Dataset	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
glass4	$0.847 \pm 0.132$	$0.847 \pm 0.132$	$0.824 \pm 0.167$	$0.820 \pm 0.168$	$0.803 \pm 0.168$	$0.811 \pm 0.168$
ecoli-0-2-3-4-vs-5	$0.845 \pm 0.097$	$0.845 \pm 0.097$	$0.883 \pm 0.093$	$0.891 \pm 0.086$	$0.896 \pm 0.089$	$0.898 \pm 0.090$
glass-0-1-6-vs-2	$0.557 \pm 0.104$	$0.557 \pm 0.104$	$0.672 \overset{1,2}{\pm} 0.136$	$0.655 \pm 0.135$	$0.677 \overset{1,2}{\pm} 0.143$	$0.675 \pm 0.136$
ecoli-0-1- $vs$ -5	$0.866 \pm 0.099$	$0.866 \pm 0.099$	$0.877 \pm 0.089$	$0.893 \pm 0.086$	$0.892 \pm 0.087$	$0.897 \pm 0.085$
yeast-1-4-5-8-vs-7	$0.506 \pm 0.027$	$0.506 \pm 0.027$	$0.566 \pm 0.075$	$0.576 \pm 0.088$	$0.549 \pm 0.072$	$0.566 \pm 0.080$
ecoli4	$0.873 \pm 0.105$	$0.873 \stackrel{-}{\pm} 0.105$	$0.900 \pm 0.094$	$0.900 \pm 0.094$	$0.910 \pm 0.100$	$0.908 \pm 0.100$
$led 7 digit \hbox{-} 0 \hbox{-} 2 \hbox{-} 4 \hbox{-} 5 \hbox{-} 6 \hbox{-} 7 \hbox{-} 8 \hbox{-} 9 \hbox{-} vs \hbox{-} 1$	$0.881 \pm 0.074$	$0.881 \pm 0.074$	$0.640 \pm 0.084$	$0.866 \pm 0.113$	$0.643 \pm 0.080$	$0.861 \pm 0.109$
glass5	$0.847 \pm 0.179$	$0.847 \pm 0.179$	$0.880 \pm 0.173$	$0.889 \pm 0.171$	$0.926 \pm 0.140$	$0.928 \pm 0.147$
ecoli-0-3-4-6- $vs$ -5	$0.834 \pm 0.114$	$0.834 \pm 0.114$	$0.889 \pm 0.111$	$0.892 \pm 0.102$	$0.893 \pm 0.105$	$0.893 \pm 0.105$
yeast-0-5-6-7-9-vs-4	$0.666 \pm 0.090$	$0.665 \pm 0.090$	$0.780 \pm 0.055$	$0.779 \pm 0.062$	$0.770 \pm 0.066$	$0.775 \pm 0.073$
yeast6	$0.711 \pm 0.086$	$0.711 \pm 0.086$	$0.794 \pm 0.090$	$0.803 \pm 0.082$	$0.794 \pm 0.100$	$0.799 \pm 0.096$
ecoli-0-6-7- $vs$ -5	$0.865 \pm 0.122$	$0.865 \pm 0.122$	$0.871 \pm 0.102$	$0.871 \pm 0.104$	$0.868 \pm 0.104$	$0.866 \pm 0.105$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.903 \pm 0.137$	$0.903 \pm 0.137$	$0.852 \pm 0.166$	$0.858 \pm 0.165$	$0.905 \pm 0.139$	$0.911 \pm 0.129$
ecoli - 0 - 1 - 3 - 7 - vs - 2 - 6	$0.718 \pm 0.221$	$0.718 \stackrel{4}{\pm} 0.221$	$0.844 \pm 0.200$	$0.842 \pm 0.199$	$0.843 \pm 0.201$	$0.838 \pm 0.198$
yeast - 0 - 2 - 5 - 6 - vs - 3 - 7 - 8 - 9	$0.720 \pm 0.049$	$0.720 \pm 0.049$	$0.758 \pm 0.055$	$0.762 \pm 0.056$	$0.754 \pm 0.057$	$0.758 \pm 0.059$
ecoli - 0 - 1 - 4 - 7 - vs - 5 - 6	$0.820 \pm 0.087$	$0.820 \pm 0.087$	$0.864 \pm 0.105$ $1.2$	$0.874 \pm 0.095$ $1.2$	$0.891 \pm 0.081$	$0.889 \pm 0.084$ $1.2$
yeast5	$0.810 \pm 0.078$	$0.810 \pm 0.078$	$0.900 \pm 0.068$	$0.908 \pm 0.067$	$0.913 \pm 0.056$	$0.915 \pm 0.057$
shuttle- $c2$ - $vs$ - $c4$	$1.000 \pm 0.000$	$1.000 \pm 0.000$	$0.970 \pm 0.107$	$0.970 \pm 0.107$	$0.970 \pm 0.107$	$0.970 \pm 0.107$
ecoli - 0 - 1 - 4 - 7 - $vs$ - 2 - 3 - 5 - 6	$0.804 \pm 0.095$	$0.809 \pm 0.097$	$0.843 \pm 0.091$ $1,2,4$	$0.835 \pm 0.094$	$0.853 \pm 0.078$ $1,2,4,6$	$0.844 \pm 0.080$ $1.2$
$yeast\hbox{-} 0\hbox{-} 3\hbox{-} 5\hbox{-} 9\hbox{-} vs\hbox{-} 7\hbox{-} 8$	$0.596 \pm 0.055$	$0.596 \pm 0.055$	$0.647 \pm 0.064$	$0.656 \pm 0.077$	$0.647 \pm 0.073$ $1,2$	$0.668 \pm 0.079$ $1,2,5$
yeast-1-vs-7	$0.551 \pm 0.048$	$0.551 \pm 0.048$	$0.664 \pm 0.095$	$0.690 \pm 0.103$ $1,2,3,5$	$0.642 \pm 0.102$ $1.2$	$0.669 \pm 0.102$ $1,2,5$
yeast-1-2-8-9- $vs$ -7	$0.566 \pm 0.059$	$0.566 \pm 0.059$	$0.639 \pm 0.092$	$0.659 \pm 0.111$	$0.618 \pm 0.083$ $1.2$	$0.654 \pm 0.096$ $1,2,5$
ecoli- $0$ - $1$ - $4$ - $6$ - $vs$ - $5$	$0.828 \pm 0.097$	$0.828 \pm 0.097$	$0.877 \pm 0.076$ $1,2$	$0.886 \pm 0.079$ $1,2$	$0.883 \pm 0.084$ $1,2$	$0.885 \pm 0.085$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	$0.567 \pm 0.104$	$0.567 \pm 0.104$	$0.651 \pm 0.119$	$0.656 \pm 0.115$	$0.689 \pm 0.135$	$0.701 \pm 0.132$ $1,2,3$
yeast-2-vs-4	$0.816 \pm 0.074$	$0.816 \pm 0.074$	$0.846 \pm 0.064$	$0.858 \pm 0.068$	$0.845 \pm 0.065$	$0.851 \pm 0.068$ $1.2$
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.946 \pm 0.137$ $3,4$	$0.946 \pm 0.137$ $3,4$	$0.834 \pm 0.187$	$0.831 \pm 0.189$	$0.863 \pm 0.175$	$0.862 \pm 0.175$
glass2	$0.584 \pm 0.094$	$0.584 \pm 0.094$	$0.679 \pm 0.130$ $1.2$	$0.689 \pm 0.141$ $1.2$	$0.690 \pm 0.134$	$0.707 \pm 0.139$ $1.2$
yeast-2-vs-8	$0.708 \pm 0.134$	$0.708 \pm 0.134$	$0.776 \pm 0.110$ $1,2,6$	$0.778 \pm 0.111$	$0.776 \pm 0.110$ $1,2,6$	$0.776 \pm 0.110$ $1.2$
vowel0	$0.954 \pm 0.032$ 3,4,5,6	$0.954 \pm 0.032$ $3,4,5,6$	$0.903 \pm 0.051$	$0.920 \pm 0.041$ 3,5,6	$0.890 \pm 0.051$	$0.904 \pm 0.049$
glass-0-4-vs-5	$0.989 \pm 0.021$ 3,4,5,6	$0.989 \pm 0.021$ 3,4,5,6	$0.985 \pm 0.077$	0.984 ± 0.081	$0.985 \pm 0.077$	$0.984 \pm 0.081$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 4\hbox{-} 6\hbox{-} vs\hbox{-} 2$	$0.566 \pm 0.119$	$0.569 \pm 0.118$	$0.672 \pm 0.121$	$0.665 \pm 0.129$	$0.660 \pm 0.115$ $1,2$	$0.667 \pm 0.135$ $1,2$
yeast4	$0.599 \pm 0.064$	$0.596 \pm 0.064$	$0.726 \pm 0.066$	$0.745 \pm 0.064$	$0.720 \pm 0.063$	$0.745 \pm 0.081$
ecoli-0-4-6- $vs$ -5	$0.834 \pm 0.098$	$0.834 \pm 0.098$	$0.879 \pm 0.098$	$0.883 \pm 0.098$	$0.887 \pm 0.093$	$0.889 \pm 0.093$
page-blocks-1-3-vs-4	$0.976 \pm 0.054$	$0.976 \pm 0.054$	$0.864 \pm 0.105$	$0.870 \pm 0.104$	$0.923 \pm 0.087$	$0.934 \pm 0.076$
yeast - 0 - 2 - 5 - 7 - 9 - vs - 3 - 6 - 8	$3,4,5,6 \\ 0.857 \pm 0.055$	$3,4,5,6 \\ 0.856 \pm 0.055$	$0.897 \pm 0.040$	$0.894 \pm 0.042$	$0.898 \pm 0.040$	$0.897 \pm 0.041$
ecoli- $0$ - $1$ - $vs$ - $2$ - $3$ - $5$	$0.818 \pm 0.100$	$0.818 \pm 0.100$	$0.846 \pm 0.097$	$0.846 \pm 0.096$	$0.845 \pm 0.098$	$0.832 \pm 0.103$
ecoli- $0$ - $6$ - $7$ - $vs$ - $3$ - $5$	$0.795 \pm 0.131$	$0.797 \pm 0.126$	$0.833 \pm 0.105$	$0.841 \pm 0.104$	$0.829 \pm 0.102$	$0.834 \pm 0.108$
ecoli-0-3-4-7-vs-5-6	$0.855 \pm 0.093$	$0.855 \pm 0.093$	$0.875 \pm 0.085$	$0.883 \pm 0.086$	$0.881 \pm 0.086$	$0.883 \pm 0.078$
ecoli - 0 - 2 - 6 - 7 - vs - 3 - 5	$0.804 \pm 0.111$	$0.804 \pm 0.111$	$0.838 \pm 0.110$	$0.839 \pm 0.105$	$0.839 \pm 0.107$	$0.841 \pm 0.099$
shuttle-c0-vs-c4	$1.000 \pm 0.000$	$1.000 \pm 0.000$	$0.998 \pm 0.006$	$0.998 \pm 0.006$	$0.998 \pm 0.006$	$0.998 \pm 0.006$
ecoli-0-3-4- $vs$ -5	$0.857 \pm 0.116$	$0.857 \pm 0.116$	$0.888 \pm 0.121$	$0.895 \pm 0.118$	$0.894 \pm 0.126$	$0.893 \pm 0.127$
	_	_	1,2	1,2	1,2	1,2

Table 1: Results for BAC metric

	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
Mean rank	2.293	2.366	3.524	4.293	3.976	4.549
	_	_	1,2	1,2,3	1,2	1,2,3,5

Table 2: Results for mean ranks according to BAC metric

Dataset	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
glass4	0.694 ± 0.228	$0.694 \pm 0.228$	$0.594 \pm 0.258$	$0.576 \pm 0.256$	$0.585 \pm 0.288$	$0.589 \pm 0.283$
ecoli- $0$ - $2$ - $3$ - $4$ - $vs$ - $5$	$\begin{array}{c} 3,4,5,6 \\ 0.746 \pm 0.151 \end{array}$	$\begin{array}{c} 3,4,5,6 \\ 0.746 \pm 0.151 \end{array}$	$0.813 \pm 0.140$	$0.822 \pm 0.128$	$0.830 \pm 0.143$	$0.830 \stackrel{-}{\pm} 0.143$
$glass\hbox{-}0\hbox{-}1\hbox{-}6\hbox{-}vs\hbox{-}2$	$0.182 \pm 0.237$	$0.182 \pm 0.237$	$0.323 \pm 0.170$	$0.282 \pm 0.146$	$0.314 \pm 0.178$	$0.299 \pm 0.153$
ecoli- $0$ - $1$ - $vs$ - $5$	$0.780 \pm 0.142$	$0.780 \pm 0.142$	$0.822 \pm 0.124$	$0.830 \pm 0.111$	$0.844 \pm 0.118$	$0.846 \pm 0.115$
yeast-1-4-5-8- $vs$ -7	$0.031 \pm 0.083$	$0.031 \pm 0.083$	$0.147 \pm 0.107$	$0.132 \pm 0.077$	$0.126 \pm 0.109$	$0.130 \pm 0.078$
ecoli4	$0.767 \pm 0.162$	$0.767 \pm 0.162$	$0.847 \pm 0.134$	$0.817 \pm 0.134$	$0.851 \pm 0.141$	$0.831 \pm 0.141$
$led 7 digit \hbox{-} 0\hbox{-} 2\hbox{-} 4\hbox{-} 5\hbox{-} 6\hbox{-} 7\hbox{-} 8\hbox{-} 9\hbox{-} vs\hbox{-} 1$	$0.706 \pm 0.100$	$0.708 \pm 0.103$	$0.386 \pm 0.189$	$0.713 \pm 0.173$	$0.393 \pm 0.185$	$0.706 \pm 0.155$
glass5	$0.701 \pm 0.326$	$0.701 \pm 0.326$	$0.717 \pm 0.306$	$0.670 \pm 0.298$	$0.810 \pm 0.252$	$0.773 \pm 0.276$
ecoli- $0$ - $3$ - $4$ - $6$ - $vs$ - $5$	$0.722 \pm 0.187$	$0.722 \pm 0.187$	$0.802 \pm 0.169$	$0.803 \pm 0.154$	$0.805 \pm 0.167$	$0.804 \pm 0.169$
yeast - 0 - 5 - 6 - 7 - 9 - vs - 4	$0.420 \pm 0.182$	$0.418 \pm 0.182$	$0.565 \pm 0.086$	$0.499 \pm 0.086$	$0.547 \pm 0.102$	$0.491 \pm 0.103$
yeast6	$0.493 \pm 0.161$	$0.493 \pm 0.161$	$0.509 \pm 0.130$	$0.441 \pm 0.107$	$0.534 \pm 0.142$	$0.473 \overset{1,2}{\pm} 0.131$
ecoli-0-6-7-vs-5	$0.773 \pm 0.195$	$0.773 \stackrel{4}{\pm} 0.195$	$0.793 \pm 0.159$	$0.778 \pm 0.164$	$0.781 \pm 0.167$	$0.758 \pm 0.165$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.767 \pm 0.239$	$0.767 \pm 0.239$	$0.671 \pm 0.288$	$0.644 \pm 0.288$	$0.792 \pm 0.242$	$0.772 \pm 0.229$
ecoli- $0$ - $1$ - $3$ - $7$ - $vs$ - $2$ - $6$	$0.437 \pm 0.426$	$0.437 \pm 0.426$	$0.620 \pm 0.355$	$0.566 \pm 0.329$	$0.617 \pm 0.361$	$0.547 \pm 0.346$
$yeast \hbox{-} 0\hbox{-} 2\hbox{-} 5\hbox{-} 6\hbox{-} vs\hbox{-} 3\hbox{-} 7\hbox{-} 8\hbox{-} 9$	$0.542 \pm 0.093$	$0.542 \pm 0.093$	$0.618 \pm 0.096$	$0.609 \pm 0.098$	$0.609 \pm 0.100$	$0.586 \pm 0.108$
ecoli - 0 - 1 - 4 - 7 - vs - 5 - 6	$0.716 \pm 0.143$	$0.716 \pm 0.143$	$0.784 \pm 0.145$	$0.771 \pm 0.136$	$0.823 \pm 0.116$	$0.789 \pm 0.121$
yeast5	$0.666 \pm 0.114$	$0.666 \pm 0.114$	$0.723 \pm 0.103$	$0.712 \pm 0.109$	$0.753 \pm 0.089$	$0.735 \pm 0.092$
shuttle-c2-vs-c4	$1.000 \pm 0.000$	$1.000 \pm 0.000$	$0.947 \pm 0.203$	$0.947 \pm 0.203$	$0.947 \pm 0.203$	$0.947 \pm 0.203$
ecoli - 0 - 1 - 4 - 7 - vs - 2 - 3 - 5 - 6	$0.667 \pm 0.153$	$0.674 \pm 0.152$	$0.761 \pm 0.139$ $1.2.4.6$	$0.695 \pm 0.158$	$0.783 \pm 0.116$	$0.712 \pm 0.122$
yeast - 0 - 3 - 5 - 9 - vs - 7 - 8	$0.288 \pm 0.127$	$0.288 \pm 0.127$	$0.397 \pm 0.135$	$0.380 \pm 0.135$	$0.377 \pm 0.139$	$0.355 \pm 0.116$
yeast-1-vs-7	$0.169 \pm 0.137$	$0.169 \pm 0.137$	$0.318 \pm 0.134$	$0.301 \pm 0.112$	$0.287 \pm 0.146$	$0.278 \pm 0.113$
$yeast\hbox{-} 1\hbox{-} 2\hbox{-} 8\hbox{-} 9\hbox{-} vs\hbox{-} 7$	$0.200 \pm 0.167$	$0.200 \pm 0.167$	$0.262 \pm 0.149$	$0.199 \pm 0.107$	$0.226 \pm 0.130$	$0.195 \stackrel{1,2}{\pm} 0.089$
ecoli- $0$ - $1$ - $4$ - $6$ - $vs$ - $5$	$0.713 \pm 0.153$	$0.713 \pm 0.153$	$0.801 \pm 0.119$	$0.802 \pm 0.123$	$0.812 \pm 0.123$	$0.813 \pm 0.124$
$glass\hbox{-}0\hbox{-}1\hbox{-}5\hbox{-}vs\hbox{-}2$	$0.202 \pm 0.231$	$0.202 \pm 0.231$	$0.307 \pm 0.153$	$0.292 \pm 0.112$	$0.345 \pm 0.160$	$0.349 \pm 0.145$
yeast-2-vs-4	$0.699 \pm 0.118$	$0.699 \pm 0.118$	$0.763 \pm 0.093$	$0.765 \pm 0.092$	$0.765 \pm 0.091$	$0.748 \pm 0.093$
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.867 \pm 0.251$	$0.867 \pm 0.251$	$0.699 \pm 0.350$	$0.686 \pm 0.351$	$0.772 \pm 0.320$	$0.765 \pm 0.319$
glass2	$0.230 \pm 0.220$	$0.231 \pm 0.221$	$0.346 \pm 0.197$	$0.312 \pm 0.158$	$0.344 \pm 0.180$ $1,2$	$0.338 \pm 0.158$
yeast-2-vs-8	$0.511 \pm 0.281$	$0.511 \pm 0.281$	$0.668 \pm 0.193$ $1,2,6$	$0.656 \pm 0.197$ $1,2$	$0.668 \pm 0.193$ $1,2,6$	$0.634 \pm 0.193$ $1,2$
vowel0	$0.911 \pm 0.049$	$0.912 \pm 0.049$	$0.865 \pm 0.066$	$0.882 \pm 0.055$	$0.850 \pm 0.063$	$0.861 \pm 0.063$
glass-0-4-vs-5	$0.927 \pm 0.133$	$0.927 \pm 0.133$	$0.973 \pm 0.146$ $1,2$	$0.973 \pm 0.146$	$0.973 \pm 0.146$	$0.973 \pm 0.146$
$glass\hbox{-}0\hbox{-}1\hbox{-}4\hbox{-}6\hbox{-}vs\hbox{-}2$	$0.189 \pm 0.253$	$0.196 \pm 0.253$	$0.330 \pm 0.171$	$0.281 \pm 0.131$	$0.298 \pm 0.147$	$0.294 \pm 0.151$
yeast4	$0.266 \pm 0.151$	$0.259 \pm 0.153$	$0.420 \pm 0.103$	$0.353 \pm 0.081$	$0.409 \pm 0.103$	$0.353 \pm 0.097$
ecoli-0-4-6- $vs$ -5	$0.720 \pm 0.160$	$0.720 \pm 0.160$	$0.798 \pm 0.153$	$0.799 \pm 0.157$	$0.810 \pm 0.146$	$0.813 \pm 0.146$
$page-blocks-1\hbox{-}3\hbox{-}vs\hbox{-}4$	$0.943 \pm 0.080$	$0.943 \pm 0.080$	$0.803 \pm 0.150$	$0.780 \pm 0.173$	$0.903 \pm 0.115$	$0.915 \pm 0.098$
yeast - 0 - 2 - 5 - 7 - 9 - vs - 3 - 6 - 8	$0.768 \pm 0.082$	$0.767 \pm 0.082$	$0.820 \pm 0.059$ $1,2,4$	$0.806 \pm 0.067$	$0.822 \pm 0.061$	$0.812 \pm 0.060$
ecoli- $0$ - $1$ - $vs$ - $2$ - $3$ - $5$	$0.699 \pm 0.177$	$0.699 \pm 0.177$	$0.782 \pm 0.150$	$0.746 \pm 0.152$	$0.784 \pm 0.156$	$0.727 \pm 0.168$
ecoli-0-6-7- $vs$ -3-5	$0.659 \pm 0.244$	$0.665 \pm 0.231$	$0.731 \pm 0.163$	$0.731 \pm 0.170$	$0.719 \pm 0.168$	$0.705 \pm 0.188$
ecoli-0-3-4-7-vs-5-6	$0.770 \pm 0.137$	$0.770 \pm 0.137$	$0.789 \pm 0.121$	$0.784 \pm 0.126$	$0.796 \pm 0.136$	$0.776 \pm 0.123$
ecoli- $0$ - $2$ - $6$ - $7$ - $vs$ - $3$ - $5$	$0.682 \pm 0.195$	$0.682 \pm 0.195$	$0.754 \pm 0.185$	$0.737 \pm 0.178$	$0.742 \pm 0.178$	$0.714 \pm 0.168$
shuttle-c0-vs-c4	$1.000 \pm 0.000$	$1.000 \pm 0.000$	$0.998 \pm 0.006$	$0.998 \pm 0.006$	$0.998 \pm 0.006$	$0.998 \pm 0.006$
ecoli-0-3-4-vs-5	$0.756 \pm 0.193$	$0.756 \pm 0.193$	$0.810 \pm 0.184$	$0.814 \pm 0.178$	$0.807 \pm 0.208$	$0.798 \pm 0.210$

Table 3: Results for F1 metric

	OSB (1)   OKNORAU (2)   TBAC (3)   TBAW (4)   OTBAC (5)   OTBAW (6)								
Mean rank	2.293	2.390	4.463	3.451	4.707	3.695			
	_	-	1,2,4	1,2	1,2,4,6	1,2			

Table 4: Results for mean ranks according to F1 metric

Dataset	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
glass4	$0.734 \pm 0.282$	$0.734 \pm 0.282$	$0.587 \pm 0.294$	$0.557 \pm 0.285$	$0.591 \pm 0.307$	$0.581 \pm 0.305$
ecoli - 0 - 2 - 3 - 4 - vs - 5	$0.832 \pm 0.177$	$0.832 \pm 0.177$	$0.875 \pm 0.138$	$0.873 \pm 0.131$	$0.879 \stackrel{-}{\pm} 0.152$	$0.875 \pm 0.152$
glass-0-1-6-vs-2	$0.271 \pm 0.376$	$0.271 \pm 0.376$	$0.255 \pm 0.139$	$0.204 \pm 0.122$	$0.233 \stackrel{-}{\pm} 0.141$	$0.212 \pm 0.114$
ecoli-0-1-vs-5	$0.875 \pm 0.146$	$0.875 \stackrel{-}{\pm} 0.146$	$0.933 \stackrel{4}{\pm} 0.121$	$0.910 \pm 0.125$	$0.940 \stackrel{6}{\pm} 0.110$	$0.935 \pm 0.115$
$yeast\hbox{-} 1\hbox{-} 4\hbox{-} 5\hbox{-} 8\hbox{-} vs\hbox{-} 7$	$0.077 \pm 0.226$	$0.077 \pm 0.226$	$0.122 \pm 0.110$	$0.086 \pm 0.052$	$0.105 \pm 0.094$	$0.088 \pm 0.054$
ecoli4	$0.829 \pm 0.187$	$0.829 \pm 0.187$	$0.925 \pm 0.121$	$0.859 \pm 0.144$	$0.922 \pm 0.124$	$0.879 \pm 0.139$
$led 7 digit \hbox{-} 0 \hbox{-} 2 \hbox{-} 4 \hbox{-} 5 \hbox{-} 6 \hbox{-} 7 \hbox{-} 8 \hbox{-} 9 \hbox{-} vs \hbox{-} 1$	$0.644 \pm 0.113$	$0.647 \pm 0.115$	$0.679 \pm 0.285$	$0.710 \pm 0.162$	$0.641 \pm 0.274$	$0.717 \pm 0.121$
glass5	$0.763 \pm 0.357$	$0.763 \pm 0.357$	$0.723 \pm 0.332$	$0.616 \pm 0.315$	$0.813 \pm 0.278$	$0.733 \pm 0.303$
ecoli-0-3-4-6- $vs$ -5	$0.821 \pm 0.195$	$0.821 \stackrel{4}{\pm} 0.195$	$0.846 \pm 0.155$	$0.831 \pm 0.160$	$0.838 \pm 0.163$	$0.836 \pm 0.170$
yeast - 0 - 5 - 6 - 7 - 9 - vs - 4	$0.537 \pm 0.222$	$0.535 \pm 0.222$	$0.534 \pm 0.118$	$0.412 \pm 0.101$	$0.520 \pm 0.119$	$0.401 \pm 0.103$
yeast6	$0.668 \pm 0.248$	$0.668 \pm 0.248$	$0.455 \pm 0.128$	$0.351 \pm 0.107$	$0.508 \pm 0.155$	$0.399 \pm 0.136$
ecoli-0-6-7- $vs$ -5	$0.853 \pm 0.191$	$0.853 \pm 0.191$	$0.878 \pm 0.151$	$0.842 \pm 0.171$	$0.852 \pm 0.170$	$0.801 \stackrel{4}{\pm} 0.178$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.788 \pm 0.279$	$0.788 \pm 0.279$	$0.687 \pm 0.325$	$0.618 \pm 0.316$	$0.820 \pm 0.268$	$0.763 \pm 0.268$
ecoli - 0 - 1 - 3 - 7 - vs - 2 - 6	$0.470 \pm 0.462$	$0.470 \stackrel{4}{\pm} 0.462$	$0.613 \pm 0.383$	$0.538 \pm 0.362$	$0.611 \pm 0.392$	$0.521 \pm 0.386$
$yeast\hbox{-} 0\hbox{-} 2\hbox{-} 5\hbox{-} 6\hbox{-} vs\hbox{-} 3\hbox{-} 7\hbox{-} 8\hbox{-} 9$	$0.670 \pm 0.136$	$0.670 \pm 0.136$	$0.745 \pm 0.109$	$0.711 \pm 0.149$	$0.738 \pm 0.116$	$0.653 \pm 0.162$
ecoli - 0 - 1 - 4 - 7 - vs - 5 - 6	$0.832 \pm 0.164$	$0.832 \pm 0.164$	$0.898 \pm 0.128$	$0.826 \pm 0.149$	$0.887 \pm 0.135$	$0.822 \pm 0.165$
yeast5	$0.744 \pm 0.138$	$0.744 \pm 0.138$	$0.661 \pm 0.120$	$0.636 \pm 0.134$	$0.695 \pm 0.115$	$0.660 \pm 0.110$
shuttle- $c2$ - $vs$ - $c4$	$3,4,5,6$ $1.000 \pm 0.000$	$3,4,5,6$ $1.000 \pm 0.000$	$0.960 \stackrel{4}{\pm} 0.195$	$0.960 \pm 0.195$	$0.960 \pm 0.195$	$0.960 \pm 0.195$
ecoli - 0 - 1 - 4 - 7 - vs - 2 - 3 - 5 - 6	$0.769 \pm 0.147$	$0.773 \pm 0.145$	$0.886 \pm 0.117$	$0.733 \pm 0.197$	$0.902 \pm 0.128$	$0.744 \pm 0.158$
yeast - 0 - 3 - 5 - 9 - vs - 7 - 8	$0.456 \pm 0.220$	$0.456 \pm 0.220$	$0.552 \pm 0.188$	$0.455 \pm 0.199$	$0.470 \pm 0.176$	$0.322 \pm 0.131$
yeast-1-vs-7	$0.370 \pm 0.366$	$0.370 \pm 0.366$	$0.278 \pm 0.129$	$0.220 \pm 0.087$	$0.254 \pm 0.139$	$0.203 \pm 0.089$
$yeast\hbox{-} 1\hbox{-} 2\hbox{-} 8\hbox{-} 9\hbox{-} vs\hbox{-} 7$	$0.449 \pm 0.406$	$0.449 \pm 0.406$	$0.241 \pm 0.157$	$0.135 \pm 0.075$	$0.214 \pm 0.160$	$0.132 \pm 0.062$
ecoli- $0$ - $1$ - $4$ - $6$ - $vs$ - $5$	$0.827 \pm 0.186$	$0.827 \pm 0.186$	$0.874 \pm 0.152$	$0.851 \pm 0.160$	$0.881 \pm 0.132$	$0.879 \pm 0.136$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	$0.298 \pm 0.371$	$0.298 \pm 0.371$	$0.252 \pm 0.149$	$0.208 \pm 0.081$	$0.263 \pm 0.135$	$0.255 \pm 0.123$
yeast-2-vs-4	$0.776 \pm 0.117$	$0.776 \pm 0.117$	$0.850 \pm 0.099$	$0.822 \pm 0.109$	$0.859 \pm 0.092$	$0.797 \pm 0.116$
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.850 \pm 0.269$	$0.850 \pm 0.269$	$0.767 \pm 0.375$	$0.742 \pm 0.380$	$0.867 \pm 0.326$	$0.857 \pm 0.329$
glass2	$0.333 \pm 0.360$	$0.336 \pm 0.361$	$0.299 \pm 0.196$	$0.230 \pm 0.128$	$0.267 \pm 0.150$	$0.245 \pm 0.121$
yeast-2-vs-8	$0.745 \pm 0.364$	$0.745 \pm 0.364$	$0.918 \pm 0.163$ $1,2,6$	$0.869 \pm 0.208$	$0.918 \pm 0.163$ $1,2,6$	$0.806 \pm 0.235$
vowel0	$0.910 \pm 0.069$	$0.911 \pm 0.068$	$0.940 \pm 0.068$ $1,2,6$	$0.930 \pm 0.074$	$0.938 \pm 0.063$	$0.925 \pm 0.073$
glass-0-4-vs-5	$0.888 \pm 0.197$	$0.888 \pm 0.197$	$0.980 \pm 0.139$	$0.980 \pm 0.139$	$0.980 \pm 0.139$	$0.980 \pm 0.139$ $1.2$
$glass\hbox{-}0\hbox{-}1\hbox{-}4\hbox{-}6\hbox{-}vs\hbox{-}2$	$0.233 \pm 0.332$	$0.242 \pm 0.332$	$0.281 \pm 0.181$	$0.202 \pm 0.101$	$0.228 \pm 0.116$	$0.211 \pm 0.114$
yeast4	$0.418 \pm 0.223$	$0.409 \pm 0.229$	$0.388 \pm 0.109$	$0.269 \pm 0.075$	$0.372 \pm 0.104$	$0.267 \pm 0.078$
ecoli-0-4- $6$ - $vs$ - $5$	$0.797 \pm 0.174$	$0.797 \pm 0.174$	$0.865 \pm 0.157$ $1,2$	$0.848 \pm 0.166$	$0.867 \pm 0.161$ $1,2$	$0.868 \pm 0.160$
page-blocks-1-3-vs-4	$0.939 \pm 0.084$	$0.939 \pm 0.084$	$0.938 \pm 0.106$	$0.840 \pm 0.183$	$0.993 \pm 0.046$	$0.986 \pm 0.056$
yeast - 0 - 2 - 5 - 7 - 9 - vs - 3 - 6 - 8	$0.821 \pm 0.091$	$0.821 \pm 0.091$	$0.835 \pm 0.075$	$0.809 \pm 0.085$	$0.836 \pm 0.075$	$0.816 \pm 0.075$
ecoli-0-1-vs-2-3-5	$0.776 \pm 0.188$	$0.776 \pm 0.188$	$0.937 \pm 0.111$	$0.811 \pm 0.155$	$0.934 \pm 0.142$	$0.814 \pm 0.181$
ecoli-0-6-7-vs-3-5	$0.791 \pm 0.278$	$0.797 \pm 0.262$	$0.840 \pm 0.159$	$0.813 \pm 0.183$	$0.819 \pm 0.191$	$0.753 \pm 0.223$
ecoli-0-3-4-7-vs-5-6	$0.866 \pm 0.153$	$0.866 \pm 0.153$	$0.839 \pm 0.129$ $4,6$	$0.804 \pm 0.138$	$0.832 \pm 0.149$	$0.780 \pm 0.147$
ecoli-0-2-6-7-vs-3-5	$0.819 \pm 0.225$	$0.819 \pm 0.225$	$0.874 \pm 0.180$	$0.824 \pm 0.201$	$0.830 \pm 0.194$	$0.755 \pm 0.208$
shuttle-c0-vs-c4	$1.000 \stackrel{6}{\pm} 0.000$	$1.000 \stackrel{6}{\pm} 0.000$	$1.000 \overset{4,6}{\pm} 0.000$	$1.000 \pm 0.000$	$1.000 \stackrel{6}{\pm} 0.000$	$1.000 \pm 0.000$
ecoli-0-3-4-vs-5	$0.813 \pm 0.199$	$0.813 \pm 0.199$	$0.883 \pm 0.145$	$0.871 \pm 0.158$	$0.856 \pm 0.192$	$0.837 \pm 0.202$

Table 5: Results for Precision metric

	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
Mean rank	3.366	3.439	4.439	2.476	4.488	2.793
	4	4	1,2,4,6	_	1,2,4,6	_

Table 6: Results for mean ranks according to Precision metric

Dataset	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
glass4	$0.713 \pm 0.264$	$0.713 \pm 0.264$	$0.687 \pm 0.332$	$0.683 \pm 0.333$	$0.633 \pm 0.336$	$0.653 \pm 0.334$
ecoli-0-2-3-4- $vs$ -5	$0.710 \pm 0.195$	$0.710 \pm 0.195$	$0.780 \pm 0.184$	$0.795 \pm 0.170$	$0.805 \stackrel{-}{\pm} 0.175$	$0.810 \pm 0.177$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 2$	$0.150 \pm 0.201$	$0.150 \pm 0.201$	$0.483 \pm 0.273$	$0.525 \pm 0.274$	$0.512 \pm 0.287$	$0.540 \pm 0.279$
ecoli-0-1- $vs$ -5	$0.745 \pm 0.203$	$0.745 \stackrel{-}{\pm} 0.203$	$0.760 \pm 0.180$	$0.795 \pm 0.178$	$0.790 \pm 0.175$	$0.800 \pm 0.173$
yeast-1-4-5-8-vs-7	$0.020 \pm 0.054$	$0.020 \pm 0.054$	$0.207 \pm 0.147$	$0.300 \pm 0.176$	$0.163 \pm 0.139$	$0.260 \pm 0.149$
ecoli4	$0.760 \pm 0.211$	$0.760 \pm 0.211$	$0.805 \pm 0.189$	$0.810 \pm 0.190$	$0.825 \pm 0.201$	$0.825 \pm 0.201$
$led 7 digit \hbox{-} 0 \hbox{-} 2 \hbox{-} 4 \hbox{-} 5 \hbox{-} 6 \hbox{-} 7 \hbox{-} 8 \hbox{-} 9 \hbox{-} vs \hbox{-} 1$	$0.806 \pm 0.150$	$0.806 \pm 0.150$	$0.292 \pm 0.172$	$0.760 \pm 0.233$	$0.300 \pm 0.160$	$0.751 \pm 0.226$
glass5	$0.700 \stackrel{3.5}{\pm} 0.360$	$0.700 \pm 0.360$	$0.770 \pm 0.349$	$0.800 \pm 0.346$	$0.860 \pm 0.283$	$0.870 \pm 0.296$
ecoli-0-3-4-6- $vs$ -5	$0.690 \pm 0.226$	$0.690 \pm 0.226$	$0.795 \pm 0.221$	$0.805 \pm 0.201$	$0.805 \pm 0.207$	$0.805 \pm 0.207$
yeast - 0 - 5 - 6 - 7 - 9 - vs - 4	$0.364 \pm 0.183$	$0.362 \pm 0.183$	$0.624 \pm 0.114$	$0.673 \pm 0.134$	$0.606 \pm 0.141$	$0.667 \pm 0.147$
yeast6	$0.429 \pm 0.173$	$0.429 \pm 0.173$	$0.606 \pm 0.181$	$0.637 \pm 0.169$	$0.603 \stackrel{1,2}{\pm} 0.202$	$0.623 \pm 0.197$
ecoli-0-6-7- $vs$ -5	$0.745 \pm 0.242$	$0.745 \pm 0.242$	$0.755 \pm 0.203$	$0.760 \pm 0.205$	$0.750 \pm 0.206$	$0.755 \pm 0.209$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.820 \pm 0.278$	$0.820 \pm 0.278$	$0.720 \pm 0.334$	$0.740 \pm 0.335$	$0.820 \pm 0.278$	$0.840 \pm 0.253$
ecoli-0-1-3-7- $vs$ -2-6	$0.440 \pm 0.443$	$0.440 \pm 0.443$	$0.700 \pm 0.400$	$0.700 \pm 0.400$	$0.700 \pm 0.400$	$0.700 \pm 0.400$
yeast - 0 - 2 - 5 - 6 - vs - 3 - 7 - 8 - 9	$0.466 \pm 0.098$	$0.466 \pm 0.098$	$0.537 \pm 0.111$	$0.553 \pm 0.115$	$0.528 \pm 0.115$	$0.555 \pm 0.121$
ecoli - 0 - 1 - 4 - 7 - vs - 5 - 6	$0.652 \pm 0.173$	$0.652 \pm 0.173$	$0.736 \pm 0.213$	$0.764 \pm 0.194$	$0.792 \pm 0.164$	$0.796 \pm 0.172$
yeast5	$0.627 \pm 0.157$	$0.627 \pm 0.157$	$0.812 \pm 0.135$ $1.2$	$0.831 \pm 0.134$ $1.2$	$0.838 \pm 0.113$	$0.843 \pm 0.113$
shuttle- $c2$ - $vs$ - $c4$	$1.000 \pm 0.000$	$1.000 \pm 0.000$	$0.940 \pm 0.215$	$0.940 \pm 0.215$	$0.940 \pm 0.215$	$0.940 \pm 0.215$
$ecoli \hbox{-} 0 \hbox{-} 1 \hbox{-} 4 \hbox{-} 7 \hbox{-} vs \hbox{-} 2 \hbox{-} 3 \hbox{-} 5 \hbox{-} 6$	$0.629 \pm 0.194$	$0.639 \pm 0.197$	$0.695 \pm 0.184$	$0.699 \pm 0.188$	$0.716 \pm 0.159$	$0.716 \pm 0.166$
yeast - 0 - 3 - 5 - 9 - vs - 7 - 8	$0.224 \pm 0.110$	$0.224 \pm 0.110$	$0.324 \pm 0.128$ $1.2$	$0.376 \pm 0.171$	$0.338 \pm 0.152$	$0.458 \pm 0.175$
yeast-1- $vs$ -7	$0.117 \pm 0.095$	$0.117 \pm 0.095$	$0.407 \pm 0.194$	$0.510 \pm 0.217$	$0.363 \pm 0.207$	$0.473 \pm 0.206$
$yeast\hbox{-} 1\hbox{-} 2\hbox{-} 8\hbox{-} 9\hbox{-} vs\hbox{-} 7$	$0.137 \pm 0.118$	$0.137 \pm 0.118$	$0.313 \pm 0.184$	$0.403 \pm 0.223$	$0.270 \pm 0.169$	$0.393 \pm 0.196$
ecoli- $0$ - $1$ - $4$ - $6$ - $vs$ - $5$	$0.670 \pm 0.196$	$0.670 \pm 0.196$	$0.765 \pm 0.153$	$0.785 \pm 0.158$	$0.775 \pm 0.167$	$0.780 \pm 0.170$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	$0.172 \pm 0.207$	$0.172 \pm 0.207$	$0.455 \pm 0.252$	$0.533 \pm 0.250$	$0.548 \pm 0.271$	$0.610 \pm 0.254$
yeast-2- $vs$ -4	$0.654 \pm 0.150$	$0.654 \pm 0.150$	$0.707 \pm 0.131$	$0.735 \pm 0.139$	$0.703 \pm 0.131$	$0.725 \pm 0.139$
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.910 \pm 0.258$	$0.910 \pm 0.258$	$0.680 \pm 0.370$	$0.680 \pm 0.370$	$0.730 \pm 0.349$	$0.730 \pm 0.349$
glass2	$0.195 \pm 0.192$	$0.195 \pm 0.192$	$0.458 \pm 0.258$	$0.553 \pm 0.276$	$0.507 \pm 0.254$	$0.572 \pm 0.269$
yeast-2- $vs$ -8	$0.420 \pm 0.271$	$0.420 \pm 0.271$	$0.555 \pm 0.219$	$0.560 \pm 0.221$	$0.555 \pm 0.219$	$0.560 \pm 0.221$
vowel0	$0.918 \pm 0.065$ 3,4,5,6	$0.918 \pm 0.065$ $3,4,5,6$	$0.811 \pm 0.104$	$0.847 \pm 0.085 \\ 3.5.6$	$0.787 \pm 0.105$	$0.814 \pm 0.100 \\ 5$
glass-0-4-vs-5	$1.000 \pm 0.000$	$1.000 \pm 0.000$	$0.970 \pm 0.155$	$0.970 \pm 0.155$	$0.970 \pm 0.155$	$0.970 \pm 0.155$
$glass\hbox{-}0\hbox{-}1\hbox{-}4\hbox{-}6\hbox{-}vs\hbox{-}2$	$0.175 \pm 0.234$	$0.180 \pm 0.232$	$0.462 \pm 0.251$ $1,2$	$0.520 \pm 0.282$ $1,2,3$	$0.463 \pm 0.235$ $1,2$	$0.515 \pm 0.258$ $1,2$
yeast4	$0.208 \pm 0.129$	$0.202 \pm 0.130$	$0.480 \pm 0.134$	$0.546 \pm 0.134$	$0.470 \pm 0.126$	$0.544 \pm 0.162$
ecoli-0-4- $6$ - $vs$ - $5$	$0.690 \pm 0.197$	$0.690 \pm 0.197$	$0.775 \pm 0.195 \\ 1.2$	$0.785 \pm 0.193$	$0.790 \pm 0.182$ $1,2$	$0.795 \pm 0.184$ $1,2$
page-blocks-1-3-vs-4	$0.955 \pm 0.108$	$0.955 \pm 0.108$	$0.731 \pm 0.211$	$0.751 \pm 0.204$	$0.846 \pm 0.173$	$0.868 \pm 0.152$
yeast - 0 - 2 - 5 - 7 - 9 - vs - 3 - 6 - 8	$0.732 \pm 0.112$	$0.731 \pm 0.111$	$0.812 \pm 0.079$	$0.811 \pm 0.084$	$0.813 \pm 0.079$	$0.815 \pm 0.082$ $1,2$
ecoli- $0$ - $1$ - $vs$ - $2$ - $3$ - $5$	$0.655 \pm 0.200$	$0.655 \pm 0.200$	$0.698 \pm 0.194$	$0.711 \pm 0.190$	$0.695 \pm 0.193$	$0.682 \pm 0.203$
ecoli-0-6-7-vs-3-5	$0.605 \pm 0.266$	$0.610 \pm 0.257$	$0.682 \pm 0.210$	$0.704 \pm 0.208$	$0.677 \pm 0.202$	$0.698 \pm 0.207$
ecoli-0-3-4-7-vs-5-6	$0.724 \pm 0.187$	$0.724 \pm 0.187$	$0.768 \pm 0.171$	$0.788 \pm 0.171$	$0.780 \pm 0.166$	$0.792 \pm 0.154$
ecoli - 0 - 2 - 6 - 7 - vs - 3 - 5	$0.626 \pm 0.225$	$0.626 \pm 0.225$	$0.688 \pm 0.216$	$0.697 \pm 0.205$	$0.694 \pm 0.207$	$0.712 \pm 0.193$
shuttle-c0-vs-c4	$1.000 \pm 0.000$	$1.000 \pm 0.000$	$0.996 \pm 0.012$	$0.996 \pm 0.012$	$0.996 \pm 0.012$	$0.996 \pm 0.012$
ecoli- $0$ - $3$ - $4$ - $vs$ - $5$	$0.735 \pm 0.225$	$0.735 \pm 0.225$	$0.790 \pm 0.241$ $1,2$	$0.805 \pm 0.236$ $1,2$	$0.805 \pm 0.251$ $1,2$	$0.805 \pm 0.251$ $1,2$

Table 7: Results for Recall metric

	OSB (1)   OKNORAU (2)   TBAC (3)   TBAW (4)   OTBAC (5)   OTBAW (6)							
$Mean\ rank$	2.341	2.341	3.159	4.537	3.707	4.915		
	_	-	_	1,2,3,5	1,2,3	1,2,3,5		

Table 8: Results for mean ranks according to Recall metric

Dataset	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
glass4	$0.847 \pm 0.132$	$0.847 \pm 0.132$	$0.824 \pm 0.167$	$0.820 \pm 0.168$	$0.803 \pm 0.168$	$0.811 \pm 0.168$
ecoli- $0$ - $2$ - $3$ - $4$ - $vs$ - $5$	$0.845 \pm 0.097$	$0.845 \pm 0.097$	$0.883 \stackrel{4}{\pm} 0.093$	$0.891 \pm 0.086$	$0.896 \pm 0.089$	$0.898 \stackrel{-}{\pm} 0.090$
$glass\hbox{-}0\hbox{-}1\hbox{-}6\hbox{-}vs\hbox{-}2$	$0.557 \pm 0.104$	$0.557 \pm 0.104$	$0.672 \pm 0.136$	$0.655 \pm 0.135$	$0.677 \pm 0.143$	$0.675 \pm 0.136$
ecoli- $0$ - $1$ - $vs$ - $5$	$0.866 \pm 0.099$	$0.866 \pm 0.099$	$0.877 \pm 0.089$	$0.893 \pm 0.086$	$0.892 \pm 0.087$	$0.897 \pm 0.085$
yeast-1-4-5-8- $vs$ -7	$0.506 \pm 0.027$	$0.506 \pm 0.027$	$0.566 \pm 0.075$	$0.576 \pm 0.088$	$0.549 \pm 0.072$	$0.566 \pm 0.080$
ecoli4	$0.873 \pm 0.105$	$0.873 \pm 0.105$	$0.900 \pm 0.094$	$0.900 \pm 0.094$	$0.910 \pm 0.100$	$0.908 \pm 0.100$
$led 7 digit \hbox{-} 0\hbox{-} 2\hbox{-} 4\hbox{-} 5\hbox{-} 6\hbox{-} 7\hbox{-} 8\hbox{-} 9\hbox{-} vs\hbox{-} 1$	$0.881 \pm 0.074$	$0.881 \pm 0.074$	$0.640 \pm 0.084$	$0.866 \pm 0.113$	$0.643 \pm 0.080$	$0.861 \pm 0.109$
glass5	$0.847 \pm 0.179$	$0.847 \pm 0.179$	$0.880 \pm 0.173$	$0.889 \pm 0.171$	$0.926 \stackrel{-}{\pm} 0.140$	$0.928 \pm 0.147$
ecoli- $0$ - $3$ - $4$ - $6$ - $vs$ - $5$	$0.834 \pm 0.114$	$0.834 \pm 0.114$	$0.889 \pm 0.111$	$0.892 \pm 0.102$	$0.893 \pm 0.105$	$0.893 \pm 0.105$
yeast - 0 - 5 - 6 - 7 - 9 - vs - 4	$0.666 \pm 0.090$	$0.665 \pm 0.090$	$0.780 \pm 0.055$	$0.779 \pm 0.062$	$0.770 \pm 0.066$	$0.775 \pm 0.073$
yeast6	$0.711 \pm 0.086$	$0.711 \pm 0.086$	$0.794 \pm 0.090$	$0.803 \pm 0.082$	$0.794 \stackrel{1,2}{\pm} 0.100$	$0.799 \stackrel{1,2}{\pm} 0.096$
ecoli- $0$ - $6$ - $7$ - $vs$ - $5$	$0.865 \pm 0.122$	$0.865 \pm 0.122$	$0.871 \pm 0.102$	$0.871 \pm 0.104$	$0.868 \pm 0.104$	$0.866 \pm 0.105$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.903 \pm 0.137$	$0.903 \pm 0.137$	$0.852 \pm 0.166$	$0.858 \pm 0.165$	$0.905 \stackrel{6}{\pm} 0.139$	$0.911 \pm 0.129$
ecoli- $0$ - $1$ - $3$ - $7$ - $vs$ - $2$ - $6$	$0.718 \stackrel{4}{\pm} 0.221$	$0.718 \pm 0.221$	$0.844 \pm 0.200$	$0.842 \pm 0.199$	$0.843 \pm 0.201$	$0.838 \pm 0.198$
$yeast \hbox{-} 0\hbox{-} 2\hbox{-} 5\hbox{-} 6\hbox{-} vs\hbox{-} 3\hbox{-} 7\hbox{-} 8\hbox{-} 9$	$0.720 \pm 0.049$	$0.720 \pm 0.049$	$0.758 \pm 0.055$	$0.762 \pm 0.056$	$0.754 \pm 0.057$	$0.758 \pm 0.059$
ecoli - 0 - 1 - 4 - 7 - vs - 5 - 6	$0.820 \pm 0.087$	$0.820 \pm 0.087$	$0.864 \pm 0.105$	$0.874 \pm 0.095$	$0.891 \pm 0.081$	$0.889 \pm 0.084$
yeast5	$0.810 \pm 0.078$	$0.810 \pm 0.078$	$0.900 \pm 0.068$	$0.908 \pm 0.067$	$0.913 \pm 0.056$	$0.915 \pm 0.057$
shuttle-c2-vs-c4	$1.000 \pm 0.000$	$1.000 \pm 0.000$	$0.970 \pm 0.107$	$0.970 \pm 0.107$	$0.970 \pm 0.107$	$0.970 \pm 0.107$
ecoli - 0 - 1 - 4 - 7 - vs - 2 - 3 - 5 - 6	$0.804 \pm 0.095$	$0.809 \pm 0.097$	$0.843 \pm 0.091$	$0.835 \pm 0.094$	$0.853 \pm 0.078$	$0.844 \pm 0.080$
yeast - 0 - 3 - 5 - 9 - vs - 7 - 8	$0.596 \pm 0.055$	$0.596 \pm 0.055$	$0.647 \pm 0.064$	$0.656 \pm 0.077$	$0.647 \pm 0.073$	$0.668 \pm 0.079$
yeast-1-vs-7	$0.551 \pm 0.048$	$0.551 \pm 0.048$	$0.664 \pm 0.095$	$0.690 \pm 0.103$	$0.642 \pm 0.102$	$0.669 \pm 0.102$
$yeast\hbox{-} 1\hbox{-} 2\hbox{-} 8\hbox{-} 9\hbox{-} vs\hbox{-} 7$	$0.566 \pm 0.059$	$0.566 \pm 0.059$	$0.639 \pm 0.092$	$0.659 \pm 0.111$	$0.618 \pm 0.083$	$0.654 \pm 0.096$
ecoli-0-1-4-6-vs-5	$0.828 \pm 0.097$	$0.828 \pm 0.097$	$0.877 \pm 0.076$	$0.886 \pm 0.079$	$0.883 \pm 0.084$	$0.885 \pm 0.085$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	$0.567 \pm 0.104$	$0.567 \pm 0.104$	$0.651 \pm 0.119$	$0.656 \pm 0.115$	$0.689 \pm 0.135$	$0.701 \pm 0.132 \\ 1,2,3$
yeast-2-vs-4	$0.816 \pm 0.074$	$0.816 \pm 0.074$	$0.846 \pm 0.064$	$0.858 \pm 0.068$ $1,2,6$	$0.845 \pm 0.065$ $1,2$	$0.851 \pm 0.068$ $1.2$
glass-0-6-vs-5	$0.946 \pm 0.137$	$0.946 \pm 0.137$	$0.834 \pm 0.187$	$0.831 \pm 0.189$	$0.863 \pm 0.175$	$0.862 \pm 0.175$
glass2	$0.584 \pm 0.094$	$0.584 \pm 0.094$	$0.679 \pm 0.130$ $1,2$	$0.689 \pm 0.141$	$0.690 \stackrel{4}{\pm} 0.134$ $1,2$	$0.707 \stackrel{4}{\pm} 0.139$ <sub>1,2</sub>
yeast-2-vs-8	$0.708 \pm 0.134$	$0.708 \pm 0.134$	$0.776 \pm 0.110$ $1,2,6$	$0.778 \pm 0.111$	$0.776 \pm 0.110$ $1,2,6$	$0.776 \pm 0.110$ $1,2$
vowel0	$0.954 \pm 0.032$	$0.954 \pm 0.032$	$0.903 \pm 0.051$	$0.920 \pm 0.041 \\ 3,5,6$	$0.890 \pm 0.051$	$0.904 \pm 0.049$
$glass\hbox{-} 0\hbox{-} 4\hbox{-} vs\hbox{-} 5$	$0.989 \pm 0.021$ $3,4,5,6$ $3,4,5,6$	$3,4,5,6 \\ 0.989 \pm 0.021 \\ 3,4,5,6$	$0.985 \pm 0.077$	$0.984 \pm 0.081$	$0.985 \pm 0.077$	$0.984 \pm 0.081$
$glass\hbox{-}0\hbox{-}1\hbox{-}4\hbox{-}6\hbox{-}vs\hbox{-}2$	$0.566 \pm 0.119$	$0.569 \pm 0.118$	$0.672 \pm 0.121$ $1,2$	$0.665 \pm 0.129$ $1,2$	$0.660 \pm 0.115$ $1,2$	$0.667 \pm 0.135$ $1,2$
yeast4	$0.599 \pm 0.064$	$0.596 \pm 0.064$	$0.726 \pm 0.066$	$0.745 \pm 0.064$	$0.720 \pm 0.063$	$0.745 \pm 0.081$
ecoli-0-4-6-vs-5	$0.834 \pm 0.098$	$0.834 \pm 0.098$	$0.879 \pm 0.098$	$0.883 \pm 0.098$	$0.887 \pm 0.093$	$0.889 \pm 0.093$
$page-blocks-1\hbox{-}3\hbox{-}vs\hbox{-}4$	$0.976 \pm 0.054$	$0.976 \pm 0.054$	$0.864 \pm 0.105$	$0.870 \pm 0.104$	$0.923 \pm 0.087$ $3,4$	$0.934 \pm 0.076$ $3.4$
$yeast \hbox{-} 0 \hbox{-} 2 \hbox{-} 5 \hbox{-} 7 \hbox{-} 9 \hbox{-} vs \hbox{-} 3 \hbox{-} 6 \hbox{-} 8$	$3,4,5,6 \\ 0.857 \pm 0.055 \\ -$	$3,4,5,6 \\ 0.856 \pm 0.055$	$0.897 \pm 0.040$	$0.894 \pm 0.042$	$0.898 \pm 0.040$	$0.897 \pm 0.041$
ecoli- $0$ - $1$ - $vs$ - $2$ - $3$ - $5$	$0.818 \pm 0.100$	$0.818 \pm 0.100$	$0.846 \pm 0.097$	$0.846 \pm 0.096$	$0.845 \pm 0.098$	$0.832 \pm 0.103$
$ecoli\mbox{-}0\mbox{-}6\mbox{-}7\mbox{-}vs\mbox{-}3\mbox{-}5$	$0.795 \pm 0.131$	$0.797 \pm 0.126$	$0.833 \pm 0.105$	$0.841 \pm 0.104$	$0.829 \pm 0.102$	$0.834 \pm 0.108$
ecoli- $0$ - $3$ - $4$ - $7$ - $vs$ - $5$ - $6$	$0.855 \pm 0.093$	$0.855 \pm 0.093$	$0.875 \pm 0.085$	$0.883 \pm 0.086$	$0.881 \pm 0.086$	$0.883 \pm 0.078$
ecoli- $0$ - $2$ - $6$ - $7$ - $vs$ - $3$ - $5$	$0.804 \pm 0.111$	$0.804 \pm 0.111$	$0.838 \pm 0.110$	$0.839 \pm 0.105$	$0.839 \pm 0.107$	$0.841 \pm 0.099$
shuttle-c0-vs-c4	$1.000 \pm 0.000$	$1.000 \pm 0.000$	$0.998 \pm 0.006$	$0.998 \pm 0.006$	$0.998 \pm 0.006$	$0.998 \pm 0.006$
ecoli-0-3-4-vs-5	$0.857 \pm 0.116$	$0.857 \pm 0.116$	$0.888 \pm 0.121$	$0.895 \pm 0.118$	$0.894 \pm 0.126$	$0.893 \pm 0.127$

Table 9: Results for AUC metric

	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
Mean rank	2.293	2.366	3.524	4.293	3.976	4.549
	_	_	1,2	1,2,3	1,2	1,2,3,5

Table 10: Results for mean ranks according to AUC metric

Dataset	OSB (1)	OKNORAU (2)	TBAC (3)	TBAW (4)	OTBAC (5)	OTBAW (6)
glass4	$0.809 \pm 0.210$	$0.809 \pm 0.210$	$0.759 \pm 0.291$	$0.755 \pm 0.290$	$0.723 \pm 0.305$	$0.735 \pm 0.305$
ecoli-0-2-3-4-vs-5	$0.825 \pm 0.123$	$0.825 \pm 0.123$	$0.870 \pm 0.111$	$0.880 \pm 0.098$	$0.885 \stackrel{-}{\pm} 0.106$	$0.887 \pm 0.106$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 2$	$0.238 \pm 0.298$	$0.238 \pm 0.298$	$0.596 \pm 0.242$	$0.598 \pm 0.221$	$0.601 \pm 0.260$	$0.613 \pm 0.240$
ecoli- $0$ - $1$ - $vs$ - $5$	$0.848 \pm 0.123$	$0.848 \pm 0.123$	$0.863 \overset{1,2}{\pm} 0.104$	$0.881 \pm 0.100$	$0.880 \stackrel{1,2}{\pm} 0.101$	$0.886 \pm 0.098$
yeast-1-4-5-8-vs-7	$0.049 \pm 0.132$	$0.049 \pm 0.132$	$0.375 \pm 0.226$	$0.467 \pm 0.193$	$0.316 \pm 0.230$	$0.438 \pm 0.190$
ecoli4	$0.856 \pm 0.129$	$0.856 \pm 0.129$	$0.888 \pm 0.112$	$0.888 \pm 0.112$	$0.898 \pm 0.119$	$0.896 \pm 0.119$
$led 7 digit \hbox{-} 0 \hbox{-} 2 \hbox{-} 4 \hbox{-} 5 \hbox{-} 6 \hbox{-} 7 \hbox{-} 8 \hbox{-} 9 \hbox{-} vs \hbox{-} 1$	$0.874 \pm 0.082$	$0.874 \pm 0.083$	$0.499 \pm 0.197$	$0.840 \pm 0.174$	$0.513 \pm 0.182$	$0.840 \pm 0.149$
glass5	$0.764 \pm 0.334$	$0.764 \pm 0.334$	$0.811 \pm 0.321$	$0.823 \pm 0.321$	$0.889 \pm 0.248$	$0.884 \pm 0.274$
ecoli-0-3-4-6- $vs$ -5	$0.809 \pm 0.145$	$0.809 \pm 0.145$	$0.874 \pm 0.135$	$0.881 \pm 0.117$	$0.880 \pm 0.127$	$0.879 \pm 0.127$
yeast - 0 - 5 - 6 - 7 - 9 - vs - 4	$0.560 \pm 0.195$	$0.558 \pm 0.195$	$0.760 \pm 0.068$	$0.767 \pm 0.071$	$0.746 \pm 0.089$	$0.762 \pm 0.085$
yeast6	$0.633 \pm 0.155$	$0.633 \pm 0.155$	$0.761 \pm 0.122$	$0.778 \pm 0.107$	$0.758 \pm 0.137$	$0.768 \pm 0.133$
ecoli-0-6-7- $vs$ -5	$0.843 \pm 0.155$	$0.843 \pm 0.155$	$0.854 \pm 0.125$	$0.855 \pm 0.126$	$0.850 \pm 0.127$	$0.850 \pm 0.128$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.871 \pm 0.219$	$0.871 \pm 0.219$	$0.788 \pm 0.295$	$0.795 \pm 0.296$	$0.873 \stackrel{6}{\pm} 0.220$	$0.890 \pm 0.182$
$ecoli\mbox{-}0\mbox{-}1\mbox{-}3\mbox{-}7\mbox{-}vs\mbox{-}2\mbox{-}6$	$0.480 \stackrel{4}{\pm} 0.455$	$0.480 \pm 0.455$	$0.737 \pm 0.385$	$0.735 \pm 0.383$	$0.736 \pm 0.385$	$0.732 \pm 0.382$
yeast - 0 - 2 - 5 - 6 - vs - 3 - 7 - 8 - 9	$0.669 \pm 0.074$	$0.669 \pm 0.074$	$0.721 \pm 0.076$	$0.728 \pm 0.076$	$0.715 \pm 0.079$	$0.726 \pm 0.080$
ecoli-0-1-4-7-vs-5-6	$0.795 \pm 0.110$	$0.795 \pm 0.110$	$0.844 \pm 0.130$	$0.858 \pm 0.117$	$0.880 \pm 0.093$	$0.879 \pm 0.096$
yeast5	$0.783 \pm 0.099$	$0.783 \pm 0.099$	$0.892 \pm 0.078$	$0.901 \pm 0.077$	$0.908 \pm 0.063$	$0.910 \pm 0.063$
shuttle-c2-vs-c4	$1.000 \pm 0.000$	$1.000 \pm 0.000$	$0.948 \pm 0.201$	$0.948 \pm 0.201$	$0.948 \pm 0.201$	$0.948 \pm 0.201$
ecoli - 0 - 1 - 4 - 7 - vs - 2 - 3 - 5 - 6	$0.773 \pm 0.132$	$0.779 \pm 0.132$	$0.821 \pm 0.117$	$0.815 \pm 0.119$	$0.836 \pm 0.098$	$0.828 \pm 0.099$
yeast-0-3-5-9-vs-7-8	$0.444 \pm 0.138$	$0.444 \pm 0.138$	$0.545 \pm 0.131$	$0.570 \pm 0.151$	$0.548 \pm 0.146$	$0.617 \pm 0.129$
yeast-1- $vs$ -7	$0.269 \pm 0.205$	$0.269 \pm 0.205$	$0.589 \pm 0.161$	$0.643 \pm 0.167$	$0.539 \pm 0.206$	$0.614 \pm 0.175$
yeast-1-2-8-9- $vs$ -7	$0.291 \pm 0.226$	$0.291 \pm 0.226$	$0.512 \pm 0.201$	$0.570 \pm 0.208$	$0.461 \pm 0.217$	$0.564 \pm 0.201$
ecoli- $0$ - $1$ - $4$ - $6$ - $vs$ - $5$	$0.803 \pm 0.124$	$0.803 \pm 0.124$	$0.865 \pm 0.089$	$0.875 \pm 0.090$	$0.871 \pm 0.097$	$0.873 \pm 0.098$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	$0.272 \pm 0.301$	$0.272 \pm 0.301$	$0.573 \pm 0.226$	$0.609 \pm 0.191$	$0.642 \pm 0.200$	$0.673 \pm 0.173$
yeast-2- $vs$ -4	$0.793 \pm 0.098$	$0.793 \pm 0.098$	$0.831 \pm 0.078$	$0.845 \pm 0.081$	$0.829 \pm 0.077$	$0.838 \pm 0.080$
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.916 \pm 0.241$	$0.916 \pm 0.241$	$0.742 \pm 0.349$	$0.741 \pm 0.349$	$0.791 \pm 0.319$	$0.791 \pm 0.319$
glass2	$0.321 \pm 0.291$	$0.321 \pm 0.291$	$0.594 \pm 0.242$	$0.633 \pm 0.233$	$0.621 \pm 0.241$	$0.664 \pm 0.202$
yeast-2- $vs$ -8	$0.578 \pm 0.290$	$0.578 \pm 0.290$	$0.728 \pm 0.153$	$0.731 \pm 0.154$	$0.728 \pm 0.153$ $1.2$	$0.729 \pm 0.153 \\ 1,2,3,5$
vowel0	$0.953 \pm 0.034$	$0.953 \pm 0.034$	$0.896 \pm 0.058$	$0.916 \pm 0.045 \\ 3,5,6$	$0.882 \pm 0.058$	$0.897 \pm 0.055$
$glass\hbox{-} 0\hbox{-} 4\hbox{-} vs\hbox{-} 5$	$\begin{array}{c} 3,4,5,6 \\ 0.988 \pm 0.022 \\ 3,4,5,6 \end{array}$	$3,4,5,6$ $0.988 \pm 0.022$	$0.974 \pm 0.145$	$0.974 \pm 0.145$	$0.974 \pm 0.145$	$0.974 \pm 0.145$
$glass\hbox{-}0\hbox{-}1\hbox{-}4\hbox{-}6\hbox{-}vs\hbox{-}2$	$0.260 \pm 0.316$	$0.270 \pm 0.316$	$0.586 \pm 0.245$ $1,2$	$0.599 \pm 0.231$ $1,2$	$0.590 \pm 0.214$ $1,2$	$0.609 \pm 0.225$ $1,2$
yeast4	$0.421 \pm 0.170$	$0.410 \pm 0.178$	$0.676 \pm 0.095$	$0.712 \pm 0.088$	$0.669 \pm 0.095$	$0.709 \pm 0.108$
ecoli-0-4- $6$ - $vs$ - $5$	$0.811 \pm 0.127$	$0.811 \pm 0.127$	$0.865 \pm 0.120$	$0.870 \pm 0.120$	$0.875 \pm 0.110$	$0.877 \pm 0.111$
page-blocks-1-3-vs-4	$0.973 \pm 0.060$	$0.973 \pm 0.060$	$0.844 \stackrel{1,2}{\pm} 0.127$	$0.854 \pm 0.123$	$0.914 \pm 0.099$	$0.927 \pm 0.084$
$yeast\hbox{-} 0\hbox{-} 2\hbox{-} 5\hbox{-} 7\hbox{-} 9\hbox{-} vs\hbox{-} 3\hbox{-} 6\hbox{-} 8$	$0.845 \pm 0.067$	$0.844 \pm 0.066$	$0.892 \pm 0.044$	$0.889 \pm 0.046$	$0.893 \pm 0.044$	$0.892 \pm 0.045$ $1,2$
ecoli- $0$ - $1$ - $vs$ - $2$ - $3$ - $5$	$0.786 \pm 0.158$	$0.786 \pm 0.158$	$0.824 \pm 0.124$	$0.827 \pm 0.119$	$0.823 \pm 0.122$	$0.808 \pm 0.128$
ecoli-0-6-7-vs-3-5	$0.730 \pm 0.249$	$0.739 \pm 0.230$	$0.808 \pm 0.133$	$0.819 \pm 0.131$	$0.805 \pm 0.127$	$0.812 \pm 0.133$
ecoli-0-3-4-7-vs-5-6	$0.837 \pm 0.113$	$0.837 \pm 0.113$	$0.863 \pm 0.099$	$0.872 \pm 0.098$	$0.870 \pm 0.099$	$0.874 \pm 0.088$
ecoli-0-2-6-7-vs-3-5	$0.764 \pm 0.175$	$0.764 \pm 0.175$	$0.813 \pm 0.141$	$0.817 \pm 0.131$	$0.816 \pm 0.133$	$0.822 \pm 0.121$
shuttle-c0-vs-c4	$1.000 \pm 0.000$	$1.000 \pm 0.000$	$0.998 \stackrel{1,2}{\pm} 0.006$	$0.998 \pm 0.006$	$0.998 \pm 0.006$	$0.998 \pm 0.006$
ecoli-0-3-4-vs-5	$0.837 \pm 0.145$	$0.837 \pm 0.145$	$0.870 \pm 0.151$ $1,2$	$0.878 \pm 0.145$ $1,2$	$0.870 \pm 0.186$ $1,2$	$0.869 \pm 0.186$ $1,2$

Table 11: Results for GMEAN metric

	OSB (1)   OKNORAU (2)   TBAC (3)   TBAW (4)   OTBAC (5)   OTBAW (6)								
$Mean\ rank$	2.293	2.366	3.268	4.524	3.902	4.646			
	_	-	1	1,2,3	1,2,3	1,2,3,5			

Table 12: Results for mean ranks according to GMEAN metric