Dataset	CART (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
glass-0-1-6-vs-2	0.582 ± 0.128 [−]	0.571 ± 0.113 [−]	0.569 ± 0.112 [−]	0.735 ± 0.107 [1,2,3,6]	0.751 ± 0.105 [1,2,3,6,7]	0.642 ± 0.084 [1,2,3]	0.709 ± 0.069 [1,2,3,6]
ecoli-0-3-4-7-vs-5-6	0.843 ± 0.085 [−]	0.860 ± 0.083 [−]	0.869 ± 0.084 [−]	0.881 ± 0.086 [1,6,7]	0.886 ± 0.073 [1,6,7]	0.819 ± 0.069 [−]	0.823 ± 0.061 [−]
shuttle-c2-vs-c4	1.000 ± 0.000 [−]	1.000 ± 0.000 [1,6,7]	1.000 ± 0.000 [1,6,7]	0.990 ± 0.048 [1,6,7]	0.990 ± 0.048 [1,6,7]	0.990 ± 0.048 [−]	0.990 ± 0.048 [−]
glass-0-1-4-6-vs-2	0.573 ± 0.117 [−]	0.563 ± 0.102 [−]	0.568 ± 0.108 [−]	0.728 ± 0.121 [1,2,3,6]	0.739 ± 0.125 [1,2,3,6]	0.635 ± 0.092 [−]	0.711 ± 0.106 [1,2,3,6]
yeast-1-2-8-9-vs-7	0.622 ± 0.082 [−]	0.539 ± 0.055 [−]	0.552 ± 0.059 [−]	0.677 ± 0.085 [1,2,3,6]	0.670 ± 0.073 [1,2,3,6,7]	0.680 ± 0.083 [1,2,3]	0.685 ± 0.081 [1,2,3,6]
ecoli-0-1-4-6-vs-5	0.792 ± 0.090 [2,3]	0.843 ± 0.085 [−]	0.848 ± 0.087 [−]	0.895 ± 0.078 [1,2,3,5]	0.899 ± 0.080 [1,2,3]	0.859 ± 0.073 [1,2,3]	0.882 ± 0.067 [1,2,3]
glass-0-1-6-vs-5	0.822 ± 0.182 [−]	0.849 ± 0.163 [1]	0.859 ± 0.156 [1]	0.873 ± 0.161 [1,2,3,6]	0.890 ± 0.151 [1,2,3,6]	0.900 ± 0.112 [1]	0.933 ± 0.091 [1,2,3,6]
yeast-2-vs-4	0.844 ± 0.064 [−]	0.830 ± 0.071 [−]	0.832 ± 0.070 [1]	0.851 ± 0.069 [−]	0.852 ± 0.067 [4]	0.928 ± 0.032 [1]	0.923 ± 0.031 [1,6]
glass-0-6-vs-5	0.899 ± 0.171 [−]	0.901 ± 0.163 [−]	0.901 ± 0.164 [−]	0.799 ± 0.187 [2,3]	0.802 ± 0.189 [2,3]	0.797 ± 0.147 [all]	0.827 ± 0.165 [1,2,3,4,5]
ecoli-0-3-4-6-vs-5	0.821 ± 0.111 [4,5,6,7]	0.847 ± 0.123 [4,5,6,7]	0.849 ± 0.122 [4,5,6,7]	0.901 ± 0.093 [−]	0.904 ± 0.087 [−]	0.869 ± 0.080 [−]	0.872 ± 0.065 [6]
yeast-0-3-5-9-vs-7-8	0.656 ± 0.070 [−]	0.597 ± 0.049 [1]	0.602 ± 0.051 [1]	0.661 ± 0.071 [1,2,3,6,7]	0.672 ± 0.073 [1,2,3,6,7]	0.670 ± 0.054 [1]	0.643 ± 0.045 [1]
glass-0-1-5-vs-2	0.592 ± 0.127 [2,3]	0.555 ± 0.106 [−]	0.562 ± 0.108 [−]	0.715 ± 0.125 [2,3]	0.734 ± 0.119 [2,3,7]	0.624 ± 0.086 [2,3,7]	0.684 ± 0.079 [2,3]
ecoli-0-6-7-vs-5	0.842 ± 0.121 [−]	0.869 ± 0.119 [−]	0.868 ± 0.119 [−]	0.870 ± 0.101 [1,2,3,6]	0.871 ± 0.099 [1,2,3,6,7]	0.827 ± 0.091 [2,3]	0.830 ± 0.092 [1,2,3,6]
ecoli-0-2-3-4-vs-5	0.850 ± 0.087 [6]	0.857 ± 0.092 [1,6,7]	0.862 ± 0.093 [1,6,7]	0.905 ± 0.080 [6,7]	0.911 ± 0.078 [6,7]	0.869 ± 0.076 [−]	0.876 ± 0.066 [−]
ecoli4	0.868 ± 0.091 [−]	0.875 ± 0.099 [−]	0.875 ± 0.099 [1]	0.922 ± 0.082 [1,2,3,6,7]	0.932 ± 0.084 [1,2,3,6,7]	0.909 ± 0.064 [−]	0.912 ± 0.072 [1]
yeast5	0.819 ± 0.085 [−]	0.815 ± 0.071 [1]	0.820 ± 0.076 [1]	0.941 ± 0.052 [1,2,3,6]	0.934 ± 0.053 [1,2,3,6,7]	0.939 ± 0.034 [1,2,3]	0.952 ± 0.046 [1,2,3]
ecoli-0-4-6-vs-5	0.814 ± 0.102 [−]	0.846 ± 0.102 [−]	0.851 ± 0.099 [−]	0.898 ± 0.082 [1,2,3]	0.905 ± 0.083 [1,2,3]	0.870 ± 0.076 [1,2,3]	0.876 ± 0.080 [1,2,3,6]
led7digit-0-2-4-5-6-7-8-9-vs-1	0.881 ± 0.072 [all]	0.879 ± 0.071 [1]	0.879 ± 0.072 [1]	0.651 ± 0.090 [1,2,3,6]	0.651 ± 0.093 [1,2,3,6,7]	0.864 ± 0.065 [1]	0.856 ± 0.070 [1,2,3]
ecoli-0-1-vs-5	0.814 ± 0.099 [all]	0.856 ± 0.100 [4,5,6,7]	0.861 ± 0.104 [4,5,6,7]	0.900 ± 0.079 [−]	0.907 ± 0.079 [−]	0.890 ± 0.077 [4,5,7]	0.895 ± 0.067 [4,5]
ecoli-0-2-6-7-vs-3-5	0.813 ± 0.129 [−]	0.838 ± 0.115 [1]	0.843 ± 0.108 [1]	0.836 ± 0.110 [1,2,3]	0.840 ± 0.101 [1,2,3]	0.785 ± 0.088 [1,2,3]	0.773 ± 0.082 [1,2,3]
ecoli-0-1-4-7-vs-2-3-5-6	0.796 ± 0.092 [6,7]	0.801 ± 0.092 [1,6,7]	0.808 ± 0.094 [1,6,7]	0.858 ± 0.084 [1,6,7]	0.859 ± 0.079 [6,7]	0.760 ± 0.070 [7]	0.795 ± 0.057 [−]
shuttle-c0-vs-c4	1.000 ± 0.000 [6]	1.000 ± 0.000 [6]	1.000 ± 0.000 [6]	0.998 ± 0.006 [1,2,3,6,7]	0.998 ± 0.006 [1,2,3,6,7]	0.998 ± 0.006 [−]	0.998 ± 0.006 [6]
ecoli-0-6-7-vs-3-5	0.821 ± 0.123 [−]	0.841 ± 0.114 [−]	0.843 ± 0.111 [−]	0.829 ± 0.104 [−]	0.831 ± 0.104 [−]	0.779 ± 0.090 [−]	0.767 ± 0.088 [−]
vowel0	0.963 ± 0.028 [6,7]	0.958 ± 0.029 [1,4,5,6,7]	0.958 ± 0.028 [1,4,5,6,7]	0.818 ± 0.061 [6,7]	0.809 ± 0.067 [6,7]	0.960 ± 0.018 [7]	0.959 ± 0.022 [−]
glass4	0.846 ± 0.136 [4,5]	0.854 ± 0.125 [4,5]	0.857 ± 0.127 [4,5]	0.779 ± 0.146 [−]	0.798 ± 0.148 [−]	0.815 ± 0.129 [4,5]	0.891 ± 0.107 [4,5]
yeast-0-5-6-7-9-vs-4	0.670 ± 0.077 [4,5]	0.665 ± 0.073 [4,5]	0.663 ± 0.073 [4,5]	0.790 ± 0.047 [−]	0.793 ± 0.046 [4]	0.737 ± 0.047 [4]	0.736 ± 0.046 [4,5,6]
yeast-0-2-5-6-vs-3-7-8-9	0.725 ± 0.050 [−]	0.731 ± 0.040 [−]	0.733 ± 0.042 [−]	0.772 ± 0.056 [1,2,3,6,7]	0.776 ± 0.054 [1,2,3,6,7]	0.679 ± 0.027 [1,2,3]	0.679 ± 0.025 [1,2,3]
ecoli-0-1-vs-2-3-5	0.786 ± 0.114 [6,7]	0.804 ± 0.108 [6,7]	0.807 ± 0.109 [6,7]	0.859 ± 0.088 [1,2,3,6,7]	0.859 ± 0.089 [1,2,3,6,7]	0.844 ± 0.090 [−]	0.822 ± 0.082 [−]
ecoli-0-3-4-vs-5	0.828 ± 0.116 [−]	0.866 ± 0.119 [−]	0.866 ± 0.119 [−]	0.907 ± 0.107 [1,2,3,6,7]	0.910 ± 0.112 [1,2,3,6,7]	0.868 ± 0.083 [1,2,3,7]	0.869 ± 0.086 [−]
glass5	0.831 ± 0.189 [−]	0.817 ± 0.199 [1]	0.822 ± 0.200 [1]	0.908 ± 0.142 [1,2,3,6,7]	0.912 ± 0.142 [1,2,3,6,7]	0.931 ± 0.086 [−]	0.939 ± 0.101 [1]
yeast4	0.668 ± 0.071 [−]	0.596 ± 0.059 [−]	0.601 ± 0.062 [−]	0.779 ± 0.074 [−]	0.769 ± 0.078 [4]	0.843 ± 0.055 [1,2,3]	0.837 ± 0.052 [2,3,4,5,6]
glass-0-4-vs-5	0.992 ± 0.016 [2,3]	0.992 ± 0.016 [−]	0.992 ± 0.016 [−]	0.903 ± 0.142 [1,2,3]	0.915 ± 0.137 [1,2,3]	0.894 ± 0.146 [1,2,3,4,5]	0.907 ± 0.140 [1,2,3,4,5]
yeast6	0.729 ± 0.089 [4,6,7]	0.730 ± 0.084 [4,6,7]	0.732 ± 0.085 [4,6,7]	0.838 ± 0.087 [6]	0.833 ± 0.084 [6,7]	0.830 ± 0.065 [−]	0.834 ± 0.081 [−]
page-blocks-1-3-vs-4	0.956 ± 0.064 [−]	0.981 ± 0.051 [−]	0.981 ± 0.051 [−]	0.718 ± 0.106 [1,2,3]	0.811 ± 0.109 [1,2,3]	0.932 ± 0.051 [1,2,3]	0.944 ± 0.071 [1,2,3]
yeast-1-vs-7	0.669 ± 0.095 [4,5,6]	0.550 ± 0.052 [1,4,5,6,7]	0.565 ± 0.062 [1,4,5,6,7]	0.679 ± 0.105 [−]	0.665 ± 0.103 [4]	0.692 ± 0.068 [4,5]	0.696 ± 0.071 [4,5]
ecoli-0-1-3-7-vs-2-6	0.820 ± 0.209 [2,3]	0.659 ± 0.205 [−]	0.694 ± 0.214 [−]	0.838 ± 0.199 [2,3,5]	0.832 ± 0.199 [2,3]	0.835 ± 0.194 [2,3]	0.818 ± 0.178 [1,2,3]
yeast-1-4-5-8-vs-7	0.546 ± 0.078 [2,7]	0.501 ± 0.011 [−]	0.501 ± 0.011 [−]	0.625 ± 0.091 [2,3,5,6,7]	0.620 ± 0.091 [1,2,3,7]	0.611 ± 0.081 [1,2,3,7]	0.619 ± 0.086 [2,3]
ecoli-0-1-4-7-vs-5-6	0.809 ± 0.095 [2,3]	0.822 ± 0.097 [−]	0.828 ± 0.100 [−]	0.895 ± 0.086 [1,2,3]	0.900 ± 0.079 [1,2,3]	0.824 ± 0.068 [1,2,3]	0.857 ± 0.054 [1,2,3]
yeast-2-vs-8	0.704 ± 0.113 [−]	0.749 ± 0.122 [1]	0.754 ± 0.124 [1]	0.776 ± 0.110 [1,2,3,6,7]	0.776 ± 0.109 [1,2,3,6,7]	0.753 ± 0.095 [−]	0.754 ± 0.104 [1,2,3,6]
yeast-0-2-5-7-9-vs-3-6-8	0.844 ± 0.051 [−]	0.872 ± 0.044 [1]	0.874 ± 0.043 [1]	0.900 ± 0.038 [1,2]	0.901 ± 0.036 [1]	0.824 ± 0.025 [1]	0.834 ± 0.027 [1]
glass2	0.561 ± 0.118 [6]	0.553 ± 0.079 [1,6,7]	0.560 ± 0.079 [1,6,7]	0.738 ± 0.119 [1,2,3,6,7]	0.758 ± 0.121 [1,2,3,6,7]	0.645 ± 0.082 [−]	0.735 ± 0.090 [6]
	[−]	[−]	[−]	[1,2,3,6]	[1,2,3,6]	[1,2,3]	[1,2,3,6]

Table 1: Results for BAC metric

	CART (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
Mean rank	3.000 [−]	2.915 [−]	3.598 [2]	4.976 [1,2,3,6]	5.366 [all]	3.805 [−]	4.341 [1,2,6]

Table 2: Results for mean ranks according to BAC metric

Dataset	CART (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
glass-0-1-6-vs-2	0.225 ± 0.219 [−]	0.207 ± 0.279 [−]	0.201 ± 0.272 [−]	0.324 ± 0.098 [1,2,3,6,7]	0.335 ± 0.091 [1,2,3,6,7]	0.217 ± 0.045 [−]	0.259 ± 0.043 [6]
ecoli-0-3-4-7-vs-5-6	0.686 ± 0.108 [6,7]	0.797 ± 0.118 [1,6,7]	0.803 ± 0.122 [1,6,7]	0.788 ± 0.133 [1,6,7]	0.790 ± 0.116 [1,6,7]	0.467 ± 0.104 [7]	0.438 ± 0.078 [−]
shuttle-c2-vs-c4	1.000 ± 0.000 [6,7]	1.000 ± 0.000 [1,6,7]	1.000 ± 0.000 [1,6,7]	0.987 ± 0.065 [1,6,7]	0.987 ± 0.065 [1,6,7]	0.987 ± 0.065 [7]	0.987 ± 0.065 [−]
glass-0-1-4-6-vs-2	0.220 ± 0.210 [−]	0.174 ± 0.242 [−]	0.188 ± 0.254 [−]	0.318 ± 0.115 [1,2,3,6,7]	0.328 ± 0.120 [1,2,3,6,7]	0.203 ± 0.050 [−]	0.252 ± 0.066 [2,3,6]
yeast-1-2-8-9-vs-7	0.233 ± 0.137 [2,3,5,6,7]	0.125 ± 0.170 [−]	0.164 ± 0.176 [6,7]	0.210 ± 0.084 [2,3,5,6,7]	0.195 ± 0.060 [2,6,7]	0.115 ± 0.025 [−]	0.114 ± 0.024 [−]
ecoli-0-1-4-6-vs-5	0.606 ± 0.149 [6,7]	0.766 ± 0.144 [1,6,7]	0.768 ± 0.150 [1,6,7]	0.800 ± 0.108 [1,2,3,6,7]	0.804 ± 0.113 [1,2,3,6,7]	0.472 ± 0.087 [−]	0.509 ± 0.098 [6]
glass-0-1-6-vs-5	0.631 ± 0.314 [6,7]	0.682 ± 0.275 [1,6,7]	0.701 ± 0.257 [1,6,7]	0.649 ± 0.274 [6,7]	0.715 ± 0.271 [1,6,7]	0.460 ± 0.182 [−]	0.629 ± 0.214 [6]
yeast-2-vs-4	0.707 ± 0.087 [6]	0.724 ± 0.107 [6]	0.725 ± 0.106 [1,6]	0.769 ± 0.097 [6]	0.771 ± 0.093 [4,6,7]	0.654 ± 0.065 [−]	0.631 ± 0.063 [6]
glass-0-6-vs-5	0.793 ± 0.302 [4,5,6,7]	0.811 ± 0.285 [4,5,6,7]	0.809 ± 0.287 [4,5,6,7]	0.632 ± 0.350 [6]	0.658 ± 0.353 [6,7]	0.417 ± 0.172 [−]	0.552 ± 0.259 [6]
ecoli-0-3-4-6-vs-5	0.665 ± 0.186 [6,7]	0.762 ± 0.197 [1,6,7]	0.759 ± 0.194 [1,6,7]	0.804 ± 0.144 [1,2,3,6,7]	0.800 ± 0.138 [1,2,3,6,7]	0.576 ± 0.129 [7]	0.571 ± 0.116 [−]
yeast-0-3-5-9-vs-7-8	0.366 ± 0.116 [2,3,6,7]	0.302 ± 0.128 [6,7]	0.312 ± 0.131 [6,7]	0.397 ± 0.127 [1,2,3,6,7]	0.401 ± 0.128 [1,2,3,6,7]	0.257 ± 0.031 [7]	0.241 ± 0.023 [−]
glass-0-1-5-vs-2	0.249 ± 0.210 [2,3,6,7]	0.157 ± 0.240 [−]	0.177 ± 0.250 [6]	0.322 ± 0.109 [2,3,6,7]	0.335 ± 0.106 [2,3,6,7]	0.228 ± 0.045 [−]	0.264 ± 0.054 [7]
ecoli-0-6-7-vs-5	0.726 ± 0.208 [2]	0.788 ± 0.190 [−]	0.785 ± 0.194 [−]	0.774 ± 0.159 [1,2,3,6,7]	0.778 ± 0.161 [1,2,3,6,7]	0.504 ± 0.126 [−]	0.511 ± 0.123 [2,3,6]
ecoli-0-2-3-4-vs-5	0.730 ± 0.140 [6,7]	0.791 ± 0.149 [1,4,6,7]	0.795 ± 0.151 [1,6,7]	0.822 ± 0.116 [6,7]	0.821 ± 0.115 [6,7]	0.590 ± 0.124 [−]	0.581 ± 0.113 [−]
ecoli4	0.732 ± 0.138 [6,7]	0.784 ± 0.153 [1,6,7]	0.782 ± 0.150 [1,6,7]	0.866 ± 0.116 [1,6,7]	0.855 ± 0.139 [1,6,7]	0.581 ± 0.118 [−]	0.577 ± 0.123 [−]
yeast5	0.658 ± 0.137 [6,7]	0.685 ± 0.114 [1,6,7]	0.691 ± 0.120 [1,6,7]	0.700 ± 0.087 [1,2,3,6,7]	0.723 ± 0.077 [1,2,3,6,7]	0.418 ± 0.049 [−]	0.642 ± 0.065 [6]
ecoli-0-4-6-vs-5	0.667 ± 0.159 [6]	0.766 ± 0.160 [6,7]	0.769 ± 0.152 [6,7]	0.807 ± 0.134 [6,7]	0.800 ± 0.145 [1,2,4,6,7]	0.596 ± 0.134 [−]	0.586 ± 0.136 [6]
led7digit-0-2-4-5-6-7-8-9-vs-1	0.778 ± 0.109 [6,7]	0.708 ± 0.106 [1,6,7]	0.708 ± 0.109 [1,6,7]	0.401 ± 0.199 [1,6,7]	0.393 ± 0.197 [1,6,7]	0.548 ± 0.093 [−]	0.516 ± 0.084 [−]
ecoli-0-1-vs-5	0.666 ± 0.143 [all]	0.786 ± 0.144 [4,5,6,7]	0.792 ± 0.147 [4,5,6,7]	0.859 ± 0.107 [−]	0.861 ± 0.115 [−]	0.590 ± 0.117 [4,5,7]	0.577 ± 0.103 [4,5]
ecoli-0-2-6-7-vs-3-5	0.664 ± 0.218 [6,7]	0.754 ± 0.207 [1,6,7]	0.762 ± 0.183 [1,6,7]	0.728 ± 0.188 [1,2,3,6,7]	0.732 ± 0.177 [1,2,3,6,7]	0.472 ± 0.132 [−]	0.419 ± 0.103 [−]
ecoli-0-1-4-7-vs-2-3-5-6	0.611 ± 0.148 [6,7]	0.703 ± 0.158 [1,6,7]	0.708 ± 0.158 [1,4,5,6,7]	0.776 ± 0.130 [1,6,7]	0.778 ± 0.129 [1,6,7]	0.345 ± 0.070 [7]	0.365 ± 0.062 [−]
shuttle-c0-vs-c4	1.000 ± 0.000 [6,7]	1.000 ± 0.000 [1,6,7]	1.000 ± 0.000 [1,6,7]	0.998 ± 0.006 [1,2,3,6,7]	0.998 ± 0.006 [1,2,3,6,7]	0.998 ± 0.006 [−]	0.998 ± 0.006 [−]
ecoli-0-6-7-vs-3-5	0.676 ± 0.209 [−]	0.761 ± 0.201 [1,4,5,6,7]	0.764 ± 0.195 [1,4,5,6,7]	0.721 ± 0.171 [6,7]	0.713 ± 0.178 [6,7]	0.461 ± 0.131 [7]	0.421 ± 0.110 [−]
vowel0	0.921 ± 0.045 [6,7]	0.913 ± 0.040 [1,4,5,6,7]	0.916 ± 0.038 [1,4,5,6,7]	0.736 ± 0.090 [6,7]	0.728 ± 0.096 [6,7]	0.779 ± 0.054 [7]	0.798 ± 0.067 [−]
glass4	0.680 ± 0.227 [4,5,6,7]	0.739 ± 0.205 [4,5,6,7]	0.738 ± 0.211 [4,5,6,7]	0.512 ± 0.236 [−]	0.547 ± 0.247 [−]	0.387 ± 0.151 [4,5]	0.544 ± 0.179 [4,5,6]
yeast-0-5-6-7-9-vs-4	0.391 ± 0.122 [4,5,6,7]	0.438 ± 0.137 [4,5,6,7]	0.433 ± 0.137 [4,5,6,7]	0.531 ± 0.083 [6]	0.535 ± 0.090 [4,6]	0.305 ± 0.033 [−]	0.304 ± 0.030 [6]
yeast-0-2-5-6-vs-3-7-8-9	0.491 ± 0.084 [6,7]	0.582 ± 0.075 [1,6,7]	0.587 ± 0.079 [1,6,7]	0.621 ± 0.093 [1,2,3,6,7]	0.622 ± 0.087 [1,2,3,6,7]	0.267 ± 0.016 [−]	0.266 ± 0.017 [−]
ecoli-0-1-vs-2-3-5	0.599 ± 0.183 [6,7]	0.694 ± 0.178 [1,6,7]	0.698 ± 0.182 [1,6,7]	0.808 ± 0.126 [1,2,3,6,7]	0.806 ± 0.128 [1,2,3,6,7]	0.532 ± 0.113 [−]	0.472 ± 0.101 [−]
ecoli-0-3-4-vs-5	0.683 ± 0.176 [6,7]	0.784 ± 0.182 [1,6,7]	0.784 ± 0.182 [1,6,7]	0.817 ± 0.161 [1,2,3,6,7]	0.821 ± 0.187 [1,2,3,6,7]	0.590 ± 0.123 [7]	0.583 ± 0.117 [−]
glass5	0.657 ± 0.346 [6,7]	0.640 ± 0.371 [6]	0.647 ± 0.374 [6]	0.687 ± 0.241 [1,6,7]	0.737 ± 0.245 [1,6,7]	0.485 ± 0.155 [−]	0.578 ± 0.170 [6]
yeast4	0.336 ± 0.122 [6,7]	0.277 ± 0.146 [6]	0.287 ± 0.153 [6]	0.396 ± 0.090 [6,7]	0.392 ± 0.105 [4,6,7]	0.234 ± 0.024 [−]	0.241 ± 0.030 [6]
glass-0-4-vs-5	0.942 ± 0.109 [2,3,6,7]	0.942 ± 0.109 [−]	0.942 ± 0.109 [6]	0.853 ± 0.234 [1,2,3,6,7]	0.873 ± 0.229 [1,2,3,6,7]	0.785 ± 0.260 [−]	0.808 ± 0.255 [−]
yeast6	0.422 ± 0.135 [6,7]	0.545 ± 0.151 [6,7]	0.543 ± 0.150 [6,7]	0.474 ± 0.115 [6]	0.498 ± 0.102 [6,7]	0.202 ± 0.032 [−]	0.255 ± 0.057 [−]
page-blocks-1-3-vs-4	0.903 ± 0.084 [6,7]	0.949 ± 0.078 [1,4,5,6,7]	0.949 ± 0.078 [1,4,5,6,7]	0.517 ± 0.201 [1,6,7]	0.726 ± 0.205 [1,4,6,7]	0.641 ± 0.120 [−]	0.871 ± 0.117 [6]
yeast-1-vs-7	0.353 ± 0.151 [4,5,6]	0.165 ± 0.163 [1,4,5,6,7]	0.207 ± 0.182 [1,4,5,6,7]	0.272 ± 0.102 [−]	0.244 ± 0.095 [4,6]	0.200 ± 0.031 [4]	0.201 ± 0.032 [4,5,6]
ecoli-0-1-3-7-vs-2-6	0.513 ± 0.327 [all]	0.350 ± 0.427 [−]	0.420 ± 0.440 [−]	0.524 ± 0.314 [2,3,5,6,7]	0.462 ± 0.287 [2,6,7]	0.378 ± 0.228 [−]	0.230 ± 0.143 [−]
yeast-1-4-5-8-vs-7	0.119 ± 0.133 [2,6,7]	0.006 ± 0.040 [−]	0.006 ± 0.040 [7]	0.159 ± 0.063 [2,5,6,7]	0.154 ± 0.063 [6,7]	0.113 ± 0.024 [7]	0.116 ± 0.026 [−]
ecoli-0-1-4-7-vs-5-6	0.612 ± 0.134 [2,3]	0.731 ± 0.155 [−]	0.738 ± 0.159 [−]	0.828 ± 0.125 [1,2,3,6,7]	0.828 ± 0.122 [2,3,6,7]	0.421 ± 0.087 [2,3]	0.444 ± 0.072 [2,3]
yeast-2-vs-8	0.408 ± 0.199 [6,7]	0.610 ± 0.240 [1,6,7]	0.617 ± 0.244 [1,6,7]	0.666 ± 0.197 [1,2,3,6,7]	0.658 ± 0.189 [1,2,3,6,7]	0.203 ± 0.050 [−]	0.192 ± 0.056 [6]
yeast-0-2-5-7-9-vs-3-6-8	0.711 ± 0.076 [6,7]	0.799 ± 0.067 [1,6,7]	0.802 ± 0.067 [1,6,7]	0.820 ± 0.058 [1,2,6,7]	0.821 ± 0.055 [1,6,7]	0.420 ± 0.043 [7]	0.434 ± 0.046 [−]
glass2	0.167 ± 0.204 [6,7]	0.165 ± 0.214 [1,6,7]	0.185 ± 0.216 [1,6,7]	0.330 ± 0.124 [1,2,3,6,7]	0.350 ± 0.124 [1,2,3,6,7]	0.200 ± 0.043 [−]	0.261 ± 0.059 [6]
				[1,2,3,6,7]	[1,2,3,6,7]		[1,2,3,6]

Table 3: Results for F1 metric

	CART (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
Mean rank	4.073 [6,7]	4.256 [6,7]	4.817 [1,2,6,7]	5.244 [1,6,7]	5.537 [1,2,6,7]	1.951 [−]	2.122 [−]

Table 4: Results for mean ranks according to F1 metric

Dataset	CART (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
glass-0-1-6-vs-2	0.237 ± 0.249 6	0.333 ± 0.444 −	0.308 ± 0.418 −	0.209 ± 0.070 6,7	0.216 ± 0.064 6,7	0.124 ± 0.027 −	0.151 ± 0.028 6
ecoli-0-3-4-7-vs-5-6	0.692 ± 0.154 6,7	0.914 ± 0.113 1,4,5,6,7	0.898 ± 0.130 1,4,5,6,7	0.815 ± 0.151 1,6,7	0.800 ± 0.140 1,6,7	0.338 ± 0.115 −	0.297 ± 0.071 6
shuttle-c2-vs-c4	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 −
glass-0-1-4-6-vs-2	0.258 ± 0.269 6,7	0.255 ± 0.364 −	0.275 ± 0.377 −	0.207 ± 0.081 6,7	0.215 ± 0.084 6,7	0.115 ± 0.030 −	0.147 ± 0.041 6
yeast-1-2-8-9-vs-7	0.212 ± 0.140 4,5,6,7	0.328 ± 0.444 −	0.422 ± 0.454 1,4,5,6,7	0.143 ± 0.075 6,7	0.127 ± 0.042 6,7	0.063 ± 0.013 −	0.062 ± 0.013 6
ecoli-0-1-4-6-vs-5	0.655 ± 0.218 6,7	0.891 ± 0.163 1,6,7	0.881 ± 0.172 1,6,7	0.828 ± 0.148 5,6,7	0.828 ± 0.153 6,7	0.334 ± 0.084 −	0.365 ± 0.095 6
glass-0-1-6-vs-5	0.680 ± 0.364 6,7	0.733 ± 0.323 1,6,7	0.757 ± 0.305 1,6,7	0.620 ± 0.315 1,6,7	0.697 ± 0.302 6,7	0.322 ± 0.172 −	0.523 ± 0.266 6
yeast-2-vs-4	0.709 ± 0.097 6,7	0.799 ± 0.106 4,6,7	0.794 ± 0.105 4,6,7	0.850 ± 0.097 6,7	0.852 ± 0.096 4,6,7	0.498 ± 0.074 −	0.471 ± 0.067 6
glass-0-6-vs-5	0.808 ± 0.318 6,7	0.837 ± 0.293 1,6,7	0.833 ± 0.298 1,6,7	0.705 ± 0.394 1,2,3,6,7	0.757 ± 0.393 1,2,3,6,7	0.313 ± 0.191 7	0.502 ± 0.302 −
ecoli-0-3-4-6-vs-5	0.692 ± 0.204 6,7	0.888 ± 0.177 6,7	0.874 ± 0.178 6,7	0.808 ± 0.160 6,7	0.787 ± 0.154 6,7	0.451 ± 0.159 −	0.435 ± 0.140 6
yeast-0-3-5-9-vs-7-8	0.363 ± 0.130 6,7	0.615 ± 0.255 1,4,5,6,7	0.621 ± 0.248 1,4,5,6,7	0.477 ± 0.179 1,6,7	0.422 ± 0.172 1,6,7	0.150 ± 0.019 −	0.139 ± 0.014 6
glass-0-1-5-vs-2	0.302 ± 0.304 6,7	0.253 ± 0.397 1,4,5,6,7	0.286 ± 0.411 1,4,5,6,7	0.209 ± 0.077 1,5,6,7	0.217 ± 0.074 6,7	0.131 ± 0.027 7	0.155 ± 0.035 −
ecoli-0-6-7-vs-5	0.794 ± 0.232 6,7	0.875 ± 0.174 −	0.869 ± 0.184 −	0.819 ± 0.173 6,7	0.827 ± 0.180 6,7	0.387 ± 0.143 −	0.395 ± 0.130 6
ecoli-0-2-3-4-vs-5	0.769 ± 0.174 6,7	0.906 ± 0.161 1,4,6,7	0.901 ± 0.162 1,4,6,7	0.839 ± 0.146 6,7	0.827 ± 0.158 6,7	0.464 ± 0.147 −	0.448 ± 0.138 6
ecoli4	0.743 ± 0.176 6,7	0.854 ± 0.169 1,4,5,6,7	0.850 ± 0.167 1,4,5,6,7	0.911 ± 0.127 1,6,7	0.861 ± 0.164 1,6,7	0.453 ± 0.161 −	0.451 ± 0.165 −
yeast5	0.703 ± 0.162 6,7	0.769 ± 0.140 1,6,7	0.765 ± 0.137 1,6,7	0.578 ± 0.097 all	0.618 ± 0.092 1,6,7	0.268 ± 0.039 −	0.495 ± 0.072 6
ecoli-0-4-6-vs-5	0.744 ± 0.193 4,5,6,7	0.890 ± 0.161 1,4,5,6,7	0.884 ± 0.158 1,4,5,6,7	0.819 ± 0.172 6,7	0.785 ± 0.186 4,6,7	0.473 ± 0.159 −	0.451 ± 0.146 6
led7digit-0-2-4-5-6-7-8-9-vs-1	0.797 ± 0.142 6,7	0.653 ± 0.136 1,4,5,6,7	0.654 ± 0.141 1,4,5,6,7	0.589 ± 0.286 1,6,7	0.559 ± 0.278 6,7	0.419 ± 0.106 −	0.387 ± 0.096 −
ecoli-0-1-vs-5	0.731 ± 0.181 all	0.926 ± 0.123 6,7	0.927 ± 0.121 6,7	0.951 ± 0.101 6,7	0.929 ± 0.116 6,7	0.457 ± 0.129 7	0.437 ± 0.113 −
ecoli-0-2-6-7-vs-3-5	0.722 ± 0.252 6,7	0.880 ± 0.227 1,6,7	0.893 ± 0.193 1,6,7	0.798 ± 0.196 1,6,7	0.791 ± 0.207 1,6,7	0.376 ± 0.161 −	0.307 ± 0.118 −
ecoli-0-1-4-7-vs-2-3-5-6	0.611 ± 0.157 6,7	0.870 ± 0.150 1,4,5,6,7	0.861 ± 0.148 1,4,5,6,7	0.862 ± 0.150 1,6,7	0.859 ± 0.154 6,7	0.225 ± 0.060 7	0.234 ± 0.051 −
shuttle-c0-vs-c4	1.000 ± 0.000 6,7	1.000 ± 0.000 1,6,7	1.000 ± 0.000 1,6,7	1.000 ± 0.000 1,6,7	1.000 ± 0.000 1,6,7	1.000 ± 0.000 −	1.000 ± 0.000 −
ecoli-0-6-7-vs-3-5	0.735 ± 0.236 −	0.893 ± 0.189 −	0.886 ± 0.191 −	0.814 ± 0.181 −	0.779 ± 0.199 −	0.361 ± 0.150 −	0.310 ± 0.114 −
vowel0	0.911 ± 0.067 6,7	0.906 ± 0.062 1,4,5,6,7	0.909 ± 0.058 1,4,5,6,7	0.879 ± 0.079 5,6,7	0.903 ± 0.081 6,7	0.654 ± 0.076 7	0.688 ± 0.101 −
glass4	0.730 ± 0.276 4,6,7	0.814 ± 0.242 4,6,7	0.802 ± 0.246 4,6,7	0.487 ± 0.276 6,7	0.517 ± 0.286 4,6,7	0.265 ± 0.121 −	0.410 ± 0.168 6
yeast-0-5-6-7-9-vs-4	0.395 ± 0.139 4,5,6,7	0.654 ± 0.180 4,5,6,7	0.632 ± 0.176 4,5,6,7	0.453 ± 0.117 6,7	0.457 ± 0.124 6,7	0.184 ± 0.022 −	0.183 ± 0.019 6
yeast-0-2-5-6-vs-3-7-8-9	0.479 ± 0.096 6,7	0.758 ± 0.108 1,4,5,6,7	0.759 ± 0.109 1,4,5,6,7	0.693 ± 0.102 1,6,7	0.681 ± 0.102 1,6,7	0.158 ± 0.010 −	0.157 ± 0.011 −
ecoli-0-1-vs-2-3-5	0.627 ± 0.198 6,7	0.837 ± 0.174 1,4,5,6,7	0.836 ± 0.181 1,4,5,6,7	0.955 ± 0.092 1,6,7	0.948 ± 0.100 1,6,7	0.398 ± 0.099 −	0.337 ± 0.093 −
ecoli-0-3-4-vs-5	0.738 ± 0.200 6,7	0.882 ± 0.165 1,6,7	0.882 ± 0.165 1,6,7	0.840 ± 0.156 1,2,3,6,7	0.834 ± 0.194 1,2,3,6,7	0.467 ± 0.133 7	0.459 ± 0.139 −
glass5	0.707 ± 0.382 6,7	0.697 ± 0.405 1,6,7	0.697 ± 0.405 1,6,7	0.633 ± 0.280 1,6,7	0.713 ± 0.286 1,6,7	0.336 ± 0.137 −	0.430 ± 0.164 6
yeast4	0.330 ± 0.134 6,7	0.559 ± 0.274 6,7	0.543 ± 0.260 6,7	0.301 ± 0.082 6,7	0.302 ± 0.097 4,6,7	0.135 ± 0.014 −	0.140 ± 0.018 6
glass-0-4-vs-5	0.908 ± 0.169 6,7	0.908 ± 0.169 1,4,5,6,7	0.908 ± 0.169 1,4,5,6,7	0.943 ± 0.209 6,7	0.960 ± 0.195 6,7	0.810 ± 0.290 −	0.827 ± 0.280 −
yeast6	0.419 ± 0.182 −	0.728 ± 0.203 6,7	0.716 ± 0.204 6,7	0.365 ± 0.104 6,7	0.399 ± 0.094 1,2,3,6,7	0.116 ± 0.019 −	0.154 ± 0.038 6
page-blocks-1-3-vs-4	0.908 ± 0.102 6,7	0.940 ± 0.083 1,4,5,6,7	0.940 ± 0.083 1,4,5,6,7	0.699 ± 0.262 6,7	0.912 ± 0.214 4,6,7	0.503 ± 0.142 −	0.860 ± 0.136 6
yeast-1-vs-7	0.333 ± 0.141 4,6	0.450 ± 0.450 1,4,6,7	0.525 ± 0.447 1,4,6,7	0.189 ± 0.077 6	0.163 ± 0.067 4,6,7	0.114 ± 0.018 −	0.114 ± 0.018 4,6
ecoli-0-1-3-7-vs-2-6	0.465 ± 0.340 4,5,6,7	0.410 ± 0.486 4,5,6,7	0.480 ± 0.489 1,4,5,6,7	0.485 ± 0.350 5,6,7	0.407 ± 0.326 6,7	0.292 ± 0.227 −	0.142 ± 0.097 −
yeast-1-4-5-8-vs-7	0.112 ± 0.127 6,7	0.020 ± 0.139 7	0.020 ± 0.139 6,7	0.098 ± 0.039 5,6,7	0.094 ± 0.039 6,7	0.061 ± 0.013 7	0.063 ± 0.014 −
ecoli-0-1-4-7-vs-5-6	0.611 ± 0.150 2,3	0.882 ± 0.137 −	0.883 ± 0.136 2,3	0.894 ± 0.136 2,3,6,7	0.869 ± 0.151 2,3,6,7	0.296 ± 0.096 2,3	0.300 ± 0.067 2,3
yeast-2-vs-8	0.442 ± 0.271 6,7	0.868 ± 0.266 1,6,7	0.868 ± 0.266 1,6,7	0.912 ± 0.183 1,6,7	0.896 ± 0.185 1,6,7	0.118 ± 0.031 −	0.110 ± 0.033 −
yeast-0-2-5-7-9-vs-3-6-8	0.709 ± 0.082 6,7	0.853 ± 0.085 1,6,7	0.853 ± 0.085 1,6,7	0.827 ± 0.075 1,6,7	0.826 ± 0.074 1,6,7	0.275 ± 0.044 7	0.286 ± 0.047 −
glass2	0.172 ± 0.228 −	0.290 ± 0.401 −	0.327 ± 0.415 6	0.220 ± 0.094 1,6,7	0.233 ± 0.092 1,6,7	0.113 ± 0.025 −	0.153 ± 0.037 6

Table 5: Results for Precision metric

	CART (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
Mean rank	4.098 6,7	5.793 1,4,5,6,7	5.695 1,4,5,6,7	4.585 6,7	4.463 6,7	1.634 −	1.732 −

Table 6: Results for mean ranks according to Precision metric

3

Dataset	CART (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
glass-0-1-6-vs-2	0.243 ± 0.247 [2,3]	0.157 ± 0.219 [—]	0.157 ± 0.219 [—]	0.757 ± 0.210 [1,2,3]	0.785 ± 0.215 [1,2,3]	0.893 ± 0.188 [1,2,3,4,5]	0.933 ± 0.130 [1,2,3,4,5]
ecoli-0-3-4-7-vs-5-6	0.728 ± 0.182 [—]	0.728 ± 0.168 [—]	0.748 ± 0.168 [—]	0.784 ± 0.168 [1,2]	0.796 ± 0.141 [1,2,3]	0.840 ± 0.154 [1,2,3,4,5]	0.892 ± 0.127 [all]
shuttle-c2-vs-c4	1.000 ± 0.000 [—]	1.000 ± 0.000 [—]	1.000 ± 0.000 [—]	0.980 ± 0.097 [—]	0.980 ± 0.097 [—]	0.980 ± 0.097 [—]	0.980 ± 0.097 [—]
glass-0-1-4-6-vs-2	0.213 ± 0.216 [2]	0.143 ± 0.206 [—]	0.155 ± 0.217 [—]	0.713 ± 0.232 [1,2,3]	0.728 ± 0.247 [1,2,3]	0.900 ± 0.194 [1,2,3,4,5]	0.910 ± 0.187 [1,2,3,4,5]
yeast-1-2-8-9-vs-7	0.280 ± 0.168 [2,3]	0.080 ± 0.111 [—]	0.107 ± 0.119 [—]	0.450 ± 0.170 [1,2,3]	0.443 ± 0.151 [1,2,3]	0.700 ± 0.188 [1,2,3,4,5]	0.730 ± 0.179 [1,2,3,4,5]
ecoli-0-1-4-6-vs-5	0.615 ± 0.188 [—]	0.695 ± 0.168 [1]	0.705 ± 0.170 [1]	0.805 ± 0.160 [1,2,3]	0.815 ± 0.164 [1,2,3]	0.860 ± 0.159 [1,2,3,4]	0.895 ± 0.142 [1,2,3,4,5]
glass-0-1-6-vs-5	0.660 ± 0.366 [—]	0.710 ± 0.333 [1]	0.730 ± 0.319 [1]	0.780 ± 0.318 [1,2,3]	0.800 ± 0.300 [1,2,3]	0.920 ± 0.208 [1,2,3,4,5]	0.930 ± 0.173 [1,2,3,4,5]
yeast-2-vs-4	0.722 ± 0.132 [—]	0.681 ± 0.145 [—]	0.685 ± 0.144 [—]	0.717 ± 0.140 [—]	0.719 ± 0.136 [—]	0.966 ± 0.064 [1,2,3,4,5]	0.970 ± 0.060 [1,2,3,4,5]
glass-0-6-vs-5	0.820 ± 0.328 [4,5]	0.820 ± 0.312 [4,5]	0.820 ± 0.312 [4,5]	0.620 ± 0.368 [—]	0.620 ± 0.368 [—]	0.780 ± 0.285 [4,5]	0.740 ± 0.335 [5]
ecoli-0-3-4-6-vs-5	0.680 ± 0.218 [—]	0.705 ± 0.243 [—]	0.710 ± 0.241 [—]	0.825 ± 0.182 [1,2,3]	0.835 ± 0.170 [1,2,3]	0.875 ± 0.152 [1,2,3,4]	0.885 ± 0.124 [1,2,3,4,5]
yeast-0-3-5-9-vs-7-8	0.394 ± 0.146 [2,3]	0.210 ± 0.100 [—]	0.220 ± 0.103 [—]	0.374 ± 0.154 [2,3]	0.416 ± 0.154 [2,3,4]	0.912 ± 0.112 [1,2,3,4,5]	0.900 ± 0.089 [1,2,3,4,5]
glass-0-1-5-vs-2	0.262 ± 0.252 [2,3]	0.128 ± 0.216 [—]	0.142 ± 0.218 [—]	0.737 ± 0.249 [2,3]	0.773 ± 0.243 [2,3,4]	0.918 ± 0.153 [1,2,3,4,5]	0.927 ± 0.162 [1,2,3,4,5]
ecoli-0-6-7-vs-5	0.705 ± 0.243 [—]	0.750 ± 0.234 [1]	0.750 ± 0.234 [1]	0.760 ± 0.199 [1,2,3]	0.760 ± 0.193 [1,2,3]	0.800 ± 0.199 [1,2,3,4,5]	0.800 ± 0.199 [1,2,3,4,5]
ecoli-0-2-3-4-vs-5	0.730 ± 0.179 [—]	0.725 ± 0.182 [—]	0.735 ± 0.183 [—]	0.830 ± 0.161 [1,2,3]	0.845 ± 0.157 [1,2,3]	0.865 ± 0.151 [1,2,3]	0.890 ± 0.133 [1,2,3]
ecoli4	0.755 ± 0.183 [—]	0.760 ± 0.199 [—]	0.760 ± 0.199 [—]	0.850 ± 0.165 [1,2,3]	0.875 ± 0.167 [1,2,3]	0.900 ± 0.141 [1,2,3]	0.910 ± 0.164 [1,2,3,4]
yeast5	0.648 ± 0.170 [—]	0.636 ± 0.143 [—]	0.647 ± 0.153 [—]	0.903 ± 0.105 [1,2,3]	0.886 ± 0.107 [1,2,3]	0.960 ± 0.073 [1,2,3,4,5]	0.933 ± 0.094 [1,2,3,4]
ecoli-0-4-6-vs-5	0.660 ± 0.210 [—]	0.705 ± 0.204 [—]	0.715 ± 0.200 [—]	0.820 ± 0.158 [1,2,3]	0.840 ± 0.156 [1,2,3]	0.865 ± 0.143 [1,2,3]	0.890 ± 0.142 [1,2,3,4,5]
led7digit-0-2-4-5-6-7-8-9-vs-1	0.782 ± 0.143 [4,5]	0.801 ± 0.144 [4,5]	0.801 ± 0.144 [4,5]	0.323 ± 0.177 [—]	0.326 ± 0.184 [—]	0.845 ± 0.140 [1,2,3]	0.846 ± 0.160 [1,2,3,4,5]
ecoli-0-1-vs-5	0.655 ± 0.205 [—]	0.720 ± 0.203 [1]	0.730 ± 0.211 [1]	0.805 ± 0.160 [1,2,3]	0.820 ± 0.158 [1,2,3]	0.890 ± 0.159 [1,2,3,4,5]	0.910 ± 0.139 [1,2,3,4,5]
ecoli-0-2-6-7-vs-3-5	0.659 ± 0.255 [—]	0.688 ± 0.226 [1]	0.698 ± 0.212 [1]	0.693 ± 0.215 [1,2,3]	0.704 ± 0.193 [1,2,3]	0.732 ± 0.189 [1,2,3]	0.760 ± 0.186 [1,2,3]
ecoli-0-1-4-7-vs-2-3-5-6	0.632 ± 0.180 [—]	0.611 ± 0.184 [—]	0.627 ± 0.189 [—]	0.730 ± 0.167 [1,2,3]	0.731 ± 0.157 [1,2,3]	0.795 ± 0.151 [1,2,3,4,5]	0.879 ± 0.125 [all]
shuttle-c0-vs-c4	1.000 ± 0.000 [—]	1.000 ± 0.000 [—]	1.000 ± 0.000 [—]	0.996 ± 0.012 [—]	0.996 ± 0.012 [—]	0.996 ± 0.012 [—]	0.996 ± 0.012 [—]
ecoli-0-6-7-vs-3-5	0.671 ± 0.250 [—]	0.691 ± 0.228 [—]	0.695 ± 0.221 [—]	0.678 ± 0.204 [—]	0.686 ± 0.201 [—]	0.731 ± 0.178 [—]	0.735 ± 0.184 [—]
vowel0	0.936 ± 0.055 [4,5]	0.926 ± 0.061 [4,5]	0.927 ± 0.059 [4,5]	0.646 ± 0.124 [—]	0.626 ± 0.137 [—]	0.973 ± 0.037 [4,5]	0.966 ± 0.045 [4,5]
glass4	0.717 ± 0.277 [4,5]	0.720 ± 0.250 [4,5]	0.727 ± 0.253 [4,5]	0.610 ± 0.284 [—]	0.643 ± 0.286 [—]	0.787 ± 0.245 [1,2,3,4,5]	0.880 ± 0.200 [1,2,3,4,5]
yeast-0-5-6-7-9-vs-4	0.412 ± 0.159 [4]	0.353 ± 0.150 [4]	0.351 ± 0.150 [4]	0.678 ± 0.103 [—]	0.685 ± 0.098 [—]	0.908 ± 0.100 [1,2,3,4,5]	0.908 ± 0.098 [all]
yeast-0-2-5-6-vs-3-7-8-9	0.512 ± 0.097 [2,3]	0.479 ± 0.080 [—]	0.484 ± 0.084 [—]	0.573 ± 0.114 [1,2,3]	0.584 ± 0.111 [1,2,3]	0.863 ± 0.074 [1,2,3,4,5]	0.878 ± 0.060 [1,2,3,4,5]
ecoli-0-1-vs-2-3-5	0.615 ± 0.230 [2,3]	0.621 ± 0.215 [—]	0.629 ± 0.218 [—]	0.723 ± 0.178 [1,2,3]	0.723 ± 0.178 [1,2,3]	0.833 ± 0.177 [1,2,3,4,5]	0.837 ± 0.170 [1,2,3,4,5]
ecoli-0-3-4-vs-5	0.690 ± 0.237 [—]	0.745 ± 0.237 [—]	0.745 ± 0.237 [—]	0.835 ± 0.215 [1,2,3]	0.840 ± 0.222 [1,2,3]	0.860 ± 0.174 [1,2,3]	0.865 ± 0.181 [1,2,3]
glass5	0.670 ± 0.382 [—]	0.640 ± 0.400 [—]	0.650 ± 0.403 [—]	0.840 ± 0.290 [1,2,3]	0.840 ± 0.290 [1,2,3]	0.960 ± 0.168 [1,2,3]	0.940 ± 0.190 [1,2,3]
yeast4	0.364 ± 0.141 [2,3]	0.198 ± 0.119 [—]	0.208 ± 0.125 [—]	0.613 ± 0.152 [1,2,3]	0.591 ± 0.158 [1,2,3]	0.888 ± 0.122 [1,2,3,4,5]	0.864 ± 0.108 [1,2,3]
glass-0-4-vs-5	1.000 ± 0.000 [4,5,6,7]	1.000 ± 0.000 [4,5,6,7]	1.000 ± 0.000 [4,5,6,7]	0.810 ± 0.280 [—]	0.830 ± 0.275 [—]	0.820 ± 0.278 [—]	0.840 ± 0.272 [—]
yeast6	0.477 ± 0.182 [—]	0.466 ± 0.170 [—]	0.469 ± 0.171 [—]	0.709 ± 0.178 [1,2,3]	0.691 ± 0.172 [1,2,3]	0.811 ± 0.144 [1,2,3,4,5]	0.774 ± 0.171 [1,2,3]
page-blocks-1-3-vs-4	0.918 ± 0.131 [4,5]	0.967 ± 0.102 [4,5,7]	0.967 ± 0.102 [4,5,7]	0.449 ± 0.215 [—]	0.625 ± 0.219 [—]	0.931 ± 0.102 [1,2,3,4,5]	0.899 ± 0.139 [1,2,3,4,5]
yeast-1-vs-7	0.393 ± 0.190 [2,3]	0.103 ± 0.104 [—]	0.133 ± 0.124 [—]	0.527 ± 0.211 [1,2,3]	0.520 ± 0.215 [4]	0.847 ± 0.166 [4,5]	0.860 ± 0.157 [4,5]
ecoli-0-1-3-7-vs-2-6	0.660 ± 0.417 [2,3]	0.320 ± 0.409 [—]	0.390 ± 0.427 [—]	0.700 ± 0.400 [1,2,3]	0.700 ± 0.400 [1,2,3]	0.720 ± 0.401 [1,2,3,4,5]	0.750 ± 0.390 [1,2,3,4,5]
yeast-1-4-5-8-vs-7	0.140 ± 0.157 [2,3]	0.003 ± 0.023 [—]	0.003 ± 0.023 [—]	0.437 ± 0.176 [2,3]	0.430 ± 0.179 [2,3]	0.723 ± 0.175 [2,3]	0.733 ± 0.169 [2,3]
ecoli-0-1-4-7-vs-5-6	0.656 ± 0.200 [2,3]	0.652 ± 0.195 [—]	0.664 ± 0.201 [—]	0.800 ± 0.174 [1,2,3]	0.812 ± 0.157 [1,2,3]	0.832 ± 0.166 [1,2,3,4,5]	0.896 ± 0.121 [1,2,3,4,5]
yeast-2-vs-8	0.435 ± 0.233 [—]	0.500 ± 0.244 [1]	0.510 ± 0.249 [1]	0.555 ± 0.219 [1,2,3]	0.555 ± 0.219 [1,2,3]	0.760 ± 0.223 [1,2,3]	0.795 ± 0.232 [all]
yeast-0-2-5-7-9-vs-3-6-8	0.721 ± 0.102 [—]	0.759 ± 0.087 [1]	0.764 ± 0.086 [1]	0.820 ± 0.077 [1,2]	0.822 ± 0.072 [1,2]	0.925 ± 0.073 [1,2,3,4,5]	0.933 ± 0.076 [1,2,3,4,5]
glass2	0.187 ± 0.238 [—]	0.120 ± 0.157 [—]	0.137 ± 0.158 [—]	0.700 ± 0.234 [1,2,3]	0.738 ± 0.219 [1,2,3]	0.895 ± 0.182 [1,2,3,4,5]	0.918 ± 0.162 [1,2,3,4,5]

Table 7: Results for Recall metric

	CART (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
Mean rank	2.732 [—]	2.280 [—]	3.061 [2]	3.610 [1,2]	4.146 [1,2,4]	5.829 [1,2,3,4,5]	6.341 [all]

Table 8: Results for mean ranks according to Recall metric

Table 9 presents AUC results; Table 10 presents mean ranks. In each cell the value is shown as mean ± standard deviation, with the significance group (indices of methods significantly outperformed) given below in bracketed form.

Dataset	CART (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
glass-0-1-6-vs-2	0.582 ± 0.128 [—]	0.571 ± 0.113 [—]	0.569 ± 0.112 [—]	0.735 ± 0.107 [1,2,3,6]	0.751 ± 0.105 [1,2,3,6,7]	0.642 ± 0.084 [1,2,3]	0.709 ± 0.069 [1,2,3,6]
ecoli-0-3-4-7-vs-5-6	0.843 ± 0.085 [—]	0.860 ± 0.083 [1,6,7]	0.869 ± 0.084 [1,6,7]	0.881 ± 0.086 [1,6,7]	0.886 ± 0.073 [1,6,7]	0.819 ± 0.069 [—]	0.823 ± 0.061 [—]
shuttle-c2-vs-c4	1.000 ± 0.000 [—]	1.000 ± 0.000 [—]	1.000 ± 0.000 [—]	0.990 ± 0.048 [—]	0.990 ± 0.048 [—]	0.990 ± 0.048 [—]	0.990 ± 0.048 [—]
glass-0-1-4-6-vs-2	0.573 ± 0.117 [—]	0.563 ± 0.102 [—]	0.568 ± 0.108 [—]	0.728 ± 0.121 [1,2,3,6]	0.739 ± 0.125 [1,2,3,6,7]	0.635 ± 0.092 [1,2,3]	0.711 ± 0.106 [1,2,3,6]
yeast-1-2-8-9-vs-7	0.622 ± 0.082 [2,3]	0.539 ± 0.055 [—]	0.552 ± 0.059 [—]	0.677 ± 0.085 [1,2,3]	0.670 ± 0.073 [1,2,3]	0.680 ± 0.083 [1,2,3]	0.685 ± 0.081 [1,2,3]
ecoli-0-1-4-6-vs-5	0.792 ± 0.090 [—]	0.843 ± 0.085 [1]	0.848 ± 0.087 [1]	0.895 ± 0.078 [1,2,3,5]	0.899 ± 0.080 [1,2,3]	0.859 ± 0.073 [1,2,3]	0.882 ± 0.067 [1,2,3]
glass-0-1-6-vs-5	0.822 ± 0.182 [—]	0.849 ± 0.163 [1]	0.859 ± 0.156 [1]	0.873 ± 0.161 [1,2,3,6]	0.890 ± 0.151 [1,2,3,6]	0.900 ± 0.112 [1]	0.933 ± 0.091 [1,2,3,6]
yeast-2-vs-4	0.844 ± 0.064 [—]	0.830 ± 0.071 [—]	0.832 ± 0.070 [1]	0.851 ± 0.069 [1]	0.852 ± 0.067 [4]	0.928 ± 0.032 [1]	0.923 ± 0.031 [1,6]
glass-0-6-vs-5	0.899 ± 0.171 [—]	0.901 ± 0.163 [—]	0.901 ± 0.164 [—]	0.799 ± 0.187 [2,3]	0.802 ± 0.189 [2,3]	0.797 ± 0.147 [all]	0.827 ± 0.165 [1,2,3,4,5]
ecoli-0-3-4-6-vs-5	0.821 ± 0.111 [4,5,6,7]	0.847 ± 0.123 [4,5,6,7]	0.849 ± 0.122 [4,5,6,7]	0.901 ± 0.093 [—]	0.904 ± 0.087 [—]	0.869 ± 0.080 [—]	0.872 ± 0.065 [6]
yeast-0-3-5-9-vs-7-8	0.656 ± 0.070 [—]	0.597 ± 0.049 [1]	0.602 ± 0.051 [1]	0.661 ± 0.071 [1,2,3,6,7]	0.672 ± 0.073 [1,2,3,6,7]	0.670 ± 0.054 [1]	0.643 ± 0.045 [1]
glass-0-1-5-vs-2	0.592 ± 0.127 [2,3]	0.555 ± 0.106 [—]	0.562 ± 0.108 [—]	0.715 ± 0.125 [2,3]	0.734 ± 0.119 [2,3,7]	0.624 ± 0.086 [2,3]	0.684 ± 0.079 [2,3]
ecoli-0-6-7-vs-5	0.842 ± 0.121 [—]	0.869 ± 0.119 [—]	0.868 ± 0.119 [—]	0.870 ± 0.101 [1,2,3,6]	0.871 ± 0.099 [1,2,3,6,7]	0.827 ± 0.091 [2,3]	0.830 ± 0.092 [1,2,3,6]
ecoli-0-2-3-4-vs-5	0.850 ± 0.087 [—]	0.857 ± 0.092 [1,6,7]	0.862 ± 0.093 [1,6,7]	0.905 ± 0.080 [6,7]	0.911 ± 0.078 [6,7]	0.869 ± 0.076 [—]	0.876 ± 0.066 [—]
ecoli4	0.868 ± 0.091 [—]	0.875 ± 0.099 [1]	0.875 ± 0.099 [1]	0.922 ± 0.082 [1,2,3,6,7]	0.932 ± 0.084 [1,2,3,6,7]	0.909 ± 0.064 [—]	0.912 ± 0.072 [1]
yeast5	0.819 ± 0.085 [—]	0.815 ± 0.071 [1]	0.820 ± 0.076 [1]	0.941 ± 0.052 [1,2,3,6,7]	0.934 ± 0.053 [1,2,3,6,7]	0.939 ± 0.034 [1,2,3]	0.952 ± 0.046 [1,2,3]
ecoli-0-4-6-vs-5	0.814 ± 0.102 [—]	0.846 ± 0.102 [—]	0.851 ± 0.099 [—]	0.898 ± 0.082 [1,2,3]	0.905 ± 0.083 [1,2,3]	0.870 ± 0.076 [1,2,3]	0.876 ± 0.080 [1,2,3,6]
led7digit-0-2-4-5-6-7-8-9-vs-1	0.881 ± 0.072 [—]	0.879 ± 0.071 [1]	0.879 ± 0.072 [1]	0.651 ± 0.090 [1,2,3,6]	0.651 ± 0.093 [1,2,3,6,7]	0.864 ± 0.065 [1]	0.856 ± 0.070 [1,2,3]
ecoli-0-1-vs-5	0.814 ± 0.099 [all]	0.856 ± 0.100 [4,5,6,7]	0.861 ± 0.104 [4,5,6,7]	0.900 ± 0.079 [—]	0.907 ± 0.079 [—]	0.890 ± 0.077 [4,5,7]	0.895 ± 0.067 [4,5]
ecoli-0-2-6-7-vs-3-5	0.813 ± 0.129 [—]	0.838 ± 0.115 [1]	0.843 ± 0.108 [1]	0.836 ± 0.110 [1,2,3]	0.840 ± 0.101 [1,2,3]	0.785 ± 0.088 [1,2,3]	0.773 ± 0.082 [1,2,3]
ecoli-0-1-4-7-vs-2-3-5-6	0.796 ± 0.092 [6,7]	0.801 ± 0.092 [1,6,7]	0.808 ± 0.094 [1,6,7]	0.858 ± 0.084 [1,6,7]	0.859 ± 0.079 [6,7]	0.760 ± 0.070 [7]	0.795 ± 0.057 [—]
shuttle-c0-vs-c4	1.000 ± 0.000 [6]	1.000 ± 0.000 [6]	1.000 ± 0.000 [6]	0.998 ± 0.006 [1,2,3,6,7]	0.998 ± 0.006 [1,2,3,6,7]	0.998 ± 0.006 [—]	0.998 ± 0.006 [6]
ecoli-0-6-7-vs-3-5	0.821 ± 0.123 [—]	0.841 ± 0.114 [—]	0.843 ± 0.111 [—]	0.829 ± 0.104 [—]	0.831 ± 0.104 [—]	0.779 ± 0.090 [—]	0.767 ± 0.088 [—]
vowel0	0.963 ± 0.028 [6,7]	0.958 ± 0.029 [1,4,5,6,7]	0.958 ± 0.028 [1,4,5,6,7]	0.818 ± 0.061 [—]	0.809 ± 0.067 [—]	0.960 ± 0.018 [7]	0.959 ± 0.022 [—]
glass4	0.846 ± 0.136 [4,5]	0.854 ± 0.125 [4,5]	0.857 ± 0.127 [4,5]	0.779 ± 0.146 [—]	0.798 ± 0.148 [—]	0.815 ± 0.129 [4,5]	0.891 ± 0.107 [4,5]
yeast-0-5-6-7-9-vs-4	0.670 ± 0.077 [4,5]	0.665 ± 0.073 [4,5]	0.663 ± 0.073 [4,5]	0.790 ± 0.047 [—]	0.793 ± 0.046 [4]	0.737 ± 0.047 [4]	0.736 ± 0.046 [4,5,6]
yeast-0-2-5-6-vs-3-7-8-9	0.725 ± 0.050 [—]	0.731 ± 0.040 [—]	0.733 ± 0.042 [—]	0.772 ± 0.056 [1,2,3,6,7]	0.776 ± 0.054 [1,2,3,6,7]	0.679 ± 0.027 [1,2,3]	0.679 ± 0.025 [1,2,3]
ecoli-0-1-vs-2-3-5	0.786 ± 0.114 [6,7]	0.804 ± 0.108 [6,7]	0.807 ± 0.109 [6,7]	0.859 ± 0.088 [1,2,3,6,7]	0.859 ± 0.089 [1,2,3,6,7]	0.844 ± 0.090 [—]	0.822 ± 0.082 [—]
ecoli-0-3-4-vs-5	0.828 ± 0.116 [—]	0.866 ± 0.119 [—]	0.866 ± 0.119 [—]	0.907 ± 0.107 [1,2,3,6,7]	0.910 ± 0.112 [1,2,3,6,7]	0.868 ± 0.083 [1,2,3,7]	0.869 ± 0.086 [—]
glass5	0.831 ± 0.189 [—]	0.817 ± 0.199 [1]	0.822 ± 0.200 [1]	0.908 ± 0.142 [1,2,3,6,7]	0.912 ± 0.142 [1,2,3,6,7]	0.931 ± 0.086 [1]	0.939 ± 0.101 [1]
yeast4	0.668 ± 0.071 [—]	0.596 ± 0.059 [—]	0.601 ± 0.062 [—]	0.779 ± 0.074 [—]	0.769 ± 0.078 [4]	0.843 ± 0.055 [1,2,3]	0.837 ± 0.052 [2,3,4,5,6]
glass-0-4-vs-5	0.992 ± 0.016 [2,3]	0.992 ± 0.016 [—]	0.992 ± 0.016 [—]	0.903 ± 0.142 [1,2,3]	0.915 ± 0.137 [1,2,3]	0.894 ± 0.146 [1,2,3,4,5]	0.907 ± 0.140 [1,2,3,4,5]
yeast6	0.729 ± 0.089 [4,6,7]	0.730 ± 0.084 [4,6,7]	0.732 ± 0.085 [4,6,7]	0.838 ± 0.087 [6]	0.833 ± 0.084 [6,7]	0.830 ± 0.065 [—]	0.834 ± 0.081 [—]
page-blocks-1-3-vs-4	0.956 ± 0.064 [—]	0.981 ± 0.051 [—]	0.981 ± 0.051 [—]	0.718 ± 0.106 [1,2,3]	0.811 ± 0.109 [1,2,3]	0.932 ± 0.051 [1,2,3]	0.944 ± 0.071 [1,2,3]
yeast-1-vs-7	0.669 ± 0.095 [4,5,6]	0.550 ± 0.052 [1,4,5,6,7]	0.565 ± 0.062 [1,4,5,6,7]	0.679 ± 0.105 [—]	0.665 ± 0.103 [4]	0.692 ± 0.068 [4,5]	0.696 ± 0.071 [4,5]
ecoli-0-1-3-7-vs-2-6	0.820 ± 0.209 [2,3]	0.659 ± 0.205 [—]	0.694 ± 0.214 [—]	0.838 ± 0.199 [2,3,5]	0.832 ± 0.199 [2,3]	0.835 ± 0.194 [2,3]	0.818 ± 0.178 [1,2,3]
yeast-1-4-5-8-vs-7	0.546 ± 0.078 [2,7]	0.501 ± 0.011 [—]	0.501 ± 0.011 [—]	0.625 ± 0.091 [2,3,5,6,7]	0.620 ± 0.091 [1,2,3,7]	0.611 ± 0.081 [1,2,3,5,7]	0.619 ± 0.086 [2,3]
ecoli-0-1-4-7-vs-5-6	0.809 ± 0.095 [2,3]	0.822 ± 0.097 [—]	0.828 ± 0.100 [—]	0.895 ± 0.086 [1,2,3]	0.900 ± 0.079 [1,2,3]	0.824 ± 0.068 [1,2,3]	0.857 ± 0.054 [1,2,3]
yeast-2-vs-8	0.704 ± 0.113 [—]	0.749 ± 0.122 [1]	0.754 ± 0.124 [1]	0.776 ± 0.110 [1,2,3,6,7]	0.776 ± 0.109 [1,2,3,6,7]	0.753 ± 0.095 [—]	0.754 ± 0.104 [1,2,3,6]
yeast-0-2-5-7-9-vs-3-6-8	0.844 ± 0.051 [6]	0.872 ± 0.044 [1,6,7]	0.874 ± 0.043 [1,6,7]	0.900 ± 0.038 [1,2,3,6,7]	0.901 ± 0.036 [1,2,3,6,7]	0.824 ± 0.025 [—]	0.834 ± 0.027 [6]
glass2	0.561 ± 0.118 [—]	0.553 ± 0.079 [—]	0.560 ± 0.079 [—]	0.738 ± 0.119 [1,2,3,6]	0.758 ± 0.121 [1,2,3,6]	0.645 ± 0.082 [1,2,3]	0.735 ± 0.090 [1,2,3,6]

Table 9: Results for AUC metric

	CART (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
Mean rank	3.000 [—]	2.915 [—]	3.598 [2]	4.976 [1,2,3,6]	5.366 [all]	3.805 [—]	4.341 [1,2,6]

Table 10: Results for mean ranks according to AUC metric

5

Dataset	CART (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
glass-0-1-6-vs-2	0.358 ± 0.310 (−)	0.240 ± 0.313 (−)	0.239 ± 0.312 (−)	0.725 ± 0.114 (1,2,3,6,7)	0.739 ± 0.111 (1,2,3,6,7)	0.579 ± 0.077 (1,2,3)	0.666 ± 0.073 (1,2,3,6)
ecoli-0-3-4-7-vs-5-6	0.828 ± 0.102 (−)	0.843 ± 0.100 (1,6,7)	0.854 ± 0.099 (1,6,7)	0.871 ± 0.098 (1,6,7)	0.878 ± 0.080 (1,6,7)	0.812 ± 0.070 (−)	0.815 ± 0.063 (−)
shuttle-c2-vs-c4	1.000 ± 0.000 (−)	1.000 ± 0.000 (−)	1.000 ± 0.000 (−)	0.988 ± 0.057 (−)	0.988 ± 0.057 (−)	0.988 ± 0.057 (−)	0.988 ± 0.057 (−)
glass-0-1-4-6-vs-2	0.336 ± 0.298 (−)	0.226 ± 0.297 (−)	0.241 ± 0.305 (−)	0.711 ± 0.155 (1,2,3,6,7)	0.719 ± 0.161 (1,2,3,6,7)	0.561 ± 0.114 (1,2,3)	0.675 ± 0.104 (1,2,3,6)
yeast-1-2-8-9-vs-7	0.475 ± 0.209 (2,3)	0.172 ± 0.224 (−)	0.228 ± 0.233 (−)	0.625 ± 0.124 (1,2,3,5)	0.620 ± 0.111 (1,2,3)	0.670 ± 0.092 (1,2,3,4,5)	0.676 ± 0.078 (1,2,3,4,5)
ecoli-0-1-4-6-vs-5	0.756 ± 0.151 (−)	0.824 ± 0.105 (1)	0.829 ± 0.106 (1)	0.885 ± 0.089 (1,2,3,6)	0.890 ± 0.091 (1,2,3,6)	0.853 ± 0.077 (1)	0.877 ± 0.071 (1,2,3,6)
glass-0-1-6-vs-5	0.729 ± 0.343 (−)	0.783 ± 0.293 (−)	0.803 ± 0.272 (−)	0.825 ± 0.273 (−)	0.849 ± 0.250 (4)	0.886 ± 0.160 (1)	0.928 ± 0.102 (1,6)
yeast-2-vs-4	0.831 ± 0.076 (−)	0.812 ± 0.090 (−)	0.814 ± 0.090 (−)	0.836 ± 0.082 (3)	0.838 ± 0.079 (2,3)	0.926 ± 0.033 (all)	0.921 ± 0.032 (1,6)
glass-0-6-vs-5	0.846 ± 0.301 (4,5,6,7)	0.856 ± 0.277 (4,5,6,7)	0.856 ± 0.278 (4,5,6,7)	0.696 ± 0.352 (−)	0.699 ± 0.353 (−)	0.768 ± 0.203 (−)	0.769 ± 0.284 (6)
ecoli-0-3-4-6-vs-5	0.796 ± 0.143 (−)	0.821 ± 0.155 (1)	0.823 ± 0.154 (1)	0.892 ± 0.105 (1,2,3,6)	0.896 ± 0.098 (1,2,3,6,7)	0.865 ± 0.084 (1,2)	0.869 ± 0.065 (1,2,3)
yeast-0-3-5-9-vs-7-8	0.588 ± 0.119 (2,3)	0.432 ± 0.141 (−)	0.445 ± 0.134 (−)	0.577 ± 0.139 (2,3)	0.605 ± 0.136 (2,3)	0.619 ± 0.056 (2,3,7)	0.585 ± 0.049 (2,3)
glass-0-1-5-vs-2	0.389 ± 0.300 (2,3)	0.195 ± 0.294 (−)	0.219 ± 0.301 (−)	0.696 ± 0.158 (1,2,3,6,7)	0.714 ± 0.152 (1,2,3,6,7)	0.544 ± 0.082 (1,2,3)	0.628 ± 0.086 (1,2,3,6)
ecoli-0-6-7-vs-5	0.811 ± 0.182 (−)	0.848 ± 0.149 (1,6,7)	0.848 ± 0.149 (1,6,7)	0.855 ± 0.120 (6,7)	0.856 ± 0.117 (6,7)	0.816 ± 0.103 (−)	0.819 ± 0.104 (−)
ecoli-0-2-3-4-vs-5	0.834 ± 0.109 (−)	0.839 ± 0.114 (1)	0.845 ± 0.115 (1)	0.897 ± 0.090 (1,2,3,6,7)	0.904 ± 0.087 (1,2,3,6,7)	0.865 ± 0.079 (1,2,3)	0.872 ± 0.068 (1,2,3,6)
ecoli4	0.854 ± 0.106 (−)	0.859 ± 0.122 (1)	0.858 ± 0.122 (1)	0.914 ± 0.093 (1,2,3,6,7)	0.925 ± 0.095 (1,2,3,6,7)	0.904 ± 0.070 (1,2,3)	0.906 ± 0.087 (1,2,3,6)
yeast5	0.793 ± 0.113 (−)	0.790 ± 0.091 (−)	0.796 ± 0.096 (1)	0.938 ± 0.058 (1,2,3)	0.931 ± 0.058 (1,2,3)	0.938 ± 0.035 (1,2,3)	0.950 ± 0.048 (1,2,3,6)
ecoli-0-4-6-vs-5	0.787 ± 0.136 (−)	0.824 ± 0.129 (1)	0.830 ± 0.126 (1)	0.890 ± 0.091 (1,2,3,6)	0.899 ± 0.091 (1,2,3,6,7)	0.866 ± 0.078 (1,2)	0.873 ± 0.082 (1,2,3)
led7digit-0-2-4-5-6-7-8-9-vs-1	0.871 ± 0.081 (4,5,7)	0.872 ± 0.080 (1,4,5,7)	0.872 ± 0.080 (1,4,5,7)	0.525 ± 0.202 (−)	0.529 ± 0.196 (−)	0.859 ± 0.071 (4,5,7)	0.850 ± 0.082 (4,5)
ecoli-0-1-vs-5	0.788 ± 0.125 (−)	0.836 ± 0.125 (1)	0.841 ± 0.128 (1)	0.890 ± 0.091 (1,2,3)	0.898 ± 0.090 (1,2,3)	0.885 ± 0.083 (1,2,3)	0.891 ± 0.071 (1,2,3)
ecoli-0-2-6-7-vs-3-5	0.771 ± 0.207 (−)	0.806 ± 0.174 (1,6,7)	0.819 ± 0.137 (1,6,7)	0.813 ± 0.140 (1,6,7)	0.821 ± 0.124 (1,6,7)	0.772 ± 0.100 (1,7)	0.762 ± 0.090 (−)
ecoli-0-1-4-7-vs-2-3-5-6	0.770 ± 0.117 (−)	0.767 ± 0.127 (−)	0.777 ± 0.129 (6)	0.843 ± 0.101 (1,2,3,6,7)	0.844 ± 0.095 (1,2,3,6,7)	0.752 ± 0.071 (−)	0.786 ± 0.055 (6)
shuttle-c0-vs-c4	1.000 ± 0.000 (−)	1.000 ± 0.000 (−)	1.000 ± 0.000 (−)	0.998 ± 0.006 (−)	0.998 ± 0.006 (−)	0.998 ± 0.006 (−)	0.998 ± 0.006 (−)
ecoli-0-6-7-vs-3-5	0.780 ± 0.206 (6,7)	0.809 ± 0.176 (1,4,5,6,7)	0.813 ± 0.171 (1,4,5,6,7)	0.805 ± 0.129 (6,7)	0.809 ± 0.128 (6,7)	0.769 ± 0.100 (7)	0.756 ± 0.100 (−)
vowel0	0.962 ± 0.029 (4,5)	0.957 ± 0.031 (4,5)	0.957 ± 0.030 (4,5)	0.796 ± 0.077 (−)	0.783 ± 0.086 (−)	0.959 ± 0.018 (4,5)	0.959 ± 0.022 (4,5,6)
glass4	0.813 ± 0.193 (4,5)	0.824 ± 0.180 (4,5)	0.827 ± 0.182 (4,5)	0.719 ± 0.250 (−)	0.742 ± 0.254 (4)	0.803 ± 0.141 (4)	0.884 ± 0.117 (4,5,6)
yeast-0-5-6-7-9-vs-4	0.605 ± 0.121 (−)	0.573 ± 0.125 (−)	0.571 ± 0.125 (−)	0.779 ± 0.055 (1,2,3,6,7)	0.782 ± 0.053 (1,2,3,6,7)	0.713 ± 0.046 (1,2,3)	0.713 ± 0.042 (1,2,3)
yeast-0-2-5-6-vs-3-7-8-9	0.690 ± 0.067 (6,7)	0.684 ± 0.057 (6,7)	0.687 ± 0.060 (6,7)	0.742 ± 0.076 (1,2,3,6,7)	0.748 ± 0.073 (1,2,3,6,7)	0.652 ± 0.026 (−)	0.648 ± 0.028 (−)
ecoli-0-1-vs-2-3-5	0.746 ± 0.175 (−)	0.769 ± 0.144 (−)	0.774 ± 0.146 (−)	0.841 ± 0.108 (1,2,3,7)	0.841 ± 0.108 (1,2,3,7)	0.837 ± 0.100 (1,2,3,7)	0.814 ± 0.091 (1,2)
ecoli-0-3-4-vs-5	0.802 ± 0.148 (−)	0.845 ± 0.147 (1)	0.845 ± 0.147 (1)	0.895 ± 0.130 (1,2,3,6,7)	0.892 ± 0.169 (1,2,3,6,7)	0.861 ± 0.090 (1)	0.861 ± 0.097 (1)
glass5	0.729 ± 0.364 (−)	0.695 ± 0.389 (1)	0.701 ± 0.391 (1)	0.870 ± 0.247 (1,2,3)	0.874 ± 0.248 (1,2,3)	0.919 ± 0.144 (1,2,3)	0.926 ± 0.155 (1,2,3)
yeast4	0.581 ± 0.126 (2,3)	0.416 ± 0.155 (−)	0.425 ± 0.160 (−)	0.755 ± 0.095 (1,2,3)	0.741 ± 0.103 (1,2,3)	0.839 ± 0.055 (1,2,3,4,5)	0.834 ± 0.051 (1,2,3,4,5)
glass-0-4-vs-5	0.991 ± 0.017 (4,6,7)	0.991 ± 0.017 (4,6,7)	0.991 ± 0.017 (4,6,7)	0.871 ± 0.222 (6)	0.884 ± 0.220 (6,7)	0.865 ± 0.220 (−)	0.879 ± 0.219 (−)
yeast6	0.670 ± 0.136 (−)	0.668 ± 0.132 (−)	0.670 ± 0.132 (−)	0.821 ± 0.109 (1,2,3)	0.813 ± 0.106 (1,2,3)	0.825 ± 0.070 (1,2,3)	0.825 ± 0.096 (1,2,3)
page-blocks-1-3-vs-4	0.952 ± 0.072 (4,5,6)	0.979 ± 0.057 (1,4,5,6,7)	0.979 ± 0.057 (1,4,5,6,7)	0.632 ± 0.208 (−)	0.766 ± 0.193 (4)	0.931 ± 0.053 (4,5)	0.940 ± 0.078 (4,5)
yeast-1-vs-7	0.582 ± 0.181 (2,3)	0.234 ± 0.220 (−)	0.282 ± 0.230 (−)	0.647 ± 0.133 (1,2,3,5)	0.628 ± 0.154 (2,3)	0.666 ± 0.062 (1,2,3)	0.671 ± 0.063 (1,2,3)
ecoli-0-1-3-7-vs-2-6	0.695 ± 0.405 (2,3)	0.361 ± 0.435 (−)	0.435 ± 0.447 (−)	0.732 ± 0.382 (1,2,3,5)	0.728 ± 0.380 (2,3)	0.732 ± 0.378 (1,2,3,5,7)	0.726 ± 0.351 (1,2,3)
yeast-1-4-5-8-vs-7	0.261 ± 0.254 (2,3)	0.008 ± 0.057 (−)	0.008 ± 0.057 (−)	0.579 ± 0.142 (1,2,3)	0.572 ± 0.144 (1,2,3)	0.593 ± 0.070 (1,2,3,5)	0.603 ± 0.075 (1,2,3,5)
ecoli-0-1-4-7-vs-5-6	0.784 ± 0.121 (−)	0.794 ± 0.127 (1)	0.801 ± 0.131 (1)	0.884 ± 0.101 (1,2,3)	0.891 ± 0.088 (1,2,3)	0.816 ± 0.074 (1,2,3)	0.853 ± 0.054 (1,2,3,6)
yeast-2-vs-8	0.598 ± 0.252 (−)	0.669 ± 0.225 (1)	0.676 ± 0.228 (1)	0.728 ± 0.153 (1,2,3)	0.728 ± 0.153 (1,2,3)	0.739 ± 0.104 (1,2,3)	0.737 ± 0.117 (1,2,3,6)
yeast-0-2-5-7-9-vs-3-6-8	0.832 ± 0.061 (−)	0.863 ± 0.050 (1,6,7)	0.866 ± 0.050 (1,6,7)	0.896 ± 0.042 (1,2,3,6,7)	0.897 ± 0.039 (1,2,3,6,7)	0.815 ± 0.027 (−)	0.826 ± 0.028 (6)
glass2	0.276 ± 0.311 (−)	0.211 ± 0.271 (−)	0.242 ± 0.274 (−)	0.719 ± 0.158 (1,2,3,6)	0.743 ± 0.158 (1,2,3,6,7)	0.584 ± 0.073 (1,2,3)	0.705 ± 0.089 (1,2,3,6)

Table 11: Results for GMEAN metric

	CART (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
Mean rank	2.951 (−)	2.793 (−)	3.476 (1,2)	4.756 (1,2,3)	5.244 (1,2,3,4,6)	4.146 (1,2)	4.634 (1,2,3,6)

Table 12: Results for mean ranks according to GMEAN metric