

Dataset	kNN (1)	SB (2)	OSB (3)	KNORAU (4)	OKNORAU (5)	TBA.4 (6)	OTBA.4 (7)
<i>glass4</i>	0.750 ± 0.158	0.774 ± 0.155	0.904 ± 0.142	0.776 ± 0.160	0.905 ± 0.142	0.745 ± 0.130	0.859 ± 0.157
<i>ecoli-0-2-3-4-vs-5</i>	⁶ 0.890 ± 0.083	⁶ 0.896 ± 0.090	^{1,2,4,6} 0.910 ± 0.078	⁶ 0.895 ± 0.090	^{1,2,4,6} 0.908 ± 0.078	[—] 0.897 ± 0.082	^{1,6} 0.907 ± 0.080
<i>glass-0-1-6-vs-2</i>	0.522 ± 0.062	0.499 ± 0.049	0.676 ± 0.132	0.496 ± 0.041	0.643 ± 0.124	² 0.525 ± 0.083	[—] 0.656 ± 0.140
<i>ecoli-0-1-vs-5</i>	^{2,4} 0.891 ± 0.089	[—] 0.886 ± 0.090	^{1,2,4,5,6} 0.918 ± 0.074	[—] 0.889 ± 0.088	^{1,2,4,6} 0.916 ± 0.073	² 0.905 ± 0.077	^{1,2,4,6} 0.919 ± 0.076
<i>yeast-1-4-5-8-vs-7</i>	[—] 0.501 ± 0.010	[—] 0.503 ± 0.018	⁵ 0.547 ± 0.075	[—] 0.503 ± 0.018	[—] 0.553 ± 0.077	[—] 0.504 ± 0.019	⁵ 0.540 ± 0.069
<i>ecoli4</i>	0.894 ± 0.100	0.908 ± 0.102	^{1,2,4,6,7} 0.918 ± 0.094	0.911 ± 0.103	^{1,2,4,6} 0.917 ± 0.094	[—] 0.911 ± 0.103	^{1,2,4,6} 0.924 ± 0.089
<i>led7digit-0-2-4-5-6-7-8-9-vs-1</i>	0.635 ± 0.077	0.642 ± 0.103	^{2,4,6} 0.899 ± 0.066	0.622 ± 0.091	^{2,4,6} 0.857 ± 0.121	[—] 0.583 ± 0.099	^{3,5} 0.701 ± 0.128
<i>glass5</i>	⁶ 0.648 ± 0.165	⁶ 0.608 ± 0.159	^{all} 0.823 ± 0.196	⁶ 0.617 ± 0.174	^{1,2,4,6,7} 0.823 ± 0.203	[—] 0.665 ± 0.183	^{1,2,4,6} 0.836 ± 0.192
<i>ecoli-0-3-4-6-vs-5</i>	0.895 ± 0.094	0.888 ± 0.091	^{1,2,4,6} 0.908 ± 0.089	0.885 ± 0.093	^{1,2,4,6} 0.906 ± 0.089	[—] 0.886 ± 0.092	^{1,2,4,6} 0.904 ± 0.092
<i>yeast-0-5-6-7-9-vs-4</i>	⁶ 0.649 ± 0.074	⁶ 0.657 ± 0.078	[—] 0.793 ± 0.065	[—] 0.661 ± 0.077	[—] 0.797 ± 0.061	⁴ 0.631 ± 0.081	[—] 0.773 ± 0.067
<i>yeast6</i>	[—] 0.757 ± 0.091	⁶ 0.730 ± 0.095	^{1,2,4,6,7} 0.821 ± 0.087	⁶ 0.728 ± 0.104	^{1,2,4,6,7} 0.818 ± 0.083	[—] 0.657 ± 0.091	^{1,2,4,6} 0.790 ± 0.097
<i>ecoli-0-6-7-vs-5</i>	^{2,4,6} 0.840 ± 0.108	⁶ 0.840 ± 0.109	^{1,2,4,5,6} 0.876 ± 0.101	⁶ 0.842 ± 0.102	^{1,2,4,6} 0.865 ± 0.100	[—] 0.843 ± 0.096	^{1,2,4,6} 0.871 ± 0.103
<i>glass-0-1-6-vs-5</i>	0.668 ± 0.151	0.617 ± 0.164	⁵ 0.868 ± 0.157	0.636 ± 0.170	[—] 0.853 ± 0.165	[—] 0.630 ± 0.163	⁵ 0.854 ± 0.169
<i>ecoli-0-1-3-7-vs-2-6</i>	[—] 0.850 ± 0.200	[—] 0.849 ± 0.199	^{1,2,4,6,7} 0.841 ± 0.197	[—] 0.850 ± 0.199	^{1,2,4,6} 0.843 ± 0.198	[—] 0.849 ± 0.200	^{1,2,4,6} 0.845 ± 0.202
<i>yeast-0-2-5-6-vs-3-7-8-9</i>	^{3,5,7} 0.756 ± 0.042	^{3,5,7} 0.753 ± 0.041	[—] 0.790 ± 0.041	^{3,5,7} 0.755 ± 0.045	[—] 0.788 ± 0.042	^{3,5,7} 0.688 ± 0.046	³ 0.782 ± 0.042
<i>ecoli-0-1-4-7-vs-5-6</i>	⁶ 0.865 ± 0.098	⁶ 0.853 ± 0.107	^{1,2,4,6} 0.894 ± 0.085	⁶ 0.844 ± 0.107	^{1,2,4,6} 0.894 ± 0.076	[—] 0.860 ± 0.094	^{1,2,4,6} 0.896 ± 0.088
<i>yeast5</i>	[—] 0.821 ± 0.064	[—] 0.811 ± 0.067	^{2,4,6} 0.929 ± 0.052	[—] 0.819 ± 0.071	^{2,4,6} 0.929 ± 0.048	⁴ 0.766 ± 0.078	^{2,3,4,5} 0.906 ± 0.058
<i>shuttle-c2-vs-c4</i>	⁶ 0.585 ± 0.177	⁶ 0.585 ± 0.177	^{1,2,4,6} 0.995 ± 0.034	⁶ 0.600 ± 0.180	^{1,2,4,6} 0.995 ± 0.034	[—] 0.705 ± 0.238	^{1,2,4,6} 0.995 ± 0.034
<i>ecoli-0-1-4-7-vs-2-3-5-6</i>	0.833 ± 0.100	0.826 ± 0.099	^{1,2,4,6} 0.852 ± 0.077	0.828 ± 0.099	^{1,2,4,6} 0.857 ± 0.076	^{1,2,4} 0.824 ± 0.085	^{1,2,4,6} 0.852 ± 0.085
<i>yeast-0-3-5-9-vs-7-8</i>	[—] 0.641 ± 0.058	[—] 0.619 ± 0.053	^{2,6,7} 0.707 ± 0.064	[—] 0.628 ± 0.062	^{1,2,6,7} 0.697 ± 0.070	[—] 0.607 ± 0.052	⁶ 0.646 ± 0.054
<i>yeast-1-vs-7</i>	^{2,6} 0.529 ± 0.043	[—] 0.546 ± 0.058	^{all} 0.631 ± 0.098	⁶ 0.548 ± 0.063	^{1,2,4,6,7} 0.634 ± 0.099	[—] 0.528 ± 0.043	^{2,4,6} 0.616 ± 0.094
<i>yeast-1-2-8-9-vs-7</i>	[—] 0.508 ± 0.024	⁶ 0.511 ± 0.033	^{1,2,4,6} 0.623 ± 0.085	[—] 0.512 ± 0.034	^{1,2,3,4,6} 0.634 ± 0.088	[—] 0.508 ± 0.025	^{1,2,4,6} 0.588 ± 0.090
<i>ecoli-0-1-4-6-vs-5</i>	[—] 0.886 ± 0.091	[—] 0.891 ± 0.086	^{1,2,4,6} 0.914 ± 0.073	[—] 0.888 ± 0.089	^{1,2,4,6,7} 0.913 ± 0.077	[—] 0.898 ± 0.090	^{1,2,4,6} 0.917 ± 0.074
<i>glass-0-1-5-vs-2</i>	0.533 ± 0.066	0.522 ± 0.062	[—] 0.670 ± 0.135	0.541 ± 0.076	[—] 0.658 ± 0.131	[—] 0.555 ± 0.110	^{3,5} 0.665 ± 0.146
<i>yeast-2-vs-4</i>	² 0.820 ± 0.066	[—] 0.825 ± 0.066	^{1,2,4,5,6} 0.873 ± 0.061	[—] 0.822 ± 0.065	^{1,2,4,6} 0.873 ± 0.062	[—] 0.816 ± 0.064	^{1,2,4,6} 0.858 ± 0.060
<i>glass-0-6-vs-5</i>	[—] 0.714 ± 0.194	[—] 0.653 ± 0.182	^{1,2,4,6,7} 0.950 ± 0.086	[—] 0.688 ± 0.210	^{1,2,4,6,7} 0.945 ± 0.103	[—] 0.703 ± 0.200	^{1,2,4,6} 0.939 ± 0.096
<i>glass2</i>	² 0.547 ± 0.083	[—] 0.528 ± 0.076	^{1,2,4,6} 0.707 ± 0.129	[—] 0.529 ± 0.069	^{1,2,4,6} 0.712 ± 0.116	[—] 0.571 ± 0.123	^{1,2,4,6} 0.702 ± 0.140
<i>yeast-2-vs-8</i>	^{2,4} 0.774 ± 0.114	[—] 0.774 ± 0.114	^{1,2,4,6} 0.774 ± 0.106	0.774 ± 0.114	^{1,2,4,6} 0.786 ± 0.105	[—] 0.774 ± 0.114	^{1,2,4,6} 0.774 ± 0.111
<i>vowel0</i>	³ 0.970 ± 0.038	³ 0.949 ± 0.044	[—] 0.990 ± 0.026	³ 0.969 ± 0.039	[—] 0.991 ± 0.026	³ 0.852 ± 0.052	^{1,2,3,4,6} 0.967 ± 0.043
<i>glass-0-4-vs-5</i>	^{2,6} 0.744 ± 0.204	⁶ 0.731 ± 0.185	^{1,2,4,6,7} 0.956 ± 0.096	^{2,6} 0.756 ± 0.214	^{1,2,4,6,7} 0.959 ± 0.091	[—] 0.791 ± 0.189	^{2,6} 0.968 ± 0.057
<i>glass-0-1-4-6-vs-2</i>	0.518 ± 0.062	0.510 ± 0.056	^{1,2,4,6} 0.700 ± 0.131	0.515 ± 0.059	^{1,2,4,6} 0.691 ± 0.140	[—] 0.519 ± 0.073	^{1,2,4,6} 0.654 ± 0.135
<i>yeast4</i>	[—] 0.555 ± 0.043	[—] 0.574 ± 0.057	^{1,2,4,6} 0.717 ± 0.076	[—] 0.574 ± 0.052	^{1,2,4,6} 0.718 ± 0.080	[—] 0.535 ± 0.040	^{1,2,4,6} 0.665 ± 0.062
<i>ecoli-0-4-6-vs-5</i>	[—] 0.901 ± 0.084	^{1,6} 0.903 ± 0.083	^{1,2,4,6,7} 0.916 ± 0.081	⁶ 0.900 ± 0.084	^{all} 0.912 ± 0.082	[—] 0.899 ± 0.086	^{1,2,4,6} 0.912 ± 0.084
<i>page-blocks-1-3-vs-4</i>	⁶ 0.818 ± 0.106	⁶ 0.815 ± 0.100	⁵ 0.912 ± 0.091	0.815 ± 0.101	² 0.903 ± 0.094	[—] 0.754 ± 0.101	[—] 0.836 ± 0.102
<i>yeast-0-2-5-7-9-vs-3-6-8</i>	⁶ 0.892 ± 0.042	⁶ 0.893 ± 0.043	^{1,2,4,6,7} 0.896 ± 0.038	⁶ 0.891 ± 0.043	^{1,2,4,6,7} 0.895 ± 0.039	[—] 0.871 ± 0.043	^{1,6} 0.896 ± 0.042
<i>ecoli-0-1-vs-2-3-5</i>	⁶ 0.833 ± 0.093	⁶ 0.838 ± 0.090	^{5,6} 0.877 ± 0.089	⁶ 0.848 ± 0.098	⁶ 0.873 ± 0.090	[—] 0.852 ± 0.087	⁶ 0.872 ± 0.086
<i>ecoli-0-6-7-vs-3-5</i>	0.792 ± 0.119	0.796 ± 0.116	^{1,2,7} 0.863 ± 0.099	¹ 0.783 ± 0.121	^{1,2,7} 0.866 ± 0.095	¹ 0.811 ± 0.105	^{1,2} 0.859 ± 0.101
<i>ecoli-0-3-4-7-vs-5-6</i>	[—] 0.869 ± 0.097	[—] 0.856 ± 0.089	^{1,2,4,6} 0.893 ± 0.075	[—] 0.853 ± 0.094	^{1,2,4,6} 0.893 ± 0.076	[—] 0.851 ± 0.092	^{1,2,4,6} 0.904 ± 0.073
<i>ecoli-0-2-6-7-vs-3-5</i>	0.797 ± 0.125	0.805 ± 0.115	^{2,4,6} 0.859 ± 0.091	[—] 0.801 ± 0.115	^{2,4,6} 0.862 ± 0.081	[—] 0.810 ± 0.102	^{2,3,4,5,6} 0.850 ± 0.095
<i>shuttle-c0-vs-c4</i>	[—] 0.996 ± 0.008	[—] 0.995 ± 0.008	^{1,2,4,6} 0.996 ± 0.008	[—] 0.995 ± 0.008	^{1,2,4,6} 0.996 ± 0.008	[—] 0.996 ± 0.008	¹ 0.996 ± 0.008
<i>ecoli-0-3-4-vs-5</i>	[—] 0.903 ± 0.105	[—] 0.897 ± 0.112	[—] 0.912 ± 0.099	[—] 0.892 ± 0.110	[—] 0.910 ± 0.099	[—] 0.904 ± 0.111	[—] 0.909 ± 0.102
	[—]	[—]	[—]	[—]	[—]	[—]	^{1,6}

Table 1: Results for BAC metric

	kNN (1)	SB (2)	OSB (3)	KNORAU (4)	OKNORAU (5)	TBA.4 (6)	OTBA.4 (7)
<i>Mean rank</i>	3.785	3.588	4.702	3.618	4.510	3.317	4.481
	2,4,6	—	1,2,4,5,6	6	1,2,4,6	—	1,2,4,6

Table 2: Results for mean ranks according to BAC metric

Dataset	kNN (1)	SB (2)	OSB (3)	KNORAU (4)	OKNORAU (5)	TBA.4 (6)	OTBA.4 (7)
<i>glass4</i>	0.641 ± 0.310	0.697 ± 0.274	0.870 ± 0.242	0.692 ± 0.292	0.871 ± 0.242	0.671 ± 0.235	0.818 ± 0.251
<i>ecoli-0-2-3-4-vs-5</i>	0.878 ± 0.100	0.884 ± 0.107	0.903 ± 0.086	0.884 ± 0.108	0.901 ± 0.087	0.888 ± 0.093	0.901 ± 0.089
<i>glass-0-1-6-vs-2</i>	0.118 ± 0.222	0.063 ± 0.171	0.618 ± 0.224	0.050 ± 0.151	0.565 ± 0.239	0.138 ± 0.251	0.563 ± 0.262
<i>ecoli-0-1-vs-5</i>	0.879 ± 0.104	0.872 ± 0.105	0.911 ± 0.082	0.876 ± 0.102	0.909 ± 0.082	0.896 ± 0.088	0.913 ± 0.084
<i>yeast-1-4-5-8-vs-7</i>	0.008 ± 0.056	0.024 ± 0.096	0.296 ± 0.245	0.024 ± 0.096	0.330 ± 0.243	0.024 ± 0.096	0.232 ± 0.241
<i>ecoli4</i>	0.879 ± 0.124	0.895 ± 0.126	0.908 ± 0.112	0.898 ± 0.127	0.907 ± 0.112	0.898 ± 0.127	0.916 ± 0.106
<i>led7digit-0-2-4-5-6-7-8-9-vs-1</i>	0.494 ± 0.179	0.478 ± 0.241	0.895 ± 0.071	0.444 ± 0.221	0.832 ± 0.184	0.294 ± 0.286	0.612 ± 0.214
<i>glass5</i>	0.394 ± 0.387	0.290 ± 0.377	0.716 ± 0.376	0.301 ± 0.393	0.709 ± 0.392	0.425 ± 0.404	0.741 ± 0.365
<i>ecoli-0-3-4-6-vs-5</i>	0.883 ± 0.108	0.876 ± 0.105	0.900 ± 0.101	0.872 ± 0.107	0.898 ± 0.101	0.875 ± 0.104	0.896 ± 0.103
<i>yeast-0-5-6-7-9-vs-4</i>	0.532 ± 0.164	0.541 ± 0.190	0.779 ± 0.078	0.552 ± 0.179	0.784 ± 0.071	0.479 ± 0.203	0.747 ± 0.091
<i>yeast6</i>	0.707 ± 0.136	0.666 ± 0.145	0.799 ± 0.112	0.655 ± 0.179	0.795 ± 0.108	0.534 ± 0.181	0.754 ± 0.132
<i>ecoli-0-6-7-vs-5</i>	0.814 ± 0.139	0.814 ± 0.139	0.863 ± 0.119	0.819 ± 0.126	0.852 ± 0.121	0.820 ± 0.120	0.857 ± 0.122
<i>glass-0-1-6-vs-5</i>	0.459 ± 0.368	0.308 ± 0.385	0.818 ± 0.272	0.355 ± 0.394	0.793 ± 0.293	0.349 ± 0.386	0.796 ± 0.294
<i>ecoli-0-1-3-7-vs-2-6</i>	0.741 ± 0.387	0.741 ± 0.387	0.734 ± 0.383	0.741 ± 0.387	0.735 ± 0.384	0.741 ± 0.387	0.738 ± 0.386
<i>yeast-0-2-5-6-vs-3-7-8-9</i>	0.719 ± 0.058	0.715 ± 0.059	0.777 ± 0.049	0.717 ± 0.063	0.777 ± 0.050	0.613 ± 0.077	0.757 ± 0.054
<i>ecoli-0-1-4-7-vs-5-6</i>	0.844 ± 0.132	0.830 ± 0.137	0.884 ± 0.104	0.818 ± 0.140	0.886 ± 0.088	0.841 ± 0.116	0.884 ± 0.108
<i>yeast5</i>	0.798 ± 0.083	0.785 ± 0.086	0.926 ± 0.057	0.795 ± 0.089	0.926 ± 0.052	0.723 ± 0.109	0.900 ± 0.066
<i>shuttle-c2-vs-c4</i>	0.182 ± 0.369	0.182 ± 0.369	0.994 ± 0.041	0.225 ± 0.386	0.994 ± 0.041	0.422 ± 0.481	0.994 ± 0.041
<i>ecoli-0-1-4-7-vs-2-3-5-6</i>	0.805 ± 0.133	0.797 ± 0.128	0.840 ± 0.092	0.799 ± 0.130	0.845 ± 0.091	0.798 ± 0.109	0.835 ± 0.105
<i>yeast-0-3-5-9-vs-7-8</i>	0.533 ± 0.123	0.486 ± 0.134	0.679 ± 0.084	0.502 ± 0.145	0.668 ± 0.095	0.449 ± 0.135	0.560 ± 0.096
<i>yeast-1-vs-7</i>	0.142 ± 0.199	0.204 ± 0.227	0.526 ± 0.190	0.210 ± 0.235	0.535 ± 0.192	0.142 ± 0.199	0.464 ± 0.223
<i>yeast-1-2-8-9-vs-7</i>	0.041 ± 0.122	0.052 ± 0.143	0.481 ± 0.210	0.060 ± 0.151	0.507 ± 0.206	0.041 ± 0.122	0.349 ± 0.261
<i>ecoli-0-1-4-6-vs-5</i>	0.873 ± 0.105	0.879 ± 0.100	0.908 ± 0.081	0.876 ± 0.103	0.906 ± 0.087	0.887 ± 0.104	0.910 ± 0.083
<i>glass-0-1-5-vs-2</i>	0.161 ± 0.246	0.139 ± 0.235	0.606 ± 0.226	0.207 ± 0.267	0.593 ± 0.222	0.256 ± 0.299	0.583 ± 0.259
<i>yeast-2-vs-4</i>	0.797 ± 0.083	0.803 ± 0.083	0.865 ± 0.069	0.800 ± 0.081	0.865 ± 0.071	0.793 ± 0.080	0.845 ± 0.070
<i>glass-0-6-vs-5</i>	0.521 ± 0.407	0.393 ± 0.404	0.944 ± 0.099	0.442 ± 0.437	0.930 ± 0.162	0.493 ± 0.417	0.932 ± 0.110
<i>glass2</i>	0.201 ± 0.271	0.146 ± 0.248	0.649 ± 0.215	0.153 ± 0.245	0.665 ± 0.188	0.273 ± 0.321	0.630 ± 0.239
<i>yeast-2-vs-8</i>	0.718 ± 0.181	0.718 ± 0.181	0.733 ± 0.148	0.718 ± 0.181	0.751 ± 0.142	0.718 ± 0.181	0.727 ± 0.153
<i>vowel0</i>	0.969 ± 0.041	0.946 ± 0.048	0.989 ± 0.028	0.967 ± 0.041	0.990 ± 0.028	0.837 ± 0.063	0.966 ± 0.046
<i>glass-0-4-vs-5</i>	0.560 ± 0.419	0.564 ± 0.387	0.942 ± 0.157	0.576 ± 0.430	0.947 ± 0.153	0.677 ± 0.363	0.966 ± 0.063
<i>glass-0-1-4-6-vs-2</i>	0.098 ± 0.210	0.085 ± 0.195	0.642 ± 0.229	0.106 ± 0.212	0.615 ± 0.261	0.125 ± 0.236	0.542 ± 0.281
<i>yeast4</i>	0.288 ± 0.183	0.347 ± 0.183	0.662 ± 0.116	0.348 ± 0.184	0.664 ± 0.121	0.195 ± 0.188	0.575 ± 0.111
<i>ecoli-0-4-6-vs-5</i>	0.892 ± 0.095	0.894 ± 0.094	0.909 ± 0.090	0.891 ± 0.095	0.905 ± 0.090	0.890 ± 0.096	0.906 ± 0.092
<i>page-blocks-1-3-vs-4</i>	0.789 ± 0.138	0.786 ± 0.128	0.905 ± 0.105	0.786 ± 0.130	0.895 ± 0.110	0.700 ± 0.144	0.813 ± 0.127
<i>yeast-0-2-5-7-9-vs-3-6-8</i>	0.885 ± 0.047	0.887 ± 0.048	0.893 ± 0.041	0.885 ± 0.049	0.892 ± 0.042	0.862 ± 0.049	0.891 ± 0.047
<i>ecoli-0-1-vs-2-3-5</i>	0.807 ± 0.125	0.814 ± 0.117	0.865 ± 0.106	0.825 ± 0.125	0.861 ± 0.109	0.833 ± 0.108	0.859 ± 0.104
<i>ecoli-0-6-7-vs-3-5</i>	0.750 ± 0.159	0.751 ± 0.180	0.849 ± 0.118	0.725 ± 0.208	0.853 ± 0.113	0.780 ± 0.135	0.843 ± 0.120
<i>ecoli-0-3-4-7-vs-5-6</i>	0.852 ± 0.116	0.839 ± 0.107	0.885 ± 0.085	0.833 ± 0.113	0.886 ± 0.086	0.832 ± 0.111	0.897 ± 0.081
<i>ecoli-0-2-6-7-vs-3-5</i>	0.747 ± 0.192	0.762 ± 0.180	0.844 ± 0.111	0.755 ± 0.181	0.850 ± 0.096	0.778 ± 0.136	0.832 ± 0.119
<i>shuttle-c0-vs-c4</i>	0.996 ± 0.008	0.995 ± 0.008	0.996 ± 0.008	0.995 ± 0.009	0.996 ± 0.008	0.995 ± 0.008	0.996 ± 0.008
<i>ecoli-0-3-4-vs-5</i>	0.888 ± 0.132	0.880 ± 0.142	0.901 ± 0.121	0.875 ± 0.137	0.899 ± 0.120	0.890 ± 0.137	0.899 ± 0.122

Table 3: Results for GMEAN metric

	kNN (1)	SB (2)	OSB (3)	KNORAU (4)	OKNORAU (5)	TBA.4 (6)	OTBA.4 (7)
<i>Mean rank</i>	3.690	3.538	4.775	3.565	4.593	3.290	4.549
	2,6	—	1,2,4,5,6	—	1,2,4,6	—	1,2,4,6

Table 4: Results for mean ranks according to GMEAN metric