835 ± 0.045	0.829 ± 0.095
<i>glass-0-6-vs-5</i>	0.800 ± 0.400	0.800 ± 0.244	0.800 ± 0.244	0.800 ± 0.400	0.867 ± 0.266	0.800 ± 0.400	0.867 ± 0.266
<i>glass2</i>	0.450 ± 0.458	0.226 ± 0.165	0.235 ± 0.084	0.180 ± 0.108	0.198 ± 0.051	0.219 ± 0.043	0.177 ± 0.064
<i>yeast-2-vs-8</i>	0.950 ± 0.099	0.430 ± 0.057	0.435 ± 0.104	0.950 ± 0.099	0.703 ± 0.169	0.950 ± 0.099	0.670 ± 0.188
<i>vowel0</i>	0.989 ± 0.021	0.979 ± 0.025	0.989 ± 0.021	0.856 ± 0.081	0.890 ± 0.050	0.861 ± 0.064	0.946 ± 0.031
<i>glass-0-4-vs-5</i>	0.800 ± 0.400	0.633 ± 0.371	0.667 ± 0.365	0.867 ± 0.163	0.700 ± 0.244	0.600 ± 0.326	0.633 ± 0.194
<i>glass-0-1-4-6-vs-2</i>	0.100 ± 0.200	0.276 ± 0.179	0.253 ± 0.168	0.215 ± 0.077	0.204 ± 0.076	0.190 ± 0.079	0.184 ± 0.068
<i>yeast4</i>	0.227 ± 0.197	0.433 ± 0.207	0.378 ± 0.126	0.508 ± 0.177	0.353 ± 0.054	0.382 ± 0.072	0.278 ± 0.018
<i>ecoli-0-4-6-vs-5</i>	0.950 ± 0.099	0.740 ± 0.174	0.756 ± 0.184	0.870 ± 0.166	0.790 ± 0.180	0.870 ± 0.166	0.790 ± 0.180
<i>page-blocks-1-3-vs-4</i>	0.667 ± 0.192	0.619 ± 0.205	0.643 ± 0.223	0.600 ± 0.249	0.700 ± 0.204	0.717 ± 0.221	0.755 ± 0.169
<i>yeast-0-2-5-7-9-vs-3-6-8</i>	0.869 ± 0.078	0.698 ± 0.070	0.696 ± 0.077	0.853 ± 0.090	0.782 ± 0.071	0.850 ± 0.112	0.777 ± 0.066
<i>ecoli-0-1-vs-2-3-5</i>	1.000 ± 0.000	0.765 ± 0.144	0.765 ± 0.144	1.000 ± 0.000	0.914 ± 0.171	0.950 ± 0.099	0.864 ± 0.175
<i>ecoli-0-6-7-vs-3-5</i>	0.800 ± 0.244	0.778 ± 0.182	0.778 ± 0.182	0.833 ± 0.210	0.793 ± 0.193	0.767 ± 0.200	0.810 ± 0.185
<i>ecoli-0-3-4-7-vs-5-6</i>	0.920 ± 0.097	0.696 ± 0.077	0.676 ± 0.107	0.870 ± 0.107	0.807 ± 0.127	0.870 ± 0.107	0.837 ± 0.085
<i>ecoli-0-2-6-7-vs-3-5</i>	1.000 ± 0.000	0.850 ± 0.200	0.811 ± 0.232	0.800 ± 0.194	0.758 ± 0.204	0.778 ± 0.182	0.758 ± 0.204
<i>shuttle-c0-vs-c4</i>	1.000 ± 0.000	1.000 ± 0.000	1.000 ± 0.000	1.000 ± 0.000	1.000 ± 0.000	1.000 ± 0.000	1.000 ± 0.000
<i>ecoli-0-3-4-vs-5</i>	0.920 ± 0.160	0.743 ± 0.163	0.702 ± 0.183	0.920 ± 0.160	0.820 ± 0.183	0.880 ± 0.160	0.820 ± 0.183

Table 5: Results for Precision metric

	kNN (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
<i>Mean rank</i>	5.378	3.744	3.037	4.854	3.695	3.939	3.354
	2,3,5,6,7	3	—	2,3,5,6,7	—	7	—

Table 6: Results for mean ranks according to Precision metric

Dataset	kNN (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
<i>glass4</i>	0.600 ± 0.326	0.800 ± 0.400	0.800 ± 0.400	0.600 ± 0.326	0.667 ± 0.365	0.667 ± 0.365	0.733 ± 0.388
<i>ecoli-0-2-3-4-vs-5</i>	0.750 ± 0.000	0.850 ± 0.122	0.850 ± 0.122	0.800 ± 0.099	0.800 ± 0.099	0.800 ± 0.099	0.800 ± 0.099
<i>glass-0-1-6-vs-2</i>	0.067 ± 0.133	0.533 ± 0.124	0.467 ± 0.124	0.667 ± 0.182	0.667 ± 0.182	0.767 ± 0.122	0.767 ± 0.200
<i>ecoli-0-1-vs-5</i>	0.750 ± 0.223	0.850 ± 0.122	0.850 ± 0.122	0.850 ± 0.122	0.850 ± 0.122	0.850 ± 0.122	0.850 ± 0.122
<i>yeast-1-4-5-8-vs-7</i>	0.000 ± 0.000	0.233 ± 0.081	0.233 ± 0.081	0.367 ± 0.194	0.467 ± 0.194	0.467 ± 0.194	0.533 ± 0.124
<i>ecoli4</i>	0.800 ± 0.187	0.850 ± 0.200	0.850 ± 0.200	0.850 ± 0.200	0.850 ± 0.200	0.850 ± 0.200	0.850 ± 0.200
<i>led7digit-0-2-4-5-6-7-8-9-vs-1</i>	0.250 ± 0.145	0.868 ± 0.120	0.868 ± 0.120	0.139 ± 0.221	0.304 ± 0.172	0.732 ± 0.195	0.689 ± 0.299
<i>glass5</i>	0.200 ± 0.244	0.600 ± 0.374	0.600 ± 0.374	0.600 ± 0.489	0.800 ± 0.400	0.600 ± 0.489	0.800 ± 0.400
<i>ecoli-0-3-4-6-vs-5</i>	0.750 ± 0.000	0.850 ± 0.122	0.850 ± 0.122	0.800 ± 0.099	0.800 ± 0.099	0.800 ± 0.099	0.800 ± 0.099
<i>yeast-0-5-6-7-9-vs-4</i>	0.373 ± 0.116	0.649 ± 0.167	0.629 ± 0.154	0.567 ± 0.056	0.645 ± 0.084	0.607 ± 0.110	0.665 ± 0.104
<i>yeast6</i>	0.514 ± 0.114	0.657 ± 0.069	0.629 ± 0.069	0.629 ± 0.114	0.657 ± 0.069	0.686 ± 0.106	0.657 ± 0.069
<i>ecoli-0-6-7-vs-5</i>	0.700 ± 0.291	0.800 ± 0.291	0.800 ± 0.291	0.800 ± 0.291	0.800 ± 0.291	0.800 ± 0.291	0.800 ± 0.291
<i>glass-0-1-6-vs-5</i>	0.200 ± 0.244	0.900 ± 0.200	0.900 ± 0.200	0.600 ± 0.374	0.900 ± 0.200	0.600 ± 0.374	0.900 ± 0.200
<i>ecoli-0-1-3-7-vs-2-6</i>	0.800 ± 0.244	0.800 ± 0.244	0.800 ± 0.244	0.800 ± 0.244	0.800 ± 0.244	0.800 ± 0.244	0.800 ± 0.244
<i>yeast-0-2-5-6-vs-3-7-8-9</i>	0.545 ± 0.033	0.677 ± 0.050	0.686 ± 0.061	0.535 ± 0.066	0.646 ± 0.045	0.505 ± 0.071	0.586 ± 0.054
<i>ecoli-0-1-4-7-vs-5-6</i>	0.760 ± 0.195	0.840 ± 0.149	0.880 ± 0.097	0.720 ± 0.160	0.800 ± 0.126	0.800 ± 0.126	0.800 ± 0.126
<i>yeast5</i>	0.681 ± 0.051	0.911 ± 0.044	0.933 ± 0.054	0.867 ± 0.083	0.889 ± 0.070	0.889 ± 0.099	0.889 ± 0.099
<i>shuttle-c2-vs-c4</i>	0.100 ± 0.200	1.000 ± 0.000	1.000 ± 0.000	0.300 ± 0.399	1.000 ± 0.000	0.300 ± 0.399	1.000 ± 0.000
<i>ecoli-0-1-4-7-vs-2-3-5-6</i>	0.687 ± 0.168	0.720 ± 0.177	0.720 ± 0.177	0.687 ± 0.168	0.720 ± 0.177	0.720 ± 0.177	0.720 ± 0.177
<i>yeast-0-3-5-9-vs-7-8</i>	0.300 ± 0.109	0.560 ± 0.119	0.520 ± 0.116	0.300 ± 0.063	0.400 ± 0.109	0.260 ± 0.048	0.440 ± 0.135
<i>yeast-1-vs-7</i>	0.067 ± 0.081	0.367 ± 0.163	0.367 ± 0.163	0.467 ± 0.124	0.367 ± 0.194	0.567 ± 0.133	0.500 ± 0.258
<i>yeast-1-2-8-9-vs-7</i>	0.000 ± 0.000	0.300 ± 0.124	0.333 ± 0.149	0.167 ± 0.105	0.367 ± 0.124	0.300 ± 0.163	0.433 ± 0.081
<i>ecoli-0-1-4-6-vs-5</i>	0.800 ± 0.187	0.850 ± 0.122	0.850 ± 0.122	0.850 ± 0.122	0.850 ± 0.122	0.800 ± 0.187	0.850 ± 0.122
<i>glass-0-1-5-vs-2</i>	0.133 ± 0.163	0.433 ± 0.249	0.433 ± 0.249	0.533 ± 0.201	0.783 ± 0.194	0.717 ± 0.163	0.783 ± 0.194
<i>yeast-2-vs-4</i>	0.645 ± 0.138	0.780 ± 0.172	0.780 ± 0.172	0.684 ± 0.120	0.742 ± 0.151	0.702 ± 0.144	0.742 ± 0.151
<i>glass-0-6-vs-5</i>	0.600 ± 0.374	0.900 ± 0.200	0.900 ± 0.200	0.500 ± 0.316	0.800 ± 0.244	0.500 ± 0.316	0.800 ± 0.244
<i>glass2</i>	0.183 ± 0.152	0.350 ± 0.226	0.417 ± 0.149	0.517 ± 0.343	0.717 ± 0.266	0.783 ± 0.194	0.667 ± 0.320
<i>yeast-2-vs-8</i>	0.550 ± 0.187	0.600 ± 0.200	0.650 ± 0.122	0.550 ± 0.187	0.550 ± 0.187	0.550 ± 0.187	0.550 ± 0.187
<i>vowel0</i>	0.978 ± 0.027	1.000 ± 0.000	1.000 ± 0.000	0.656 ± 0.107	0.956 ± 0.064	0.833 ± 0.111	0.956 ± 0.064
<i>glass-0-4-vs-5</i>	0.600 ± 0.374	0.800 ± 0.400	0.800 ± 0.400	0.800 ± 0.244	1.000 ± 0.000	0.700 ± 0.400	1.000 ± 0.000
<i>glass-0-1-4-6-vs-2</i>	0.067 ± 0.133	0.550 ± 0.348	0.550 ± 0.348	0.683 ± 0.213	0.733 ± 0.249	0.633 ± 0.221	0.633 ± 0.221
<i>yeast4</i>	0.115 ± 0.108	0.527 ± 0.083	0.527 ± 0.054	0.511 ± 0.101	0.591 ± 0.078	0.587 ± 0.100	0.591 ± 0.078
<i>ecoli-0-4-6-vs-5</i>	0.750 ± 0.000	0.850 ± 0.122	0.850 ± 0.122	0.800 ± 0.099	0.800 ± 0.099	0.800 ± 0.099	0.800 ± 0.099
<i>page-blocks-1-3-vs-4</i>	0.593 ± 0.199	0.853 ± 0.180	0.780 ± 0.271	0.520 ± 0.263	0.667 ± 0.220	0.593 ± 0.270	0.660 ± 0.279
<i>yeast-0-2-5-7-9-vs-3-6-8</i>	0.798 ± 0.082	0.849 ± 0.076	0.859 ± 0.057	0.798 ± 0.088	0.829 ± 0.073	0.798 ± 0.088	0.839 ± 0.072
<i>ecoli-0-1-vs-2-3-5</i>	0.680 ± 0.203	0.840 ± 0.149	0.840 ± 0.149	0.720 ± 0.160	0.720 ± 0.160	0.720 ± 0.160	0.720 ± 0.160
<i>ecoli-0-6-7-vs-3-5</i>	0.570 ± 0.244	0.760 ± 0.159	0.760 ± 0.159	0.660 ± 0.205	0.660 ± 0.205	0.660 ± 0.205	0.710 ± 0.190
<i>ecoli-0-3-4-7-vs-5-6</i>	0.760 ± 0.080	0.840 ± 0.149	0.840 ± 0.149	0.760 ± 0.080	0.840 ± 0.149	0.800 ± 0.126	0.840 ± 0.149
<i>ecoli-0-2-6-7-vs-3-5</i>	0.570 ± 0.244	0.750 ± 0.223	0.750 ± 0.223	0.660 ± 0.205	0.660 ± 0.205	0.710 ± 0.190	0.660 ± 0.205
<i>shuttle-c0-vs-c4</i>	0.992 ± 0.016	0.992 ± 0.016	0.992 ± 0.016	0.992 ± 0.016	0.992 ± 0.016	0.992 ± 0.016	0.992 ± 0.016
<i>ecoli-0-3-4-vs-5</i>	0.750 ± 0.000	0.850 ± 0.122	0.850 ± 0.122	0.800 ± 0.099	0.850 ± 0.122	0.800 ± 0.099	0.850 ± 0.122

Table 7: Results for Recall metric

	kNN (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
<i>Mean rank</i>	1.610	5.110	5.122	2.939	4.622	3.720	4.878
	—	1,4,6	1,4,6	1	1,4,6	1,4	1,4,6

Table 8: Results for mean ranks according to Recall metric

Dataset	kNN (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
<i>glass4</i>	0.797 ± 0.167	0.875 ± 0.195	0.873 ± 0.193	0.783 ± 0.167	0.806 ± 0.183	0.816 ± 0.178	0.839 ± 0.197
<i>ecoli-0-2-3-4-vs-5</i>	0.872 ± 0.005	0.909 ± 0.066	0.906 ± 0.061	0.886 ± 0.060	0.886 ± 0.060	0.886 ± 0.060	0.886 ± 0.060
<i>glass-0-1-6-vs-2</i>	0.516 ± 0.062	0.690 ± 0.049	0.650 ± 0.049	0.728 ± 0.058	0.696 ± 0.065	0.752 ± 0.020	0.749 ± 0.066
<i>ecoli-0-1-vs-5</i>	0.873 ± 0.109	0.918 ± 0.057	0.914 ± 0.056	0.923 ± 0.058 ^{1,5}	0.923 ± 0.058	0.923 ± 0.058 ^{1,3}	0.923 ± 0.058 ¹
<i>yeast-1-4-5-8-vs-7</i>	0.498 ± 0.001	0.586 ± 0.044	0.579 ± 0.042	0.634 ± 0.100	0.653 ± 0.075	0.670 ± 0.097	0.678 ± 0.047
<i>ecoli4</i>	0.898 ± 0.091	0.912 ± 0.100 ¹	0.914 ± 0.101 ¹	0.922 ± 0.101 ¹	0.916 ± 0.102 ¹	0.919 ± 0.103 ¹	0.914 ± 0.101 ¹
<i>led7digit-0-2-4-5-6-7-8-9-vs-1</i>	0.621 ± 0.073	0.908 ± 0.059	0.907 ± 0.059	0.565 ± 0.110	0.638 ± 0.085	0.851 ± 0.088	0.821 ± 0.143
<i>glass5</i>	0.593 ± 0.123	0.783 ± 0.195 ^{1,4,5,6}	0.783 ± 0.195 ^{1,4,5,6}	0.776 ± 0.249	0.873 ± 0.204	0.776 ± 0.249 ^{4,5}	0.876 ± 0.206
<i>ecoli-0-3-4-6-vs-5</i>	0.875 ± 0.000	0.917 ± 0.051	0.911 ± 0.056	0.886 ± 0.057	0.881 ± 0.060	0.884 ± 0.059	0.881 ± 0.060
<i>yeast-0-5-6-7-9-vs-4</i>	0.679 ± 0.056	0.782 ± 0.075	0.765 ± 0.064	0.754 ± 0.039	0.781 ± 0.051	0.759 ± 0.064	0.780 ± 0.052
<i>yeast6</i>	0.754 ± 0.058	0.814 ± 0.033 ¹	0.799 ± 0.037 ¹	0.805 ± 0.055 ¹	0.815 ± 0.031 ¹	0.829 ± 0.052 ¹	0.812 ± 0.031 ¹
<i>ecoli-0-6-7-vs-5</i>	0.847 ± 0.143	0.882 ± 0.143	0.877 ± 0.142	0.890 ± 0.151	0.885 ± 0.157	0.890 ± 0.151	0.882 ± 0.161
<i>glass-0-1-6-vs-5</i>	0.586 ± 0.116	0.927 ± 0.096	0.927 ± 0.096	0.783 ± 0.188	0.927 ± 0.096	0.783 ± 0.188	0.924 ± 0.095
<i>ecoli-0-1-3-7-vs-2-6</i>	0.900 ± 0.122	0.884 ± 0.110	0.891 ± 0.115	0.898 ± 0.121	0.898 ± 0.121	0.898 ± 0.121	0.893 ± 0.116
<i>yeast-0-2-5-6-vs-3-7-8-9</i>	0.765 ± 0.020	0.802 ± 0.021	0.800 ± 0.033	0.757 ± 0.033	0.802 ± 0.023	0.745 ± 0.041	0.777 ± 0.029
<i>ecoli-0-1-4-7-vs-5-6</i>	0.880 ± 0.097	0.904 ± 0.086 ^{4,6}	0.922 ± 0.054 ^{4,6}	0.857 ± 0.078	0.893 ± 0.068 ^{4,6}	0.892 ± 0.063	0.892 ± 0.068 ⁶
<i>yeast5</i>	0.839 ± 0.026	0.947 ± 0.018	0.958 ± 0.027	0.925 ± 0.040	0.935 ± 0.035	0.934 ± 0.049	0.933 ± 0.049
<i>shuttle-c2-vs-c4</i>	0.550 ± 0.099	1.000 ± 0.000 ¹	1.000 ± 0.000 ^{1,7}	0.650 ± 0.200 ¹	1.000 ± 0.000 ¹	0.650 ± 0.200 ¹	1.000 ± 0.000 ¹
<i>ecoli-0-1-4-7-vs-2-3-5-6</i>	0.840 ± 0.084	0.831 ± 0.081 ¹	0.826 ± 0.085 ¹	0.837 ± 0.085	0.849 ± 0.088 ¹	0.852 ± 0.093	0.847 ± 0.087 ¹
<i>yeast-0-3-5-9-vs-7-8</i>	0.639 ± 0.055	0.730 ± 0.053	0.706 ± 0.055	0.639 ± 0.036	0.671 ± 0.058 ³	0.612 ± 0.032 ³	0.689 ± 0.068 ³
<i>yeast-1-vs-7</i>	0.532 ± 0.041	0.643 ± 0.097 ^{1,4,5,6,7}	0.634 ± 0.098 ^{1,4,6}	0.689 ± 0.079	0.634 ± 0.106	0.692 ± 0.077	0.667 ± 0.145
<i>yeast-1-2-8-9-vs-7</i>	0.499 ± 0.001	0.628 ± 0.059 ^{1,3}	0.643 ± 0.072 ¹	0.559 ± 0.050 ¹	0.633 ± 0.052	0.597 ± 0.074 ^{1,5}	0.659 ± 0.035
<i>ecoli-0-1-4-6-vs-5</i>	0.898 ± 0.091	0.919 ± 0.058 ¹	0.917 ± 0.059 ¹	0.919 ± 0.058	0.915 ± 0.053 ¹	0.894 ± 0.092 ¹	0.915 ± 0.053 ¹
<i>glass-0-1-5-vs-2</i>	0.557 ± 0.071	0.620 ± 0.134	0.613 ± 0.134	0.673 ± 0.090	0.727 ± 0.048	0.703 ± 0.066	0.727 ± 0.056
<i>yeast-2-vs-4</i>	0.821 ± 0.069	0.884 ± 0.085	0.882 ± 0.083	0.835 ± 0.058 ¹	0.862 ± 0.076 ¹	0.843 ± 0.071	0.862 ± 0.075 ¹
<i>glass-0-6-vs-5</i>	0.795 ± 0.195	0.935 ± 0.094	0.935 ± 0.094	0.745 ± 0.166	0.890 ± 0.135	0.745 ± 0.166	0.890 ± 0.135
<i>glass2</i>	0.579 ± 0.080	0.614 ± 0.108	0.643 ± 0.079	0.667 ± 0.164	0.739 ± 0.128	0.772 ± 0.090	0.709 ± 0.152
<i>yeast-2-vs-8</i>	0.774 ± 0.092	0.782 ± 0.093	0.804 ± 0.056	0.774 ± 0.092	0.769 ± 0.090 ^{1,2}	0.774 ± 0.092 ^{1,2,3}	0.767 ± 0.091
<i>vowel0</i>	0.988 ± 0.013	0.999 ± 0.001	0.999 ± 0.001	0.822 ± 0.051	0.972 ± 0.031	0.909 ± 0.053	0.975 ± 0.031
<i>glass-0-4-vs-5</i>	0.800 ± 0.187 ^{4,6}	0.882 ± 0.192 ^{4,6}	0.888 ± 0.194 ^{4,6}	0.888 ± 0.113	0.969 ± 0.027 ⁴	0.832 ± 0.186 ⁴	0.964 ± 0.022 ^{4,6}
<i>glass-0-1-4-6-vs-2</i>	0.525 ± 0.064	0.708 ± 0.187	0.698 ± 0.188	0.727 ± 0.115	0.731 ± 0.140	0.686 ± 0.136	0.681 ± 0.131
<i>yeast4</i>	0.553 ± 0.050	0.747 ± 0.038	0.745 ± 0.021 ¹	0.745 ± 0.050 ¹	0.776 ± 0.040	0.775 ± 0.045	0.768 ± 0.037
<i>ecoli-0-4-6-vs-5</i>	0.872 ± 0.005	0.906 ± 0.067 ¹	0.906 ± 0.068 ¹	0.892 ± 0.055 ¹	0.886 ± 0.057 ^{1,7}	0.892 ± 0.055 ¹	0.886 ± 0.057 ¹
<i>page-blocks-1-3-vs-4</i>	0.784 ± 0.092	0.906 ± 0.084	0.873 ± 0.132	0.749 ± 0.138	0.823 ± 0.109	0.788 ± 0.135	0.823 ± 0.139
<i>yeast-0-2-5-7-9-vs-3-6-8</i>	0.892 ± 0.039	0.903 ± 0.035 ^{1,4}	0.908 ± 0.024 ⁴	0.891 ± 0.042	0.901 ± 0.035	0.890 ± 0.043	0.906 ± 0.033 ⁴
<i>ecoli-0-1-vs-2-3-5</i>	0.840 ± 0.101	0.904 ± 0.073	0.904 ± 0.073	0.860 ± 0.079	0.853 ± 0.077	0.858 ± 0.081	0.851 ± 0.079
<i>ecoli-0-6-7-vs-3-5</i>	0.778 ± 0.127	0.863 ± 0.068	0.863 ± 0.068	0.823 ± 0.109	0.820 ± 0.107	0.817 ± 0.105	0.845 ± 0.099
<i>ecoli-0-3-4-7-vs-5-6</i>	0.876 ± 0.038	0.901 ± 0.077	0.898 ± 0.080	0.874 ± 0.042	0.909 ± 0.080	0.894 ± 0.066	0.911 ± 0.077
<i>ecoli-0-2-6-7-vs-3-5</i>	0.785 ± 0.122	0.860 ± 0.100	0.858 ± 0.102	0.820 ± 0.105	0.815 ± 0.097	0.840 ± 0.086	0.815 ± 0.097
<i>shuttle-c0-vs-c4</i>	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008
<i>ecoli-0-3-4-vs-5</i>	0.869 ± 0.011	0.906 ± 0.061	0.900 ± 0.061	0.894 ± 0.053	0.911 ± 0.063	0.892 ± 0.048	0.911 ± 0.063

Table 9: Results for AUC metric

	kNN (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
<i>Mean rank</i>	1.805	5.085	4.683	3.366	4.683	3.890	4.488
	—	1,3,4,6	1,4	1	1,4	1	1,4

Table 10: Results for mean ranks according to AUC metric

Dataset	kNN (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
<i>glass4</i>	0.690 ± 0.352	0.777 ± 0.389	0.775 ± 0.387	0.679 ± 0.347	0.706 ± 0.362	0.713 ± 0.364	0.742 ± 0.379
<i>ecoli-0-2-3-4-vs-5</i>	0.864 ± 0.004	0.904 ± 0.068	0.902 ± 0.064	0.881 ± 0.062	0.881 ± 0.062	0.881 ± 0.062	0.881 ± 0.062
<i>glass-0-1-6-vs-2</i>	0.112 ± 0.224	0.665 ± 0.071	0.617 ± 0.072	0.713 ± 0.060	0.684 ± 0.062	0.744 ± 0.018	0.737 ± 0.064
<i>ecoli-0-1-vs-5</i>	0.854 ± 0.128	0.913 ± 0.061	0.909 ± 0.060	0.917 ± 0.062	0.917 ± 0.062	0.917 ± 0.062	0.917 ± 0.062
<i>yeast-1-4-5-8-vs-7</i>	0.000 ± 0.000	0.461 ± 0.082	0.458 ± 0.080	0.554 ± 0.156	0.605 ± 0.129	0.622 ± 0.145	0.656 ± 0.068
<i>ecoli4</i>	0.886 ± 0.106	0.903 ± 0.115	0.905 ± 0.116	0.912 ± 0.116	0.906 ± 0.117	0.909 ± 0.117	0.905 ± 0.116
<i>led7digit-0-2-4-5-6-7-8-9-vs-1</i>	0.477 ± 0.143	0.905 ± 0.062	0.904 ± 0.062	0.221 ± 0.298	0.521 ± 0.153	0.834 ± 0.108	0.778 ± 0.220
<i>glass5</i>	0.281 ± 0.344	0.674 ± 0.361	0.674 ± 0.361	0.588 ± 0.479	0.780 ± 0.390	0.588 ± 0.479	0.783 ± 0.391
<i>ecoli-0-3-4-6-vs-5</i>	0.866 ± 0.000	0.911 ± 0.055	0.907 ± 0.060	0.881 ± 0.060	0.876 ± 0.063	0.879 ± 0.061	0.876 ± 0.063
<i>yeast-0-5-6-7-9-vs-4</i>	0.598 ± 0.097	0.763 ± 0.090	0.746 ± 0.076	0.730 ± 0.044	0.767 ± 0.058	0.741 ± 0.073	0.769 ± 0.062
<i>yeast6</i>	0.709 ± 0.088	0.798 ± 0.041	0.779 ± 0.044	0.781 ± 0.073	0.798 ± 0.040	0.814 ± 0.062	0.796 ± 0.039
<i>ecoli-0-6-7-vs-5</i>	0.812 ± 0.188	0.857 ± 0.188	0.852 ± 0.187	0.866 ± 0.195	0.862 ± 0.197	0.866 ± 0.195	0.861 ± 0.200
<i>glass-0-1-6-vs-5</i>	0.277 ± 0.338	0.919 ± 0.111	0.919 ± 0.111	0.671 ± 0.360	0.919 ± 0.111	0.671 ± 0.360	0.916 ± 0.110
<i>ecoli-0-1-3-7-vs-2-6</i>	0.883 ± 0.143	0.866 ± 0.130	0.874 ± 0.136	0.881 ± 0.142	0.881 ± 0.142	0.881 ± 0.142	0.875 ± 0.137
<i>yeast-0-2-5-6-vs-3-7-8-9</i>	0.733 ± 0.025	0.791 ± 0.026	0.791 ± 0.036	0.723 ± 0.044	0.786 ± 0.027	0.704 ± 0.054	0.752 ± 0.036
<i>ecoli-0-1-4-7-vs-5-6</i>	0.863 ± 0.122	0.899 ± 0.092	0.920 ± 0.056	0.841 ± 0.089	0.886 ± 0.075	0.884 ± 0.070	0.885 ± 0.075
<i>yeast5</i>	0.823 ± 0.031	0.946 ± 0.019	0.958 ± 0.027	0.922 ± 0.043	0.933 ± 0.037	0.931 ± 0.052	0.931 ± 0.052
<i>shuttle-c2-vs-c4</i>	0.141 ± 0.282	1.000 ± 0.000	1.000 ± 0.000	0.341 ± 0.428	1.000 ± 0.000	0.341 ± 0.428	1.000 ± 0.000
<i>ecoli-0-1-4-7-vs-2-3-5-6</i>	0.820 ± 0.097	0.816 ± 0.093	0.812 ± 0.096	0.817 ± 0.098	0.832 ± 0.101	0.836 ± 0.106	0.831 ± 0.100
<i>yeast-0-3-5-9-vs-7-8</i>	0.533 ± 0.094	0.704 ± 0.070	0.676 ± 0.072	0.539 ± 0.060	0.609 ± 0.082	0.499 ± 0.052	0.635 ± 0.099
<i>yeast-1-vs-7</i>	0.163 ± 0.200	0.569 ± 0.134	0.564 ± 0.134	0.648 ± 0.097	0.515 ± 0.260	0.676 ± 0.092	0.583 ± 0.292
<i>yeast-1-2-8-9-vs-7</i>	0.000 ± 0.000	0.523 ± 0.109	0.548 ± 0.128	0.351 ± 0.186	0.563 ± 0.098	0.498 ± 0.133	0.616 ± 0.055
<i>ecoli-0-1-4-6-vs-5</i>	0.886 ± 0.106	0.914 ± 0.062	0.912 ± 0.063	0.914 ± 0.062	0.910 ± 0.057	0.883 ± 0.106	0.910 ± 0.057
<i>glass-0-1-5-vs-2</i>	0.225 ± 0.275	0.525 ± 0.277	0.520 ± 0.275	0.642 ± 0.125	0.710 ± 0.043	0.692 ± 0.061	0.710 ± 0.052
<i>yeast-2-vs-4</i>	0.797 ± 0.091	0.872 ± 0.099	0.870 ± 0.097	0.818 ± 0.072	0.849 ± 0.090	0.827 ± 0.085	0.849 ± 0.089
<i>glass-0-6-vs-5</i>	0.683 ± 0.365	0.926 ± 0.111	0.926 ± 0.111	0.624 ± 0.332	0.876 ± 0.152	0.624 ± 0.332	0.876 ± 0.152
<i>glass2</i>	0.327 ± 0.269	0.485 ± 0.261	0.592 ± 0.105	0.567 ± 0.310	0.723 ± 0.141	0.764 ± 0.091	0.681 ± 0.176
<i>yeast-2-vs-8</i>	0.728 ± 0.133	0.746 ± 0.137	0.785 ± 0.072	0.728 ± 0.133	0.724 ± 0.132	0.728 ± 0.133	0.723 ± 0.132
<i>vowel0</i>	0.988 ± 0.013	0.999 ± 0.001	0.999 ± 0.001	0.802 ± 0.064	0.971 ± 0.032	0.904 ± 0.058	0.974 ± 0.033
<i>glass-0-4-vs-5</i>	0.683 ± 0.365	0.781 ± 0.391	0.788 ± 0.394	0.871 ± 0.133	0.969 ± 0.028	0.723 ± 0.375	0.963 ± 0.023
<i>glass-0-1-4-6-vs-2</i>	0.114 ± 0.227	0.612 ± 0.333	0.604 ± 0.331	0.717 ± 0.127	0.721 ± 0.144	0.677 ± 0.141	0.671 ± 0.135
<i>yeast4</i>	0.255 ± 0.218	0.712 ± 0.054	0.712 ± 0.030	0.704 ± 0.067	0.752 ± 0.052	0.748 ± 0.064	0.746 ± 0.049
<i>ecoli-0-4-6-vs-5</i>	0.864 ± 0.004	0.902 ± 0.069	0.902 ± 0.070	0.886 ± 0.057	0.881 ± 0.060	0.886 ± 0.057	0.881 ± 0.060
<i>page-blocks-1-3-vs-4</i>	0.749 ± 0.120	0.899 ± 0.093	0.852 ± 0.157	0.690 ± 0.188	0.797 ± 0.131	0.744 ± 0.169	0.789 ± 0.168
<i>yeast-0-2-5-7-9-vs-3-6-8</i>	0.886 ± 0.045	0.901 ± 0.039	0.906 ± 0.026	0.885 ± 0.048	0.897 ± 0.039	0.884 ± 0.049	0.902 ± 0.037
<i>ecoli-0-1-vs-2-3-5</i>	0.815 ± 0.124	0.898 ± 0.081	0.898 ± 0.081	0.844 ± 0.090	0.837 ± 0.088	0.842 ± 0.092	0.836 ± 0.089
<i>ecoli-0-6-7-vs-3-5</i>	0.733 ± 0.163	0.850 ± 0.082	0.850 ± 0.082	0.798 ± 0.126	0.796 ± 0.124	0.793 ± 0.123	0.827 ± 0.115
<i>ecoli-0-3-4-7-vs-5-6</i>	0.867 ± 0.046	0.895 ± 0.084	0.893 ± 0.086	0.865 ± 0.049	0.903 ± 0.087	0.886 ± 0.074	0.905 ± 0.085
<i>ecoli-0-2-6-7-vs-3-5</i>	0.738 ± 0.160	0.841 ± 0.118	0.839 ± 0.120	0.795 ± 0.122	0.790 ± 0.115	0.821 ± 0.103	0.790 ± 0.115
<i>shuttle-c0-vs-c4</i>	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008	0.996 ± 0.008
<i>ecoli-0-3-4-vs-5</i>	0.861 ± 0.009	0.901 ± 0.064	0.896 ± 0.064	0.888 ± 0.056	0.907 ± 0.066	0.885 ± 0.051	0.907 ± 0.066

Table 11: Results for GMEAN metric

	kNN (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
<i>Mean rank</i>	1.805	4.976	4.671	3.378	4.671	3.902	4.598
	—	1,4	1,4	1	1,4,6	1	1,4

Table 12: Results for mean ranks according to GMEAN metric