

# No Title Given

No Author Given

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## 1 Results

Table 1. CART – AUC

Dataset name	SMOTE	polynom-ft-SMOTE	Lee	SMOBD	G-SMOTE	INQ-SMOTE	Assembled-SMOTE	SMOTE-TomekLinks	JFOTS.pr	JFOTS.re	JFOTS.prom
abalone19	0.561 ± 0.042	0.561 ± 0.015	0.546 ± 0.038	<b>0.565 ± 0.042</b>	0.545 ± 0.052	0.557 ± 0.051	0.555 ± 0.047	0.561 ± 0.042	0.565 ± 0.019	0.540 ± 0.045	0.547 ± 0.070
abalone18	0.665 ± 0.059	0.609 ± 0.040	0.672 ± 0.051	<b>0.685 ± 0.051</b>	0.653 ± 0.033	0.684 ± 0.082	0.649 ± 0.038	0.667 ± 0.062	0.658 ± 0.041	0.561 ± 0.075	0.613 ± 0.061
ecoli-0-1-3-vs-2-6	0.790 ± 0.115	0.790 ± 0.115	0.790 ± 0.115	<b>0.815 ± 0.063</b>	0.776 ± 0.100	0.790 ± 0.115	0.790 ± 0.115	0.790 ± 0.115	0.694 ± 0.110	0.609 ± 0.088	0.713 ± 0.115
glass-0-1-6-vs-2	0.629 ± 0.058	0.570 ± 0.054	<b>0.663 ± 0.054</b>	0.642 ± 0.063	0.609 ± 0.057	0.588 ± 0.108	0.633 ± 0.108	0.628 ± 0.055	0.653 ± 0.106	0.576 ± 0.043	0.608 ± 0.052
glass-0-1-6-vs-2	0.860 ± 0.133	0.860 ± 0.133	0.860 ± 0.133	0.860 ± 0.133	0.794 ± 0.185	<b>0.804 ± 0.133</b>	0.860 ± 0.133	0.860 ± 0.133	0.765 ± 0.151	0.883 ± 0.154	0.763 ± 0.158
glass2	0.591 ± 0.121	0.563 ± 0.077	0.577 ± 0.111	0.610 ± 0.101	0.599 ± 0.108	0.582 ± 0.110	0.575 ± 0.094	0.606 ± 0.124	0.586 ± 0.076	0.550 ± 0.077	<b>0.616 ± 0.091</b>
glass1	0.854 ± 0.086	0.835 ± 0.053	0.854 ± 0.087	0.845 ± 0.086	<b>0.857 ± 0.082</b>	0.808 ± 0.090	0.853 ± 0.090	0.854 ± 0.086	0.797 ± 0.109	0.764 ± 0.140	0.770 ± 0.114
glass2	0.851 ± 0.154	0.849 ± 0.153	0.851 ± 0.154	0.851 ± 0.154	0.862 ± 0.160	<b>0.935 ± 0.107</b>	0.851 ± 0.154	0.851 ± 0.154	0.839 ± 0.150	0.895 ± 0.127	0.791 ± 0.156
page-blocks-1-3-vs-4	0.969 ± 0.059	0.949 ± 0.060	0.966 ± 0.068	0.964 ± 0.068	0.972 ± 0.063	0.962 ± 0.050	<b>0.983 ± 0.032</b>	0.969 ± 0.059	0.902 ± 0.062	0.884 ± 0.100	0.924 ± 0.089
yeast-0-5-6-7-9-vs-4	0.696 ± 0.057	0.680 ± 0.048	<b>0.713 ± 0.047</b>	0.694 ± 0.056	0.677 ± 0.039	0.712 ± 0.055	0.688 ± 0.037	0.701 ± 0.042	0.662 ± 0.046	0.496 ± 0.008	0.675 ± 0.058
yeast-1-2-8-9-vs-2	0.588 ± 0.028	0.578 ± 0.047	0.590 ± 0.030	0.578 ± 0.047	0.599 ± 0.051	<b>0.647 ± 0.062</b>	0.586 ± 0.023	0.604 ± 0.044	0.554 ± 0.057	0.511 ± 0.004	0.561 ± 0.041
yeast-1-4-5-8-vs-2	0.532 ± 0.049	<b>0.554 ± 0.026</b>	0.535 ± 0.064	0.529 ± 0.045	0.537 ± 0.053	0.518 ± 0.041	0.551 ± 0.029	0.526 ± 0.048	0.506 ± 0.033	0.505 ± 0.003	0.538 ± 0.056
yeast-1-vs-2	0.613 ± 0.057	0.623 ± 0.049	0.601 ± 0.067	0.635 ± 0.052	0.598 ± 0.055	<b>0.659 ± 0.038</b>	0.616 ± 0.048	0.609 ± 0.053	0.584 ± 0.046	0.511 ± 0.029	0.599 ± 0.068
yeast-2-vs-4	0.845 ± 0.046	0.840 ± 0.055	0.865 ± 0.043	0.861 ± 0.068	0.854 ± 0.053	0.862 ± 0.041	<b>0.865 ± 0.042</b>	0.839 ± 0.037	0.815 ± 0.050	0.583 ± 0.141	0.810 ± 0.033
yeast-2-vs-8	0.730 ± 0.089	0.762 ± 0.068	0.775 ± 0.104	<b>0.778 ± 0.084</b>	0.760 ± 0.070	0.751 ± 0.045	0.747 ± 0.065	0.741 ± 0.087	0.756 ± 0.049	0.520 ± 0.031	0.743 ± 0.049
yeast4	0.675 ± 0.044	0.657 ± 0.052	0.689 ± 0.061	0.690 ± 0.049	0.633 ± 0.041	<b>0.719 ± 0.055</b>	0.674 ± 0.083	0.678 ± 0.046	0.670 ± 0.050	0.497 ± 0.009	0.606 ± 0.055
yeast5	0.862 ± 0.073	0.846 ± 0.068	0.846 ± 0.064	0.859 ± 0.068	0.855 ± 0.065	<b>0.878 ± 0.049</b>	0.868 ± 0.057	0.864 ± 0.076	0.841 ± 0.048	0.510 ± 0.001	0.777 ± 0.113
yeast6	0.730 ± 0.066	0.692 ± 0.047	0.725 ± 0.067	0.747 ± 0.062	0.743 ± 0.047	<b>0.768 ± 0.051</b>	0.742 ± 0.059	0.731 ± 0.064	0.679 ± 0.058	0.521 ± 0.033	0.687 ± 0.050
cleveland4-vs-4	<b>0.814 ± 0.055</b>	0.731 ± 0.129	0.785 ± 0.103	0.792 ± 0.083	0.750 ± 0.127	0.745 ± 0.048	0.801 ± 0.063	<b>0.814 ± 0.055</b>	0.756 ± 0.084	0.736 ± 0.097	0.690 ± 0.070
ecoli-0-1-4-7-vs-2-3-5-6	0.792 ± 0.074	0.794 ± 0.048	0.822 ± 0.039	0.790 ± 0.060	0.776 ± 0.066	0.822 ± 0.050	<b>0.827 ± 0.054</b>	0.806 ± 0.077	0.721 ± 0.104	0.550 ± 0.083	0.745 ± 0.084
ecoli-0-1-vs-2-3-5	0.799 ± 0.062	0.806 ± 0.102	0.784 ± 0.059	0.749 ± 0.042	0.788 ± 0.041	<b>0.841 ± 0.058</b>	0.781 ± 0.050	0.800 ± 0.062	0.753 ± 0.087	0.649 ± 0.137	0.759 ± 0.083
ecoli-0-2-6-7-vs-3-5	0.799 ± 0.045	0.787 ± 0.062	0.809 ± 0.054	0.822 ± 0.075	<b>0.829 ± 0.057</b>	0.827 ± 0.063	0.778 ± 0.066	0.802 ± 0.047	0.773 ± 0.057	0.566 ± 0.120	0.804 ± 0.060
ecoli-0-6-7-vs-3-5	0.795 ± 0.060	0.794 ± 0.048	0.810 ± 0.052	0.813 ± 0.063	0.832 ± 0.070	<b>0.834 ± 0.060</b>	0.790 ± 0.056	0.796 ± 0.069	0.773 ± 0.056	0.594 ± 0.147	0.767 ± 0.098
ecoli-0-6-7-vs-2	0.840 ± 0.068	0.840 ± 0.074	0.828 ± 0.068	0.838 ± 0.071	0.837 ± 0.064	0.842 ± 0.044	0.825 ± 0.060	0.839 ± 0.070	<b>0.850 ± 0.078</b>	0.574 ± 0.127	0.835 ± 0.094
glass-0-1-4-6-vs-2	0.595 ± 0.051	0.560 ± 0.082	0.610 ± 0.072	0.591 ± 0.062	0.613 ± 0.070	<b>0.638 ± 0.077</b>	0.558 ± 0.066	0.576 ± 0.062	0.558 ± 0.071	0.557 ± 0.034	0.569 ± 0.060
glass-0-1-5-vs-2	0.689 ± 0.067	0.597 ± 0.068	0.677 ± 0.082	<b>0.713 ± 0.110</b>	0.631 ± 0.069	0.605 ± 0.090	0.649 ± 0.079	0.678 ± 0.062	0.598 ± 0.070	0.536 ± 0.072	0.561 ± 0.088
yeast-0-2-5-6-vs-3-7-8-9	0.713 ± 0.037	0.712 ± 0.051	<b>0.735 ± 0.038</b>	0.714 ± 0.027	0.717 ± 0.033	0.728 ± 0.046	0.709 ± 0.037	0.700 ± 0.034	0.646 ± 0.082	0.541 ± 0.061	0.643 ± 0.035
yeast-0-3-5-9-vs-7-8	0.598 ± 0.035	<b>0.638 ± 0.041</b>	0.621 ± 0.044	0.623 ± 0.050	0.614 ± 0.049	0.629 ± 0.050	0.615 ± 0.028	0.630 ± 0.031	0.550 ± 0.059	0.512 ± 0.016	0.563 ± 0.064
abalone-17-vs-7-8-9-10	0.644 ± 0.041	0.642 ± 0.033	0.643 ± 0.042	0.660 ± 0.045	0.645 ± 0.045	<b>0.667 ± 0.024</b>	0.646 ± 0.039	0.642 ± 0.036	0.633 ± 0.055	0.569 ± 0.057	0.603 ± 0.051
abalone-19-vs-10-11-12-13	0.556 ± 0.041	0.517 ± 0.024	0.556 ± 0.050	0.548 ± 0.035	0.541 ± 0.055	<b>0.576 ± 0.050</b>	0.557 ± 0.034	0.560 ± 0.028	0.523 ± 0.039	0.514 ± 0.041	0.527 ± 0.058
abalone-20-vs-8-9-10	0.696 ± 0.050	0.584 ± 0.065	0.674 ± 0.065	0.682 ± 0.050	0.630 ± 0.071	<b>0.789 ± 0.061</b>	0.681 ± 0.059	0.696 ± 0.050	0.621 ± 0.054	0.589 ± 0.042	0.606 ± 0.068
abalone-21-vs-8	0.726 ± 0.121	0.655 ± 0.074	0.699 ± 0.092	0.691 ± 0.116	0.736 ± 0.075	<b>0.790 ± 0.070</b>	0.692 ± 0.105	0.734 ± 0.126	0.712 ± 0.125	0.614 ± 0.092	0.649 ± 0.081
flats F	0.558 ± 0.035	0.581 ± 0.030	0.570 ± 0.045	0.578 ± 0.038	0.588 ± 0.025	0.580 ± 0.034	0.576 ± 0.048	0.577 ± 0.035	0.636 ± 0.083	0.575 ± 0.068	<b>0.666 ± 0.078</b>
kddcup-bufferoverflow-vs-jack	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>
kddcup-rootkit-inap-vs-jack	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>
kr-vs-k-zero-vs-right	0.961 ± 0.050	0.965 ± 0.051	0.965 ± 0.052	0.965 ± 0.051	<b>0.968 ± 0.042</b>	0.966 ± 0.071	0.954 ± 0.058	0.961 ± 0.050	0.771 ± 0.082	0.702 ± 0.042	0.858 ± 0.115
poker-8-9-vs-2	0.572 ± 0.039	0.558 ± 0.049	0.566 ± 0.032	0.572 ± 0.032	0.545 ± 0.051	<b>0.585 ± 0.070</b>	0.543 ± 0.028	0.572 ± 0.039	0.531 ± 0.048	0.517 ± 0.054	0.522 ± 0.031
poker-8-9-vs-6	0.680 ± 0.087	0.824 ± 0.141	0.670 ± 0.096	0.644 ± 0.084	0.750 ± 0.143	0.628 ± 0.096	0.657 ± 0.105	0.680 ± 0.087	0.990 ± 0.001	0.999 ± 0.001	<b>0.999 ± 0.001</b>
poker-8-vs-9	0.685 ± 0.101	0.685 ± 0.163	0.703 ± 0.123	0.685 ± 0.095	0.691 ± 0.098	0.669 ± 0.162	0.677 ± 0.100	0.685 ± 0.101	<b>0.931 ± 0.085</b>	<b>0.931 ± 0.084</b>	0.832 ± 0.165
winequality-red-3-vs-2	0.564 ± 0.082	0.564 ± 0.082	0.564 ± 0.082	0.562 ± 0.084	0.586 ± 0.095	0.613 ± 0.127	0.563 ± 0.081	0.564 ± 0.082	<b>0.686 ± 0.209</b>	0.647 ± 0.162	0.621 ± 0.158
winequality-red-3-vs-6	0.516 ± 0.043	0.529 ± 0.066	0.506 ± 0.040	0.518 ± 0.045	0.528 ± 0.089	<b>0.565 ± 0.056</b>	0.525 ± 0.064	0.516 ± 0.043	0.519 ± 0.047	0.528 ± 0.049	0.557 ± 0.062
winequality-red-4	0.552 ± 0.048	0.528 ± 0.030	<b>0.576 ± 0.029</b>	0.572 ± 0.036	0.564 ± 0.040	0.571 ± 0.036	0.548 ± 0.017	0.552 ± 0.050	0.537 ± 0.031	0.531 ± 0.031	0.547 ± 0.038
winequality-red-8-vs-6-7	0.543 ± 0.041	0.557 ± 0.050	0.550 ± 0.039	<b>0.562 ± 0.051</b>	0.556 ± 0.054	0.555 ± 0.043	0.545 ± 0.048	0.543 ± 0.041	0.544 ± 0.043	0.529 ± 0.053	0.539 ± 0.039
winequality-red-8-vs-6	0.609 ± 0.052	0.608 ± 0.064	0.605 ± 0.046	0.603 ± 0.067	0.579 ± 0.047	0.614 ± 0.058	<b>0.630 ± 0.056</b>	0.609 ± 0.052	0.577 ± 0.044	0.566 ± 0.063	0.571 ± 0.058
winequality-white-3-9-vs-2	0.596 ± 0.063	0.544 ± 0.047	0.540 ± 0.054	0.546 ± 0.056	0.533 ± 0.061	<b>0.643 ± 0.056</b>	0.535 ± 0.037	0.566 ± 0.063	0.528 ± 0.031	0.509 ± 0.019	0.525 ± 0.021
winequality-white-3-vs-7	0.539 ± 0.045	0.557 ± 0.060	0.576 ± 0.061	0.567 ± 0.055	0.590 ± 0.046	<b>0.737 ± 0.086</b>	0.524 ± 0.047	0.539 ± 0.045	0.546 ± 0.032	0.578 ± 0.076	0.574 ± 0.066
winequality-white-9-vs-4	0.722 ± 0.163	0.672 ± 0.100	0.721 ± 0.162	0.721 ± 0.162	<b>0.722 ± 0.162</b>	0.692 ± 0.141	0.721 ± 0.162	0.722 ± 0.163	0.573 ± 0.112	0.573 ± 0.112	0.573 ± 0.112
zoo-3	0.658 ± 0.189	0.608 ± 0.123	0.665 ± 0.158	0.650 ± 0.156	0.635 ± 0.160	<b>0.738 ± 0.159</b>	0.639 ± 0.122	0.658 ± 0.189	0.509 ± 0.127	0.509 ± 0.127	0.509 ± 0.127
ecoli1	0.841 ± 0.056	0.848 ± 0.049	0.827 ± 0.049	0.836 ± 0.039	0.837 ± 0.041	0.842 ± 0.033	0.822 ± 0.048	<b>0.860 ± 0.041</b>	0.751 ± 0.067	0.556 ± 0.105	0.798 ± 0.050
ecoli2	0.855 ± 0.028	0.838 ± 0.035	0.850 ± 0.033	0.852 ± 0.036	0.854 ± 0.029	<b>0.866 ± 0.037</b>	0.852 ± 0.041	0.855 ± 0.028	0.777 ± 0.083	0.578 ± 0.113	0.818 ± 0.056
ecoli3	0.745 ± 0.049	0.748 ± 0.065	0.768 ± 0.067	0.772 ± 0.049	0.766 ± 0.053	<b>0.833 ± 0.049</b>	0.775 ± 0.051	0.755 ± 0.053	0.760 ± 0.050	0.554 ± 0.100	0.753 ± 0.110
glass0	0.767 ± 0.036	0.770 ± 0.060	0.772 ± 0.038	0.787 ± 0.033	0.781 ± 0.041	<b>0.802 ± 0.041</b>	0.794 ± 0.040	0.774 ± 0.025	0.746 ± 0.051	0.673 ± 0.069	0.731 ± 0.068
glass1	0.719 ± 0.029	<b>0.733 ± 0.031</b>	0.727 ± 0.054	0.726 ± 0.058	0.714 ± 0.045	0.717 ± 0.046	0.726 ± 0.061	0.716 ± 0.033	0.676 ± 0.081	0.591 ± 0.058	0.658 ± 0.049
haberman	0.584 ± 0.035	0.567 ± 0.025	0.573 ± 0.041	0.563 ± 0.045	0.572 ± 0.052	0.577 ± 0.038	0.565 ± 0.055	<b>0.596 ± 0.045</b>	0.584 ± 0.025	0.536 ± 0.058	0.573 ± 0.052
page-blocks0	0.917 ± 0.012	0.898 ± 0.010	0.915 ± 0.010	0.914 ± 0.008	0.907 ± 0.009	0.900 ± 0.009	<b>0.919 ± 0.011</b>	0.917 ± 0.008	0.907 ± 0.013	0.895 ± 0.014	0.890 ± 0.019
ptms	0.965 ± 0.020	0.673 ± 0.023	0.660 ± 0.021	0.665 ± 0.015	0.663 ± 0.024	<b>0.678 ± 0.027</b>	0.658 ± 0.021	0.670 ± 0.025	0.659 ± 0.030	0.600 ± 0.041	0.665 ± 0.027
vehicle1	0.668 ± 0.024	0.668 ± 0.021	0.680 ± 0.032	0.671 ± 0.025	0.664 ± 0.028	<b>0.685 ± 0.023</b>	0.671 ± 0.024	0.676 ± 0.014	0.663 ± 0.019	0.665 ± 0.021	0.667 ± 0.022
vehicle3	0.666 ± 0.023	<b>0.690 ± 0.023</b>	0.655 ± 0.023	0.677 ± 0.028	0.671 ± 0.019	0.685 ± 0.014	0.67				

Table 2. SVM – AUC

Dataset name	SMOTE	polynom-fit-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TomekLinks	JFOTS <sub>pr</sub>	JFOTS <sub>rc</sub>	JFOTS <sub>prom</sub>
abalone19	0.593 ± 0.063	0.569 ± 0.048	0.593 ± 0.057	0.599 ± 0.065	0.602 ± 0.063	<b>0.655 ± 0.056</b>	0.593 ± 0.062	0.593 ± 0.063	0.620 ± 0.082	0.597 ± 0.083	0.610 ± 0.047
abalone19-18	0.740 ± 0.052	0.698 ± 0.036	0.745 ± 0.035	0.750 ± 0.042	0.738 ± 0.055	<b>0.782 ± 0.043</b>	0.739 ± 0.038	0.739 ± 0.051	0.678 ± 0.060	0.661 ± 0.091	0.668 ± 0.076
ecoli-0-1-3-7-vs-2-6	0.845 ± 0.075	0.847 ± 0.078	0.838 ± 0.074	0.842 ± 0.076	0.845 ± 0.079	0.828 ± 0.078	0.844 ± 0.075	0.845 ± 0.075	0.840 ± 0.110	<b>0.861 ± 0.092</b>	
glass-0-1-6-vs-2	0.740 ± 0.099	0.697 ± 0.081	<b>0.744 ± 0.090</b>	0.740 ± 0.079	0.690 ± 0.076	0.622 ± 0.083	0.743 ± 0.072	0.740 ± 0.100	0.724 ± 0.090	0.673 ± 0.092	0.694 ± 0.065
glass-0-1-6-vs-2	0.820 ± 0.098	0.792 ± 0.117	0.820 ± 0.098	0.820 ± 0.098	0.792 ± 0.116	0.843 ± 0.147	0.820 ± 0.098	0.784 ± 0.123	<b>0.869 ± 0.153</b>	0.808 ± 0.146	
glass2	0.642 ± 0.143	0.638 ± 0.134	0.648 ± 0.140	0.637 ± 0.137	0.651 ± 0.137	<b>0.677 ± 0.158</b>	0.648 ± 0.146	0.641 ± 0.143	0.626 ± 0.130	0.631 ± 0.118	0.643 ± 0.119
glass5	<b>0.892 ± 0.094</b>	0.852 ± 0.116	0.883 ± 0.108	0.876 ± 0.121	0.876 ± 0.103	0.870 ± 0.111	0.876 ± 0.082		<b>0.892 ± 0.094</b>	0.821 ± 0.068	0.788 ± 0.142
glass5	0.818 ± 0.106	0.809 ± 0.103	0.828 ± 0.099	0.828 ± 0.099	0.817 ± 0.106	0.854 ± 0.155	0.818 ± 0.106	0.818 ± 0.106	0.788 ± 0.098	<b>0.870 ± 0.119</b>	0.847 ± 0.117
page-blocks-1-3-vs-4	0.904 ± 0.111	0.791 ± 0.070	<b>0.908 ± 0.112</b>	0.907 ± 0.112	0.903 ± 0.119	0.796 ± 0.048	0.888 ± 0.116	0.904 ± 0.114	0.819 ± 0.074	0.862 ± 0.073	0.835 ± 0.124
yeast-0-5-6-7-9-vs-4	0.749 ± 0.047	0.741 ± 0.037	0.762 ± 0.040	0.752 ± 0.049	0.747 ± 0.055	<b>0.765 ± 0.030</b>	0.749 ± 0.041	0.746 ± 0.047	0.696 ± 0.066	0.496 ± 0.008	0.706 ± 0.068
yeast-1-2-8-9-vs-7	0.606 ± 0.041	0.594 ± 0.054	0.608 ± 0.050	0.605 ± 0.049	0.620 ± 0.049	<b>0.673 ± 0.069</b>	0.605 ± 0.053	0.610 ± 0.038	0.566 ± 0.052	0.511 ± 0.004	0.584 ± 0.039
yeast-1-4-5-8-vs-7	0.571 ± 0.051	0.568 ± 0.051	0.564 ± 0.047	0.561 ± 0.037	0.577 ± 0.047	<b>0.600 ± 0.034</b>	0.557 ± 0.035	0.571 ± 0.050	0.543 ± 0.035	0.505 ± 0.003	0.576 ± 0.050
yeast-1-vs-7	0.690 ± 0.041	0.671 ± 0.046	0.691 ± 0.039	<b>0.692 ± 0.043</b>	0.664 ± 0.066	0.686 ± 0.064	0.683 ± 0.040	0.689 ± 0.041	0.596 ± 0.086	0.512 ± 0.030	0.630 ± 0.066
yeast-2-vs-4	0.870 ± 0.039	0.862 ± 0.040	0.873 ± 0.039	<b>0.875 ± 0.045</b>	0.871 ± 0.046	0.869 ± 0.034	0.868 ± 0.046	0.870 ± 0.038	0.848 ± 0.033	0.605 ± 0.174	0.855 ± 0.054
yeast-2-vs-4	0.736 ± 0.046	0.773 ± 0.051	0.747 ± 0.043	0.756 ± 0.040	0.738 ± 0.047	<b>0.795 ± 0.064</b>	0.740 ± 0.063	0.736 ± 0.046	0.756 ± 0.071	0.517 ± 0.025	0.692 ± 0.091
yeast4	0.765 ± 0.034	0.746 ± 0.032	0.769 ± 0.042	0.768 ± 0.032	0.750 ± 0.033	<b>0.792 ± 0.032</b>	0.757 ± 0.024	0.764 ± 0.034	0.688 ± 0.023	0.497 ± 0.009	0.744 ± 0.086
yeast5	0.927 ± 0.029	0.924 ± 0.030	0.927 ± 0.029	0.927 ± 0.029	0.930 ± 0.028	<b>0.941 ± 0.024</b>	0.927 ± 0.029	0.927 ± 0.029	0.900 ± 0.064	0.510 ± 0.001	0.860 ± 0.135
yeast6	0.843 ± 0.049	0.840 ± 0.046	0.848 ± 0.054	0.840 ± 0.049	0.844 ± 0.049	<b>0.862 ± 0.034</b>	0.842 ± 0.053	0.843 ± 0.049	0.756 ± 0.054	0.520 ± 0.031	0.816 ± 0.041
cleveland-0-vs-4	0.719 ± 0.089	0.681 ± 0.082	0.728 ± 0.101	0.736 ± 0.099	0.704 ± 0.084	<b>0.845 ± 0.052</b>	0.719 ± 0.088	0.719 ± 0.089	0.718 ± 0.048	0.666 ± 0.101	0.680 ± 0.101
ecoli-0-1-4-7-vs-2-3-5-6	0.872 ± 0.032	0.851 ± 0.020	0.867 ± 0.029	0.866 ± 0.019	0.870 ± 0.033	<b>0.884 ± 0.033</b>	0.871 ± 0.037	0.872 ± 0.032	0.758 ± 0.130	0.595 ± 0.135	0.836 ± 0.070
ecoli-0-1-vs-2-3-5	0.854 ± 0.041	0.865 ± 0.044	0.863 ± 0.044	0.861 ± 0.043	0.856 ± 0.041	<b>0.886 ± 0.047</b>	0.858 ± 0.045	0.853 ± 0.041	0.793 ± 0.088	0.692 ± 0.199	0.820 ± 0.055
ecoli-0-2-6-7-vs-3-5	0.834 ± 0.056	0.842 ± 0.061	0.838 ± 0.056	0.843 ± 0.056	0.853 ± 0.063	<b>0.871 ± 0.050</b>	0.835 ± 0.059	0.834 ± 0.056	0.827 ± 0.054	0.667 ± 0.149	0.851 ± 0.053
ecoli-0-6-7-vs-3-5	0.846 ± 0.055	0.851 ± 0.056	0.843 ± 0.056	0.857 ± 0.059	0.856 ± 0.062	<b>0.869 ± 0.060</b>	0.846 ± 0.061	0.846 ± 0.055	0.845 ± 0.051	0.680 ± 0.159	0.852 ± 0.052
ecoli-0-6-7-vs-2	0.861 ± 0.043	0.863 ± 0.043	0.863 ± 0.044	0.859 ± 0.043	0.860 ± 0.042	<b>0.887 ± 0.047</b>	0.859 ± 0.044	0.862 ± 0.042	0.861 ± 0.044	0.647 ± 0.163	0.884 ± 0.085
glass-0-1-4-6-vs-2	0.710 ± 0.101	0.669 ± 0.128	0.713 ± 0.107	0.702 ± 0.131	0.665 ± 0.120	0.625 ± 0.090	<b>0.716 ± 0.127</b>	0.709 ± 0.101	0.609 ± 0.085	0.662 ± 0.083	0.631 ± 0.134
glass-0-1-5-vs-2	0.696 ± 0.063	0.659 ± 0.067	0.701 ± 0.062	<b>0.711 ± 0.071</b>	0.671 ± 0.071	0.581 ± 0.049	0.685 ± 0.068	0.696 ± 0.063	0.673 ± 0.066	0.616 ± 0.162	0.641 ± 0.105
yeast-0-2-3-5-6-vs-7-8-9	0.782 ± 0.026	0.775 ± 0.041	0.778 ± 0.032	0.788 ± 0.019	0.772 ± 0.038	<b>0.791 ± 0.030</b>	0.781 ± 0.029	0.783 ± 0.026	0.735 ± 0.062	0.559 ± 0.109	0.765 ± 0.040
yeast-0-3-5-6-vs-7-8	<b>0.696 ± 0.035</b>	0.640 ± 0.032	0.687 ± 0.036	0.690 ± 0.045	0.689 ± 0.041	0.660 ± 0.035	0.692 ± 0.034	0.695 ± 0.036	0.634 ± 0.069	0.516 ± 0.027	0.588 ± 0.081
abalone-17-vs-7-8-9-10	0.814 ± 0.021	0.742 ± 0.040	0.809 ± 0.024	0.810 ± 0.034	0.806 ± 0.028	<b>0.823 ± 0.025</b>	0.816 ± 0.024	0.813 ± 0.019	0.677 ± 0.073	0.722 ± 0.090	0.746 ± 0.114
abalone-19-vs-10-11-12-13	0.633 ± 0.062	0.582 ± 0.058	0.637 ± 0.061	0.636 ± 0.052	0.629 ± 0.058	<b>0.659 ± 0.075</b>	0.629 ± 0.067	0.633 ± 0.062	0.631 ± 0.085	0.594 ± 0.058	0.572 ± 0.097
abalone-20-vs-8-9-10	0.806 ± 0.048	0.775 ± 0.041	0.809 ± 0.043	0.802 ± 0.047	0.797 ± 0.051	<b>0.884 ± 0.051</b>	0.798 ± 0.055	0.806 ± 0.048	0.743 ± 0.109	0.742 ± 0.103	0.714 ± 0.111
abalone-21-vs-2	0.798 ± 0.117	0.789 ± 0.120	0.798 ± 0.116	0.804 ± 0.117	0.799 ± 0.122	<b>0.839 ± 0.070</b>	0.798 ± 0.117	0.799 ± 0.117	0.771 ± 0.144	0.728 ± 0.125	0.771 ± 0.142
flaw-F	0.738 ± 0.040	0.689 ± 0.046	0.732 ± 0.044	0.743 ± 0.049	0.725 ± 0.043	<b>0.777 ± 0.047</b>	0.738 ± 0.045	0.738 ± 0.040	0.681 ± 0.073	0.575 ± 0.068	0.727 ± 0.077
kddcup-bufferoverflow-vs-back	0.993 ± 0.013	0.997 ± 0.010	0.993 ± 0.013	0.993 ± 0.013	0.993 ± 0.013	<b>1.000 ± 0.000</b>	0.993 ± 0.013	0.993 ± 0.013	0.997 ± 0.010	0.997 ± 0.010	0.997 ± 0.010
kddcup-rootkit-innp-vs-back	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	0.977 ± 0.023	<b>0.977 ± 0.023</b>	0.977 ± 0.042	0.977 ± 0.042	0.977 ± 0.042
kr-vs-karozo-vs-aignt	0.937 ± 0.052	0.934 ± 0.057	0.937 ± 0.052	0.937 ± 0.052	0.934 ± 0.057	<b>0.950 ± 0.050</b>	0.934 ± 0.057	0.937 ± 0.052	0.843 ± 0.076	0.701 ± 0.041	0.831 ± 0.108
poker-8-9-vs-2	0.625 ± 0.067	0.588 ± 0.066	0.617 ± 0.058	0.613 ± 0.056	0.614 ± 0.073	<b>0.677 ± 0.074</b>	0.614 ± 0.047	0.625 ± 0.067	0.634 ± 0.079	0.562 ± 0.085	0.575 ± 0.073
poker-8-9-vs-4	0.757 ± 0.064	0.724 ± 0.047	0.757 ± 0.064	0.744 ± 0.054	0.732 ± 0.066	0.937 ± 0.055	0.749 ± 0.086	0.757 ± 0.064	0.379 ± 0.041	<b>0.986 ± 0.037</b>	0.979 ± 0.041
poker-8-vs-6	0.783 ± 0.073	0.712 ± 0.059	0.783 ± 0.073	0.789 ± 0.066	0.746 ± 0.081	<b>0.968 ± 0.051</b>	0.789 ± 0.065	0.783 ± 0.073	0.869 ± 0.123	0.850 ± 0.107	0.831 ± 0.152
poker-9-vs-7	0.636 ± 0.104	0.636 ± 0.104	0.636 ± 0.104	0.636 ± 0.130	0.680 ± 0.135	0.611 ± 0.087	0.611 ± 0.087	0.636 ± 0.104	<b>0.729 ± 0.163</b>	0.686 ± 0.139	0.657 ± 0.151
winequality-red-3-vs-2	0.540 ± 0.049	0.542 ± 0.050	0.539 ± 0.049	0.540 ± 0.049	0.541 ± 0.049	<b>0.608 ± 0.057</b>	0.550 ± 0.050	0.540 ± 0.049	0.539 ± 0.096	0.526 ± 0.117	0.516 ± 0.082
winequality-red-4	0.638 ± 0.034	0.611 ± 0.029	0.632 ± 0.033	<b>0.644 ± 0.035</b>	0.625 ± 0.032	0.617 ± 0.029	0.641 ± 0.034	0.637 ± 0.033	0.548 ± 0.026	0.599 ± 0.051	0.609 ± 0.050
winequality-red-5	0.571 ± 0.054	0.550 ± 0.055	<b>0.572 ± 0.054</b>	0.571 ± 0.054	0.555 ± 0.062	0.541 ± 0.063	0.557 ± 0.048	0.571 ± 0.054	0.542 ± 0.067	0.518 ± 0.081	0.550 ± 0.060
winequality-red-8-vs-6	0.614 ± 0.031	0.610 ± 0.024	0.615 ± 0.031	0.615 ± 0.030	0.625 ± 0.030	0.627 ± 0.056	0.625 ± 0.030	0.614 ± 0.031	<b>0.637 ± 0.044</b>	0.609 ± 0.096	0.622 ± 0.079
winequality-white-3-9-vs-2	0.565 ± 0.051	0.529 ± 0.045	0.559 ± 0.057	0.560 ± 0.048	0.542 ± 0.039	<b>0.685 ± 0.039</b>	0.557 ± 0.051	0.565 ± 0.051	0.519 ± 0.064	0.528 ± 0.055	0.565 ± 0.055
winequality-white-3-vs-7	0.533 ± 0.049	0.528 ± 0.041	0.549 ± 0.066	0.547 ± 0.067	0.546 ± 0.039	<b>0.756 ± 0.077</b>	0.539 ± 0.047	0.533 ± 0.049	0.561 ± 0.063	0.607 ± 0.121	0.594 ± 0.077
winequality-white-9-vs-4	0.815 ± 0.134	0.815 ± 0.134	0.815 ± 0.134	0.699 ± 0.218	<b>0.815 ± 0.134</b>	0.695 ± 0.214	0.815 ± 0.134	0.815 ± 0.134	0.707 ± 0.175	0.707 ± 0.175	0.707 ± 0.175
zoo-0	<b>0.611 ± 0.162</b>	<b>0.611 ± 0.162</b>	<b>0.611 ± 0.162</b>	0.597 ± 0.163	<b>0.611 ± 0.162</b>	0.595 ± 0.161	<b>0.611 ± 0.162</b>	<b>0.611 ± 0.162</b>	0.547 ± 0.174	0.547 ± 0.174	0.547 ± 0.174
ecoli1	0.885 ± 0.027	0.886 ± 0.020	0.886 ± 0.020	0.884 ± 0.020	0.883 ± 0.021	<b>0.889 ± 0.015</b>	0.881 ± 0.022	0.884 ± 0.026	0.875 ± 0.033	0.576 ± 0.145	0.885 ± 0.015
ecoli2	0.940 ± 0.024	0.932 ± 0.014	0.941 ± 0.024	0.940 ± 0.026	0.939 ± 0.025	0.938 ± 0.021	<b>0.942 ± 0.022</b>	0.939 ± 0.025	0.860 ± 0.082	0.604 ± 0.146	0.894 ± 0.032
ecoli3	0.889 ± 0.022	0.893 ± 0.024	0.887 ± 0.022	<b>0.894 ± 0.017</b>	0.893 ± 0.021	0.893 ± 0.019	0.887 ± 0.021	0.892 ± 0.021	0.858 ± 0.056	0.602 ± 0.169	0.794 ± 0.122
glass0	0.779 ± 0.040	0.790 ± 0.020	0.785 ± 0.039	0.778 ± 0.037	<b>0.793 ± 0.037</b>	0.771 ± 0.032	0.792 ± 0.034	0.778 ± 0.036	0.742 ± 0.032	0.724 ± 0.065	0.751 ± 0.044
glass1	0.701 ± 0.038	0.689 ± 0.043	0.690 ± 0.038	0.696 ± 0.034	<b>0.703 ± 0.040</b>	0.677 ± 0.038	0.698 ± 0.039	0.701 ± 0.044	0.694 ± 0.062	0.598 ± 0.048	0.684 ± 0.049
haberman	0.611 ± 0.026	<b>0.642 ± 0.035</b>	0.619 ± 0.026	0.597 ± 0.031	0.611 ± 0.039	0.627 ± 0.027	0.614 ± 0.034	0.611 ± 0.028	0.613 ± 0.039	0.559 ± 0.092	0.622 ± 0.057
page-blocks0	0.931 ± 0.008	0.900 ± 0.008	0.931 ± 0.007	0.923 ± 0.009	0.932 ± 0.008	0.848 ± 0.016	0.930 ± 0.008	<b>0.932 ± 0.008</b>	0.879 ± 0.034	0.892 ± 0.025	0.882 ± 0.028
ptms	0.727 ± 0.030	0.722 ± 0.027	0.729 ± 0.023	0.726 ± 0.022	0.731 ± 0.025	0.730 ± 0.017	<b>0.732 ± 0.028</b>	0.728 ± 0.032	0.706 ± 0.018	0.666 ± 0.030	0.725 ± 0.022
vehicle1	0.789 ± 0.027	0.749 ± 0.023	0.790 ± 0.026	0.790 ± 0.020	0.798 ± 0.016	0.792 ± 0.023	0.791 ± 0.019	0.793 ± 0.025	0.695 ± 0.047	<b>0.804 ± 0.018</b>	0.779 ± 0.036
vehicle2	0.789 ± 0.022	0.734 ± 0.017	0.790 ± 0.018	<b>0.797 ± 0.026</b>	0.790 ± 0.016	0.789 ± 0.023	0.789 ± 0.018	0.790 ± 0.021	0.650 ± 0.021	0.789 ± 0.027	0.764 ± 0.038
yeast1	0.71										

Table 3. KNN – BAC

Dataset name	SMOTE	polynom-fit-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TonekLinks	JFOTS_pr	JFOTS_rc	JFOTS_prom
abalone19	0.568 ± 0.069	0.519 ± 0.028	0.568 ± 0.069	0.567 ± 0.069	0.549 ± 0.043	0.554 ± 0.047	0.565 ± 0.062	<b>0.568 ± 0.069</b>	0.520 ± 0.030	0.497 ± 0.011	0.520 ± 0.032
abalone18	0.719 ± 0.033	0.704 ± 0.044	0.704 ± 0.034	0.709 ± 0.040	0.700 ± 0.048	0.692 ± 0.053	0.714 ± 0.041	<b>0.720 ± 0.033</b>	0.645 ± 0.066	0.572 ± 0.063	0.627 ± 0.058
ecoli-0-1-3-7_vs-2-6	0.834 ± 0.075	<b>0.835 ± 0.076</b>	0.834 ± 0.074	0.833 ± 0.074	<b>0.835 ± 0.076</b>	0.833 ± 0.076	0.834 ± 0.075	0.834 ± 0.075	0.800 ± 0.108	0.800 ± 0.106	0.820 ± 0.096
glass0-1-6_vs-2	0.718 ± 0.086	0.682 ± 0.045	0.713 ± 0.081	0.714 ± 0.084	0.700 ± 0.056	0.657 ± 0.063	<b>0.725 ± 0.082</b>	0.717 ± 0.085	0.638 ± 0.040	0.606 ± 0.086	0.660 ± 0.084
glass0-1-6_vs-2	0.914 ± 0.097	<b>0.915 ± 0.098</b>	0.914 ± 0.097	0.914 ± 0.098	0.894 ± 0.135	0.881 ± 0.120	0.914 ± 0.097	0.914 ± 0.097	0.878 ± 0.118	0.842 ± 0.192	0.801 ± 0.162
glass0	0.630 ± 0.134	0.653 ± 0.137	0.637 ± 0.151	<b>0.644 ± 0.141</b>	0.630 ± 0.135	0.627 ± 0.112	0.635 ± 0.145	0.628 ± 0.133	0.640 ± 0.098	0.583 ± 0.096	0.596 ± 0.080
glass0	0.901 ± 0.057	<b>0.903 ± 0.068</b>	0.876 ± 0.056	0.885 ± 0.056	0.879 ± 0.071	0.863 ± 0.038	0.892 ± 0.048	0.901 ± 0.057	0.818 ± 0.061	0.752 ± 0.141	0.755 ± 0.062
glass0	0.931 ± 0.110	<b>0.933 ± 0.110</b>	0.921 ± 0.116	0.931 ± 0.110	0.922 ± 0.108	0.862 ± 0.108	0.931 ± 0.110	0.931 ± 0.110	0.821 ± 0.114	0.867 ± 0.136	0.831 ± 0.130
page-blocks-1-3_vs-0	<b>0.983 ± 0.023</b>	0.978 ± 0.024	0.982 ± 0.023	<b>0.983 ± 0.023</b>	0.949 ± 0.095	0.980 ± 0.016	0.979 ± 0.025	<b>0.983 ± 0.023</b>	0.850 ± 0.104	0.835 ± 0.086	0.888 ± 0.110
yeast-0-5-6-7-9_vs-4	0.727 ± 0.045	<b>0.740 ± 0.038</b>	0.730 ± 0.040	0.733 ± 0.043	0.729 ± 0.053	0.731 ± 0.045	0.718 ± 0.035	0.725 ± 0.043	0.671 ± 0.068	0.498 ± 0.002	0.643 ± 0.072
yeast-1-2-8-9_vs-7	0.672 ± 0.048	<b>0.685 ± 0.045</b>	0.668 ± 0.040	0.663 ± 0.040	0.649 ± 0.065	0.660 ± 0.052	0.667 ± 0.051	0.672 ± 0.048	0.586 ± 0.044	0.500 ± 0.000	0.567 ± 0.049
yeast-1-4-5-8_vs-7	0.611 ± 0.040	<b>0.614 ± 0.044</b>	0.594 ± 0.052	0.571 ± 0.051	0.577 ± 0.042	0.605 ± 0.039	0.611 ± 0.038	0.611 ± 0.038	0.536 ± 0.036	0.500 ± 0.000	0.521 ± 0.048
yeast-1_vs-7	0.723 ± 0.036	0.723 ± 0.036	0.726 ± 0.035	<b>0.732 ± 0.042</b>	0.702 ± 0.055	0.690 ± 0.033	0.701 ± 0.051	0.722 ± 0.035	0.608 ± 0.035	0.409 ± 0.002	0.575 ± 0.076
yeast-2_vs-4	0.873 ± 0.030	0.863 ± 0.035	0.869 ± 0.033	0.871 ± 0.030	0.873 ± 0.029	0.861 ± 0.034	<b>0.875 ± 0.027</b>	0.874 ± 0.030	0.842 ± 0.048	0.603 ± 0.158	0.830 ± 0.047
yeast-2_vs-8	0.802 ± 0.051	<b>0.810 ± 0.046</b>	0.794 ± 0.045	0.801 ± 0.053	0.803 ± 0.044	0.806 ± 0.057	0.798 ± 0.051	0.801 ± 0.050	0.772 ± 0.051	0.534 ± 0.105	0.802 ± 0.062
yeast4	0.729 ± 0.025	0.733 ± 0.034	0.729 ± 0.027	0.729 ± 0.027	0.713 ± 0.033	0.727 ± 0.045	<b>0.735 ± 0.039</b>	0.729 ± 0.025	0.692 ± 0.034	0.500 ± 0.000	0.640 ± 0.051
yeast5	0.929 ± 0.036	0.920 ± 0.035	0.925 ± 0.036	0.922 ± 0.035	0.910 ± 0.034	<b>0.933 ± 0.049</b>	0.929 ± 0.034	0.929 ± 0.036	0.865 ± 0.054	0.500 ± 0.000	0.817 ± 0.129
yeast6	0.814 ± 0.044	0.816 ± 0.038	0.815 ± 0.044	0.813 ± 0.044	0.812 ± 0.046	<b>0.829 ± 0.035</b>	0.809 ± 0.043	0.814 ± 0.044	0.733 ± 0.073	0.500 ± 0.000	0.775 ± 0.039
cleveland0_vs-4	0.876 ± 0.009	0.868 ± 0.036	0.881 ± 0.029	0.875 ± 0.068	0.873 ± 0.033	0.813 ± 0.009	<b>0.883 ± 0.024</b>	0.876 ± 0.009	0.738 ± 0.086	0.719 ± 0.135	0.711 ± 0.117
ecoli-0-1-4-7_vs-2-3-5-6	0.883 ± 0.018	0.878 ± 0.024	0.880 ± 0.018	0.876 ± 0.018	<b>0.884 ± 0.022</b>	0.877 ± 0.028	0.882 ± 0.021	0.884 ± 0.018	0.730 ± 0.121	0.568 ± 0.099	0.803 ± 0.098
ecoli-0-1_vs-2-3-5	0.884 ± 0.024	<b>0.887 ± 0.026</b>	0.878 ± 0.025	0.880 ± 0.025	0.879 ± 0.024	0.875 ± 0.042	0.886 ± 0.030	0.884 ± 0.024	0.821 ± 0.104	0.689 ± 0.160	0.820 ± 0.066
ecoli-0-2-6-7_vs-3-5	0.839 ± 0.051	0.839 ± 0.051	0.842 ± 0.061	0.840 ± 0.053	<b>0.843 ± 0.057</b>	0.840 ± 0.038	0.838 ± 0.049	0.839 ± 0.050	0.810 ± 0.041	0.588 ± 0.122	0.840 ± 0.027
ecoli-0-6-7_vs-3-5	0.851 ± 0.054	0.855 ± 0.053	0.854 ± 0.064	<b>0.858 ± 0.050</b>	0.847 ± 0.061	0.841 ± 0.052	0.851 ± 0.052	0.852 ± 0.053	0.813 ± 0.051	0.614 ± 0.143	0.799 ± 0.079
ecoli-0-6-7_vs-2	0.866 ± 0.047	0.865 ± 0.056	0.867 ± 0.045	0.867 ± 0.053	0.870 ± 0.046	<b>0.870 ± 0.036</b>	0.865 ± 0.049	0.867 ± 0.048	0.830 ± 0.065	0.509 ± 0.123	0.865 ± 0.063
glass0-1-1-4-6_vs-2	<b>0.674 ± 0.098</b>	0.665 ± 0.088	0.671 ± 0.103	0.673 ± 0.099	0.645 ± 0.101	0.624 ± 0.058	0.666 ± 0.105	0.669 ± 0.095	0.549 ± 0.071	0.582 ± 0.110	0.567 ± 0.085
glass0-1-5_vs-2	0.676 ± 0.059	0.674 ± 0.055	<b>0.684 ± 0.063</b>	0.669 ± 0.065	0.667 ± 0.084	0.631 ± 0.060	0.683 ± 0.059	0.675 ± 0.060	0.657 ± 0.088	0.622 ± 0.128	0.595 ± 0.111
yeast-0-2-5-6_vs-3-7-8-9	0.772 ± 0.031	0.768 ± 0.025	<b>0.775 ± 0.028</b>	0.772 ± 0.026	0.773 ± 0.030	0.764 ± 0.023	0.772 ± 0.031	0.773 ± 0.032	0.684 ± 0.075	0.533 ± 0.058	0.683 ± 0.036
yeast-0-5-5-9_vs-7-8	0.679 ± 0.037	0.675 ± 0.035	0.679 ± 0.037	0.670 ± 0.043	0.678 ± 0.037	<b>0.681 ± 0.050</b>	0.669 ± 0.030	0.680 ± 0.038	0.569 ± 0.083	0.502 ± 0.011	0.561 ± 0.065
abalone-17_vs-7-8-9-10	0.749 ± 0.046	0.719 ± 0.034	<b>0.752 ± 0.045</b>	0.745 ± 0.046	0.713 ± 0.044	0.739 ± 0.042	0.743 ± 0.044	0.749 ± 0.046	0.606 ± 0.033	0.582 ± 0.077	0.612 ± 0.072
abalone-19_vs-10-11-12-13	0.583 ± 0.037	0.551 ± 0.025	0.587 ± 0.040	<b>0.589 ± 0.047</b>	0.554 ± 0.046	0.569 ± 0.045	0.570 ± 0.044	0.582 ± 0.037	0.535 ± 0.032	0.515 ± 0.033	0.523 ± 0.044
abalone-20_vs-8-9-10	0.750 ± 0.055	0.692 ± 0.025	0.758 ± 0.062	<b>0.761 ± 0.067</b>	0.667 ± 0.058	0.709 ± 0.052	0.743 ± 0.082	0.746 ± 0.058	0.635 ± 0.056	0.549 ± 0.077	0.638 ± 0.049
abalone-21_vs-2	<b>0.830 ± 0.084</b>	0.771 ± 0.079	0.815 ± 0.074	0.815 ± 0.076	0.797 ± 0.080	0.794 ± 0.065	0.822 ± 0.080	0.830 ± 0.084	0.703 ± 0.095	0.667 ± 0.121	0.710 ± 0.089
flare-F	0.693 ± 0.044	0.674 ± 0.035	0.690 ± 0.050	0.693 ± 0.044	0.671 ± 0.043	0.693 ± 0.036	<b>0.694 ± 0.041</b>	0.692 ± 0.044	0.552 ± 0.042	0.504 ± 0.009	0.566 ± 0.053
kddcup-buffer_overflow_vs-back	0.957 ± 0.047	0.957 ± 0.047	0.957 ± 0.047	0.957 ± 0.047	0.947 ± 0.050	<b>0.960 ± 0.042</b>	0.947 ± 0.043	0.957 ± 0.047	0.957 ± 0.045	0.957 ± 0.045	0.957 ± 0.045
kddcup-rootkit_innp_vs-back	<b>0.973 ± 0.022</b>	0.964 ± 0.040	<b>0.973 ± 0.022</b>	<b>0.973 ± 0.022</b>	0.955 ± 0.045	0.945 ± 0.027	0.955 ± 0.050	<b>0.973 ± 0.022</b>	0.961 ± 0.040	0.964 ± 0.040	0.964 ± 0.040
kr-vs-karoo_vs-rlght	0.940 ± 0.050	0.930 ± 0.053	0.944 ± 0.050	<b>0.944 ± 0.049</b>	0.926 ± 0.061	0.944 ± 0.060	0.929 ± 0.060	0.940 ± 0.050	0.757 ± 0.163	0.500 ± 0.000	0.749 ± 0.175
poker-8-9_vs-2	0.609 ± 0.059	0.578 ± 0.036	0.617 ± 0.065	0.608 ± 0.062	0.548 ± 0.044	<b>0.643 ± 0.048</b>	0.614 ± 0.061	0.609 ± 0.059	0.546 ± 0.069	0.514 ± 0.036	0.550 ± 0.075
poker-8-9_vs-6	0.949 ± 0.040	0.912 ± 0.033	0.949 ± 0.039	0.949 ± 0.039	0.904 ± 0.053	0.976 ± 0.027	0.937 ± 0.031	0.949 ± 0.040	<b>0.988 ± 0.038</b>	0.976 ± 0.048	0.976 ± 0.048
poker-8_vs-6	0.942 ± 0.061	0.851 ± 0.057	0.942 ± 0.061	0.942 ± 0.061	0.875 ± 0.098	<b>0.978 ± 0.018</b>	0.932 ± 0.078	0.942 ± 0.061	0.906 ± 0.122	0.931 ± 0.113	0.864 ± 0.167
poker-9_vs-7	0.839 ± 0.152	<b>0.839 ± 0.152</b>	0.839 ± 0.152	0.816 ± 0.135	0.795 ± 0.125	0.828 ± 0.145	0.793 ± 0.152	0.839 ± 0.152	0.789 ± 0.233	0.806 ± 0.192	0.721 ± 0.197
winequality-red-3_vs-2	0.584 ± 0.061	0.577 ± 0.053	0.584 ± 0.061	0.583 ± 0.061	0.578 ± 0.053	<b>0.592 ± 0.064</b>	0.575 ± 0.052	0.584 ± 0.061	0.543 ± 0.069	0.493 ± 0.033	0.560 ± 0.058
winequality-red-4	0.597 ± 0.027	0.583 ± 0.043	0.596 ± 0.029	0.596 ± 0.021	0.588 ± 0.036	0.557 ± 0.024	<b>0.602 ± 0.024</b>	0.597 ± 0.026	0.540 ± 0.025	0.521 ± 0.038	0.558 ± 0.047
winequality-red-8_vs-6-7	0.530 ± 0.064	<b>0.543 ± 0.068</b>	0.536 ± 0.063	0.537 ± 0.063	0.536 ± 0.055	0.530 ± 0.060	0.534 ± 0.055	0.531 ± 0.064	0.542 ± 0.058	0.534 ± 0.070	0.536 ± 0.045
winequality-red-8_vs-6	<b>0.635 ± 0.050</b>	0.630 ± 0.052	0.624 ± 0.055	0.635 ± 0.051	0.595 ± 0.050	0.600 ± 0.052	0.632 ± 0.043	0.635 ± 0.050	0.593 ± 0.064	0.584 ± 0.077	0.616 ± 0.088
winequality-white-3-9_vs-2	<b>0.618 ± 0.030</b>	0.613 ± 0.033	0.617 ± 0.035	0.617 ± 0.034	0.573 ± 0.029	0.602 ± 0.053	0.599 ± 0.034	<b>0.618 ± 0.030</b>	0.547 ± 0.046	0.518 ± 0.029	0.575 ± 0.054
winequality-white-3_vs-7	0.630 ± 0.086	0.573 ± 0.064	0.633 ± 0.092	0.619 ± 0.094	0.577 ± 0.058	<b>0.644 ± 0.064</b>	0.630 ± 0.099	0.630 ± 0.086	0.585 ± 0.074	0.509 ± 0.089	0.570 ± 0.054
winequality-white-9_vs-4	0.878 ± 0.091	<b>0.882 ± 0.095</b>	0.878 ± 0.091	0.766 ± 0.164	0.879 ± 0.092	0.774 ± 0.172	0.878 ± 0.091	0.878 ± 0.091	0.726 ± 0.177	0.726 ± 0.177	0.726 ± 0.177
zoo-0	<b>0.827 ± 0.157</b>	<b>0.827 ± 0.157</b>	<b>0.827 ± 0.157</b>	0.717 ± 0.191	<b>0.827 ± 0.157</b>	0.692 ± 0.167	<b>0.827 ± 0.157</b>	<b>0.827 ± 0.157</b>	0.630 ± 0.130	0.630 ± 0.130	0.630 ± 0.130
ecoli1	0.864 ± 0.026	0.863 ± 0.019	0.868 ± 0.030	<b>0.871 ± 0.024</b>	0.870 ± 0.026	0.864 ± 0.028	0.863 ± 0.033	0.867 ± 0.023	0.802 ± 0.055	0.563 ± 0.127	0.840 ± 0.047
ecoli2	0.915 ± 0.028	<b>0.922 ± 0.025</b>	0.913 ± 0.027	0.914 ± 0.027	0.919 ± 0.029	0.911 ± 0.021	0.914 ± 0.027	0.915 ± 0.028	0.837 ± 0.086	0.584 ± 0.138	0.863 ± 0.061
ecoli3	0.866 ± 0.019	0.857 ± 0.022	<b>0.868 ± 0.015</b>	0.859 ± 0.025	0.854 ± 0.035	0.851 ± 0.028	0.861 ± 0.018	0.865 ± 0.015	0.800 ± 0.053	0.575 ± 0.119	0.749 ± 0.100
glass0	0.791 ± 0.035	0.799 ± 0.036	0.786 ± 0.034	0.794 ± 0.028	0.797 ± 0.027	0.787 ± 0.041	0.800 ± 0.030	<b>0.800 ± 0.034</b>	0.778 ± 0.047	0.700 ± 0.116	0.778 ± 0.050
glass1	0.738 ± 0.047	<b>0.749 ± 0.053</b>	0.745 ± 0.044	0.748 ± 0.037	0.739 ± 0.042	0.740 ± 0.031	0.736 ± 0.030	0.738 ± 0.051	0.698 ± 0.068	0.531 ± 0.081	0.685 ± 0.054
haberman	0.601 ± 0.034	<b>0.616 ± 0.036</b>	0.587 ± 0.044	0.588 ± 0.016	0.588 ± 0.039	0.587 ± 0.039	0.584 ± 0.029	0.599 ± 0.030	0.600 ± 0.024	0.535 ± 0.074	0.599 ± 0.054
page-blocks0	0.929 ± 0.010	0.911 ± 0.012	0.928 ± 0.012	0.921 ± 0.012	0.924 ± 0.011	0.887 ± 0.016	<b>0.931 ± 0.009</b>	0.930 ± 0.010	0.895 ± 0.018	0.905 ± 0.012	0.899 ± 0.015
ptm	0.655 ± 0.021	<b>0.708 ± 0.018</b>	0.686 ± 0.013	0.687 ± 0.016	0.682 ± 0.017	0.690 ± 0.021	0.693 ± 0.024	0.693 ± 0.024	0.686 ± 0.020	0.616 ± 0.053	0.692 ± 0.021
vehicle1	0.723 ± 0.026	<b>0.740 ± 0.017</b>	0.720 ± 0.024	0.736 ± 0.025	0.725 ± 0.019	0.720 ± 0.022	0.731 ± 0.022	0.724 ± 0.027	0.667 ± 0.022	0.716 ± 0.030	0.699 ± 0.027
vehicle3	0.708 ± 0.018	0.700 ± 0.029	0.712 ± 0.019	<b>0.718 ± 0.025</b>	0.710 ± 0.017	0.692 ± 0.023	0.712 ± 0.020	0.706 ± 0.020	0.656 ± 0.019	0.696 ± 0.023	0.70

Table 4. CART – G-mean

Dataset name	SMOTE	polynom-fit-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TonekLinks	JFOTS_pr	JFOTS_rc	JFOTS_prom
abalone19	0.365 ± 0.148	0.075 ± 0.114	0.312 ± 0.168	<b>0.387 ± 0.110</b>	0.282 ± 0.174	0.332 ± 0.116	0.358 ± 0.122	0.365 ± 0.148	0.084 ± 0.132	0.354 ± 0.206	0.365 ± 0.176
abalone18	0.605 ± 0.100	0.508 ± 0.072	0.619 ± 0.082	0.630 ± 0.075	0.584 ± 0.056	<b>0.640 ± 0.133</b>	0.588 ± 0.059	0.610 ± 0.105	0.583 ± 0.073	0.442 ± 0.144	0.511 ± 0.106
ecoli-0-1-3-7-vs-2-6	0.723 ± 0.254	<b>0.793 ± 0.086</b>	0.723 ± 0.254	0.723 ± 0.254	<b>0.793 ± 0.086</b>	0.736 ± 0.145	0.723 ± 0.254	0.723 ± 0.254	0.594 ± 0.232	0.407 ± 0.274	0.619 ± 0.241
glass0-1-6-vs-2	0.565 ± 0.089	0.461 ± 0.086	<b>0.614 ± 0.088</b>	0.573 ± 0.101	0.522 ± 0.101	0.529 ± 0.151	0.552 ± 0.155	0.564 ± 0.085	0.567 ± 0.180	0.466 ± 0.089	0.516 ± 0.105
glass0-1-6-vs-2	0.829 ± 0.185	0.828 ± 0.185	0.829 ± 0.185	0.829 ± 0.185	0.706 ± 0.315	<b>0.872 ± 0.170</b>	0.829 ± 0.185	0.829 ± 0.185	0.704 ± 0.209	0.854 ± 0.204	0.701 ± 0.213
glass2	0.431 ± 0.261	0.399 ± 0.218	0.402 ± 0.248	0.495 ± 0.204	0.430 ± 0.259	0.472 ± 0.209	0.405 ± 0.235	0.453 ± 0.267	0.422 ± 0.228	0.451 ± 0.106	<b>0.526 ± 0.148</b>
glass3	0.841 ± 0.102	0.823 ± 0.064	0.841 ± 0.103	0.831 ± 0.101	<b>0.847 ± 0.097</b>	0.789 ± 0.113	0.840 ± 0.104	0.841 ± 0.102	0.761 ± 0.154	0.740 ± 0.159	0.732 ± 0.148
glass5	0.813 ± 0.206	0.812 ± 0.205	0.813 ± 0.206	0.813 ± 0.206	0.826 ± 0.212	<b>0.924 ± 0.129</b>	0.813 ± 0.206	0.813 ± 0.206	0.796 ± 0.201	0.874 ± 0.165	0.742 ± 0.204
page-blocks1-3-vs-4	0.967 ± 0.065	0.945 ± 0.069	0.962 ± 0.077	0.961 ± 0.076	0.969 ± 0.072	0.960 ± 0.056	<b>0.993 ± 0.054</b>	0.967 ± 0.065	0.895 ± 0.070	0.874 ± 0.113	0.917 ± 0.100
yeast-0-5-6-7-9-vs-4	0.658 ± 0.088	0.631 ± 0.068	0.683 ± 0.066	0.654 ± 0.085	0.631 ± 0.063	<b>0.694 ± 0.070</b>	0.649 ± 0.054	0.671 ± 0.056	0.603 ± 0.074	0.091 ± 0.057	0.627 ± 0.088
yeast-1-2-8-9-vs-7	0.475 ± 0.059	0.424 ± 0.108	0.485 ± 0.061	0.453 ± 0.100	0.477 ± 0.105	<b>0.598 ± 0.094</b>	0.475 ± 0.048	0.503 ± 0.081	0.394 ± 0.111	0.143 ± 0.028	0.383 ± 0.160
yeast-1-4-5-8-vs-7	0.357 ± 0.150	0.397 ± 0.066	0.350 ± 0.169	0.336 ± 0.140	0.326 ± 0.185	0.388 ± 0.102	<b>0.420 ± 0.060</b>	0.344 ± 0.142	0.196 ± 0.172	0.099 ± 0.027	0.365 ± 0.195
yeast-1-vs-7	0.531 ± 0.092	0.536 ± 0.090	0.515 ± 0.103	0.568 ± 0.087	0.500 ± 0.094	<b>0.631 ± 0.056</b>	0.544 ± 0.077	0.526 ± 0.084	0.439 ± 0.103	0.099 ± 0.170	0.478 ± 0.187
yeast-2-vs-4	0.837 ± 0.053	0.828 ± 0.065	0.858 ± 0.049	0.851 ± 0.079	0.845 ± 0.060	0.857 ± 0.046	<b>0.859 ± 0.048</b>	0.831 ± 0.042	0.800 ± 0.060	0.256 ± 0.341	0.792 ± 0.043
yeast-2-vs-8	0.689 ± 0.129	0.726 ± 0.063	0.737 ± 0.149	<b>0.750 ± 0.113</b>	0.723 ± 0.092	0.727 ± 0.063	0.712 ± 0.090	0.704 ± 0.128	0.715 ± 0.068	0.187 ± 0.191	0.702 ± 0.069
yeast4	0.612 ± 0.076	0.541 ± 0.057	0.631 ± 0.094	0.634 ± 0.076	0.538 ± 0.073	<b>0.684 ± 0.077</b>	0.597 ± 0.139	0.614 ± 0.079	0.605 ± 0.088	0.113 ± 0.022	0.472 ± 0.110
yeast5	0.848 ± 0.089	0.829 ± 0.086	0.830 ± 0.077	0.845 ± 0.081	0.841 ± 0.076	<b>0.873 ± 0.055</b>	0.858 ± 0.066	0.850 ± 0.091	0.828 ± 0.058	0.142 ± 0.009	0.717 ± 0.209
yeast6	0.683 ± 0.098	0.630 ± 0.070	0.675 ± 0.103	0.707 ± 0.090	0.702 ± 0.068	<b>0.748 ± 0.063</b>	0.701 ± 0.087	0.684 ± 0.095	0.603 ± 0.088	0.188 ± 0.138	0.615 ± 0.085
cleveland0-vs-4	<b>0.800 ± 0.067</b>	0.648 ± 0.257	0.753 ± 0.151	0.753 ± 0.111	0.676 ± 0.253	0.717 ± 0.090	0.782 ± 0.079	<b>0.800 ± 0.067</b>	0.725 ± 0.108	0.701 ± 0.137	0.634 ± 0.098
ecoli-0-1-4-7-vs-2-3-5-6	0.772 ± 0.097	0.776 ± 0.059	0.810 ± 0.047	0.771 ± 0.088	0.751 ± 0.082	<b>0.818 ± 0.053</b>	0.815 ± 0.063	0.787 ± 0.100	0.652 ± 0.161	0.244 ± 0.269	0.708 ± 0.117
ecoli-0-1-vs-2-3-5	0.779 ± 0.077	0.773 ± 0.149	0.759 ± 0.078	0.719 ± 0.058	0.768 ± 0.055	<b>0.831 ± 0.076</b>	0.750 ± 0.064	0.781 ± 0.077	0.709 ± 0.154	0.430 ± 0.360	0.728 ± 0.106
ecoli-0-2-6-7-vs-3-5	0.782 ± 0.058	0.761 ± 0.080	0.795 ± 0.067	0.807 ± 0.090	0.817 ± 0.064	<b>0.820 ± 0.070</b>	0.758 ± 0.079	0.785 ± 0.060	0.744 ± 0.074	0.292 ± 0.293	0.786 ± 0.075
ecoli-0-6-7-vs-3-5	0.777 ± 0.084	0.772 ± 0.059	0.795 ± 0.067	0.800 ± 0.075	0.819 ± 0.081	<b>0.826 ± 0.068</b>	0.774 ± 0.068	0.779 ± 0.084	0.743 ± 0.081	0.366 ± 0.320	0.729 ± 0.154
ecoli-0-6-7-vs-2	0.828 ± 0.077	0.825 ± 0.087	0.816 ± 0.076	0.827 ± 0.080	0.823 ± 0.074	<b>0.835 ± 0.050</b>	0.812 ± 0.067	0.827 ± 0.079	0.833 ± 0.106	0.363 ± 0.250	0.813 ± 0.124
glass-0-1-4-6-vs-2	0.487 ± 0.109	0.389 ± 0.220	0.512 ± 0.136	0.481 ± 0.121	0.520 ± 0.131	<b>0.597 ± 0.106</b>	0.424 ± 0.113	0.428 ± 0.176	0.362 ± 0.211	0.432 ± 0.067	0.453 ± 0.121
glass-0-1-5-vs-2	0.649 ± 0.092	0.508 ± 0.112	0.628 ± 0.114	<b>0.679 ± 0.142</b>	0.560 ± 0.113	0.534 ± 0.196	0.593 ± 0.112	0.635 ± 0.083	0.486 ± 0.172	0.366 ± 0.165	0.468 ± 0.142
yeast-0-2-5-6-vs-3-7-8-9	0.684 ± 0.050	0.673 ± 0.070	<b>0.712 ± 0.047</b>	0.685 ± 0.037	0.686 ± 0.045	0.703 ± 0.062	0.680 ± 0.048	0.668 ± 0.049	0.564 ± 0.122	0.493 ± 0.054	0.566 ± 0.054
yeast-0-5-5-9-vs-7-8	0.531 ± 0.071	0.568 ± 0.068	0.567 ± 0.060	0.570 ± 0.070	0.551 ± 0.068	<b>0.587 ± 0.066</b>	0.561 ± 0.045	0.584 ± 0.050	0.396 ± 0.169	0.153 ± 0.120	0.470 ± 0.107
abalone-17-vs-7-8-10	0.559 ± 0.073	0.546 ± 0.062	0.557 ± 0.075	0.586 ± 0.075	0.552 ± 0.077	<b>0.605 ± 0.036</b>	0.562 ± 0.067	0.557 ± 0.066	0.519 ± 0.116	0.417 ± 0.064	0.507 ± 0.070
abalone-19-vs-10-11-12-13	0.382 ± 0.149	0.203 ± 0.139	0.379 ± 0.154	0.382 ± 0.097	0.390 ± 0.185	<b>0.468 ± 0.114</b>	0.393 ± 0.092	0.411 ± 0.076	0.200 ± 0.180	0.316 ± 0.183	0.312 ± 0.223
abalone-20-vs-8-9-10	0.634 ± 0.081	0.371 ± 0.210	0.593 ± 0.123	0.611 ± 0.088	0.504 ± 0.132	<b>0.771 ± 0.078</b>	0.609 ± 0.098	0.634 ± 0.081	0.476 ± 0.171	0.854 ± 0.102	0.855 ± 0.116
abalone-21-vs-2	0.633 ± 0.253	0.534 ± 0.125	0.604 ± 0.221	0.585 ± 0.241	0.690 ± 0.098	<b>0.768 ± 0.087</b>	0.586 ± 0.234	0.642 ± 0.259	0.626 ± 0.200	0.473 ± 0.204	0.517 ± 0.203
flame-F	0.367 ± 0.098	0.422 ± 0.066	0.394 ± 0.110	0.419 ± 0.093	0.447 ± 0.050	0.425 ± 0.082	0.411 ± 0.105	0.421 ± 0.080	0.561 ± 0.122	0.413 ± 0.119	<b>0.589 ± 0.146</b>
kddcup-bufferoverflow-vs-back	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>
kddcup-rootkit-innp-vs-back	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>
kr-vs-karozo-vs-ahgnt	0.959 ± 0.053	0.963 ± 0.055	0.963 ± 0.055	0.963 ± 0.055	<b>0.967 ± 0.044</b>	0.962 ± 0.081	0.951 ± 0.063	0.959 ± 0.053	0.731 ± 0.119	0.697 ± 0.043	0.849 ± 0.123
poker-8-vs-9	0.386 ± 0.143	0.300 ± 0.205	0.386 ± 0.080	0.404 ± 0.078	0.266 ± 0.195	<b>0.430 ± 0.145</b>	0.323 ± 0.073	0.386 ± 0.143	0.165 ± 0.210	0.330 ± 0.202	0.249 ± 0.173
poker-8-vs-9	0.595 ± 0.142	0.787 ± 0.178	0.573 ± 0.155	0.529 ± 0.151	0.687 ± 0.188	0.465 ± 0.260	0.524 ± 0.228	0.595 ± 0.142	0.999 ± 0.001	0.999 ± 0.001	<b>0.999 ± 0.001</b>
poker-8-vs-6	0.569 ± 0.225	0.537 ± 0.295	0.615 ± 0.179	0.590 ± 0.164	0.581 ± 0.222	0.524 ± 0.289	0.559 ± 0.221	0.569 ± 0.225	<b>0.924 ± 0.004</b>	0.924 ± 0.003	0.786 ± 0.227
poker-9-vs-7	0.267 ± 0.274	0.267 ± 0.274	0.267 ± 0.274	0.337 ± 0.285	0.373 ± 0.324	0.267 ± 0.273	0.267 ± 0.273	<b>0.467 ± 0.418</b>	0.449 ± 0.338	0.386 ± 0.347	0.347 ± 0.347
winequality-red-3-vs-2	0.132 ± 0.201	0.151 ± 0.235	0.088 ± 0.176	0.132 ± 0.202	0.120 ± 0.250	<b>0.325 ± 0.219</b>	0.150 ± 0.234	0.132 ± 0.201	0.133 ± 0.203	0.218 ± 0.218	0.282 ± 0.236
winequality-red-4	0.391 ± 0.120	0.325 ± 0.083	<b>0.458 ± 0.069</b>	0.446 ± 0.078	0.409 ± 0.090	0.446 ± 0.075	0.401 ± 0.044	0.390 ± 0.123	0.316 ± 0.091	0.393 ± 0.111	0.365 ± 0.096
winequality-red-8-vs-6-7	0.314 ± 0.168	0.339 ± 0.185	0.327 ± 0.174	0.352 ± 0.188	0.319 ± 0.216	<b>0.395 ± 0.095</b>	0.312 ± 0.174	0.314 ± 0.174	0.283 ± 0.193	0.201 ± 0.213	0.286 ± 0.156
winequality-red-8-vs-6	0.498 ± 0.107	0.479 ± 0.123	0.491 ± 0.099	0.463 ± 0.187	0.409 ± 0.156	0.514 ± 0.115	<b>0.538 ± 0.107</b>	0.498 ± 0.107	0.427 ± 0.092	0.327 ± 0.229	0.360 ± 0.202
winequality-white-3-9-vs-2	0.361 ± 0.207	0.293 ± 0.173	0.285 ± 0.201	0.319 ± 0.189	0.225 ± 0.208	<b>0.507 ± 0.102</b>	0.312 ± 0.129	0.361 ± 0.207	0.290 ± 0.158	0.168 ± 0.137	0.235 ± 0.122
winequality-white-3-vs-7	0.296 ± 0.165	0.317 ± 0.190	0.372 ± 0.208	0.383 ± 0.159	0.424 ± 0.153	<b>0.690 ± 0.122</b>	0.221 ± 0.193	0.296 ± 0.165	0.319 ± 0.121	0.347 ± 0.249	0.351 ± 0.206
winequality-white-9-vs-4	0.588 ± 0.329	0.530 ± 0.275	0.587 ± 0.328	0.588 ± 0.327	<b>0.588 ± 0.329</b>	0.558 ± 0.302	0.587 ± 0.328	0.588 ± 0.329	0.263 ± 0.325	0.263 ± 0.325	0.263 ± 0.325
zoo-3	0.451 ± 0.391	0.394 ± 0.329	0.496 ± 0.344	0.480 ± 0.336	0.424 ± 0.362	<b>0.656 ± 0.267</b>	0.467 ± 0.313	0.451 ± 0.391	0.321 ± 0.266	0.321 ± 0.266	0.321 ± 0.266
ecoli1	0.835 ± 0.063	0.811 ± 0.044	0.821 ± 0.056	0.830 ± 0.045	0.832 ± 0.045	0.839 ± 0.057	0.814 ± 0.054	<b>0.857 ± 0.044</b>	0.737 ± 0.077	0.204 ± 0.285	0.789 ± 0.057
ecoli2	0.850 ± 0.032	0.811 ± 0.040	0.844 ± 0.036	0.841 ± 0.042	0.849 ± 0.032	<b>0.863 ± 0.038</b>	0.846 ± 0.046	0.850 ± 0.032	0.756 ± 0.103	0.275 ± 0.300	0.807 ± 0.070
ecoli3	0.719 ± 0.063	0.719 ± 0.083	0.748 ± 0.084	0.754 ± 0.061	0.746 ± 0.065	<b>0.828 ± 0.054</b>	0.758 ± 0.063	0.732 ± 0.067	0.732 ± 0.062	0.262 ± 0.268	0.704 ± 0.194
glass0	0.763 ± 0.035	0.766 ± 0.065	0.765 ± 0.043	0.784 ± 0.035	0.777 ± 0.042	<b>0.800 ± 0.041</b>	0.791 ± 0.040	0.772 ± 0.025	0.740 ± 0.058	0.651 ± 0.093	0.726 ± 0.074
glass1	0.716 ± 0.029	<b>0.727 ± 0.034</b>	0.723 ± 0.058	0.723 ± 0.060	0.708 ± 0.049	0.714 ± 0.047	0.723 ± 0.062	0.712 ± 0.036	0.657 ± 0.110	0.488 ± 0.104	0.652 ± 0.050
haberman	0.564 ± 0.045	0.542 ± 0.034	0.546 ± 0.061	0.531 ± 0.060	0.542 ± 0.069	0.539 ± 0.043	0.533 ± 0.074	<b>0.573 ± 0.056</b>	0.531 ± 0.047	0.465 ± 0.089	0.512 ± 0.071
page-blocks0	0.915 ± 0.012	0.895 ± 0.011	0.913 ± 0.011	0.912 ± 0.008	0.905 ± 0.010	0.896 ± 0.010	<b>0.918 ± 0.012</b>	0.916 ± 0.008	0.904 ± 0.014	0.891 ± 0.016	0.886 ± 0.021
ptms	0.659 ± 0.021	0.666 ± 0.026	0.653 ± 0.022	0.658 ± 0.016	0.657 ± 0.025	<b>0.674 ± 0.027</b>	0.651 ± 0.023	0.664 ± 0.026	0.651 ± 0.031	0.581 ± 0.055	0.658 ± 0.028
vehicle1	0.649 ± 0.031	0.651 ± 0.027	0.653 ± 0.042	0.654 ± 0.031	0.647 ± 0.035	<b>0.675 ± 0.025</b>	0.660 ± 0.029	0.661 ± 0.021	0.645 ± 0.023	0.645 ± 0.025	0.649 ± 0.042
vehicle2	0.652 ± 0.027	<b>0.677 ± 0.026</b>	0.636 ± 0.027	0.665 ± 0.033	0.656 ± 0.022	0.675 ± 0.015	0.659 ± 0.027	0.653 ± 0.015	0.645 ±		

Table 5. SVM – G-mean

Dataset name	SMOTE	polynom-fit-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TonekLinks	JFOTS_pr	JFOTS_rc	JFOTS_prom
abalone19	0.500 ± 0.124	0.397 ± 0.159	0.501 ± 0.119	0.509 ± 0.129	0.511 ± 0.111	<b>0.618 ± 0.081</b>	0.500 ± 0.124	0.500 ± 0.124	0.569 ± 0.152	0.548 ± 0.125	0.591 ± 0.039
abalone18	0.721 ± 0.064	0.640 ± 0.055	0.731 ± 0.043	0.736 ± 0.051	0.719 ± 0.066	<b>0.769 ± 0.051</b>	0.723 ± 0.046	0.721 ± 0.064	0.602 ± 0.109	0.638 ± 0.113	0.604 ± 0.128
ecoli-0-1-3-7-vs-2-6	0.826 ± 0.097	0.828 ± 0.099	0.821 ± 0.095	0.824 ± 0.097	0.827 ± 0.100	0.813 ± 0.098	0.826 ± 0.097	0.826 ± 0.097	0.821 ± 0.140	0.818 ± 0.140	<b>0.845 ± 0.113</b>
glass-0-1-6-vs-2	0.722 ± 0.120	0.660 ± 0.109	0.732 ± 0.102	0.730 ± 0.089	0.652 ± 0.111	0.551 ± 0.150	<b>0.732 ± 0.084</b>	0.721 ± 0.121	0.712 ± 0.100	0.609 ± 0.144	0.673 ± 0.079
glass-0-1-6-vs-2	0.791 ± 0.132	0.747 ± 0.164	0.791 ± 0.132	0.791 ± 0.132	0.747 ± 0.164	0.812 ± 0.130	0.791 ± 0.132	0.791 ± 0.132	0.713 ± 0.256	<b>0.841 ± 0.201</b>	0.770 ± 0.191
glass2	0.546 ± 0.287	0.528 ± 0.283	0.554 ± 0.287	0.538 ± 0.284	0.555 ± 0.287	<b>0.593 ± 0.302</b>	0.552 ± 0.291	0.546 ± 0.286	0.550 ± 0.235	0.552 ± 0.163	0.588 ± 0.219
glass3	0.827 ± 0.153	0.866 ± 0.136	0.854 ± 0.158	0.859 ± 0.131	0.854 ± 0.136	0.862 ± 0.100	<b>0.880 ± 0.113</b>	0.799 ± 0.090	0.772 ± 0.158	0.783 ± 0.112	
glass5	0.786 ± 0.143	0.774 ± 0.139	0.800 ± 0.134	0.800 ± 0.134	0.785 ± 0.143	0.826 ± 0.200	0.786 ± 0.143	0.786 ± 0.143	0.751 ± 0.133	<b>0.848 ± 0.154</b>	0.823 ± 0.153
page-blocks-1-3-vs-4	0.891 ± 0.135	0.759 ± 0.097	<b>0.896 ± 0.113</b>	0.895 ± 0.133	0.889 ± 0.144	0.777 ± 0.061	0.872 ± 0.141	0.891 ± 0.135	0.799 ± 0.091	0.853 ± 0.081	0.804 ± 0.168
yeast-0-5-6-7-9-vs-4	0.732 ± 0.057	0.716 ± 0.046	0.749 ± 0.047	0.734 ± 0.060	0.730 ± 0.065	<b>0.753 ± 0.037</b>	0.733 ± 0.048	0.729 ± 0.058	0.679 ± 0.098	0.691 ± 0.057	0.678 ± 0.087
yeast-1-2-8-vs-7	0.557 ± 0.067	0.510 ± 0.119	0.563 ± 0.075	0.553 ± 0.075	0.567 ± 0.071	<b>0.624 ± 0.106</b>	0.553 ± 0.090	0.564 ± 0.056	0.452 ± 0.120	0.143 ± 0.028	0.510 ± 0.082
yeast-1-4-5-8-vs-7	0.510 ± 0.079	0.480 ± 0.091	0.495 ± 0.076	0.498 ± 0.064	0.507 ± 0.087	<b>0.540 ± 0.073</b>	0.487 ± 0.065	0.510 ± 0.079	0.428 ± 0.156	0.099 ± 0.027	0.533 ± 0.085
yeast-1-vs-7	0.672 ± 0.048	0.657 ± 0.060	0.675 ± 0.045	<b>0.675 ± 0.050</b>	0.627 ± 0.090	0.661 ± 0.077	0.664 ± 0.048	0.671 ± 0.049	0.504 ± 0.109	0.099 ± 0.168	0.529 ± 0.175
yeast-2-vs-4	0.863 ± 0.044	0.855 ± 0.046	0.868 ± 0.044	<b>0.869 ± 0.051</b>	0.864 ± 0.052	0.865 ± 0.037	0.862 ± 0.053	0.863 ± 0.044	0.837 ± 0.037	0.282 ± 0.380	0.846 ± 0.060
yeast-2-vs-8	0.705 ± 0.063	0.737 ± 0.069	0.718 ± 0.058	0.727 ± 0.059	0.704 ± 0.062	<b>0.767 ± 0.086</b>	0.705 ± 0.101	0.705 ± 0.063	0.718 ± 0.109	0.184 ± 0.184	0.650 ± 0.111
yeast4	0.749 ± 0.040	0.718 ± 0.045	0.754 ± 0.049	0.753 ± 0.038	0.742 ± 0.042	<b>0.784 ± 0.039</b>	0.749 ± 0.030	0.749 ± 0.040	0.627 ± 0.044	0.113 ± 0.022	0.709 ± 0.135
yeast5	0.925 ± 0.030	0.922 ± 0.031	0.926 ± 0.030	0.926 ± 0.030	0.928 ± 0.029	<b>0.940 ± 0.025</b>	0.926 ± 0.030	0.925 ± 0.030	0.893 ± 0.073	0.142 ± 0.009	0.818 ± 0.237
yeast6	0.832 ± 0.060	0.828 ± 0.057	0.838 ± 0.065	0.830 ± 0.060	0.833 ± 0.060	<b>0.860 ± 0.035</b>	0.831 ± 0.063	0.832 ± 0.060	0.717 ± 0.079	0.186 ± 0.134	0.802 ± 0.050
cleveand-0-vs-4	0.632 ± 0.136	0.590 ± 0.134	0.662 ± 0.149	0.674 ± 0.147	0.629 ± 0.131	<b>0.833 ± 0.062</b>	0.652 ± 0.136	0.652 ± 0.136	0.678 ± 0.066	0.594 ± 0.159	0.590 ± 0.228
ecoli-0-1-4-7-vs-2-3-5-6	0.865 ± 0.036	0.840 ± 0.023	0.860 ± 0.034	0.859 ± 0.022	0.863 ± 0.038	<b>0.881 ± 0.035</b>	0.865 ± 0.041	0.865 ± 0.036	0.697 ± 0.103	0.358 ± 0.360	0.825 ± 0.085
ecoli-1-vs-2-3-5	0.844 ± 0.048	0.855 ± 0.051	0.854 ± 0.051	0.852 ± 0.050	0.846 ± 0.048	<b>0.881 ± 0.055</b>	0.849 ± 0.051	0.843 ± 0.048	0.754 ± 0.157	0.503 ± 0.416	0.809 ± 0.059
ecoli-0-2-6-7-vs-3-5	0.820 ± 0.064	0.826 ± 0.072	0.825 ± 0.066	0.830 ± 0.065	0.841 ± 0.073	<b>0.865 ± 0.058</b>	0.821 ± 0.070	0.820 ± 0.064	0.810 ± 0.064	0.525 ± 0.348	0.843 ± 0.060
ecoli-0-6-7-vs-3-5	0.834 ± 0.065	0.838 ± 0.067	0.830 ± 0.065	0.845 ± 0.070	0.844 ± 0.072	<b>0.862 ± 0.068</b>	0.833 ± 0.071	0.834 ± 0.065	0.832 ± 0.060	0.552 ± 0.332	0.843 ± 0.059
ecoli-0-6-7-vs-2	0.832 ± 0.049	0.854 ± 0.049	0.854 ± 0.050	0.850 ± 0.049	0.850 ± 0.048	<b>0.883 ± 0.050</b>	0.850 ± 0.049	0.853 ± 0.048	0.851 ± 0.051	0.470 ± 0.323	0.872 ± 0.103
glass-0-1-4-6-vs-2	0.678 ± 0.149	0.582 ± 0.248	<b>0.680 ± 0.158</b>	0.657 ± 0.186	0.588 ± 0.240	0.570 ± 0.132	0.678 ± 0.179	0.677 ± 0.149	0.568 ± 0.127	0.590 ± 0.141	0.577 ± 0.173
glass-0-1-5-vs-2	0.675 ± 0.079	0.609 ± 0.103	0.682 ± 0.078	<b>0.690 ± 0.089</b>	0.627 ± 0.098	0.494 ± 0.090	0.660 ± 0.088	0.675 ± 0.079	0.642 ± 0.088	0.469 ± 0.296	0.615 ± 0.128
yeast-0-2-5-6-vs-3-7-8-9	0.766 ± 0.034	0.749 ± 0.057	0.764 ± 0.036	0.775 ± 0.026	0.756 ± 0.043	<b>0.779 ± 0.036</b>	0.767 ± 0.035	0.768 ± 0.033	0.714 ± 0.063	0.494 ± 0.145	0.749 ± 0.060
yeast-0-5-5-9-vs-7-8	<b>0.680 ± 0.044</b>	0.548 ± 0.060	0.672 ± 0.045	0.671 ± 0.057	0.672 ± 0.051	0.610 ± 0.087	0.670 ± 0.042	0.679 ± 0.045	0.604 ± 0.093	0.160 ± 0.139	0.565 ± 0.089
abalone-17-vs-1-8-9-10	0.808 ± 0.023	0.709 ± 0.053	0.802 ± 0.027	0.803 ± 0.038	0.797 ± 0.032	<b>0.816 ± 0.028</b>	0.810 ± 0.027	0.806 ± 0.022	0.616 ± 0.119	0.703 ± 0.104	0.734 ± 0.131
abalone-19-vs-10-11-12-13	0.582 ± 0.101	0.445 ± 0.129	0.588 ± 0.098	0.589 ± 0.091	0.571 ± 0.092	<b>0.617 ± 0.114</b>	0.574 ± 0.106	0.582 ± 0.101	0.556 ± 0.162	0.550 ± 0.116	0.529 ± 0.136
abalone-20-vs-8-9-10	0.798 ± 0.059	0.747 ± 0.055	0.794 ± 0.050	0.784 ± 0.058	0.776 ± 0.063	<b>0.880 ± 0.055</b>	0.778 ± 0.069	0.789 ± 0.059	0.687 ± 0.164	0.721 ± 0.129	0.666 ± 0.163
abalone-21-vs-2	0.757 ± 0.171	0.741 ± 0.173	0.756 ± 0.170	0.765 ± 0.172	0.756 ± 0.177	<b>0.824 ± 0.085</b>	0.757 ± 0.171	0.757 ± 0.171	0.713 ± 0.211	0.690 ± 0.160	0.709 ± 0.210
flav-F	0.723 ± 0.050	0.630 ± 0.068	0.717 ± 0.055	0.728 ± 0.060	0.707 ± 0.054	<b>0.766 ± 0.057</b>	0.722 ± 0.056	0.723 ± 0.050	0.641 ± 0.114	0.413 ± 0.119	0.706 ± 0.096
kddcup-bufferoverflow-vs-back	0.993 ± 0.014	0.997 ± 0.010	0.993 ± 0.014	0.993 ± 0.014	0.993 ± 0.014	<b>1.000 ± 0.000</b>	0.993 ± 0.014	0.993 ± 0.014	0.997 ± 0.010	0.997 ± 0.010	0.997 ± 0.010
kddcup-rootkit-innp-vs-back	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	0.977 ± 0.031	<b>0.977 ± 0.023</b>	0.970 ± 0.045	0.976 ± 0.045	0.976 ± 0.045
kr-vs-karozs-vs-ahgt	0.934 ± 0.055	0.930 ± 0.061	0.934 ± 0.055	0.934 ± 0.055	0.930 ± 0.061	<b>0.948 ± 0.054</b>	0.930 ± 0.061	0.934 ± 0.055	0.835 ± 0.083	0.697 ± 0.043	0.817 ± 0.120
poker-8-9-vs-6	0.512 ± 0.141	0.402 ± 0.185	0.499 ± 0.129	0.493 ± 0.126	0.480 ± 0.152	<b>0.624 ± 0.119</b>	0.499 ± 0.103	0.512 ± 0.141	0.572 ± 0.118	0.527 ± 0.103	0.479 ± 0.119
poker-8-9-vs-6	0.711 ± 0.092	0.666 ± 0.072	0.711 ± 0.092	0.695 ± 0.080	0.674 ± 0.100	0.934 ± 0.059	0.689 ± 0.154	0.711 ± 0.092	0.977 ± 0.044	<b>0.985 ± 0.040</b>	0.977 ± 0.044
poker-8-vs-6	0.746 ± 0.101	0.645 ± 0.091	0.746 ± 0.101	0.755 ± 0.089	0.692 ± 0.118	<b>0.966 ± 0.056</b>	0.755 ± 0.089	0.746 ± 0.101	0.840 ± 0.152	0.839 ± 0.153	0.808 ± 0.174
poker-9-vs-7	0.432 ± 0.296	0.432 ± 0.296	0.432 ± 0.296	0.398 ± 0.340	0.501 ± 0.341	0.391 ± 0.267	0.432 ± 0.296	0.432 ± 0.296	<b>0.613 ± 0.333</b>	0.554 ± 0.307	0.485 ± 0.340
winequality-red-3-vs-2	0.221 ± 0.221	0.222 ± 0.222	0.221 ± 0.221	0.221 ± 0.221	0.221 ± 0.221	<b>0.452 ± 0.171</b>	0.266 ± 0.217	0.221 ± 0.221	0.249 ± 0.266	0.354 ± 0.244	0.296 ± 0.258
winequality-red-4	0.385 ± 0.058	0.528 ± 0.054	0.576 ± 0.057	<b>0.594 ± 0.057</b>	0.559 ± 0.055	0.533 ± 0.057	0.589 ± 0.055	0.584 ± 0.058	0.425 ± 0.101	0.581 ± 0.054	0.569 ± 0.072
winequality-red-8-vs-6-7	0.410 ± 0.167	0.410 ± 0.167	0.409 ± 0.167	0.323 ± 0.226	0.347 ± 0.197	0.377 ± 0.154	0.377 ± 0.154	0.410 ± 0.167	0.366 ± 0.211	<b>0.424 ± 0.183</b>	0.385 ± 0.169
winequality-red-8-vs-6	0.517 ± 0.061	0.517 ± 0.061	0.517 ± 0.061	0.530 ± 0.060	0.547 ± 0.114	0.537 ± 0.056	0.517 ± 0.061	<b>0.575 ± 0.075</b>	0.560 ± 0.104	0.518 ± 0.091	
winequality-white-3-vs-2	0.382 ± 0.169	0.228 ± 0.197	0.368 ± 0.165	0.374 ± 0.154	0.287 ± 0.161	<b>0.624 ± 0.061</b>	0.364 ± 0.157	0.382 ± 0.169	0.331 ± 0.175	0.461 ± 0.114	0.444 ± 0.113
winequality-white-3-vs-7	0.246 ± 0.209	0.194 ± 0.199	0.292 ± 0.217	0.292 ± 0.216	0.297 ± 0.165	<b>0.713 ± 0.105</b>	0.278 ± 0.194	0.246 ± 0.209	0.395 ± 0.175	0.485 ± 0.246	0.428 ± 0.206
winequality-white-9-vs-4	0.777 ± 0.168	0.777 ± 0.168	0.777 ± 0.168	0.441 ± 0.452	<b>0.777 ± 0.168</b>	0.437 ± 0.449	0.777 ± 0.168	0.777 ± 0.168	0.553 ± 0.373	0.553 ± 0.373	0.553 ± 0.373
zoo-3	0.297 ± 0.377	0.297 ± 0.377	0.297 ± 0.377	0.240 ± 0.373	0.297 ± 0.377	0.238 ± 0.372	0.297 ± 0.377	0.297 ± 0.377	<b>0.359 ± 0.313</b>	<b>0.359 ± 0.313</b>	<b>0.359 ± 0.313</b>
ecoli1	0.884 ± 0.027	0.884 ± 0.020	0.885 ± 0.020	0.883 ± 0.020	0.883 ± 0.024	<b>0.888 ± 0.015</b>	0.880 ± 0.022	0.884 ± 0.026	0.874 ± 0.033	0.227 ± 0.328	0.884 ± 0.015
ecoli2	0.940 ± 0.025	0.931 ± 0.017	0.940 ± 0.025	0.939 ± 0.027	0.938 ± 0.026	0.938 ± 0.021	<b>0.942 ± 0.022</b>	0.938 ± 0.026	0.857 ± 0.086	0.309 ± 0.346	0.893 ± 0.033
ecoli3	0.888 ± 0.023	0.892 ± 0.026	0.886 ± 0.023	<b>0.893 ± 0.018</b>	0.893 ± 0.022	0.893 ± 0.019	0.886 ± 0.021	0.892 ± 0.022	0.854 ± 0.064	0.324 ± 0.356	0.751 ± 0.209
glass0	0.772 ± 0.041	<b>0.787 ± 0.020</b>	0.779 ± 0.040	0.768 ± 0.041	0.787 ± 0.038	0.762 ± 0.037	0.786 ± 0.036	0.771 ± 0.037	0.723 ± 0.039	0.674 ± 0.112	0.738 ± 0.064
glass1	<b>0.694 ± 0.041</b>	0.677 ± 0.048	0.680 ± 0.047	0.686 ± 0.036	0.691 ± 0.048	0.662 ± 0.044	0.687 ± 0.043	0.694 ± 0.047	0.673 ± 0.074	0.474 ± 0.093	0.655 ± 0.045
haberman	0.584 ± 0.042	<b>0.606 ± 0.052</b>	0.596 ± 0.038	0.575 ± 0.055	0.589 ± 0.060	0.597 ± 0.046	0.596 ± 0.043	0.583 ± 0.046	0.573 ± 0.062	0.536 ± 0.105	0.605 ± 0.059
page-blocks0	0.931 ± 0.008	0.897 ± 0.009	0.931 ± 0.007	0.922 ± 0.010	0.931 ± 0.008	0.838 ± 0.019	0.930 ± 0.009	<b>0.931 ± 0.008</b>	0.875 ± 0.037	0.888 ± 0.026	0.878 ± 0.031
ptms	0.726 ± 0.030	0.715 ± 0.030	0.728 ± 0.024	0.725 ± 0.022	0.730 ± 0.025	0.728 ± 0.017	<b>0.731 ± 0.028</b>	0.727 ± 0.032	0.692 ± 0.048	0.639 ± 0.039	0.720 ± 0.023
vehicle1	0.786 ± 0.026	0.741 ± 0.027	0.787 ± 0.026	0.787 ± 0.019	0.796 ± 0.015	0.789 ± 0.024	0.789 ± 0.018	0.789 ± 0.024	0.662 ± 0.070	<b>0.798 ± 0.017</b>	0.774 ± 0.042
vehicle5	0.786 ± 0.020	0.728 ± 0.020	0.786 ± 0.016	<b>0.793 ± 0.024</b>	0.788 ± 0.016	0.786 ± 0.021	0.786 ± 0.017	0.787 ± 0.019	0.591 ± 0.047	0.782 ± 0.029	0.755 ± 0.050
yeast1	0.710 ± 0.012	0.678 ±									

Table 6. KNN – Precision

Dataset name	SMOTE	polynom-fit-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TomekLinks	JFOTS <sub>pr</sub>	JFOTS <sub>rc</sub>	JFOTS <sub>prom</sub>
abalone19	0.023 ± 0.017	0.019 ± 0.018	0.023 ± 0.016	0.023 ± 0.017	<b>0.026 ± 0.018</b>	0.020 ± 0.011	0.023 ± 0.015	0.023 ± 0.017	0.025 ± 0.030	0.002 ± 0.005	0.008 ± 0.005
abalone18	0.244 ± 0.036	0.278 ± 0.044	0.230 ± 0.029	0.233 ± 0.033	0.259 ± 0.042	0.275 ± 0.045	0.243 ± 0.034	0.246 ± 0.038	<b>0.597 ± 0.184</b>	0.176 ± 0.130	0.410 ± 0.242
ecoli-0-1-3-7-vs-2-6	0.378 ± 0.110	0.413 ± 0.150	0.381 ± 0.119	0.371 ± 0.113	0.414 ± 0.151	0.354 ± 0.099	0.374 ± 0.111	0.378 ± 0.110	0.315 ± 0.136	0.303 ± 0.082	<b>0.425 ± 0.239</b>
glass-0-1-6-vs-2	0.278 ± 0.099	0.240 ± 0.046	0.271 ± 0.085	0.272 ± 0.084	0.277 ± 0.066	0.211 ± 0.052	<b>0.288 ± 0.094</b>	0.273 ± 0.093	0.239 ± 0.051	0.194 ± 0.128	0.277 ± 0.091
glass-0-1-6-vs-2	0.689 ± 0.156	0.689 ± 0.156	0.686 ± 0.148	0.686 ± 0.191	0.664 ± 0.174	0.505 ± 0.214	0.679 ± 0.152	0.689 ± 0.156	0.575 ± 0.197	0.438 ± 0.241	0.538 ± 0.289
glass2	0.182 ± 0.110	0.180 ± 0.114	0.176 ± 0.109	0.180 ± 0.102	0.181 ± 0.113	0.170 ± 0.080	0.170 ± 0.104	0.176 ± 0.105	<b>0.205 ± 0.103</b>	0.154 ± 0.136	0.179 ± 0.075
glass1	0.558 ± 0.133	<b>0.582 ± 0.119</b>	0.532 ± 0.120	0.545 ± 0.141	0.550 ± 0.141	0.508 ± 0.135	0.556 ± 0.128	0.558 ± 0.133	0.560 ± 0.133	0.366 ± 0.203	0.339 ± 0.190
glass5	0.637 ± 0.131	<b>0.670 ± 0.149</b>	0.657 ± 0.165	0.637 ± 0.131	0.669 ± 0.157	0.408 ± 0.138	0.637 ± 0.131	0.637 ± 0.131	0.582 ± 0.190	0.547 ± 0.221	0.505 ± 0.201
page-blocks1-3-vs-4	0.778 ± 0.098	0.748 ± 0.095	0.768 ± 0.123	<b>0.781 ± 0.110</b>	0.774 ± 0.132	0.729 ± 0.119	0.778 ± 0.113	0.778 ± 0.098	0.740 ± 0.166	0.590 ± 0.203	0.757 ± 0.131
yeast-0-5-6-7-9-vs-4	0.303 ± 0.042	0.315 ± 0.037	0.307 ± 0.037	0.319 ± 0.040	0.316 ± 0.049	0.331 ± 0.053	0.308 ± 0.045	<b>0.472 ± 0.122</b>	0.000 ± 0.000	0.323 ± 0.138	0.323 ± 0.138
yeast-1-2-8-9-vs-7	0.096 ± 0.018	0.118 ± 0.023	0.094 ± 0.017	0.093 ± 0.016	0.114 ± 0.036	0.099 ± 0.022	0.094 ± 0.018	0.095 ± 0.017	<b>0.346 ± 0.235</b>	0.000 ± 0.000	0.184 ± 0.210
yeast-1-4-5-8-vs-7	0.091 ± 0.016	0.093 ± 0.032	0.092 ± 0.019	0.086 ± 0.025	0.084 ± 0.028	0.080 ± 0.022	0.089 ± 0.017	0.091 ± 0.016	<b>0.096 ± 0.007</b>	0.000 ± 0.000	0.037 ± 0.046
yeast-1-vs-7	0.202 ± 0.027	0.216 ± 0.037	0.201 ± 0.020	0.201 ± 0.027	0.213 ± 0.042	0.192 ± 0.024	0.188 ± 0.035	0.200 ± 0.027	<b>0.363 ± 0.136</b>	0.000 ± 0.000	0.255 ± 0.303
yeast-2-vs-4	0.668 ± 0.074	0.609 ± 0.085	0.645 ± 0.072	0.645 ± 0.053	0.634 ± 0.070	0.616 ± 0.076	0.647 ± 0.078	0.672 ± 0.073	<b>0.848 ± 0.653</b>	0.226 ± 0.347	0.724 ± 0.088
yeast-2-vs-8	0.271 ± 0.084	0.500 ± 0.084	0.261 ± 0.088	0.260 ± 0.075	0.347 ± 0.101	0.309 ± 0.042	0.256 ± 0.075	0.270 ± 0.085	<b>0.661 ± 0.293</b>	0.100 ± 0.300	0.503 ± 0.168
yeast4	0.200 ± 0.029	0.215 ± 0.030	0.202 ± 0.033	0.207 ± 0.035	0.217 ± 0.034	0.172 ± 0.020	0.211 ± 0.033	0.200 ± 0.029	<b>0.430 ± 0.080</b>	0.000 ± 0.000	0.295 ± 0.141
yeast5	0.504 ± 0.073	0.529 ± 0.071	0.499 ± 0.070	0.496 ± 0.060	0.522 ± 0.068	0.382 ± 0.060	0.493 ± 0.062	0.503 ± 0.074	<b>0.641 ± 0.145</b>	0.000 ± 0.000	0.505 ± 0.200
yeast6	0.225 ± 0.035	0.277 ± 0.041	0.228 ± 0.039	0.221 ± 0.038	0.264 ± 0.038	0.150 ± 0.027	0.224 ± 0.040	0.226 ± 0.035	<b>0.475 ± 0.126</b>	0.000 ± 0.000	0.392 ± 0.132
development-0-vs-4	0.596 ± 0.150	0.584 ± 0.121	0.589 ± 0.154	0.574 ± 0.121	<b>0.653 ± 0.105</b>	0.634 ± 0.123	0.600 ± 0.131	0.596 ± 0.150	0.491 ± 0.152	0.386 ± 0.239	0.355 ± 0.228
ecoli-0-1-4-7-vs-2-3-5-6	0.554 ± 0.092	0.619 ± 0.087	0.551 ± 0.075	0.572 ± 0.082	0.559 ± 0.090	0.532 ± 0.085	0.545 ± 0.103	0.559 ± 0.092	<b>0.751 ± 0.091</b>	0.142 ± 0.182	0.564 ± 0.210
ecoli-0-1-vs-2-3-5	0.729 ± 0.155	0.756 ± 0.148	0.701 ± 0.141	0.724 ± 0.150	0.773 ± 0.164	0.669 ± 0.162	0.691 ± 0.134	0.729 ± 0.155	<b>0.801 ± 0.152</b>	0.367 ± 0.340	0.642 ± 0.218
ecoli-0-2-6-7-vs-3-5	0.579 ± 0.118	0.612 ± 0.110	0.576 ± 0.136	0.630 ± 0.140	0.586 ± 0.125	0.527 ± 0.104	0.577 ± 0.126	0.575 ± 0.117	<b>0.828 ± 0.124</b>	0.172 ± 0.163	0.687 ± 0.187
ecoli-0-6-7-vs-3-5	0.613 ± 0.140	0.645 ± 0.128	0.607 ± 0.156	0.685 ± 0.164	0.614 ± 0.117	0.591 ± 0.126	0.609 ± 0.132	0.619 ± 0.133	<b>0.806 ± 0.092</b>	0.287 ± 0.337	0.678 ± 0.260
ecoli-0-6-7-vs-2	0.642 ± 0.203	0.670 ± 0.189	0.642 ± 0.199	0.655 ± 0.204	0.665 ± 0.188	0.575 ± 0.140	0.645 ± 0.210	0.645 ± 0.201	<b>0.816 ± 0.149</b>	0.216 ± 0.312	0.773 ± 0.162
glass-0-1-4-6-vs-2	0.237 ± 0.080	<b>0.241 ± 0.085</b>	0.231 ± 0.091	0.230 ± 0.085	0.230 ± 0.101	0.203 ± 0.063	0.231 ± 0.091	0.235 ± 0.081	0.117 ± 0.071	0.136 ± 0.130	0.120 ± 0.079
glass-0-1-5-vs-2	0.226 ± 0.048	0.235 ± 0.065	0.227 ± 0.048	0.226 ± 0.059	<b>0.246 ± 0.087</b>	0.204 ± 0.049	0.239 ± 0.056	0.225 ± 0.049	0.235 ± 0.085	0.200 ± 0.148	0.204 ± 0.126
yeast-0-2-5-6-vs-3-7-8-9	0.532 ± 0.027	0.368 ± 0.033	0.330 ± 0.023	0.336 ± 0.033	0.356 ± 0.025	0.379 ± 0.058	0.332 ± 0.033	0.334 ± 0.028	<b>0.534 ± 0.137</b>	0.187 ± 0.205	0.464 ± 0.090
yeast-0-5-5-9-vs-7-8	0.252 ± 0.043	0.281 ± 0.053	0.250 ± 0.042	0.245 ± 0.046	0.283 ± 0.042	<b>0.285 ± 0.060</b>	0.241 ± 0.030	0.252 ± 0.041	0.292 ± 0.191	0.040 ± 0.120	0.188 ± 0.099
abalone-17-vs-7-8-9-10	0.190 ± 0.032	0.281 ± 0.044	0.191 ± 0.030	0.187 ± 0.028	0.231 ± 0.043	0.210 ± 0.032	0.194 ± 0.033	0.190 ± 0.033	<b>0.325 ± 0.063</b>	0.156 ± 0.115	0.147 ± 0.111
abalone-19-vs-10-11-12-13	0.047 ± 0.012	<b>0.056 ± 0.018</b>	0.049 ± 0.012	0.049 ± 0.014	0.048 ± 0.025	0.047 ± 0.017	0.044 ± 0.014	0.047 ± 0.012	0.056 ± 0.036	0.016 ± 0.015	0.035 ± 0.036
abalone-20-vs-8-9-10	0.164 ± 0.028	0.130 ± 0.051	0.169 ± 0.033	0.171 ± 0.031	0.166 ± 0.049	0.118 ± 0.029	0.167 ± 0.034	0.161 ± 0.028	<b>0.284 ± 0.154</b>	0.041 ± 0.052	0.188 ± 0.149
abalone-21-vs-2	0.440 ± 0.119	0.520 ± 0.162	0.418 ± 0.108	0.412 ± 0.104	0.485 ± 0.165	0.393 ± 0.120	0.400 ± 0.098	0.437 ± 0.122	0.421 ± 0.200	0.318 ± 0.268	<b>0.566 ± 0.187</b>
flame-F	0.202 ± 0.038	0.209 ± 0.028	0.198 ± 0.040	0.202 ± 0.041	0.209 ± 0.039	0.195 ± 0.031	0.206 ± 0.046	0.197 ± 0.032	<b>0.369 ± 0.253</b>	0.150 ± 0.320	0.234 ± 0.139
kddcup-bufferoverflow-vs-back	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	0.394 ± 0.019	0.994 ± 0.019	0.994 ± 0.019
kddcup-rookite-innp-vs-back	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>
kevs-vs-keros-vs-night	0.730 ± 0.153	<b>0.765 ± 0.172</b>	0.723 ± 0.157	0.741 ± 0.152	0.758 ± 0.164	0.539 ± 0.083	0.740 ± 0.155	0.730 ± 0.153	0.550 ± 0.324	0.000 ± 0.000	0.506 ± 0.375
poker-8-9-vs-2	0.065 ± 0.026	<b>0.091 ± 0.037</b>	0.066 ± 0.029	0.064 ± 0.029	0.055 ± 0.045	0.053 ± 0.018	0.060 ± 0.027	0.065 ± 0.026	0.052 ± 0.064	0.017 ± 0.035	0.045 ± 0.057
poker-8-9-vs-6	0.428 ± 0.060	0.466 ± 0.080	0.426 ± 0.058	0.435 ± 0.064	0.505 ± 0.050	0.360 ± 0.065	0.434 ± 0.092	0.428 ± 0.060	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>
poker-8-vs-6	0.310 ± 0.074	0.341 ± 0.111	0.308 ± 0.073	0.297 ± 0.072	0.350 ± 0.102	0.267 ± 0.049	0.314 ± 0.085	0.310 ± 0.074	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	0.878 ± 0.300
poker-9-vs-7	0.497 ± 0.228	0.507 ± 0.234	0.495 ± 0.226	0.523 ± 0.267	0.550 ± 0.268	0.652 ± 0.273	0.532 ± 0.241	0.497 ± 0.228	0.597 ± 0.459	<b>0.698 ± 0.389</b>	0.391 ± 0.382
winequality-red-3-vs-2	0.081 ± 0.045	0.095 ± 0.058	0.081 ± 0.045	0.080 ± 0.045	0.091 ± 0.051	<b>0.161 ± 0.098</b>	0.088 ± 0.050	0.081 ± 0.045	0.063 ± 0.074	0.008 ± 0.023	0.059 ± 0.053
winequality-red-4	0.082 ± 0.015	0.080 ± 0.023	0.081 ± 0.018	0.080 ± 0.012	0.096 ± 0.025	0.085 ± 0.023	0.084 ± 0.015	0.082 ± 0.015	<b>0.116 ± 0.063</b>	0.054 ± 0.055	0.082 ± 0.037
winequality-red-5-vs-6-7	0.031 ± 0.024	0.040 ± 0.029	0.033 ± 0.023	0.033 ± 0.024	0.042 ± 0.026	0.040 ± 0.030	0.035 ± 0.020	0.031 ± 0.024	0.041 ± 0.033	0.040 ± 0.049	<b>0.049 ± 0.039</b>
winequality-red-8-vs-6	0.090 ± 0.019	0.087 ± 0.023	0.089 ± 0.019	0.092 ± 0.038	0.094 ± 0.036	0.097 ± 0.037	0.090 ± 0.019	0.099 ± 0.049	0.082 ± 0.054	<b>0.125 ± 0.084</b>	0.081 ± 0.061
winequality-white-3-9-vs-2	0.068 ± 0.019	0.097 ± 0.030	0.066 ± 0.017	0.066 ± 0.017	0.082 ± 0.027	0.136 ± 0.074	0.060 ± 0.016	0.068 ± 0.019	<b>0.158 ± 0.284</b>	0.024 ± 0.019	0.091 ± 0.063
winequality-white-3-vs-7	0.112 ± 0.065	0.100 ± 0.065	0.111 ± 0.066	0.105 ± 0.067	0.207 ± 0.270	<b>0.414 ± 0.245</b>	0.114 ± 0.068	0.112 ± 0.065	0.147 ± 0.101	0.110 ± 0.078	0.105 ± 0.062
winequality-white-9-vs-4	0.514 ± 0.337	<b>0.536 ± 0.319</b>	0.514 ± 0.337	0.421 ± 0.392	0.516 ± 0.335	0.465 ± 0.373	0.514 ± 0.337	0.514 ± 0.337	0.165 ± 0.129	0.165 ± 0.129	0.165 ± 0.129
zoo-0-460	<b>0.460 ± 0.260</b>	<b>0.460 ± 0.260</b>	<b>0.460 ± 0.260</b>	0.367 ± 0.354	<b>0.460 ± 0.260</b>	0.367 ± 0.354	<b>0.460 ± 0.260</b>	<b>0.460 ± 0.260</b>	0.253 ± 0.238	0.253 ± 0.238	0.253 ± 0.238
ecoli1	0.700 ± 0.057	<b>0.713 ± 0.065</b>	0.694 ± 0.047	0.710 ± 0.041	0.700 ± 0.054	0.700 ± 0.056	0.691 ± 0.046	0.697 ± 0.055	0.646 ± 0.041	0.139 ± 0.280	0.693 ± 0.064
ecoli2	0.692 ± 0.080	<b>0.721 ± 0.089</b>	0.687 ± 0.100	0.693 ± 0.088	0.727 ± 0.078	0.669 ± 0.064	0.689 ± 0.090	0.690 ± 0.079	0.637 ± 0.148	0.193 ± 0.309	0.648 ± 0.109
ecoli3	0.475 ± 0.036	0.482 ± 0.036	0.473 ± 0.024	0.478 ± 0.043	0.477 ± 0.041	0.424 ± 0.034	0.476 ± 0.035	0.473 ± 0.037	<b>0.539 ± 0.072</b>	0.113 ± 0.180	0.478 ± 0.181
glass0	0.608 ± 0.053	0.611 ± 0.056	0.599 ± 0.038	0.606 ± 0.043	0.610 ± 0.047	0.608 ± 0.055	0.616 ± 0.050	0.614 ± 0.054	0.611 ± 0.034	0.508 ± 0.204	<b>0.632 ± 0.081</b>
glass1	0.614 ± 0.061	0.620 ± 0.068	0.633 ± 0.070	<b>0.634 ± 0.053</b>	0.626 ± 0.059	0.633 ± 0.042	0.616 ± 0.048	0.616 ± 0.064	0.602 ± 0.070	0.444 ± 0.196	0.564 ± 0.063
haberman	0.366 ± 0.033	0.400 ± 0.035	0.348 ± 0.032	0.355 ± 0.015	0.359 ± 0.040	0.362 ± 0.029	0.348 ± 0.021	0.364 ± 0.035	<b>0.435 ± 0.005</b>	0.308 ± 0.120	0.420 ± 0.102
page-blocks0	0.733 ± 0.025	0.804 ± 0.021	0.732 ± 0.026	0.750 ± 0.029	0.738 ± 0.016	<b>0.855 ± 0.012</b>	0.728 ± 0.025	0.732 ± 0.024	0.824 ± 0.055	0.757 ± 0.034	0.771 ± 0.055
ptms	0.549 ± 0.026	0.586 ± 0.019	0.554 ± 0.013	0.552 ± 0.019	0.549 ± 0.022	0.569 ± 0.027	0.553 ± 0.019	0.556 ± 0.029	<b>0.601 ± 0.031</b>	0.491 ± 0.075	0.577 ± 0.036
vehicle1	0.476 ± 0.020	<b>0.516 ± 0.027</b>	0.476 ± 0.023	0.490 ± 0.021	0.485 ± 0.018	0.496 ± 0.029	0.487 ± 0.022	0.477 ± 0.021	0.505 ± 0.036	0.83 ± 0.029	0.85 ± 0.032
vehicle2	0.470 ± 0.028	0.474 ± 0.037	0.473 ± 0.026	0.471 ± 0.028	0.475 ± 0.024	0.470 ± 0.029	0.467 ± 0.02				

Table 7. CART – Recall

Dataset name	SMOTE	polynom-fit-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TonekLinks	JFOTS_pr	JFOTS_rc	JFOTS_prom
abalone19	0.162 ± 0.089	0.019 ± 0.029	0.131 ± 0.081	0.169 ± 0.089	0.112 ± 0.104	0.131 ± 0.099	0.150 ± 0.102	0.162 ± 0.089	0.025 ± 0.041	<b>0.319 ± 0.111</b>	0.312 ± 0.357
abalone19	0.410 ± 0.123	0.261 ± 0.078	0.429 ± 0.119	0.452 ± 0.088	0.367 ± 0.068	<b>0.486 ± 0.170</b>	0.381 ± 0.077	0.419 ± 0.131	0.362 ± 0.086	0.352 ± 0.248	0.295 ± 0.120
ecoli-0-1-3-7-vs-2-6	0.600 ± 0.232	<b>0.650 ± 0.128</b>	0.600 ± 0.232	0.600 ± 0.232	<b>0.650 ± 0.128</b>	0.575 ± 0.199	0.600 ± 0.232	0.600 ± 0.232	0.417 ± 0.211	0.250 ± 0.183	0.450 ± 0.221
glass0-1-6-vs-2	0.367 ± 0.114	0.244 ± 0.088	0.435 ± 0.125	0.375 ± 0.137	0.318 ± 0.126	0.369 ± 0.187	0.364 ± 0.211	0.365 ± 0.108	0.382 ± 0.206	<b>0.450 ± 0.301</b>	0.308 ± 0.115
glass0-1-6-vs-2	0.735 ± 0.273	0.735 ± 0.273	0.735 ± 0.273	0.735 ± 0.273	0.610 ± 0.369	<b>0.805 ± 0.272</b>	0.735 ± 0.273	0.555 ± 0.306	<b>0.805 ± 0.313</b>	0.500 ± 0.322	
glass2	0.275 ± 0.223	0.233 ± 0.160	0.239 ± 0.199	0.312 ± 0.182	0.274 ± 0.216	0.318 ± 0.230	0.239 ± 0.175	0.300 ± 0.232	0.251 ± 0.158	<b>0.479 ± 0.285</b>	0.331 ± 0.175
glass2	0.740 ± 0.165	0.707 ± 0.109	0.740 ± 0.165	0.724 ± 0.164	<b>0.755 ± 0.151</b>	0.681 ± 0.187	0.740 ± 0.165	0.740 ± 0.165	0.610 ± 0.222	0.600 ± 0.146	0.381 ± 0.219
glass5	0.720 ± 0.316	0.720 ± 0.316	0.720 ± 0.316	0.720 ± 0.316	0.745 ± 0.327	<b>0.890 ± 0.221</b>	0.720 ± 0.316	0.690 ± 0.309	0.815 ± 0.266	0.610 ± 0.314	
page-blocks1-3-vs-4	0.943 ± 0.119	0.907 ± 0.124	0.906 ± 0.137	0.936 ± 0.137	0.860 ± 0.128	0.943 ± 0.105	<b>0.971 ± 0.065</b>	0.943 ± 0.119	0.814 ± 0.129	0.793 ± 0.176	0.857 ± 0.172
yeast-0-5-6-7-9-vs-4	0.493 ± 0.131	0.436 ± 0.101	0.524 ± 0.107	0.482 ± 0.125	0.442 ± 0.085	0.573 ± 0.119	0.470 ± 0.090	0.509 ± 0.088	0.401 ± 0.107	<b>0.980 ± 0.020</b>	0.444 ± 0.124
yeast-1-2-8-vs-7	0.247 ± 0.060	0.200 ± 0.089	0.260 ± 0.063	0.233 ± 0.100	0.253 ± 0.107	0.420 ± 0.133	0.247 ± 0.052	0.280 ± 0.088	0.180 ± 0.099	<b>1.000 ± 0.000</b>	0.207 ± 0.159
yeast-1-4-5-8-vs-7	0.167 ± 0.095	0.173 ± 0.053	0.167 ± 0.124	0.147 ± 0.083	0.153 ± 0.112	0.193 ± 0.101	0.200 ± 0.060	0.153 ± 0.085	0.073 ± 0.076	<b>1.000 ± 0.000</b>	0.253 ± 0.251
yeast-1-vs-7	0.320 ± 0.111	0.320 ± 0.102	0.307 ± 0.120	0.367 ± 0.109	0.287 ± 0.116	0.487 ± 0.099	0.340 ± 0.105	0.313 ± 0.099	0.213 ± 0.093	<b>0.760 ± 0.398</b>	0.440 ± 0.285
yeast-2-vs-4	0.741 ± 0.098	0.718 ± 0.114	0.769 ± 0.093	0.762 ± 0.137	0.754 ± 0.112	<b>0.796 ± 0.091</b>	0.773 ± 0.093	0.729 ± 0.078	0.668 ± 0.103	0.775 ± 0.310	0.651 ± 0.076
yeast-2-vs-8	0.530 ± 0.185	0.550 ± 0.136	0.600 ± 0.228	0.610 ± 0.181	0.550 ± 0.150	0.580 ± 0.108	0.540 ± 0.128	0.550 ± 0.180	0.520 ± 0.098	<b>0.940 ± 0.120</b>	0.510 ± 0.104
yeast4	0.401 ± 0.096	0.306 ± 0.066	0.428 ± 0.123	0.428 ± 0.102	0.307 ± 0.079	0.511 ± 0.110	0.394 ± 0.165	0.405 ± 0.100	0.387 ± 0.100	<b>0.980 ± 0.020</b>	0.243 ± 0.113
yeast5	0.736 ± 0.149	0.705 ± 0.137	0.705 ± 0.129	0.732 ± 0.139	0.723 ± 0.132	0.795 ± 0.098	0.750 ± 0.117	0.741 ± 0.155	0.695 ± 0.100	<b>1.000 ± 0.000</b>	0.664 ± 0.179
yeast6	0.494 ± 0.143	0.413 ± 0.091	0.483 ± 0.140	0.528 ± 0.133	0.510 ± 0.099	0.608 ± 0.106	0.516 ± 0.122	0.495 ± 0.137	0.381 ± 0.115	<b>0.978 ± 0.067</b>	0.394 ± 0.102
cleaveland-0-vs-4	<b>0.681 ± 0.119</b>	0.517 ± 0.264	0.624 ± 0.209	0.610 ± 0.175	0.550 ± 0.257	0.555 ± 0.096	0.652 ± 0.140	<b>0.681 ± 0.119</b>	0.574 ± 0.170	0.629 ± 0.127	0.445 ± 0.161
ecoli-0-1-4-7-vs-2-3-5-6	0.648 ± 0.154	0.634 ± 0.089	0.696 ± 0.090	0.640 ± 0.139	0.601 ± 0.135	<b>0.750 ± 0.092</b>	0.702 ± 0.104	0.675 ± 0.169	0.464 ± 0.219	0.143 ± 0.186	0.540 ± 0.155
ecoli-0-1-vs-2-3-5	0.642 ± 0.129	0.608 ± 0.129	0.550 ± 0.093	0.625 ± 0.093	<b>0.758 ± 0.137</b>	0.617 ± 0.113	0.650 ± 0.128	0.558 ± 0.190	0.333 ± 0.296	0.575 ± 0.169	
ecoli-0-2-6-7-vs-3-5	0.655 ± 0.106	0.609 ± 0.135	0.682 ± 0.117	0.700 ± 0.163	0.709 ± 0.121	<b>0.755 ± 0.122</b>	0.618 ± 0.127	0.655 ± 0.106	0.582 ± 0.116	0.182 ± 0.244	0.655 ± 0.121
ecoli-0-6-7-vs-3-5	0.655 ± 0.140	0.627 ± 0.103	0.682 ± 0.124	0.691 ± 0.130	0.718 ± 0.155	<b>0.764 ± 0.136</b>	0.655 ± 0.121	0.655 ± 0.140	0.582 ± 0.136	0.327 ± 0.315	0.582 ± 0.183
ecoli-0-6-7-vs-2	0.720 ± 0.125	0.710 ± 0.151	0.700 ± 0.118	0.720 ± 0.125	0.700 ± 0.126	<b>0.760 ± 0.102</b>	0.690 ± 0.104	0.720 ± 0.125	0.730 ± 0.168	0.670 ± 0.332	0.700 ± 0.200
glass0-1-4-6-vs-2	0.272 ± 0.108	0.222 ± 0.157	0.310 ± 0.148	0.272 ± 0.131	0.318 ± 0.143	0.447 ± 0.163	0.211 ± 0.112	0.235 ± 0.129	0.192 ± 0.148	<b>0.494 ± 0.347</b>	0.358 ± 0.269
glass0-1-5-vs-2	0.482 ± 0.146	0.303 ± 0.122	0.461 ± 0.180	0.550 ± 0.213	0.364 ± 0.138	0.407 ± 0.188	0.411 ± 0.159	0.457 ± 0.129	0.293 ± 0.123	<b>0.596 ± 0.295</b>	0.325 ± 0.205
yeast-0-2-5-6-vs-3-7-8-9	0.322 ± 0.078	0.492 ± 0.104	0.560 ± 0.076	0.518 ± 0.056	0.513 ± 0.068	0.550 ± 0.102	0.514 ± 0.069	0.499 ± 0.075	0.356 ± 0.126	<b>0.633 ± 0.151</b>	0.342 ± 0.061
yeast-0-5-9-vs-7-8	0.336 ± 0.086	0.356 ± 0.083	0.380 ± 0.095	0.386 ± 0.090	0.552 ± 0.087	0.412 ± 0.088	0.368 ± 0.066	0.400 ± 0.067	0.176 ± 0.118	<b>0.932 ± 0.204</b>	0.320 ± 0.174
abalone-17-vs-5-8-9-10	0.334 ± 0.089	0.310 ± 0.069	0.331 ± 0.090	0.366 ± 0.093	0.321 ± 0.090	<b>0.390 ± 0.046</b>	0.334 ± 0.082	0.331 ± 0.077	0.290 ± 0.110	0.272 ± 0.224	0.334 ± 0.187
abalone-19-vs-10-11-12-13	0.181 ± 0.090	0.062 ± 0.048	0.181 ± 0.110	0.169 ± 0.084	0.131 ± 0.113	0.262 ± 0.111	0.175 ± 0.083	0.188 ± 0.062	0.075 ± 0.083	<b>0.312 ± 0.310</b>	0.188 ± 0.163
abalone-20-vs-8-9-10	0.423 ± 0.105	0.185 ± 0.130	0.377 ± 0.126	0.392 ± 0.100	0.277 ± 0.143	<b>0.638 ± 0.119</b>	0.392 ± 0.123	0.423 ± 0.105	0.392 ± 0.110	0.392 ± 0.258	0.309 ± 0.147
abalone-21-vs-2	0.486 ± 0.257	0.329 ± 0.144	0.429 ± 0.192	0.414 ± 0.234	0.500 ± 0.146	<b>0.629 ± 0.146</b>	0.414 ± 0.225	0.500 ± 0.265	0.443 ± 0.259	0.314 ± 0.237	0.314 ± 0.167
flau-F	0.149 ± 0.073	0.187 ± 0.062	0.173 ± 0.093	0.192 ± 0.081	0.210 ± 0.049	0.195 ± 0.074	0.187 ± 0.100	0.191 ± 0.075	0.386 ± 0.181	<b>0.949 ± 0.052</b>	0.416 ± 0.208
kddcup-bufferoverflow-vs-back	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>
kddcup-rookite-innp-vs-back	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>
kr-vs-karozo-vs-8ight	0.925 ± 0.101	0.932 ± 0.103	0.932 ± 0.103	0.932 ± 0.103	<b>0.939 ± 0.083</b>	0.938 ± 0.141	0.909 ± 0.116	0.925 ± 0.101	0.570 ± 0.186	0.733 ± 0.071	0.777 ± 0.172
poker-8-9-vs-6	0.175 ± 0.078	0.135 ± 0.100	0.160 ± 0.063	0.175 ± 0.067	0.111 ± 0.102	0.215 ± 0.140	0.113 ± 0.056	0.175 ± 0.078	0.072 ± 0.098	<b>0.219 ± 0.097</b>	0.156 ± 0.217
poker-8-9-vs-6	0.383 ± 0.172	0.654 ± 0.277	0.358 ± 0.186	0.308 ± 0.161	0.513 ± 0.278	0.294 ± 0.188	0.333 ± 0.208	0.383 ± 0.172	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>
poker-8-vs-6	0.376 ± 0.197	0.378 ± 0.324	0.414 ± 0.246	0.375 ± 0.189	0.389 ± 0.192	0.363 ± 0.311	0.364 ± 0.193	0.376 ± 0.197	<b>0.863 ± 0.169</b>	<b>0.863 ± 0.169</b>	0.672 ± 0.319
poker-9-vs-7	0.150 ± 0.166	0.125 ± 0.125	0.150 ± 0.166	0.150 ± 0.166	0.200 ± 0.187	0.250 ± 0.250	0.150 ± 0.166	<b>0.400 ± 0.406</b>	0.325 ± 0.317	0.275 ± 0.305	
winequality-red-3-vs-2	0.060 ± 0.092	0.080 ± 0.133	0.040 ± 0.080	0.060 ± 0.092	0.080 ± 0.183	<b>0.160 ± 0.120</b>	0.080 ± 0.133	0.060 ± 0.092	0.060 ± 0.092	0.100 ± 0.100	0.140 ± 0.128
winequality-red-4	0.182 ± 0.101	0.121 ± 0.062	<b>0.234 ± 0.069</b>	0.223 ± 0.077	0.186 ± 0.075	0.223 ± 0.079	0.177 ± 0.038	0.182 ± 0.104	0.113 ± 0.064	0.207 ± 0.126	0.151 ± 0.071
winequality-red-8-vs-6	0.278 ± 0.114	0.256 ± 0.132	0.267 ± 0.102	0.267 ± 0.142	0.200 ± 0.097	0.300 ± 0.122	<b>0.322 ± 0.126</b>	0.278 ± 0.114	0.200 ± 0.083	0.167 ± 0.134	0.178 ± 0.124
winequality-white-3-9-vs-2	0.183 ± 0.129	0.120 ± 0.098	0.128 ± 0.106	0.145 ± 0.113	0.097 ± 0.121	<b>0.338 ± 0.117</b>	0.120 ± 0.073	0.183 ± 0.129	0.079 ± 0.061	0.049 ± 0.040	0.072 ± 0.042
winequality-white-3-vs-7	0.120 ± 0.087	0.140 ± 0.120	0.190 ± 0.130	0.180 ± 0.138	0.210 ± 0.094	<b>0.510 ± 0.176</b>	0.090 ± 0.094	0.120 ± 0.087	0.120 ± 0.060	0.190 ± 0.158	0.170 ± 0.135
winequality-white-9-vs-4	<b>0.467 ± 0.332</b>	0.367 ± 0.208	<b>0.467 ± 0.332</b>	<b>0.467 ± 0.332</b>	<b>0.467 ± 0.332</b>	0.417 ± 0.281	<b>0.467 ± 0.332</b>	<b>0.467 ± 0.332</b>	0.183 ± 0.229	0.183 ± 0.229	0.183 ± 0.229
zoo-3	0.383 ± 0.380	0.283 ± 0.248	0.383 ± 0.308	0.367 ± 0.306	0.333 ± 0.325	<b>0.517 ± 0.293</b>	0.333 ± 0.236	0.383 ± 0.380	0.317 ± 0.311	0.317 ± 0.311	0.317 ± 0.311
ecoli1	0.775 ± 0.123	0.728 ± 0.088	0.747 ± 0.104	0.754 ± 0.091	0.765 ± 0.097	0.806 ± 0.090	0.733 ± 0.113	0.809 ± 0.084	0.620 ± 0.122	<b>0.821 ± 0.309</b>	0.694 ± 0.102
ecoli2	0.773 ± 0.070	0.758 ± 0.078	0.758 ± 0.064	0.755 ± 0.089	0.769 ± 0.060	<b>0.827 ± 0.085</b>	0.773 ± 0.102	0.769 ± 0.069	0.627 ± 0.158	0.662 ± 0.391	0.715 ± 0.125
ecoli3	0.743 ± 0.096	0.726 ± 0.106	0.706 ± 0.096	0.743 ± 0.076	0.740 ± 0.093	<b>0.774 ± 0.071</b>	0.751 ± 0.075	0.743 ± 0.048	0.671 ± 0.092	0.611 ± 0.127	0.666 ± 0.121
glass1	0.666 ± 0.047	0.668 ± 0.078	0.687 ± 0.110	0.679 ± 0.073	0.647 ± 0.094	0.674 ± 0.074	0.682 ± 0.091	0.645 ± 0.056	0.571 ± 0.160	<b>0.853 ± 0.132</b>	0.579 ± 0.069
haberman	0.445 ± 0.078	0.408 ± 0.059	0.417 ± 0.101	0.360 ± 0.087	0.407 ± 0.106	0.442 ± 0.065	0.397 ± 0.113	<b>0.449 ± 0.092</b>	0.361 ± 0.080	0.281 ± 0.097	0.324 ± 0.084
page-blocks0	0.865 ± 0.026	0.820 ± 0.019	0.861 ± 0.022	0.858 ± 0.015	0.841 ± 0.020	0.823 ± 0.018	<b>0.869 ± 0.024</b>	0.864 ± 0.017	0.836 ± 0.026	0.815 ± 0.028	0.807 ± 0.035
ptms	0.588 ± 0.050	0.584 ± 0.044	0.572 ± 0.045	0.581 ± 0.039	0.582 ± 0.039	<b>0.611 ± 0.038</b>	0.565 ± 0.036	0.590 ± 0.039	0.564 ± 0.043	0.472 ± 0.103	0.582 ± 0.048
vehicle1	0.519 ± 0.058	0.519 ± 0.044	0.543 ± 0.085	0.527 ± 0.055	0.522 ± 0.061	<b>0.579 ± 0.047</b>	0.543 ± 0.053	0.537 ± 0.044	0.512 ± 0.044	0.506 ± 0.042	0.523 ± 0.073
vehicle2	0.534 ± 0.046	0.558 ± 0.040	0.504 ± 0.044	0.559 ± 0.058	0.533 ± 0.039	<b>0.576 ± 0.035</b>	0.537 ± 0.054	0.535 ± 0.028	0.516 ± 0.063	0.548 ± 0.040	0.514 ± 0.064
yeast1	0.531 ± 0.031	0.526 ± 0.029	0.537 ± 0.035	0.537 ± 0.027	0.540 ± 0.037	0.550 ± 0.040	0.538 ± 0.031	0.514 ± 0.019	0.468 ± 0.091	<b>1.000 ± 0.000</b>	0.538 ± 0.134
yeast3	0.772 ± 0.056	0.704 ± 0.061	0.773 ± 0.044	0.746 ± 0.028	0.735 ± 0.045	0.778 ± 0.061	0.751 ± 0.060	0.778 ± 0.057	0.689 ± 0.058	<b>0.994 ± 0.006</b>	

Table 8. SVM – Recall

Dataset name	SMOTE	polynom-ft-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TonekLinks	JFOTS_pr	JFOTS_rc	JFOTS_prom
abalone19	0.300 ± 0.131	0.194 ± 0.099	0.300 ± 0.121	0.312 ± 0.137	0.306 ± 0.132	0.456 ± 0.119	0.300 ± 0.131	0.300 ± 0.131	0.475 ± 0.211	0.637 ± 0.276	<b>0.663 ± 0.179</b>
abalone18	0.590 ± 0.107	0.448 ± 0.077	0.610 ± 0.073	0.614 ± 0.081	0.586 ± 0.107	0.648 ± 0.083	0.595 ± 0.071	0.590 ± 0.107	0.395 ± 0.154	<b>0.681 ± 0.088</b>	0.438 ± 0.184
ecoli-0-1-3-7-vs-2-6	0.700 ± 0.155	0.700 ± 0.155	0.700 ± 0.155	0.700 ± 0.155	0.700 ± 0.155	0.725 ± 0.179	0.700 ± 0.155	0.700 ± 0.155	0.742 ± 0.248	0.742 ± 0.248	<b>0.775 ± 0.211</b>
glass-0-1-6-vs-2	0.629 ± 0.196	0.504 ± 0.167	0.654 ± 0.175	0.643 ± 0.138	0.511 ± 0.184	0.394 ± 0.208	0.643 ± 0.129	0.629 ± 0.196	0.635 ± 0.163	<b>0.815 ± 0.203</b>	0.589 ± 0.151
glass-0-1-6-vs-2	0.650 ± 0.201	0.590 ± 0.234	0.650 ± 0.201	0.650 ± 0.201	0.590 ± 0.234	0.720 ± 0.290	0.650 ± 0.201	0.590 ± 0.234	0.590 ± 0.258	<b>0.805 ± 0.313</b>	0.665 ± 0.300
glass2	0.458 ± 0.275	0.415 ± 0.259	0.471 ± 0.274	0.449 ± 0.273	0.472 ± 0.278	0.539 ± 0.297	0.471 ± 0.285	0.458 ± 0.275	0.482 ± 0.281	<b>0.764 ± 0.264</b>	0.569 ± 0.267
glass5	<b>0.802 ± 0.195</b>	0.721 ± 0.238	0.786 ± 0.225	0.771 ± 0.250	0.769 ± 0.214	0.798 ± 0.233	0.769 ± 0.171	<b>0.802 ± 0.195</b>	0.660 ± 0.140	0.752 ± 0.101	0.640 ± 0.179
glass5	0.645 ± 0.217	0.625 ± 0.211	0.665 ± 0.203	0.665 ± 0.203	0.645 ± 0.217	0.755 ± 0.298	0.645 ± 0.217	0.645 ± 0.217	0.600 ± 0.210	<b>0.795 ± 0.258</b>	0.770 ± 0.273
page-blocks-1-3-vs-4	0.836 ± 0.228	0.593 ± 0.143	0.843 ± 0.223	0.843 ± 0.223	0.836 ± 0.237	0.836 ± 0.098	0.807 ± 0.233	0.836 ± 0.228	0.750 ± 0.215	<b>0.879 ± 0.150</b>	0.729 ± 0.280
yeast-0-5-6-7-9-vs-4	0.604 ± 0.098	0.556 ± 0.066	0.635 ± 0.087	0.600 ± 0.097	0.600 ± 0.101	0.639 ± 0.065	0.604 ± 0.082	0.600 ± 0.099	0.440 ± 0.135	<b>0.980 ± 0.020</b>	0.543 ± 0.140
yeast-1-2-8-9-vs-7	0.380 ± 0.090	0.393 ± 0.101	0.373 ± 0.100	0.380 ± 0.090	0.447 ± 0.149	0.380 ± 0.112	0.387 ± 0.078	0.293 ± 0.205	<b>1.000 ± 0.000</b>	0.400 ± 0.219	0.387 ± 0.078
yeast-1-4-5-8-vs-7	0.327 ± 0.101	0.280 ± 0.107	0.307 ± 0.100	0.313 ± 0.090	0.320 ± 0.107	0.353 ± 0.099	0.300 ± 0.095	0.327 ± 0.101	0.293 ± 0.177	<b>1.000 ± 0.000</b>	0.533 ± 0.240
yeast-1-vs-7	0.540 ± 0.076	0.467 ± 0.089	0.547 ± 0.085	0.547 ± 0.078	0.467 ± 0.140	0.520 ± 0.115	0.533 ± 0.079	0.540 ± 0.076	0.320 ± 0.157	<b>0.973 ± 0.080</b>	0.547 ± 0.286
yeast-2-vs-4	0.781 ± 0.088	0.761 ± 0.088	0.792 ± 0.088	0.792 ± 0.108	0.788 ± 0.068	0.781 ± 0.101	0.781 ± 0.101	0.781 ± 0.088	0.531 ± 0.111	<b>0.978 ± 0.120</b>	0.749 ± 0.107
yeast-2-vs-8	0.550 ± 0.120	0.550 ± 0.102	0.570 ± 0.110	0.530 ± 0.100	0.610 ± 0.137	0.560 ± 0.162	0.550 ± 0.120	0.550 ± 0.120	0.560 ± 0.162	<b>0.940 ± 0.120</b>	0.510 ± 0.164
yeast4	0.619 ± 0.071	0.550 ± 0.066	0.628 ± 0.087	0.623 ± 0.066	0.604 ± 0.074	0.689 ± 0.077	0.600 ± 0.054	0.619 ± 0.071	0.420 ± 0.097	<b>0.980 ± 0.020</b>	0.595 ± 0.215
yeast5	0.882 ± 0.058	0.873 ± 0.060	0.882 ± 0.058	0.882 ± 0.058	0.886 ± 0.055	0.936 ± 0.051	0.882 ± 0.058	0.882 ± 0.058	0.823 ± 0.136	<b>1.000 ± 0.000</b>	0.845 ± 0.140
yeast6	0.727 ± 0.109	0.716 ± 0.101	0.739 ± 0.119	0.727 ± 0.107	0.726 ± 0.107	0.824 ± 0.073	0.727 ± 0.118	0.727 ± 0.109	0.531 ± 0.111	<b>0.978 ± 0.067</b>	0.675 ± 0.085
cleveland-0-vs-4	0.448 ± 0.177	0.369 ± 0.163	0.464 ± 0.203	0.481 ± 0.199	0.417 ± 0.169	<b>0.719 ± 0.104</b>	0.448 ± 0.177	0.448 ± 0.177	0.495 ± 0.104	0.502 ± 0.228	0.438 ± 0.211
ecoli-0-1-4-7-vs-2-3-5-6	0.771 ± 0.066	0.717 ± 0.041	0.765 ± 0.066	0.758 ± 0.037	0.772 ± 0.072	<b>0.826 ± 0.069</b>	0.779 ± 0.071	0.771 ± 0.066	0.540 ± 0.273	0.788 ± 0.152	0.726 ± 0.135
ecoli-0-1-vs-2-3-5	0.733 ± 0.090	0.750 ± 0.091	0.750 ± 0.091	0.733 ± 0.090	0.825 ± 0.115	0.750 ± 0.091	0.733 ± 0.090	0.608 ± 0.179	<b>0.833 ± 0.139</b>	0.717 ± 0.107	0.717 ± 0.107
ecoli-0-2-6-7-vs-3-5	0.700 ± 0.108	0.700 ± 0.122	0.709 ± 0.114	0.709 ± 0.106	0.736 ± 0.125	<b>0.809 ± 0.125</b>	0.700 ± 0.122	0.700 ± 0.108	0.673 ± 0.101	0.764 ± 0.153	0.764 ± 0.109
ecoli-0-6-7-vs-3-5	0.718 ± 0.111	0.718 ± 0.111	0.718 ± 0.111	0.736 ± 0.118	0.736 ± 0.125	<b>0.800 ± 0.134</b>	0.718 ± 0.125	0.718 ± 0.111	0.709 ± 0.106	0.764 ± 0.153	0.764 ± 0.116
ecoli-0-6-7-vs-2	0.750 ± 0.092	0.750 ± 0.092	0.750 ± 0.092	0.750 ± 0.092	0.830 ± 0.110	0.750 ± 0.092	0.750 ± 0.092	0.750 ± 0.092	0.740 ± 0.092	<b>0.870 ± 0.149</b>	0.790 ± 0.181
glass-0-1-4-6-vs-2	0.568 ± 0.209	0.456 ± 0.262	0.592 ± 0.235	0.553 ± 0.274	0.471 ± 0.243	0.411 ± 0.185	0.589 ± 0.267	0.568 ± 0.209	0.561 ± 0.263	<b>0.869 ± 0.165</b>	0.658 ± 0.313
glass-0-1-5-vs-2	0.554 ± 0.135	0.433 ± 0.142	0.565 ± 0.130	0.578 ± 0.159	0.453 ± 0.132	0.290 ± 0.098	0.532 ± 0.150	0.554 ± 0.135	0.562 ± 0.205	<b>0.811 ± 0.155</b>	0.572 ± 0.203
yeast-0-2-5-6-vs-3-7-8-9	0.635 ± 0.064	0.388 ± 0.087	0.635 ± 0.056	0.651 ± 0.057	0.621 ± 0.065	0.657 ± 0.061	0.643 ± 0.063	0.637 ± 0.062	0.592 ± 0.074	<b>0.729 ± 0.078</b>	0.621 ± 0.096
yeast-0-5-5-vs-7-8	0.560 ± 0.082	0.316 ± 0.070	0.556 ± 0.081	0.556 ± 0.095	0.548 ± 0.084	0.428 ± 0.123	0.552 ± 0.071	0.560 ± 0.082	0.512 ± 0.172	<b>0.976 ± 0.072</b>	0.504 ± 0.140
abalone-17-vs-7-8-9-10	0.717 ± 0.043	0.528 ± 0.079	0.707 ± 0.047	0.707 ± 0.069	0.693 ± 0.054	0.724 ± 0.056	0.721 ± 0.052	0.714 ± 0.041	0.410 ± 0.174	<b>0.793 ± 0.109</b>	0.717 ± 0.159
abalone-19-vs-10-11-12-13	0.419 ± 0.158	0.231 ± 0.125	0.425 ± 0.155	0.425 ± 0.142	0.387 ± 0.136	0.463 ± 0.163	0.406 ± 0.164	0.419 ± 0.158	0.412 ± 0.233	<b>0.694 ± 0.141</b>	0.488 ± 0.214
abalone-20-vs-8-9-10	0.654 ± 0.099	0.577 ± 0.086	0.662 ± 0.086	0.646 ± 0.099	0.631 ± 0.108	0.823 ± 0.103	0.638 ± 0.114	0.654 ± 0.099	0.523 ± 0.238	<b>0.838 ± 0.086</b>	0.546 ± 0.221
abalone-21-vs-2	0.614 ± 0.239	0.589 ± 0.243	0.614 ± 0.239	0.629 ± 0.241	0.614 ± 0.248	<b>0.700 ± 0.135</b>	0.614 ± 0.239	0.614 ± 0.239	0.614 ± 0.293	0.571 ± 0.221	0.557 ± 0.289
flavr-P	0.604 ± 0.093	0.419 ± 0.095	0.600 ± 0.097	0.609 ± 0.105	0.577 ± 0.090	0.674 ± 0.117	0.600 ± 0.095	0.604 ± 0.093	0.525 ± 0.200	<b>0.949 ± 0.052</b>	0.605 ± 0.163
kidcup-buffer-zeroflow-vs-back	0.987 ± 0.027	0.993 ± 0.020	0.987 ± 0.027	0.987 ± 0.027	0.987 ± 0.027	<b>1.000 ± 0.000</b>	0.987 ± 0.027	0.987 ± 0.027	0.993 ± 0.020	0.993 ± 0.020	0.993 ± 0.020
kidcup-rookit-innp-vs-back	<b>0.955 ± 0.045</b>	<b>0.955 ± 0.045</b>	<b>0.955 ± 0.045</b>	<b>0.955 ± 0.045</b>	<b>0.955 ± 0.045</b>	<b>0.955 ± 0.045</b>	0.945 ± 0.060	<b>0.955 ± 0.045</b>	<b>0.955 ± 0.045</b>	<b>0.955 ± 0.045</b>	<b>0.955 ± 0.045</b>
kr-vs-k-zero-vs-eight	0.880 ± 0.102	0.872 ± 0.113	0.880 ± 0.102	0.880 ± 0.102	0.872 ± 0.113	<b>0.918 ± 0.099</b>	0.872 ± 0.113	0.880 ± 0.102	0.752 ± 0.146	0.733 ± 0.071	0.753 ± 0.195
poker-8-9-vs-2	0.297 ± 0.142	0.201 ± 0.135	0.280 ± 0.126	0.272 ± 0.121	0.263 ± 0.155	0.452 ± 0.167	0.273 ± 0.105	0.297 ± 0.142	0.397 ± 0.160	<b>0.480 ± 0.180</b>	0.333 ± 0.194
poker-8-9-vs-6	0.514 ± 0.127	0.449 ± 0.095	0.514 ± 0.127	0.489 ± 0.107	0.465 ± 0.132	0.888 ± 0.112	0.499 ± 0.172	0.514 ± 0.127	0.960 ± 0.084	<b>0.975 ± 0.075</b>	0.960 ± 0.084
poker-8-vs-6	0.567 ± 0.146	0.425 ± 0.118	0.567 ± 0.146	0.575 ± 0.131	0.493 ± 0.161	<b>0.944 ± 0.102</b>	0.575 ± 0.131	0.567 ± 0.146	0.740 ± 0.245	0.900 ± 0.213	0.694 ± 0.250
poker-9-vs-7	0.275 ± 0.208	0.250 ± 0.194	0.275 ± 0.208	0.275 ± 0.208	0.275 ± 0.261	0.375 ± 0.280	0.225 ± 0.175	0.275 ± 0.208	<b>0.500 ± 0.296</b>	0.425 ± 0.275	0.375 ± 0.301
winequality-red-3-vs-2	0.100 ± 0.100	0.100 ± 0.100	0.100 ± 0.100	0.100 ± 0.100	0.100 ± 0.100	<b>0.240 ± 0.120</b>	0.120 ± 0.098	0.100 ± 0.100	0.140 ± 0.180	<b>0.240 ± 0.196</b>	0.120 ± 0.160
winequality-red-4	0.393 ± 0.088	0.309 ± 0.063	0.392 ± 0.084	0.404 ± 0.084	0.351 ± 0.069	0.313 ± 0.062	0.397 ± 0.084	0.393 ± 0.088	0.250 ± 0.150	<b>0.652 ± 0.151</b>	0.412 ± 0.097
winequality-red-8-vs-6	0.289 ± 0.074	0.267 ± 0.054	0.289 ± 0.074	0.289 ± 0.074	0.300 ± 0.071	0.344 ± 0.136	0.311 ± 0.067	0.289 ± 0.074	0.378 ± 0.102	<b>0.444 ± 0.217</b>	0.333 ± 0.149
winequality-white-3-9-vs-2	0.181 ± 0.109	0.085 ± 0.093	0.174 ± 0.123	0.174 ± 0.102	0.112 ± 0.081	<b>0.410 ± 0.087</b>	0.166 ± 0.106	0.181 ± 0.109	0.167 ± 0.113	0.372 ± 0.212	0.248 ± 0.145
winequality-white-3-vs-7	0.110 ± 0.104	0.090 ± 0.087	0.140 ± 0.143	0.140 ± 0.143	0.120 ± 0.087	<b>0.530 ± 0.155</b>	0.120 ± 0.098	0.110 ± 0.104	0.210 ± 0.145	0.370 ± 0.290	0.260 ± 0.191
winequality-white-9-vs-4	<b>0.633 ± 0.267</b>	<b>0.633 ± 0.267</b>	<b>0.633 ± 0.267</b>	0.400 ± 0.436	<b>0.633 ± 0.267</b>	0.400 ± 0.436	<b>0.633 ± 0.267</b>	<b>0.633 ± 0.267</b>	0.483 ± 0.361	0.483 ± 0.361	0.483 ± 0.361
ecol1	0.896 ± 0.050	0.839 ± 0.035	0.891 ± 0.047	0.883 ± 0.040	0.883 ± 0.040	0.925 ± 0.027	0.886 ± 0.047	0.896 ± 0.050	0.904 ± 0.073	<b>0.967 ± 0.062</b>	0.891 ± 0.046
ecol2	0.915 ± 0.054	0.892 ± 0.073	0.915 ± 0.054	0.912 ± 0.057	0.912 ± 0.057	0.923 ± 0.042	0.919 ± 0.047	0.912 ± 0.057	0.838 ± 0.080	<b>0.935 ± 0.106</b>	0.877 ± 0.066
ecol3	0.880 ± 0.054	0.869 ± 0.056	0.880 ± 0.054	0.880 ± 0.047	0.891 ± 0.054	0.920 ± 0.038	0.874 ± 0.050	0.886 ± 0.051	0.816 ± 0.122	<b>0.954 ± 0.035</b>	0.752 ± 0.171
glass0	0.860 ± 0.064	0.811 ± 0.063	0.863 ± 0.063	0.877 ± 0.070	0.866 ± 0.063	0.869 ± 0.055	0.874 ± 0.056	0.866 ± 0.063	0.894 ± 0.066	<b>0.951 ± 0.057</b>	0.826 ± 0.106
glass1	0.758 ± 0.078	0.771 ± 0.098	0.745 ± 0.081	0.745 ± 0.105	0.763 ± 0.096	0.674 ± 0.159	0.750 ± 0.102	0.753 ± 0.078	0.711 ± 0.159	<b>0.945 ± 0.034</b>	0.739 ± 0.072
haberman	0.475 ± 0.121	0.440 ± 0.081	0.479 ± 0.097	0.484 ± 0.122	0.492 ± 0.129	0.458 ± 0.104	0.494 ± 0.067	0.470 ± 0.122	0.408 ± 0.097	<b>0.562 ± 0.139</b>	0.495 ± 0.088
page-blocks0	0.916 ± 0.019	0.824 ± 0.018	0.914 ± 0.017	0.891 ± 0.023	0.915 ± 0.019	0.719 ± 0.033	0.915 ± 0.020	0.916 ± 0.019	0.830 ± 0.088	<b>0.963 ± 0.015</b>	0.810 ± 0.071
ptms	0.708 ± 0.047	0.635 ± 0.057	0.705 ± 0.049	0.694 ± 0.037	0.707 ± 0.036	0.688 ± 0.024	0.711 ± 0.051	0.712 ± 0.044	0.565 ± 0.030	<b>0.844 ± 0.038</b>	0.674 ± 0.063
vehicle1	0.825 ± 0.086	0.655 ± 0.058	0.827 ± 0.077	0.822 ± 0.078	0.836 ± 0.058	0.830 ± 0.080	0.821 ± 0.067	0.831 ± 0.084	0.515 ± 0.139	<b>0.897 ± 0.038</b>	0.796 ± 0.122
vehicle1	0.845 ± 0.056	0.648 ± 0.053	0.850 ± 0.053	0.866 ± 0.056	0.848 ± 0.040	0.844 ± 0.052	0.845 ± 0.040	0.847 ± 0.055	0.390 ± 0.075	<b>0.881 ± 0.068</b>	0.799 ± 0.137
yeast1	0.716 ± 0.033	0.544 ± 0.029	0.758 ± 0.024	0.724 ± 0.043	0.705 ± 0.040	0.668 ± 0.016	0.715 ± 0.038	0.717 ± 0.033	0.536 ± 0.134	<b>1.000 ± 0.000</b>	0.749 ± 0.141
yeast3	0.843 ± 0.050	0.802 ± 0.053	0.845 ± 0.045	0.842 ± 0.059	0.833 ± 0.047	0.853 ± 0.041	0.849 ± 0.052	0.843 ± 0.050	0.761 ± 0.046	<b>0.994 ± 0.006</b>	0.8



Table 9. KNN – AUC

Dataset name	SMOTE	polynom-fit-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TomekLinks	JFOTS_pr	JFOTS_rc	JFOTS_prom
abalone19	0.568 ± 0.069	0.519 ± 0.028	0.568 ± 0.069	0.567 ± 0.069	0.549 ± 0.043	0.554 ± 0.047	0.565 ± 0.062	<b>0.568 ± 0.069</b>	0.520 ± 0.030	0.497 ± 0.011	0.520 ± 0.032
abalone18	0.719 ± 0.033	0.704 ± 0.044	0.704 ± 0.034	0.709 ± 0.040	0.700 ± 0.048	0.692 ± 0.053	0.714 ± 0.041	<b>0.720 ± 0.033</b>	0.645 ± 0.066	0.572 ± 0.063	0.627 ± 0.058
ecoli-0-1-3-7_vs-2-6	0.834 ± 0.075	<b>0.835 ± 0.076</b>	0.834 ± 0.074	0.833 ± 0.074	<b>0.835 ± 0.076</b>	0.833 ± 0.076	0.834 ± 0.075	0.834 ± 0.075	0.800 ± 0.108	0.800 ± 0.106	0.820 ± 0.096
glass0-1-6_vs-2	0.718 ± 0.086	0.682 ± 0.045	0.713 ± 0.081	0.714 ± 0.084	0.700 ± 0.056	0.657 ± 0.063	<b>0.725 ± 0.082</b>	0.717 ± 0.085	0.638 ± 0.040	0.606 ± 0.086	0.660 ± 0.084
glass0-1-6_vs-2	0.914 ± 0.097	<b>0.915 ± 0.098</b>	0.914 ± 0.097	0.911 ± 0.098	0.894 ± 0.135	0.881 ± 0.120	0.914 ± 0.097	0.914 ± 0.097	0.878 ± 0.118	0.842 ± 0.192	0.801 ± 0.162
glass0	0.630 ± 0.134	0.653 ± 0.137	0.637 ± 0.151	<b>0.644 ± 0.141</b>	0.630 ± 0.135	0.627 ± 0.112	0.635 ± 0.145	0.628 ± 0.133	0.640 ± 0.098	0.583 ± 0.096	0.596 ± 0.080
glass0	0.901 ± 0.057	<b>0.903 ± 0.068</b>	0.876 ± 0.056	0.885 ± 0.056	0.879 ± 0.071	0.863 ± 0.038	0.892 ± 0.048	0.901 ± 0.057	0.818 ± 0.061	0.752 ± 0.141	0.755 ± 0.062
glass0	0.931 ± 0.110	<b>0.933 ± 0.110</b>	0.921 ± 0.116	0.931 ± 0.110	0.922 ± 0.108	0.862 ± 0.108	0.931 ± 0.110	0.931 ± 0.110	0.821 ± 0.114	0.867 ± 0.136	0.831 ± 0.130
page-blocks-1-3_vs-0	<b>0.983 ± 0.023</b>	0.978 ± 0.024	0.982 ± 0.023	<b>0.983 ± 0.023</b>	0.949 ± 0.095	0.980 ± 0.016	0.979 ± 0.025	<b>0.983 ± 0.023</b>	0.850 ± 0.104	0.835 ± 0.086	0.888 ± 0.110
yeast-0-5-6-7-9_vs-4	0.727 ± 0.045	<b>0.740 ± 0.038</b>	0.730 ± 0.040	0.733 ± 0.043	0.729 ± 0.053	0.731 ± 0.045	0.718 ± 0.035	0.725 ± 0.043	0.671 ± 0.068	0.498 ± 0.002	0.643 ± 0.072
yeast-1-2-8-9_vs-7	0.672 ± 0.048	<b>0.685 ± 0.045</b>	0.668 ± 0.040	0.663 ± 0.040	0.649 ± 0.065	0.660 ± 0.052	0.667 ± 0.051	0.672 ± 0.048	0.586 ± 0.044	0.500 ± 0.000	0.567 ± 0.049
yeast-1-4-5-8_vs-7	0.611 ± 0.040	<b>0.614 ± 0.044</b>	0.594 ± 0.052	0.571 ± 0.051	0.577 ± 0.042	0.605 ± 0.039	0.611 ± 0.038	0.611 ± 0.038	0.536 ± 0.036	0.500 ± 0.000	0.521 ± 0.048
yeast-1_vs-7	0.723 ± 0.036	0.723 ± 0.042	0.726 ± 0.035	<b>0.732 ± 0.042</b>	0.702 ± 0.055	0.690 ± 0.033	0.701 ± 0.051	0.722 ± 0.035	0.608 ± 0.035	0.409 ± 0.002	0.575 ± 0.076
yeast-2_vs-4	0.873 ± 0.030	0.863 ± 0.035	0.869 ± 0.033	0.871 ± 0.030	0.873 ± 0.029	0.861 ± 0.034	<b>0.875 ± 0.027</b>	0.874 ± 0.030	0.842 ± 0.048	0.603 ± 0.158	0.830 ± 0.047
yeast-2_vs-8	0.802 ± 0.051	<b>0.810 ± 0.046</b>	0.794 ± 0.045	0.801 ± 0.053	0.803 ± 0.044	0.806 ± 0.057	0.798 ± 0.051	0.801 ± 0.050	0.772 ± 0.051	0.534 ± 0.105	0.802 ± 0.062
yeast4	0.729 ± 0.025	0.733 ± 0.034	0.729 ± 0.027	0.729 ± 0.027	0.713 ± 0.033	0.727 ± 0.045	<b>0.735 ± 0.039</b>	0.729 ± 0.025	0.692 ± 0.034	0.500 ± 0.000	0.640 ± 0.051
yeast5	0.929 ± 0.036	0.920 ± 0.035	0.925 ± 0.036	0.922 ± 0.035	0.910 ± 0.034	<b>0.933 ± 0.049</b>	0.929 ± 0.034	0.929 ± 0.036	0.865 ± 0.054	0.500 ± 0.000	0.817 ± 0.129
yeast6	0.814 ± 0.044	0.816 ± 0.038	0.815 ± 0.044	0.813 ± 0.044	0.812 ± 0.046	<b>0.829 ± 0.035</b>	0.809 ± 0.043	0.814 ± 0.044	0.733 ± 0.073	0.500 ± 0.000	0.775 ± 0.039
cleveland0_vs-4	0.876 ± 0.009	0.868 ± 0.036	0.881 ± 0.029	0.875 ± 0.068	0.873 ± 0.033	0.813 ± 0.009	<b>0.883 ± 0.024</b>	0.876 ± 0.009	0.738 ± 0.086	0.719 ± 0.135	0.711 ± 0.117
ecoli-0-1-4-7_vs-2-3-5-6	0.883 ± 0.018	0.878 ± 0.024	0.880 ± 0.018	0.876 ± 0.018	<b>0.884 ± 0.022</b>	0.877 ± 0.028	0.882 ± 0.021	0.884 ± 0.018	0.730 ± 0.121	0.568 ± 0.099	0.803 ± 0.098
ecoli-0-1_vs-2-3-5	0.884 ± 0.024	<b>0.887 ± 0.026</b>	0.878 ± 0.025	0.880 ± 0.025	0.879 ± 0.024	0.875 ± 0.042	0.886 ± 0.030	0.884 ± 0.024	0.821 ± 0.104	0.689 ± 0.160	0.820 ± 0.066
ecoli-0-2-6-7_vs-3-5	0.839 ± 0.051	0.839 ± 0.051	0.842 ± 0.061	0.840 ± 0.053	<b>0.843 ± 0.057</b>	0.840 ± 0.038	0.838 ± 0.040	0.839 ± 0.050	0.810 ± 0.041	0.588 ± 0.122	0.840 ± 0.027
ecoli-0-6-7_vs-3-5	0.851 ± 0.054	0.855 ± 0.053	0.854 ± 0.064	<b>0.858 ± 0.050</b>	0.847 ± 0.061	0.841 ± 0.052	0.851 ± 0.052	0.852 ± 0.053	0.813 ± 0.051	0.614 ± 0.143	0.799 ± 0.079
ecoli-0-6-7_vs-2	0.866 ± 0.047	0.865 ± 0.056	0.867 ± 0.045	0.867 ± 0.053	0.870 ± 0.046	<b>0.870 ± 0.036</b>	0.865 ± 0.049	0.867 ± 0.048	0.830 ± 0.065	0.509 ± 0.123	0.865 ± 0.063
glass0-1-1-4-6_vs-2	<b>0.674 ± 0.098</b>	0.665 ± 0.088	0.671 ± 0.103	0.673 ± 0.099	0.645 ± 0.101	0.624 ± 0.058	0.666 ± 0.105	0.669 ± 0.095	0.549 ± 0.071	0.582 ± 0.110	0.567 ± 0.085
glass0-1-5_vs-2	0.676 ± 0.059	0.674 ± 0.055	<b>0.684 ± 0.063</b>	0.669 ± 0.065	0.667 ± 0.084	0.631 ± 0.060	0.683 ± 0.059	0.675 ± 0.060	0.657 ± 0.088	0.622 ± 0.128	0.595 ± 0.111
yeast-0-2-5-6_vs-3-7-8-9	0.772 ± 0.031	0.768 ± 0.025	<b>0.775 ± 0.028</b>	0.772 ± 0.026	0.773 ± 0.030	0.764 ± 0.023	0.772 ± 0.031	0.773 ± 0.032	0.684 ± 0.075	0.533 ± 0.058	0.683 ± 0.036
yeast-0-5-5-9_vs-7-8	0.679 ± 0.037	0.675 ± 0.035	0.679 ± 0.037	0.670 ± 0.043	0.678 ± 0.037	<b>0.681 ± 0.050</b>	0.669 ± 0.030	0.680 ± 0.038	0.569 ± 0.083	0.502 ± 0.011	0.561 ± 0.065
abalone-17_vs-7-8-9-10	0.749 ± 0.046	0.719 ± 0.034	<b>0.752 ± 0.045</b>	0.745 ± 0.046	0.713 ± 0.044	0.739 ± 0.042	0.743 ± 0.044	0.749 ± 0.046	0.606 ± 0.033	0.582 ± 0.077	0.612 ± 0.072
abalone-19_vs-10-11-12-13	0.583 ± 0.037	0.551 ± 0.025	0.587 ± 0.040	<b>0.589 ± 0.047</b>	0.554 ± 0.046	0.569 ± 0.045	0.570 ± 0.044	0.582 ± 0.037	0.535 ± 0.032	0.515 ± 0.033	0.523 ± 0.044
abalone-20_vs-8-9-10	0.750 ± 0.055	0.692 ± 0.025	0.758 ± 0.062	<b>0.761 ± 0.067</b>	0.667 ± 0.058	0.709 ± 0.052	0.743 ± 0.082	0.746 ± 0.058	0.635 ± 0.056	0.549 ± 0.077	0.638 ± 0.049
abalone-21_vs-2	<b>0.830 ± 0.084</b>	0.771 ± 0.079	0.815 ± 0.074	0.815 ± 0.076	0.797 ± 0.080	0.794 ± 0.065	0.822 ± 0.080	0.830 ± 0.084	0.703 ± 0.095	0.667 ± 0.121	0.710 ± 0.089
flare-F	0.693 ± 0.044	0.674 ± 0.035	0.690 ± 0.050	0.693 ± 0.044	0.671 ± 0.043	0.693 ± 0.036	<b>0.694 ± 0.041</b>	0.692 ± 0.044	0.552 ± 0.042	0.504 ± 0.009	0.566 ± 0.053
kddcup-buffer_overflow_vs-back	0.957 ± 0.047	0.957 ± 0.047	0.957 ± 0.047	0.957 ± 0.047	0.947 ± 0.050	<b>0.960 ± 0.042</b>	0.947 ± 0.043	0.957 ± 0.047	0.957 ± 0.045	0.957 ± 0.045	0.957 ± 0.045
kddcup-rootkit_insp_vs-back	<b>0.973 ± 0.022</b>	0.964 ± 0.040	<b>0.973 ± 0.022</b>	<b>0.973 ± 0.022</b>	0.955 ± 0.045	0.945 ± 0.027	0.955 ± 0.050	<b>0.973 ± 0.022</b>	0.961 ± 0.040	0.964 ± 0.040	0.964 ± 0.040
kr-vs-karoo_vs-night	0.940 ± 0.050	0.930 ± 0.053	0.944 ± 0.050	<b>0.944 ± 0.049</b>	0.926 ± 0.061	0.944 ± 0.060	0.929 ± 0.060	0.940 ± 0.050	0.757 ± 0.163	0.500 ± 0.000	0.749 ± 0.175
poker-8-9_vs-2	0.609 ± 0.059	0.578 ± 0.036	0.617 ± 0.065	0.608 ± 0.062	0.548 ± 0.044	<b>0.643 ± 0.048</b>	0.614 ± 0.061	0.609 ± 0.059	0.546 ± 0.069	0.514 ± 0.036	0.550 ± 0.075
poker-8-9_vs-6	0.949 ± 0.040	0.912 ± 0.033	0.949 ± 0.039	0.949 ± 0.039	0.904 ± 0.053	0.976 ± 0.027	0.937 ± 0.031	0.949 ± 0.040	<b>0.988 ± 0.038</b>	0.976 ± 0.048	0.976 ± 0.048
poker-8_vs-6	0.942 ± 0.061	0.851 ± 0.057	0.942 ± 0.061	0.942 ± 0.061	0.875 ± 0.098	<b>0.978 ± 0.018</b>	0.932 ± 0.078	0.942 ± 0.061	0.906 ± 0.122	0.931 ± 0.113	0.864 ± 0.167
poker-9_vs-7	0.839 ± 0.152	<b>0.839 ± 0.152</b>	0.839 ± 0.152	0.816 ± 0.135	0.795 ± 0.125	0.828 ± 0.145	0.793 ± 0.152	0.839 ± 0.152	0.789 ± 0.233	0.806 ± 0.192	0.721 ± 0.197
winequality-red-3_vs-2	0.584 ± 0.061	0.577 ± 0.053	0.584 ± 0.061	0.583 ± 0.061	0.578 ± 0.053	<b>0.592 ± 0.064</b>	0.575 ± 0.052	0.584 ± 0.061	0.543 ± 0.069	0.493 ± 0.033	0.560 ± 0.058
winequality-red-4	0.597 ± 0.027	0.583 ± 0.043	0.596 ± 0.029	0.596 ± 0.021	0.588 ± 0.036	0.557 ± 0.024	<b>0.602 ± 0.024</b>	0.597 ± 0.026	0.540 ± 0.025	0.521 ± 0.038	0.558 ± 0.047
winequality-red-8_vs-6-7	0.530 ± 0.064	<b>0.543 ± 0.068</b>	0.536 ± 0.063	0.537 ± 0.063	0.536 ± 0.055	0.530 ± 0.060	0.534 ± 0.055	0.531 ± 0.064	0.542 ± 0.058	0.534 ± 0.070	0.536 ± 0.045
winequality-red-8_vs-6	<b>0.635 ± 0.050</b>	0.630 ± 0.052	0.624 ± 0.055	0.635 ± 0.051	0.595 ± 0.050	0.600 ± 0.052	0.632 ± 0.043	0.635 ± 0.050	0.593 ± 0.064	0.584 ± 0.077	0.616 ± 0.088
winequality-white-3-9_vs-2	<b>0.618 ± 0.030</b>	0.613 ± 0.033	0.617 ± 0.035	0.617 ± 0.034	0.573 ± 0.029	0.602 ± 0.053	0.599 ± 0.034	<b>0.618 ± 0.030</b>	0.547 ± 0.046	0.518 ± 0.029	0.575 ± 0.054
winequality-white-3_vs-7	0.630 ± 0.086	0.573 ± 0.064	0.633 ± 0.092	0.619 ± 0.094	0.577 ± 0.058	<b>0.644 ± 0.064</b>	0.630 ± 0.090	0.630 ± 0.086	0.585 ± 0.074	0.509 ± 0.089	0.570 ± 0.054
winequality-white-9_vs-4	0.878 ± 0.091	<b>0.882 ± 0.095</b>	0.878 ± 0.091	0.766 ± 0.164	0.879 ± 0.092	0.774 ± 0.172	0.878 ± 0.091	0.878 ± 0.091	0.726 ± 0.177	0.726 ± 0.177	0.726 ± 0.177
zoo-0	<b>0.827 ± 0.157</b>	<b>0.827 ± 0.157</b>	<b>0.827 ± 0.157</b>	0.717 ± 0.191	<b>0.827 ± 0.157</b>	0.692 ± 0.167	<b>0.827 ± 0.157</b>	<b>0.827 ± 0.157</b>	0.630 ± 0.130	0.630 ± 0.130	0.630 ± 0.130
ecoli1	0.864 ± 0.026	0.863 ± 0.019	0.868 ± 0.030	<b>0.871 ± 0.024</b>	0.870 ± 0.026	0.864 ± 0.028	0.863 ± 0.033	0.867 ± 0.023	0.802 ± 0.055	0.563 ± 0.127	0.840 ± 0.047
ecoli2	0.915 ± 0.028	<b>0.922 ± 0.025</b>	0.913 ± 0.027	0.914 ± 0.027	0.919 ± 0.029	0.911 ± 0.021	0.914 ± 0.027	0.915 ± 0.028	0.837 ± 0.086	0.584 ± 0.138	0.863 ± 0.061
ecoli3	0.866 ± 0.019	0.857 ± 0.022	<b>0.868 ± 0.015</b>	0.859 ± 0.025	0.854 ± 0.035	0.851 ± 0.028	0.861 ± 0.018	0.865 ± 0.015	0.800 ± 0.053	0.575 ± 0.119	0.749 ± 0.100
glass0	0.791 ± 0.035	0.799 ± 0.036	0.786 ± 0.034	0.794 ± 0.028	0.797 ± 0.027	0.787 ± 0.041	0.800 ± 0.030	<b>0.800 ± 0.034</b>	0.778 ± 0.047	0.700 ± 0.116	0.778 ± 0.050
glass1	0.738 ± 0.047	<b>0.749 ± 0.053</b>	0.745 ± 0.044	0.748 ± 0.037	0.739 ± 0.042	0.740 ± 0.031	0.736 ± 0.030	0.738 ± 0.031	0.698 ± 0.068	0.531 ± 0.081	0.685 ± 0.054
haberman	0.601 ± 0.034	<b>0.616 ± 0.036</b>	0.587 ± 0.044	0.588 ± 0.016	0.588 ± 0.039	0.587 ± 0.030	0.584 ± 0.029	0.599 ± 0.030	0.600 ± 0.024	0.535 ± 0.074	0.599 ± 0.054
page-blocks0	0.929 ± 0.010	0.911 ± 0.012	0.928 ± 0.012	0.921 ± 0.012	0.924 ± 0.011	0.887 ± 0.016	<b>0.931 ± 0.009</b>	0.930 ± 0.010	0.895 ± 0.018	0.905 ± 0.012	0.899 ± 0.015
ptms	0.655 ± 0.021	<b>0.708 ± 0.018</b>	0.686 ± 0.013	0.687 ± 0.016	0.682 ± 0.017	0.690 ± 0.021	0.693 ± 0.017	0.693 ± 0.024	0.686 ± 0.020	0.616 ± 0.053	0.692 ± 0.021
vehicle1	0.723 ± 0.026	<b>0.740 ± 0.017</b>	0.720 ± 0.024	0.736 ± 0.025	0.725 ± 0.019	0.720 ± 0.022	0.731 ± 0.022	0.724 ± 0.027	0.667 ± 0.022	0.716 ± 0.030	0.699 ± 0.027
vehicle3	0.708 ± 0.018	0.700 ± 0.029	0.712 ± 0.019	<b>0.718 ± 0.025</b>	0.710 ± 0.017	0.692 ± 0.023	0.712 ± 0.020	0.706 ± 0.020	0.656 ± 0.019	0.696 ± 0.023	0.700 ±

Table 10. CART – BAC

Dataset name	SMOTE	polynom-fit-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TonekLinks	JFOTS_pr	JFOTS_rc	JFOTS_prom
abalone19	0.561 ± 0.042	0.503 ± 0.015	0.546 ± 0.038	<b>0.565 ± 0.042</b>	0.545 ± 0.052	0.537 ± 0.051	0.555 ± 0.047	0.561 ± 0.042	0.505 ± 0.019	0.540 ± 0.045	0.547 ± 0.070
abalone19-18	0.605 ± 0.059	0.609 ± 0.040	0.672 ± 0.051	<b>0.685 ± 0.051</b>	0.653 ± 0.033	0.684 ± 0.082	0.649 ± 0.058	0.607 ± 0.062	0.655 ± 0.041	0.561 ± 0.075	0.613 ± 0.061
ecoli-0-1-3-7-vs-2-6	0.790 ± 0.115	<b>0.815 ± 0.063</b>	0.790 ± 0.115	0.790 ± 0.115	<b>0.815 ± 0.063</b>	0.776 ± 0.100	0.790 ± 0.115	0.790 ± 0.115	0.694 ± 0.110	0.609 ± 0.088	0.713 ± 0.115
glass0-1-6-vs-2	0.570 ± 0.054	<b>0.663 ± 0.054</b>	0.642 ± 0.063	0.609 ± 0.057	0.588 ± 0.108	0.633 ± 0.108	0.628 ± 0.055	0.653 ± 0.106	0.576 ± 0.043	0.608 ± 0.052	
glass0-1-6-vs-2	0.800 ± 0.133	0.858 ± 0.133	0.860 ± 0.133	0.860 ± 0.133	0.794 ± 0.185	<b>0.894 ± 0.133</b>	0.860 ± 0.133	0.860 ± 0.133	0.765 ± 0.151	0.883 ± 0.154	0.763 ± 0.158
glass2	0.591 ± 0.121	0.563 ± 0.077	0.577 ± 0.111	0.610 ± 0.101	0.599 ± 0.108	0.582 ± 0.130	0.575 ± 0.094	0.606 ± 0.124	0.589 ± 0.076	0.550 ± 0.077	<b>0.616 ± 0.091</b>
glass5	0.854 ± 0.086	0.835 ± 0.053	0.854 ± 0.087	0.845 ± 0.086	<b>0.857 ± 0.082</b>	0.808 ± 0.090	0.853 ± 0.090	0.854 ± 0.086	0.797 ± 0.109	0.764 ± 0.140	0.770 ± 0.114
glass5	0.851 ± 0.154	0.849 ± 0.153	0.851 ± 0.154	0.851 ± 0.154	0.862 ± 0.160	<b>0.935 ± 0.107</b>	0.851 ± 0.154	0.851 ± 0.154	0.836 ± 0.150	0.805 ± 0.127	0.791 ± 0.156
page-blocks1-3-vs-4	0.909 ± 0.059	0.940 ± 0.060	0.966 ± 0.068	0.964 ± 0.068	0.972 ± 0.063	0.962 ± 0.059	<b>0.983 ± 0.052</b>	0.969 ± 0.059	0.902 ± 0.062	0.884 ± 0.100	0.924 ± 0.089
yeast-0-5-6-7-9-vs-4	0.696 ± 0.057	0.680 ± 0.048	<b>0.713 ± 0.047</b>	0.694 ± 0.056	0.677 ± 0.039	0.712 ± 0.055	0.688 ± 0.037	0.662 ± 0.046	0.496 ± 0.008	0.675 ± 0.058	
yeast-1-2-8-9-vs-7	0.588 ± 0.028	0.578 ± 0.047	0.590 ± 0.030	0.578 ± 0.047	0.599 ± 0.051	<b>0.647 ± 0.062</b>	0.586 ± 0.023	0.604 ± 0.044	0.554 ± 0.057	0.511 ± 0.004	0.561 ± 0.041
yeast-1-4-5-8-vs-7	0.532 ± 0.049	<b>0.554 ± 0.026</b>	0.535 ± 0.064	0.523 ± 0.045	0.537 ± 0.053	0.518 ± 0.041	0.551 ± 0.029	0.526 ± 0.048	0.506 ± 0.033	0.505 ± 0.003	0.538 ± 0.056
yeast-1-vs-7	0.613 ± 0.057	0.623 ± 0.049	0.601 ± 0.067	0.635 ± 0.052	0.598 ± 0.055	<b>0.650 ± 0.038</b>	0.616 ± 0.048	0.609 ± 0.053	0.584 ± 0.046	0.511 ± 0.029	0.599 ± 0.068
yeast-2-vs-4	0.845 ± 0.046	0.840 ± 0.055	0.865 ± 0.043	0.861 ± 0.068	0.854 ± 0.053	0.862 ± 0.041	<b>0.865 ± 0.042</b>	0.839 ± 0.037	0.815 ± 0.050	0.583 ± 0.141	0.810 ± 0.033
yeast-2-vs-8	0.730 ± 0.089	0.762 ± 0.068	0.775 ± 0.104	<b>0.778 ± 0.084</b>	0.760 ± 0.070	0.751 ± 0.045	0.747 ± 0.065	0.756 ± 0.049	0.520 ± 0.031	0.743 ± 0.049	
yeast4	0.675 ± 0.044	0.637 ± 0.032	0.689 ± 0.061	0.690 ± 0.049	0.633 ± 0.041	<b>0.719 ± 0.055</b>	0.674 ± 0.083	0.678 ± 0.046	0.676 ± 0.050	0.497 ± 0.009	0.606 ± 0.055
yeast5	0.862 ± 0.073	0.846 ± 0.068	0.846 ± 0.064	0.859 ± 0.068	0.855 ± 0.065	<b>0.878 ± 0.049</b>	0.868 ± 0.057	0.864 ± 0.076	0.841 ± 0.048	0.510 ± 0.001	0.777 ± 0.113
yeast6	0.730 ± 0.066	0.692 ± 0.047	0.725 ± 0.067	0.747 ± 0.062	0.743 ± 0.047	<b>0.768 ± 0.051</b>	0.742 ± 0.059	0.731 ± 0.064	0.736 ± 0.058	0.521 ± 0.033	0.687 ± 0.050
cleveland0-vs-4	<b>0.814 ± 0.055</b>	0.731 ± 0.129	0.785 ± 0.103	0.782 ± 0.083	0.750 ± 0.127	0.745 ± 0.048	0.801 ± 0.063	<b>0.814 ± 0.055</b>	0.756 ± 0.084	0.736 ± 0.097	0.690 ± 0.070
ecoli-0-1-4-7-vs-2-3-5-6	0.792 ± 0.071	0.794 ± 0.048	0.822 ± 0.039	0.790 ± 0.069	0.776 ± 0.066	0.822 ± 0.050	<b>0.827 ± 0.054</b>	0.806 ± 0.077	0.721 ± 0.104	0.550 ± 0.083	0.745 ± 0.084
ecoli-0-2-6-7-vs-3-5	0.799 ± 0.045	0.787 ± 0.062	0.809 ± 0.054	0.822 ± 0.075	<b>0.829 ± 0.057</b>	0.827 ± 0.063	0.778 ± 0.066	0.802 ± 0.047	0.773 ± 0.057	0.566 ± 0.120	0.804 ± 0.060
ecoli-0-6-7-vs-3-5	0.795 ± 0.069	0.794 ± 0.048	0.810 ± 0.052	0.813 ± 0.063	0.832 ± 0.070	<b>0.834 ± 0.060</b>	0.790 ± 0.056	0.796 ± 0.069	0.773 ± 0.056	0.594 ± 0.147	0.767 ± 0.098
ecoli-0-6-7-vs-2	0.849 ± 0.068	0.840 ± 0.074	0.828 ± 0.068	0.839 ± 0.071	0.837 ± 0.064	0.842 ± 0.041	0.825 ± 0.060	0.839 ± 0.070	<b>0.850 ± 0.078</b>	0.574 ± 0.127	0.835 ± 0.094
glass0-1-4-6-vs-2	0.595 ± 0.051	0.560 ± 0.082	0.610 ± 0.072	0.591 ± 0.062	0.613 ± 0.070	<b>0.638 ± 0.077</b>	0.558 ± 0.066	0.576 ± 0.062	0.558 ± 0.071	0.557 ± 0.034	0.569 ± 0.069
glass0-1-5-vs-2	0.689 ± 0.067	0.597 ± 0.068	0.677 ± 0.082	<b>0.713 ± 0.110</b>	0.631 ± 0.069	0.605 ± 0.090	0.649 ± 0.079	0.678 ± 0.062	0.598 ± 0.070	0.536 ± 0.072	0.561 ± 0.088
yeast-0-2-5-6-vs-3-7-8-9	0.713 ± 0.037	0.712 ± 0.051	<b>0.735 ± 0.038</b>	0.714 ± 0.027	0.717 ± 0.033	0.728 ± 0.046	0.709 ± 0.037	0.700 ± 0.034	0.646 ± 0.062	0.541 ± 0.061	0.643 ± 0.035
yeast-0-5-5-9-vs-7-8	0.598 ± 0.035	<b>0.638 ± 0.041</b>	0.621 ± 0.044	0.623 ± 0.050	0.614 ± 0.049	0.629 ± 0.050	0.615 ± 0.028	0.630 ± 0.031	0.550 ± 0.059	0.512 ± 0.016	0.563 ± 0.054
abalone-17-vs-3-8-9-10	0.644 ± 0.041	0.642 ± 0.033	0.643 ± 0.042	0.660 ± 0.045	0.645 ± 0.045	<b>0.667 ± 0.024</b>	0.646 ± 0.039	0.642 ± 0.036	0.633 ± 0.055	0.569 ± 0.057	0.603 ± 0.051
abalone-19-vs-10-11-12-13	0.556 ± 0.041	0.517 ± 0.024	0.556 ± 0.050	0.548 ± 0.035	0.541 ± 0.055	<b>0.576 ± 0.050</b>	0.557 ± 0.034	0.560 ± 0.028	0.523 ± 0.039	0.514 ± 0.041	0.527 ± 0.058
abalone-20-vs-8-9-10	0.696 ± 0.050	0.584 ± 0.065	0.674 ± 0.065	0.682 ± 0.050	0.630 ± 0.071	<b>0.769 ± 0.061</b>	0.681 ± 0.059	0.696 ± 0.050	0.621 ± 0.054	0.589 ± 0.042	0.606 ± 0.068
abalone-21-vs-2	0.726 ± 0.121	0.655 ± 0.074	0.699 ± 0.092	0.691 ± 0.116	0.736 ± 0.075	<b>0.790 ± 0.070</b>	0.692 ± 0.105	0.734 ± 0.126	0.712 ± 0.125	0.614 ± 0.092	0.649 ± 0.081
flame-F	0.558 ± 0.035	0.581 ± 0.030	0.570 ± 0.045	0.578 ± 0.038	0.588 ± 0.025	0.580 ± 0.034	0.576 ± 0.048	0.577 ± 0.035	0.636 ± 0.083	0.575 ± 0.068	<b>0.666 ± 0.078</b>
kddcup-bufferoverflow-vs-back	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>
kddcup-rookits-innp-vs-back	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	0.982 ± 0.036	0.982 ± 0.036	0.982 ± 0.036
kr-vs-karoo-vs-ahgnt	0.961 ± 0.050	0.965 ± 0.051	0.965 ± 0.052	0.965 ± 0.051	<b>0.968 ± 0.042</b>	0.966 ± 0.071	0.954 ± 0.058	0.961 ± 0.050	0.771 ± 0.082	0.702 ± 0.042	0.858 ± 0.115
poker-8-9-vs-6	0.572 ± 0.039	0.558 ± 0.049	0.566 ± 0.032	0.572 ± 0.032	0.545 ± 0.051	<b>0.585 ± 0.070</b>	0.543 ± 0.028	0.572 ± 0.039	0.531 ± 0.048	0.517 ± 0.054	0.522 ± 0.031
poker-8-9-vs-6	0.680 ± 0.087	0.824 ± 0.141	0.670 ± 0.096	0.644 ± 0.084	0.750 ± 0.143	0.628 ± 0.096	0.657 ± 0.105	0.680 ± 0.087	0.999 ± 0.001	0.999 ± 0.001	<b>0.999 ± 0.001</b>
poker-8-vs-6	0.685 ± 0.101	0.685 ± 0.163	0.703 ± 0.123	0.685 ± 0.095	0.691 ± 0.098	0.669 ± 0.162	0.677 ± 0.140	0.685 ± 0.101	<b>0.931 ± 0.085</b>	<b>0.931 ± 0.084</b>	0.832 ± 0.165
poker-9-vs-7	0.564 ± 0.082	0.564 ± 0.082	0.564 ± 0.082	0.562 ± 0.084	0.586 ± 0.095	0.613 ± 0.127	0.563 ± 0.081	<b>0.688 ± 0.209</b>	0.647 ± 0.162	0.621 ± 0.158	
winequality-red-3-vs-2	0.516 ± 0.043	0.529 ± 0.066	0.506 ± 0.040	0.518 ± 0.045	0.528 ± 0.089	<b>0.565 ± 0.056</b>	0.525 ± 0.064	0.516 ± 0.043	0.519 ± 0.047	0.528 ± 0.049	0.557 ± 0.062
winequality-red-4	0.552 ± 0.048	0.528 ± 0.030	<b>0.576 ± 0.029</b>	0.572 ± 0.036	0.564 ± 0.040	0.571 ± 0.036	0.548 ± 0.017	0.552 ± 0.050	0.537 ± 0.031	0.531 ± 0.031	0.547 ± 0.038
winequality-red-8-vs-6-7	0.543 ± 0.041	0.557 ± 0.050	0.550 ± 0.039	<b>0.562 ± 0.051</b>	0.556 ± 0.054	0.555 ± 0.043	0.545 ± 0.048	0.543 ± 0.041	0.544 ± 0.043	0.529 ± 0.053	0.539 ± 0.039
winequality-red-8-vs-6	0.609 ± 0.052	0.608 ± 0.064	0.605 ± 0.046	0.603 ± 0.067	0.579 ± 0.047	0.614 ± 0.058	<b>0.630 ± 0.056</b>	0.609 ± 0.052	0.577 ± 0.044	0.566 ± 0.063	0.571 ± 0.058
winequality-white-3-9-vs-2	0.566 ± 0.063	0.544 ± 0.047	0.540 ± 0.054	0.546 ± 0.056	0.533 ± 0.061	<b>0.643 ± 0.056</b>	0.535 ± 0.037	0.566 ± 0.063	0.528 ± 0.031	0.509 ± 0.019	0.525 ± 0.021
winequality-white-3-vs-2	0.539 ± 0.045	0.557 ± 0.060	0.576 ± 0.061	0.567 ± 0.055	0.590 ± 0.046	<b>0.737 ± 0.066</b>	0.524 ± 0.047	0.539 ± 0.045	0.546 ± 0.032	0.578 ± 0.076	0.574 ± 0.066
winequality-white-9-vs-4	0.722 ± 0.163	0.672 ± 0.100	0.721 ± 0.162	0.721 ± 0.162	<b>0.722 ± 0.162</b>	0.692 ± 0.141	0.721 ± 0.162	0.722 ± 0.163	0.573 ± 0.112	0.573 ± 0.112	0.573 ± 0.112
zoo-3	0.658 ± 0.189	0.608 ± 0.123	0.665 ± 0.158	0.650 ± 0.156	0.635 ± 0.160	<b>0.738 ± 0.159</b>	0.639 ± 0.122	0.658 ± 0.189	0.503 ± 0.127	0.509 ± 0.127	0.509 ± 0.127
ecoli1	0.841 ± 0.056	0.818 ± 0.039	0.827 ± 0.049	0.836 ± 0.039	0.837 ± 0.041	0.842 ± 0.033	0.822 ± 0.048	<b>0.860 ± 0.041</b>	0.751 ± 0.067	0.556 ± 0.105	0.798 ± 0.050
ecoli2	0.855 ± 0.028	0.858 ± 0.035	0.850 ± 0.033	0.852 ± 0.036	0.854 ± 0.029	<b>0.866 ± 0.037</b>	0.852 ± 0.041	0.855 ± 0.028	0.777 ± 0.083	0.578 ± 0.113	0.818 ± 0.056
ecoli3	0.745 ± 0.049	0.748 ± 0.065	0.768 ± 0.067	0.772 ± 0.049	0.766 ± 0.053	<b>0.833 ± 0.049</b>	0.775 ± 0.051	0.760 ± 0.050	0.554 ± 0.100	0.753 ± 0.110	
glass0	0.767 ± 0.036	0.770 ± 0.060	0.772 ± 0.038	0.787 ± 0.033	0.781 ± 0.041	<b>0.802 ± 0.041</b>	0.794 ± 0.040	0.774 ± 0.025	0.746 ± 0.051	0.673 ± 0.069	0.731 ± 0.068
glass1	0.719 ± 0.029	<b>0.733 ± 0.031</b>	0.727 ± 0.054	0.726 ± 0.058	0.714 ± 0.045	0.717 ± 0.046	0.726 ± 0.081	0.716 ± 0.033	0.676 ± 0.081	0.591 ± 0.058	0.658 ± 0.049
haberman	0.584 ± 0.035	0.567 ± 0.025	0.573 ± 0.041	0.563 ± 0.045	0.572 ± 0.052	0.577 ± 0.038	0.565 ± 0.055	<b>0.596 ± 0.045</b>	0.584 ± 0.025	0.536 ± 0.058	0.573 ± 0.052
page-blocks0	0.917 ± 0.012	0.898 ± 0.010	0.915 ± 0.010	0.914 ± 0.008	0.907 ± 0.009	0.900 ± 0.009	<b>0.919 ± 0.011</b>	0.917 ± 0.008	0.907 ± 0.013	0.895 ± 0.014	0.890 ± 0.019
ptms	0.665 ± 0.020	0.673 ± 0.023	0.660 ± 0.021	0.665 ± 0.015	0.663 ± 0.024	<b>0.678 ± 0.027</b>	0.658 ± 0.021	0.670 ± 0.025	0.659 ± 0.030	0.600 ± 0.041	0.665 ± 0.027
vehicle1	0.698 ± 0.024	0.698 ± 0.021	0.680 ± 0.032	0.671 ± 0.025	0.664 ± 0.028	<b>0.685 ± 0.023</b>	0.671 ± 0.024	0.676 ± 0.014	0.663 ± 0.019	0.655 ± 0.021	0.667 ± 0.032
vehicle1	0.666 ± 0.023	<b>0.690 ± 0.023</b>	0.655 ± 0.023	0.677 ± 0.028	0.671 ± 0.019	0.685 ± 0.014	0.674 ± 0.020	0.667 ± 0.013	0.662 ± 0.038	0.680 ± 0.023	0.666 ± 0.028
yeast1	0.643 ± 0.017	<b>0.653 ± 0.017</b>	0.653 ± 0.016	0.650 ± 0.011	0.649 ± 0.012	0.653 ± 0.017	0.652 ± 0.021	0.641 ± 0.009	0.610 ± 0.045	0.507 ± 0.002	0.588 ± 0.036
yeast3	0.864 ± 0.029	0.832									

Table 11. SVM – BAC

Dataset name	SMOTE	polynom-fit-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TonekLinks	JFOTS_pr	JFOTS_rc	JFOTS_prom
absalone19	0.593 ± 0.063	0.569 ± 0.048	0.593 ± 0.057	0.599 ± 0.065	0.602 ± 0.063	<b>0.655 ± 0.056</b>	0.593 ± 0.062	0.593 ± 0.063	0.620 ± 0.082	0.597 ± 0.083	0.610 ± 0.047
absalone19	0.740 ± 0.052	0.698 ± 0.036	0.745 ± 0.035	0.750 ± 0.042	0.738 ± 0.055	<b>0.782 ± 0.043</b>	0.739 ± 0.038	0.739 ± 0.051	0.678 ± 0.060	0.661 ± 0.091	0.668 ± 0.075
ecoli-0-1-3-7-vs-2-6	0.845 ± 0.075	0.847 ± 0.078	0.838 ± 0.074	0.842 ± 0.076	0.845 ± 0.079	0.828 ± 0.078	0.844 ± 0.075	0.845 ± 0.075	0.840 ± 0.110	<b>0.861 ± 0.092</b>	
glass-0-1-6-vs-2	0.740 ± 0.099	0.697 ± 0.081	<b>0.744 ± 0.090</b>	0.740 ± 0.079	0.690 ± 0.076	0.622 ± 0.083	0.743 ± 0.072	0.740 ± 0.100	0.724 ± 0.090	0.673 ± 0.092	0.694 ± 0.065
glass-0-1-6-vs-2	0.820 ± 0.098	0.792 ± 0.117	0.820 ± 0.098	0.820 ± 0.098	0.792 ± 0.116	0.843 ± 0.147	0.820 ± 0.098	0.784 ± 0.123	<b>0.809 ± 0.153</b>	0.808 ± 0.146	
glass2	0.642 ± 0.143	0.638 ± 0.134	0.648 ± 0.140	0.637 ± 0.137	0.651 ± 0.137	<b>0.677 ± 0.158</b>	0.648 ± 0.146	0.641 ± 0.143	0.626 ± 0.130	0.631 ± 0.118	0.643 ± 0.119
glass5	<b>0.892 ± 0.094</b>	0.852 ± 0.116	0.883 ± 0.108	0.876 ± 0.121	0.876 ± 0.103	0.870 ± 0.111	0.876 ± 0.082		<b>0.892 ± 0.094</b>	0.821 ± 0.068	0.788 ± 0.142
glass5	0.818 ± 0.106	0.809 ± 0.103	0.828 ± 0.099	0.828 ± 0.099	0.817 ± 0.106	0.854 ± 0.155	0.818 ± 0.106	0.818 ± 0.106	0.788 ± 0.098	<b>0.870 ± 0.119</b>	0.847 ± 0.117
page-blocks-1-3-vs-4	0.904 ± 0.111	0.791 ± 0.070	<b>0.908 ± 0.112</b>	0.907 ± 0.112	0.903 ± 0.119	0.796 ± 0.048	0.888 ± 0.116	0.904 ± 0.114	0.819 ± 0.074	0.862 ± 0.073	0.835 ± 0.124
yeast-0-5-6-7-9-vs-4	0.749 ± 0.047	0.741 ± 0.037	0.762 ± 0.040	0.752 ± 0.049	0.747 ± 0.055	<b>0.765 ± 0.030</b>	0.749 ± 0.041	0.746 ± 0.047	0.696 ± 0.066	0.496 ± 0.008	0.706 ± 0.068
yeast-1-2-8-9-vs-7	0.606 ± 0.041	0.594 ± 0.054	0.608 ± 0.050	0.605 ± 0.049	0.620 ± 0.049	<b>0.673 ± 0.069</b>	0.605 ± 0.053	0.610 ± 0.038	0.566 ± 0.052	0.511 ± 0.004	0.584 ± 0.039
yeast-1-4-5-8-vs-7	0.571 ± 0.051	0.568 ± 0.051	0.564 ± 0.047	0.561 ± 0.037	0.577 ± 0.047	<b>0.600 ± 0.034</b>	0.557 ± 0.035	0.571 ± 0.050	0.543 ± 0.035	0.505 ± 0.003	0.576 ± 0.050
yeast-1-vs-7	0.690 ± 0.041	0.671 ± 0.046	0.691 ± 0.039	<b>0.692 ± 0.043</b>	0.664 ± 0.066	0.686 ± 0.064	0.683 ± 0.040	0.689 ± 0.041	0.596 ± 0.086	0.512 ± 0.030	0.630 ± 0.066
yeast-2-vs-4	0.870 ± 0.039	0.862 ± 0.040	0.873 ± 0.039	<b>0.875 ± 0.045</b>	0.871 ± 0.046	0.869 ± 0.034	0.868 ± 0.046	0.870 ± 0.038	0.848 ± 0.033	0.605 ± 0.174	0.855 ± 0.054
yeast-2-vs-4	0.736 ± 0.046	0.773 ± 0.051	0.747 ± 0.043	0.756 ± 0.040	0.738 ± 0.047	<b>0.795 ± 0.064</b>	0.740 ± 0.063	0.736 ± 0.046	0.756 ± 0.071	0.517 ± 0.025	0.692 ± 0.091
yeast4	0.765 ± 0.034	0.746 ± 0.032	0.769 ± 0.042	0.768 ± 0.032	0.750 ± 0.033	<b>0.792 ± 0.032</b>	0.757 ± 0.024	0.764 ± 0.034	0.688 ± 0.023	0.497 ± 0.009	0.744 ± 0.086
yeast5	0.927 ± 0.029	0.924 ± 0.030	0.927 ± 0.029	0.927 ± 0.029	0.930 ± 0.028	<b>0.941 ± 0.024</b>	0.927 ± 0.029	0.927 ± 0.029	0.900 ± 0.064	0.510 ± 0.001	0.860 ± 0.135
yeast6	0.843 ± 0.049	0.840 ± 0.046	0.848 ± 0.054	0.840 ± 0.049	0.844 ± 0.049	<b>0.862 ± 0.034</b>	0.842 ± 0.053	0.843 ± 0.049	0.756 ± 0.054	0.520 ± 0.031	0.816 ± 0.041
cleveland-0-vs-4	0.719 ± 0.089	0.681 ± 0.082	0.728 ± 0.101	0.736 ± 0.099	0.704 ± 0.084	<b>0.845 ± 0.052</b>	0.719 ± 0.088	0.719 ± 0.089	0.718 ± 0.048	0.666 ± 0.101	0.680 ± 0.101
ecoli-0-1-4-7-vs-2-3-5-6	0.872 ± 0.032	0.851 ± 0.020	0.867 ± 0.029	0.866 ± 0.019	0.870 ± 0.033	<b>0.884 ± 0.033</b>	0.871 ± 0.037	0.872 ± 0.032	0.758 ± 0.130	0.595 ± 0.135	0.836 ± 0.070
ecoli-0-1-vs-2-3-5	0.854 ± 0.041	0.865 ± 0.044	0.863 ± 0.044	0.861 ± 0.043	0.856 ± 0.041	<b>0.886 ± 0.047</b>	0.858 ± 0.045	0.853 ± 0.041	0.793 ± 0.088	0.692 ± 0.199	0.820 ± 0.055
ecoli-0-2-6-7-vs-3-5	0.834 ± 0.056	0.842 ± 0.061	0.838 ± 0.056	0.843 ± 0.056	0.853 ± 0.063	<b>0.871 ± 0.050</b>	0.835 ± 0.059	0.834 ± 0.056	0.827 ± 0.054	0.667 ± 0.149	0.851 ± 0.053
ecoli-0-6-7-vs-3-5	0.846 ± 0.055	0.851 ± 0.056	0.843 ± 0.056	0.857 ± 0.059	0.856 ± 0.062	<b>0.869 ± 0.060</b>	0.846 ± 0.061	0.846 ± 0.055	0.845 ± 0.051	0.680 ± 0.159	0.852 ± 0.052
ecoli-0-6-7-vs-2	0.861 ± 0.043	0.863 ± 0.043	0.863 ± 0.044	0.859 ± 0.043	0.860 ± 0.042	<b>0.887 ± 0.047</b>	0.859 ± 0.044	0.862 ± 0.042	0.861 ± 0.044	0.647 ± 0.163	0.884 ± 0.085
glass-0-1-4-6-vs-2	0.710 ± 0.101	0.669 ± 0.128	0.713 ± 0.107	0.702 ± 0.131	0.665 ± 0.120	0.625 ± 0.090	<b>0.716 ± 0.127</b>	0.709 ± 0.101	0.609 ± 0.085	0.662 ± 0.083	0.631 ± 0.134
glass-0-1-5-vs-2	0.696 ± 0.063	0.659 ± 0.067	0.701 ± 0.062	<b>0.711 ± 0.071</b>	0.671 ± 0.071	0.581 ± 0.049	0.685 ± 0.068	0.696 ± 0.063	0.673 ± 0.066	0.616 ± 0.162	0.641 ± 0.105
yeast-0-2-5-6-vs-3-7-8-9	0.782 ± 0.026	0.775 ± 0.041	0.778 ± 0.032	0.788 ± 0.019	0.772 ± 0.038	<b>0.791 ± 0.030</b>	0.781 ± 0.029	0.783 ± 0.026	0.735 ± 0.062	0.559 ± 0.109	0.765 ± 0.050
yeast-0-5-5-9-vs-7-8	<b>0.696 ± 0.035</b>	0.640 ± 0.032	0.687 ± 0.036	0.690 ± 0.045	0.689 ± 0.041	0.660 ± 0.035	0.692 ± 0.034	0.695 ± 0.036	0.634 ± 0.069	0.516 ± 0.027	0.588 ± 0.081
abalone-17-vs-7-8-9-10	0.814 ± 0.021	0.742 ± 0.040	0.809 ± 0.024	0.810 ± 0.034	0.806 ± 0.028	<b>0.823 ± 0.025</b>	0.816 ± 0.024	0.813 ± 0.019	0.677 ± 0.073	0.722 ± 0.090	0.746 ± 0.114
absalone-19-vs-10-11-12-13	0.633 ± 0.062	0.582 ± 0.058	0.637 ± 0.061	0.636 ± 0.052	0.629 ± 0.058	<b>0.659 ± 0.075</b>	0.629 ± 0.067	0.633 ± 0.062	0.631 ± 0.085	0.594 ± 0.058	0.572 ± 0.097
absalone-20-vs-8-9-10	0.806 ± 0.048	0.775 ± 0.041	0.809 ± 0.043	0.802 ± 0.047	0.797 ± 0.051	<b>0.884 ± 0.051</b>	0.798 ± 0.055	0.806 ± 0.048	0.743 ± 0.109	0.742 ± 0.103	0.714 ± 0.111
absalone-21-vs-2	0.798 ± 0.117	0.789 ± 0.120	0.798 ± 0.116	0.804 ± 0.117	0.799 ± 0.122	<b>0.839 ± 0.070</b>	0.798 ± 0.117	0.799 ± 0.117	0.771 ± 0.144	0.728 ± 0.125	0.771 ± 0.142
flaw-F	0.738 ± 0.040	0.689 ± 0.046	0.732 ± 0.044	0.743 ± 0.049	0.725 ± 0.043	<b>0.777 ± 0.047</b>	0.738 ± 0.045	0.738 ± 0.040	0.681 ± 0.073	0.575 ± 0.068	0.727 ± 0.077
kddcup-bufferoverflow-vs-back	0.993 ± 0.013	0.997 ± 0.010	0.993 ± 0.013	0.993 ± 0.013	0.993 ± 0.013	<b>1.000 ± 0.000</b>	0.993 ± 0.013	0.993 ± 0.013	0.997 ± 0.010	0.997 ± 0.010	0.997 ± 0.010
kddcup-rootkit-innp-vs-back	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	<b>0.977 ± 0.023</b>	0.977 ± 0.020	<b>0.977 ± 0.023</b>	0.977 ± 0.042	0.977 ± 0.042	0.977 ± 0.042
kr-vs-karozo-vs-aignt	0.937 ± 0.052	0.934 ± 0.057	0.937 ± 0.052	0.937 ± 0.052	0.934 ± 0.057	<b>0.950 ± 0.050</b>	0.934 ± 0.057	0.937 ± 0.052	0.843 ± 0.076	0.701 ± 0.041	0.831 ± 0.108
poker-8-9-vs-2	0.625 ± 0.067	0.588 ± 0.066	0.617 ± 0.058	0.613 ± 0.056	0.614 ± 0.073	<b>0.677 ± 0.074</b>	0.614 ± 0.047	0.625 ± 0.067	0.634 ± 0.079	0.562 ± 0.085	0.575 ± 0.073
poker-8-9-vs-4	0.757 ± 0.064	0.724 ± 0.047	0.757 ± 0.064	0.744 ± 0.054	0.732 ± 0.066	0.937 ± 0.055	0.749 ± 0.086	0.757 ± 0.064	0.379 ± 0.041	<b>0.986 ± 0.037</b>	0.979 ± 0.041
poker-8-vs-6	0.783 ± 0.073	0.712 ± 0.059	0.783 ± 0.073	0.789 ± 0.066	0.746 ± 0.081	<b>0.968 ± 0.051</b>	0.789 ± 0.065	0.783 ± 0.073	0.869 ± 0.123	0.850 ± 0.107	0.831 ± 0.152
poker-9-vs-7	0.636 ± 0.104	0.636 ± 0.104	0.636 ± 0.104	0.636 ± 0.130	0.680 ± 0.135	0.611 ± 0.087	0.611 ± 0.087	0.636 ± 0.104	<b>0.729 ± 0.163</b>	0.686 ± 0.139	0.657 ± 0.151
winequality-red-3-vs-2	0.540 ± 0.049	0.542 ± 0.050	0.539 ± 0.049	0.540 ± 0.049	0.541 ± 0.049	<b>0.608 ± 0.057</b>	0.550 ± 0.050	0.540 ± 0.049	0.539 ± 0.096	0.526 ± 0.117	0.516 ± 0.082
winequality-red-4	0.638 ± 0.034	0.611 ± 0.029	0.632 ± 0.033	<b>0.644 ± 0.035</b>	0.625 ± 0.032	0.617 ± 0.029	0.641 ± 0.034	0.637 ± 0.033	0.548 ± 0.026	0.599 ± 0.051	0.609 ± 0.050
winequality-red-5	0.571 ± 0.054	0.550 ± 0.055	0.572 ± 0.054	0.571 ± 0.054	0.555 ± 0.062	0.541 ± 0.063	0.557 ± 0.048	0.571 ± 0.054	0.542 ± 0.067	0.518 ± 0.081	0.550 ± 0.060
winequality-red-8-vs-6	0.614 ± 0.031	0.610 ± 0.024	0.615 ± 0.031	0.615 ± 0.030	0.625 ± 0.030	0.627 ± 0.056	0.625 ± 0.030	0.614 ± 0.031	<b>0.637 ± 0.044</b>	0.609 ± 0.096	0.622 ± 0.079
winequality-white-3-9-vs-2	0.565 ± 0.051	0.529 ± 0.045	0.559 ± 0.057	0.560 ± 0.048	0.542 ± 0.039	<b>0.685 ± 0.039</b>	0.557 ± 0.051	0.565 ± 0.051	0.519 ± 0.064	0.528 ± 0.055	0.565 ± 0.055
winequality-white-3-vs-7	0.533 ± 0.049	0.528 ± 0.041	0.549 ± 0.066	0.547 ± 0.067	0.546 ± 0.039	<b>0.756 ± 0.077</b>	0.539 ± 0.047	0.533 ± 0.049	0.561 ± 0.063	0.607 ± 0.121	0.594 ± 0.077
winequality-white-9-vs-4	0.815 ± 0.134	0.815 ± 0.134	0.815 ± 0.134	0.699 ± 0.218	<b>0.815 ± 0.134</b>	0.695 ± 0.214	0.815 ± 0.134	0.815 ± 0.134	0.707 ± 0.175	0.707 ± 0.175	0.707 ± 0.175
zoo-0	<b>0.611 ± 0.162</b>	<b>0.611 ± 0.162</b>	<b>0.611 ± 0.162</b>	0.597 ± 0.163	<b>0.611 ± 0.162</b>	0.595 ± 0.161	<b>0.611 ± 0.162</b>	<b>0.611 ± 0.162</b>	0.547 ± 0.174	0.547 ± 0.174	0.547 ± 0.174
ecoli1	0.885 ± 0.027	0.886 ± 0.020	0.886 ± 0.020	0.884 ± 0.020	0.883 ± 0.021	<b>0.889 ± 0.015</b>	0.881 ± 0.022	0.884 ± 0.026	0.875 ± 0.033	0.576 ± 0.145	0.885 ± 0.015
ecoli2	0.940 ± 0.024	0.932 ± 0.014	0.941 ± 0.024	0.940 ± 0.026	0.939 ± 0.025	0.938 ± 0.021	<b>0.942 ± 0.022</b>	0.939 ± 0.025	0.860 ± 0.082	0.604 ± 0.146	0.894 ± 0.032
ecoli3	0.889 ± 0.022	0.893 ± 0.024	0.887 ± 0.022	<b>0.894 ± 0.017</b>	0.893 ± 0.021	0.893 ± 0.019	0.887 ± 0.021	0.892 ± 0.021	0.858 ± 0.056	0.602 ± 0.169	0.794 ± 0.122
glass0	0.779 ± 0.040	0.790 ± 0.020	0.785 ± 0.039	0.778 ± 0.037	<b>0.793 ± 0.037</b>	0.771 ± 0.032	0.792 ± 0.034	0.778 ± 0.036	0.742 ± 0.032	0.724 ± 0.065	0.751 ± 0.044
glass1	0.701 ± 0.038	0.689 ± 0.043	0.690 ± 0.038	0.696 ± 0.034	<b>0.703 ± 0.040</b>	0.677 ± 0.038	0.698 ± 0.039	0.701 ± 0.044	0.694 ± 0.062	0.598 ± 0.048	0.684 ± 0.029
haberman	0.611 ± 0.026	<b>0.642 ± 0.035</b>	0.619 ± 0.026	0.597 ± 0.031	0.611 ± 0.039	0.627 ± 0.027	0.614 ± 0.034	0.611 ± 0.028	0.613 ± 0.039	0.559 ± 0.092	0.622 ± 0.057
page-blocks0	0.931 ± 0.008	0.900 ± 0.008	0.931 ± 0.007	0.923 ± 0.009	0.932 ± 0.008	0.848 ± 0.016	0.930 ± 0.008	<b>0.932 ± 0.008</b>	0.879 ± 0.034	0.892 ± 0.025	0.882 ± 0.028
ptms	0.727 ± 0.030	0.722 ± 0.027	0.729 ± 0.023	0.726 ± 0.022	0.731 ± 0.025	0.730 ± 0.017	<b>0.732 ± 0.028</b>	0.728 ± 0.032	0.706 ± 0.018	0.666 ± 0.030	0.725 ± 0.022
vehicle1	0.789 ± 0.027	0.749 ± 0.023	0.790 ± 0.026	0.790 ± 0.020	0.798 ± 0.016	0.792 ± 0.023	0.791 ± 0.019	0.793 ± 0.025	0.695 ± 0.047	<b>0.804 ± 0.018</b>	0.779 ± 0.036
vehicle2	0.789 ± 0.022	0.734 ± 0.017	0.790 ± 0.018	<b>0.797 ± 0.026</b>	0.790 ± 0.016	0.789 ± 0.023	0.789 ± 0.018	0.790 ± 0.021	0.650 ± 0.021	0.789 ± 0.027	0.764 ± 0.038
yeast1	0.711 ± 0.013	0.695 ± 0									

Table 12. KNN – G-mean

Dataset name	SMOTE	polynom-fit-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TonekLinks	JFOTS_pr	JFOTS_rc	JFOTS_prom
abalone19	0.392 ± 0.183	0.189 ± 0.159	0.392 ± 0.183	0.392 ± 0.183	0.319 ± 0.174	0.390 ± 0.196	0.388 ± 0.176	<b>0.392 ± 0.183</b>	0.187 ± 0.161	0.049 ± 0.097	0.522 ± 0.183
abalone18	0.096 ± 0.043	0.666 ± 0.064	0.676 ± 0.047	0.681 ± 0.055	0.662 ± 0.069	0.649 ± 0.054	0.687 ± 0.056	<b>0.696 ± 0.044</b>	0.531 ± 0.118	0.331 ± 0.247	0.534 ± 0.088
ecoli-0-1-3-7-vs-2-6	0.817 ± 0.096	<b>0.818 ± 0.097</b>	0.817 ± 0.096	0.816 ± 0.096	0.818 ± 0.097	0.816 ± 0.097	0.817 ± 0.096	0.817 ± 0.096	0.771 ± 0.135	0.771 ± 0.133	0.797 ± 0.117
glass-0-1-6-vs-2	0.663 ± 0.056	0.697 ± 0.092	0.699 ± 0.094	0.679 ± 0.069	0.629 ± 0.089	<b>0.709 ± 0.095</b>	0.703 ± 0.095	0.591 ± 0.066	0.456 ± 0.254	0.597 ± 0.145	0.415 ± 0.145
glass-0-1-6-vs-2	0.905 ± 0.110	<b>0.906 ± 0.111</b>	0.905 ± 0.110	0.904 ± 0.111	0.873 ± 0.175	0.963 ± 0.158	0.904 ± 0.110	0.859 ± 0.157	0.767 ± 0.236	0.756 ± 0.213	0.859 ± 0.110
glass2	0.543 ± 0.246	0.523 ± 0.291	0.522 ± 0.300	0.558 ± 0.255	0.513 ± 0.288	0.551 ± 0.222	0.520 ± 0.295	0.541 ± 0.245	<b>0.562 ± 0.211</b>	0.382 ± 0.282	0.598 ± 0.138
glass1	0.897 ± 0.063	<b>0.898 ± 0.075</b>	0.870 ± 0.063	0.880 ± 0.062	0.873 ± 0.077	0.858 ± 0.042	0.888 ± 0.054	0.897 ± 0.063	0.801 ± 0.083	0.643 ± 0.328	0.719 ± 0.090
glass5	0.917 ± 0.145	<b>0.919 ± 0.146</b>	0.906 ± 0.151	0.917 ± 0.145	0.908 ± 0.143	0.849 ± 0.125	0.917 ± 0.145	0.917 ± 0.145	0.791 ± 0.151	0.842 ± 0.172	0.802 ± 0.164
page-blocks-1-3-vs-4	<b>0.983 ± 0.023</b>	0.978 ± 0.024	0.982 ± 0.023	0.983 ± 0.023	0.941 ± 0.118	0.980 ± 0.016	0.979 ± 0.026	<b>0.983 ± 0.023</b>	0.841 ± 0.125	0.821 ± 0.096	0.872 ± 0.134
yeast-0-5-6-7-9-vs-4	0.714 ± 0.053	<b>0.730 ± 0.045</b>	0.717 ± 0.050	0.719 ± 0.050	0.713 ± 0.066	0.717 ± 0.054	0.702 ± 0.043	0.702 ± 0.043	0.599 ± 0.108	0.000 ± 0.000	0.579 ± 0.108
yeast-1-2-8-9-vs-7	0.646 ± 0.063	<b>0.654 ± 0.060</b>	0.642 ± 0.054	0.634 ± 0.055	0.586 ± 0.124	0.621 ± 0.079	0.638 ± 0.067	0.646 ± 0.063	0.440 ± 0.097	0.000 ± 0.000	0.362 ± 0.188
yeast-1-4-5-8-vs-7	0.573 ± 0.058	<b>0.577 ± 0.060</b>	0.543 ± 0.086	0.482 ± 0.092	0.519 ± 0.063	0.563 ± 0.062	0.573 ± 0.062	0.573 ± 0.062	0.297 ± 0.109	0.000 ± 0.000	0.292 ± 0.220
yeast-1-vs-7	0.715 ± 0.040	0.711 ± 0.049	0.717 ± 0.040	<b>0.720 ± 0.047</b>	0.682 ± 0.067	0.671 ± 0.040	0.688 ± 0.058	0.713 ± 0.039	0.489 ± 0.082	0.000 ± 0.000	0.314 ± 0.269
yeast-2-vs-4	0.868 ± 0.034	0.857 ± 0.039	0.864 ± 0.037	0.867 ± 0.034	0.869 ± 0.032	0.856 ± 0.037	<b>0.870 ± 0.030</b>	0.869 ± 0.034	0.828 ± 0.057	0.250 ± 0.382	0.816 ± 0.055
yeast-2-vs-8	0.789 ± 0.064	0.791 ± 0.059	0.782 ± 0.058	0.789 ± 0.065	0.788 ± 0.057	<b>0.792 ± 0.068</b>	0.787 ± 0.063	0.789 ± 0.063	0.745 ± 0.061	0.084 ± 0.251	0.779 ± 0.081
yeast4	0.702 ± 0.035	0.704 ± 0.046	0.702 ± 0.036	0.700 ± 0.038	0.675 ± 0.048	0.701 ± 0.059	<b>0.708 ± 0.051</b>	0.702 ± 0.034	0.575 ± 0.058	0.000 ± 0.000	0.539 ± 0.103
yeast5	0.927 ± 0.040	0.917 ± 0.039	0.922 ± 0.040	0.920 ± 0.038	0.907 ± 0.037	<b>0.931 ± 0.052</b>	0.927 ± 0.037	0.927 ± 0.040	0.854 ± 0.064	0.000 ± 0.000	0.753 ± 0.267
yeast6	0.802 ± 0.054	0.802 ± 0.047	0.802 ± 0.054	0.801 ± 0.054	0.797 ± 0.056	<b>0.826 ± 0.038</b>	0.795 ± 0.053	0.802 ± 0.054	0.808 ± 0.108	0.000 ± 0.000	0.747 ± 0.051
clevaland-0-vs-4	0.869 ± 0.083	0.863 ± 0.039	0.878 ± 0.031	0.868 ± 0.082	0.867 ± 0.038	0.794 ± 0.087	<b>0.880 ± 0.027</b>	0.869 ± 0.083	0.698 ± 0.119	0.605 ± 0.313	0.635 ± 0.240
ecoli-0-1-4-7-vs-2-3-5-6	0.882 ± 0.018	0.874 ± 0.026	0.878 ± 0.020	0.873 ± 0.020	0.882 ± 0.024	0.874 ± 0.030	0.880 ± 0.022	<b>0.882 ± 0.019</b>	0.672 ± 0.180	0.273 ± 0.300	0.784 ± 0.122
ecoli-1-vs-2-3-5	0.880 ± 0.028	<b>0.882 ± 0.030</b>	0.873 ± 0.029	0.875 ± 0.029	0.874 ± 0.028	0.871 ± 0.045	0.882 ± 0.034	0.880 ± 0.028	0.786 ± 0.173	0.482 ± 0.307	0.808 ± 0.073
ecoli-0-2-6-7-vs-3-5	0.831 ± 0.059	0.833 ± 0.068	0.831 ± 0.061	0.834 ± 0.065	<b>0.834 ± 0.042</b>	0.830 ± 0.057	0.830 ± 0.058	0.830 ± 0.058	0.789 ± 0.050	0.359 ± 0.298	0.831 ± 0.032
ecoli-0-6-7-vs-3-5	0.844 ± 0.061	0.848 ± 0.060	0.847 ± 0.071	<b>0.850 ± 0.059</b>	0.838 ± 0.068	0.833 ± 0.057	0.844 ± 0.060	0.845 ± 0.060	0.792 ± 0.085	0.373 ± 0.344	0.780 ± 0.095
ecoli-0-6-7-vs-2	0.869 ± 0.051	0.856 ± 0.066	0.860 ± 0.050	0.859 ± 0.063	0.863 ± 0.052	<b>0.866 ± 0.039</b>	0.859 ± 0.054	0.860 ± 0.053	0.812 ± 0.078	0.318 ± 0.353	0.854 ± 0.075
glass-0-1-4-6-vs-2	<b>0.636 ± 0.142</b>	0.623 ± 0.134	0.628 ± 0.162	0.628 ± 0.160	0.587 ± 0.156	0.573 ± 0.087	0.617 ± 0.164	0.629 ± 0.139	0.393 ± 0.218	0.361 ± 0.314	0.403 ± 0.234
glass-0-1-5-vs-2	0.662 ± 0.070	0.660 ± 0.063	<b>0.673 ± 0.073</b>	0.654 ± 0.077	0.638 ± 0.122	0.602 ± 0.078	0.669 ± 0.068	0.661 ± 0.070	0.619 ± 0.135	0.418 ± 0.323	0.494 ± 0.218
yeast-0-2-5-6-vs-3-7-8-9	0.767 ± 0.036	0.760 ± 0.030	<b>0.771 ± 0.031</b>	0.768 ± 0.028	0.767 ± 0.034	0.755 ± 0.036	0.768 ± 0.035	0.768 ± 0.036	0.606 ± 0.146	0.219 ± 0.202	0.629 ± 0.056
yeast-0-5-5-9-vs-7-8	0.662 ± 0.042	0.649 ± 0.043	0.662 ± 0.043	0.652 ± 0.050	0.657 ± 0.048	0.653 ± 0.065	0.650 ± 0.037	<b>0.664 ± 0.044</b>	0.429 ± 0.149	0.028 ± 0.084	0.386 ± 0.196
abalone-17-vs-7-8-9-10	0.722 ± 0.061	0.672 ± 0.048	<b>0.726 ± 0.060</b>	0.717 ± 0.060	0.666 ± 0.062	0.706 ± 0.056	0.714 ± 0.059	0.721 ± 0.061	0.465 ± 0.072	0.387 ± 0.215	0.442 ± 0.233
abalone-19-vs-10-11-12-13	0.492 ± 0.070	0.379 ± 0.064	0.498 ± 0.076	<b>0.500 ± 0.091</b>	0.385 ± 0.153	0.454 ± 0.085	0.462 ± 0.085	0.492 ± 0.070	0.300 ± 0.130	0.251 ± 0.128	0.291 ± 0.203
abalone-20-vs-8-9-10	0.714 ± 0.080	0.580 ± 0.045	0.724 ± 0.088	<b>0.726 ± 0.093</b>	0.584 ± 0.099	0.601 ± 0.085	0.696 ± 0.120	0.708 ± 0.085	0.513 ± 0.128	0.198 ± 0.264	0.544 ± 0.115
abalone-21-vs-2	<b>0.810 ± 0.104</b>	0.732 ± 0.107	0.793 ± 0.092	0.794 ± 0.093	0.768 ± 0.101	0.769 ± 0.082	0.801 ± 0.098	0.810 ± 0.104	0.625 ± 0.159	0.515 ± 0.290	0.633 ± 0.150
flare-F	0.651 ± 0.061	0.619 ± 0.057	0.647 ± 0.072	0.651 ± 0.063	0.614 ± 0.068	<b>0.654 ± 0.053</b>	0.653 ± 0.057	0.651 ± 0.062	0.286 ± 0.168	0.043 ± 0.085	0.328 ± 0.193
kidcup-buffer-overflow-vs-back	0.954 ± 0.051	0.954 ± 0.051	0.954 ± 0.051	0.954 ± 0.051	0.944 ± 0.054	<b>0.958 ± 0.044</b>	0.944 ± 0.046	0.954 ± 0.051	0.954 ± 0.048	0.954 ± 0.048	0.954 ± 0.048
kidcup-rootkit-innp-vs-back	<b>0.972 ± 0.023</b>	0.962 ± 0.043	<b>0.972 ± 0.023</b>	<b>0.972 ± 0.023</b>	0.952 ± 0.049	0.943 ± 0.029	0.952 ± 0.055	<b>0.972 ± 0.023</b>	0.962 ± 0.042	0.962 ± 0.042	0.962 ± 0.042
kr-vs-karoo-vs-ahglt	0.937 ± 0.052	0.926 ± 0.057	0.941 ± 0.052	<b>0.941 ± 0.052</b>	0.921 ± 0.067	0.941 ± 0.065	0.924 ± 0.066	0.937 ± 0.052	0.634 ± 0.339	0.000 ± 0.000	0.588 ± 0.303
poker-8-9-vs-2	0.486 ± 0.126	0.406 ± 0.091	0.498 ± 0.136	0.484 ± 0.129	0.294 ± 0.170	<b>0.577 ± 0.084</b>	0.492 ± 0.132	0.486 ± 0.126	0.226 ± 0.242	0.086 ± 0.173	0.215 ± 0.267
poker-8-9-vs-4	0.948 ± 0.042	0.908 ± 0.036	0.947 ± 0.041	0.947 ± 0.041	0.899 ± 0.060	0.976 ± 0.027	0.936 ± 0.032	0.948 ± 0.042	<b>0.987 ± 0.040</b>	0.974 ± 0.051	0.974 ± 0.051
poker-8-vs-6	0.940 ± 0.065	0.858 ± 0.067	0.940 ± 0.065	0.939 ± 0.065	0.860 ± 0.122	<b>0.978 ± 0.018</b>	0.929 ± 0.067	0.940 ± 0.065	0.889 ± 0.148	0.918 ± 0.138	0.788 ± 0.301
poker-9-vs-7	0.773 ± 0.290	0.773 ± 0.290	0.773 ± 0.290	0.773 ± 0.291	0.748 ± 0.276	0.723 ± 0.265	0.761 ± 0.284	0.773 ± 0.290	0.635 ± 0.441	0.719 ± 0.319	0.558 ± 0.393
winequality-red-3-vs-2	0.388 ± 0.206	0.371 ± 0.193	0.388 ± 0.206	0.388 ± 0.206	0.371 ± 0.193	<b>0.392 ± 0.208</b>	0.371 ± 0.192	0.388 ± 0.206	0.239 ± 0.244	0.044 ± 0.132	0.324 ± 0.219
winequality-red-4	0.525 ± 0.046	0.484 ± 0.086	0.523 ± 0.055	0.525 ± 0.039	0.482 ± 0.074	0.410 ± 0.056	<b>0.535 ± 0.039</b>	0.525 ± 0.046	0.331 ± 0.088	0.198 ± 0.190	0.415 ± 0.102
winequality-red-5	0.332 ± 0.195	0.334 ± 0.202	0.345 ± 0.197	0.345 ± 0.197	0.334 ± 0.148	0.302 ± 0.179	<b>0.356 ± 0.152</b>	0.332 ± 0.195	0.296 ± 0.213	0.232 ± 0.246	0.328 ± 0.135
winequality-red-8-vs-6	<b>0.573 ± 0.083</b>	0.555 ± 0.083	0.555 ± 0.089	0.573 ± 0.083	0.486 ± 0.100	0.496 ± 0.102	0.567 ± 0.074	0.573 ± 0.083	0.456 ± 0.174	0.403 ± 0.231	0.491 ± 0.201
winequality-white-3-9-vs-2	<b>0.533 ± 0.061</b>	0.504 ± 0.069	0.532 ± 0.068	0.532 ± 0.067	0.415 ± 0.069	0.462 ± 0.111	0.496 ± 0.072	<b>0.533 ± 0.061</b>	0.295 ± 0.174	0.288 ± 0.164	0.390 ± 0.160
winequality-white-3-vs-7	0.489 ± 0.249	0.360 ± 0.208	0.494 ± 0.254	0.465 ± 0.255	0.367 ± 0.201	<b>0.502 ± 0.200</b>	0.479 ± 0.264	0.489 ± 0.249	0.397 ± 0.214	0.420 ± 0.242	0.354 ± 0.196
winequality-white-9-vs-4	0.865 ± 0.105	<b>0.869 ± 0.109</b>	0.865 ± 0.105	0.866 ± 0.105	0.865 ± 0.106	0.865 ± 0.351	0.865 ± 0.105	0.865 ± 0.105	0.567 ± 0.383	0.567 ± 0.383	0.567 ± 0.383
zoo-3	<b>0.769 ± 0.280</b>	<b>0.769 ± 0.280</b>	<b>0.769 ± 0.280</b>	0.545 ± 0.387	<b>0.769 ± 0.280</b>	0.516 ± 0.362	<b>0.769 ± 0.280</b>	<b>0.769 ± 0.280</b>	0.410 ± 0.343	0.410 ± 0.343	0.410 ± 0.343
ecoli1	0.863 ± 0.027	0.862 ± 0.021	0.867 ± 0.030	<b>0.870 ± 0.025</b>	0.869 ± 0.027	0.863 ± 0.030	0.862 ± 0.034	0.866 ± 0.023	0.793 ± 0.068	0.162 ± 0.325	0.837 ± 0.050
ecoli2	0.914 ± 0.029	<b>0.921 ± 0.027</b>	0.911 ± 0.029	0.913 ± 0.028	0.918 ± 0.030	0.911 ± 0.021	0.913 ± 0.027	0.914 ± 0.029	0.830 ± 0.094	0.229 ± 0.354	0.859 ± 0.067
ecoli3	0.865 ± 0.020	0.856 ± 0.023	<b>0.867 ± 0.015</b>	0.858 ± 0.026	0.852 ± 0.036	0.850 ± 0.029	0.860 ± 0.019	0.865 ± 0.016	0.786 ± 0.063	0.220 ± 0.339	0.680 ± 0.239
glass0	0.787 ± 0.035	0.794 ± 0.037	0.782 ± 0.033	0.789 ± 0.028	0.792 ± 0.027	0.785 ± 0.040	0.796 ± 0.030	<b>0.796 ± 0.035</b>	0.775 ± 0.048	0.649 ± 0.237	0.777 ± 0.051
glass1	0.736 ± 0.049	<b>0.747 ± 0.053</b>	0.743 ± 0.045	0.746 ± 0.039	0.737 ± 0.043	0.738 ± 0.033	0.735 ± 0.031	0.736 ± 0.033	0.683 ± 0.096	0.299 ± 0.233	0.682 ± 0.056
haberman	0.595 ± 0.037	<b>0.601 ± 0.051</b>	0.575 ± 0.055	0.580 ± 0.026	0.575 ± 0.050	0.570 ± 0.045	0.574 ± 0.038	0.594 ± 0.031	0.560 ± 0.031	0.468 ± 0.119	0.562 ± 0.070
page-blocks0	0.929 ± 0.010	0.909 ± 0.013	0.927 ± 0.012	0.920 ± 0.012	0.923 ± 0.011	0.881 ± 0.018	<b>0.931 ± 0.009</b>	0.929 ± 0.010	0.890 ± 0.020	0.903 ± 0.013	0.895 ± 0.016
ptms	0.684 ± 0.021	<b>0.706 ± 0.019</b>	0.684 ± 0.014	0.687 ± 0.016	0.681 ± 0.018	0.688 ± 0.022	0.686 ± 0.017	0.692 ± 0.024	0.676 ± 0.023	0.696 ± 0.058	0.689 ± 0.021
vehicle1	0.722 ± 0.026	<b>0.739 ± 0.018</b>	0.720 ± 0.024	0.735 ± 0.025	0.724 ± 0.019	0.718 ± 0.023	0.730 ± 0.023	0.723 ± 0.027	0.646 ± 0.030	0.714 ± 0.052	0.694 ± 0.032
vehicle5	0.707 ± 0.019	0.696 ± 0.030	0.711 ± 0.019	<b>0.717 ± 0.025</b>	0.708 ± 0.018	0.688 ± 0.024	0.711 ± 0.021	0.705 ± 0.020	0.619 ± 0.030	0.692 ± 0.026	0.693 ± 0.029

Table 13. CART – Precision

Dataset name	SMOTE	polynom-ft-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TonekLinks	JFOTS_pr	JFOTS_rc	JFOTS_prom
abalone19	0.028 ± 0.014	0.013 ± 0.019	0.023 ± 0.014	0.031 ± 0.013	<b>0.038 ± 0.035</b>	0.018 ± 0.015	0.026 ± 0.012	0.028 ± 0.014	0.009 ± 0.015	0.011 ± 0.010	0.012 ± 0.008
abalone18	0.236 ± 0.058	0.222 ± 0.067	0.237 ± 0.070	0.256 ± 0.070	0.270 ± 0.050	0.196 ± 0.057	0.224 ± 0.048	0.230 ± 0.057	<b>0.341 ± 0.078</b>	0.147 ± 0.117	0.360 ± 0.116
ecoli-0-1-3-7-vs-2-6	0.438 ± 0.237	<b>0.488 ± 0.186</b>	0.438 ± 0.237	0.438 ± 0.237	<b>0.488 ± 0.186</b>	0.433 ± 0.240	0.438 ± 0.237	0.438 ± 0.237	0.353 ± 0.271	0.149 ± 0.124	0.363 ± 0.262
glass-0-1-6-vs-2	0.253 ± 0.080	0.222 ± 0.146	0.281 ± 0.059	0.284 ± 0.073	0.268 ± 0.116	0.168 ± 0.106	0.262 ± 0.128	0.254 ± 0.087	<b>0.328 ± 0.180</b>	0.180 ± 0.070	0.323 ± 0.238
glass-0-1-6-vs-2	<b>0.759 ± 0.181</b>	0.704 ± 0.145	<b>0.759 ± 0.181</b>	0.750 ± 0.181	0.604 ± 0.280	0.747 ± 0.136	<b>0.759 ± 0.181</b>	<b>0.759 ± 0.181</b>	0.583 ± 0.228	0.534 ± 0.207	0.587 ± 0.342
glass2	0.214 ± 0.174	0.174 ± 0.128	0.214 ± 0.185	0.237 ± 0.164	<b>0.240 ± 0.221</b>	0.143 ± 0.081	0.204 ± 0.153	0.228 ± 0.173	0.205 ± 0.141	0.151 ± 0.111	0.230 ± 0.130
glass1	0.610 ± 0.155	0.573 ± 0.117	0.614 ± 0.167	0.604 ± 0.160	0.580 ± 0.186	0.425 ± 0.122	0.612 ± 0.176	0.610 ± 0.155	<b>0.677 ± 0.208</b>	0.552 ± 0.321	0.489 ± 0.209
glass5	0.693 ± 0.211	0.620 ± 0.145	0.693 ± 0.211	0.693 ± 0.211	0.660 ± 0.184	<b>0.734 ± 0.202</b>	0.693 ± 0.211	0.693 ± 0.211	0.665 ± 0.150	0.710 ± 0.238	0.566 ± 0.220
page-blocks1-3-vs-4	<b>0.931 ± 0.030</b>	0.865 ± 0.080	0.930 ± 0.031	0.906 ± 0.076	0.922 ± 0.046	0.777 ± 0.084	0.928 ± 0.035	<b>0.931 ± 0.030</b>	0.846 ± 0.085	0.719 ± 0.267	0.857 ± 0.136
yeast-0-5-6-7-9-vs-4	0.340 ± 0.051	<b>0.377 ± 0.045</b>	0.370 ± 0.062	0.354 ± 0.050	0.355 ± 0.072	0.290 ± 0.040	0.353 ± 0.044	0.348 ± 0.079	0.363 ± 0.042	0.096 ± 0.003	0.336 ± 0.066
yeast-1-2-8-9-vs-7	0.101 ± 0.020	<b>0.133 ± 0.063</b>	0.101 ± 0.033	0.089 ± 0.030	0.130 ± 0.047	0.097 ± 0.023	0.098 ± 0.017	0.113 ± 0.033	0.106 ± 0.083	0.032 ± 0.000	0.122 ± 0.089
yeast-1-4-5-8-vs-7	0.072 ± 0.044	<b>0.112 ± 0.041</b>	0.073 ± 0.053	0.065 ± 0.042	0.076 ± 0.048	0.050 ± 0.019	0.086 ± 0.025	0.070 ± 0.048	0.050 ± 0.066	0.044 ± 0.000	0.057 ± 0.042
yeast-1-vs-7	0.203 ± 0.070	0.234 ± 0.085	0.178 ± 0.082	0.214 ± 0.056	0.186 ± 0.085	0.169 ± 0.021	0.186 ± 0.051	0.198 ± 0.071	<b>0.270 ± 0.120</b>	0.055 ± 0.029	0.161 ± 0.079
yeast-2-vs-4	0.621 ± 0.047	0.673 ± 0.044	0.689 ± 0.044	0.677 ± 0.069	0.653 ± 0.079	0.559 ± 0.073	0.676 ± 0.055	0.619 ± 0.059	0.670 ± 0.058	0.259 ± 0.269	<b>0.715 ± 0.093</b>
yeast-2-vs-8	0.273 ± 0.116	0.518 ± 0.154	0.377 ± 0.161	0.346 ± 0.088	0.481 ± 0.131	0.259 ± 0.064	0.386 ± 0.144	0.287 ± 0.113	<b>0.792 ± 0.202</b>	0.044 ± 0.005	0.595 ± 0.269
yeast4	0.223 ± 0.033	0.258 ± 0.052	0.233 ± 0.056	0.240 ± 0.049	0.216 ± 0.059	0.202 ± 0.040	0.237 ± 0.092	0.226 ± 0.035	<b>0.280 ± 0.077</b>	0.034 ± 0.001	0.234 ± 0.110
yeast5	0.649 ± 0.091	0.624 ± 0.086	0.623 ± 0.089	0.618 ± 0.101	0.638 ± 0.056	0.393 ± 0.060	0.646 ± 0.077	<b>0.655 ± 0.095</b>	0.643 ± 0.099	0.030 ± 0.000	0.546 ± 0.191
yeast6	0.269 ± 0.050	0.272 ± 0.072	0.281 ± 0.096	0.280 ± 0.061	<b>0.354 ± 0.070</b>	0.171 ± 0.029	0.288 ± 0.081	0.273 ± 0.051	0.284 ± 0.082	0.025 ± 0.003	0.323 ± 0.092
cleaveland-0-vs-4	<b>0.558 ± 0.149</b>	0.419 ± 0.187	0.506 ± 0.173	0.542 ± 0.127	0.491 ± 0.209	0.451 ± 0.154	0.555 ± 0.136	<b>0.558 ± 0.149</b>	0.454 ± 0.115	0.454 ± 0.243	0.484 ± 0.267
ecoli-0-1-4-7-vs-2-3-5-6	0.502 ± 0.116	0.583 ± 0.115	0.583 ± 0.100	0.510 ± 0.109	0.536 ± 0.073	0.423 ± 0.111	0.589 ± 0.116	0.539 ± 0.140	<b>0.674 ± 0.091</b>	0.119 ± 0.161	0.537 ± 0.183
ecoli-0-1-vs-2-3-5	0.654 ± 0.151	<b>0.708 ± 0.060</b>	0.629 ± 0.069	0.579 ± 0.149	0.620 ± 0.134	0.530 ± 0.066	0.614 ± 0.178	0.566 ± 0.125	0.537 ± 0.135	0.552 ± 0.137	
ecoli-0-2-6-7-vs-3-5	0.581 ± 0.102	<b>0.691 ± 0.140</b>	0.566 ± 0.113	0.608 ± 0.128	0.606 ± 0.057	0.470 ± 0.121	0.547 ± 0.134	0.607 ± 0.110	0.666 ± 0.136	0.174 ± 0.221	0.634 ± 0.135
ecoli-0-6-7-vs-3-5	0.563 ± 0.149	<b>0.746 ± 0.229</b>	0.608 ± 0.165	0.586 ± 0.161	0.625 ± 0.123	0.510 ± 0.146	0.537 ± 0.145	0.570 ± 0.143	0.716 ± 0.165	0.277 ± 0.279	0.636 ± 0.236
ecoli-0-6-7-vs-2	0.697 ± 0.197	0.744 ± 0.157	0.676 ± 0.216	0.687 ± 0.224	<b>0.775 ± 0.182</b>	0.545 ± 0.136	0.688 ± 0.200	0.676 ± 0.205	0.764 ± 0.156	0.268 ± 0.302	0.758 ± 0.146
glass-0-1-4-6-vs-2	0.231 ± 0.080	0.164 ± 0.111	0.237 ± 0.096	0.219 ± 0.088	<b>0.244 ± 0.101</b>	0.192 ± 0.055	0.184 ± 0.099	0.201 ± 0.102	0.167 ± 0.127	0.130 ± 0.041	0.171 ± 0.090
glass-0-1-5-vs-2	0.335 ± 0.060	0.249 ± 0.137	<b>0.392 ± 0.230</b>	0.340 ± 0.138	0.317 ± 0.152	0.181 ± 0.077	0.300 ± 0.102	0.338 ± 0.098	0.281 ± 0.130	0.180 ± 0.098	0.173 ± 0.107
yeast-0-2-5-6-vs-3-7-8-9	0.377 ± 0.050	<b>0.444 ± 0.067</b>	0.409 ± 0.051	0.394 ± 0.055	0.416 ± 0.048	0.395 ± 0.052	0.373 ± 0.056	0.359 ± 0.046	0.409 ± 0.162	0.185 ± 0.168	0.414 ± 0.096
yeast-0-5-5-9-vs-7-8	0.296 ± 0.036	<b>0.326 ± 0.058</b>	0.237 ± 0.046	0.226 ± 0.055	0.240 ± 0.062	0.233 ± 0.062	0.220 ± 0.053	0.214 ± 0.044	0.220 ± 0.196	0.105 ± 0.014	0.188 ± 0.086
abalone-17-vs-7-8-9-10	0.162 ± 0.052	0.229 ± 0.038	0.160 ± 0.023	0.172 ± 0.037	0.205 ± 0.050	0.155 ± 0.033	0.176 ± 0.045	0.161 ± 0.053	<b>0.238 ± 0.078</b>	0.088 ± 0.070	0.139 ± 0.086
abalone-19-vs-10-11-12-13	0.049 ± 0.022	0.040 ± 0.031	0.047 ± 0.023	0.043 ± 0.015	0.050 ± 0.037	0.045 ± 0.017	<b>0.055 ± 0.018</b>	0.053 ± 0.016	0.043 ± 0.044	0.020 ± 0.013	0.039 ± 0.036
abalone-20-vs-8-9-10	0.155 ± 0.024	0.128 ± 0.097	0.151 ± 0.065	0.159 ± 0.042	0.169 ± 0.069	0.131 ± 0.033	0.161 ± 0.045	0.156 ± 0.024	<b>0.180 ± 0.095</b>	0.049 ± 0.032	0.140 ± 0.094
abalone-21-vs-2	0.278 ± 0.171	0.354 ± 0.197	0.272 ± 0.166	0.264 ± 0.191	0.382 ± 0.208	0.278 ± 0.121	0.281 ± 0.179	0.285 ± 0.173	<b>0.425 ± 0.166</b>	0.240 ± 0.210	0.399 ± 0.271
flare-F	0.155 ± 0.060	<b>0.247 ± 0.080</b>	0.175 ± 0.067	0.187 ± 0.051	0.224 ± 0.070	0.215 ± 0.094	0.177 ± 0.058	0.180 ± 0.044	0.177 ± 0.121	0.051 ± 0.018	0.201 ± 0.077
kddcup-bufferoverflow-vs-back	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>
kddcup-rootkit-innp-vs-back	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>
kr-vs-karozo-vs-aignt	0.881 ± 0.077	0.888 ± 0.067	<b>0.911 ± 0.071</b>	0.899 ± 0.065	0.895 ± 0.093	0.716 ± 0.119	0.901 ± 0.094	0.881 ± 0.077	0.645 ± 0.282	0.045 ± 0.016	0.595 ± 0.352
poker-8-9-vs-2	0.066 ± 0.033	<b>0.079 ± 0.065</b>	0.066 ± 0.028	0.068 ± 0.024	0.059 ± 0.059	0.056 ± 0.034	0.049 ± 0.022	0.066 ± 0.031	0.061 ± 0.083	0.031 ± 0.042	0.052 ± 0.061
poker-8-9-vs-4	0.247 ± 0.095	0.643 ± 0.299	0.345 ± 0.312	0.255 ± 0.299	0.469 ± 0.318	0.145 ± 0.125	0.274 ± 0.188	0.247 ± 0.095	0.938 ± 0.099	0.934 ± 0.107	<b>0.947 ± 0.106</b>
poker-8-vs-6	0.509 ± 0.330	0.375 ± 0.281	0.451 ± 0.263	0.420 ± 0.268	0.503 ± 0.308	0.315 ± 0.381	0.474 ± 0.347	0.509 ± 0.330	0.951 ± 0.114	<b>0.967 ± 0.100</b>	0.745 ± 0.303
poker-9-vs-7	0.166 ± 0.198	0.120 ± 0.126	0.166 ± 0.198	0.166 ± 0.198	0.199 ± 0.209	0.271 ± 0.320	0.148 ± 0.176	0.166 ± 0.198	<b>0.341 ± 0.402</b>	0.272 ± 0.317	0.278 ± 0.333
winequality-red-3-vs-2	0.026 ± 0.045	0.073 ± 0.151	0.025 ± 0.060	0.042 ± 0.077	0.026 ± 0.061	0.070 ± 0.056	0.034 ± 0.059	0.026 ± 0.045	0.053 ± 0.101	0.053 ± 0.096	<b>0.085 ± 0.088</b>
winequality-red-4	0.072 ± 0.035	0.060 ± 0.028	0.088 ± 0.016	0.090 ± 0.030	<b>0.104 ± 0.048</b>	0.086 ± 0.021	0.089 ± 0.012	0.071 ± 0.036	0.090 ± 0.049	0.049 ± 0.021	0.090 ± 0.047
winequality-red-8-vs-6	0.123 ± 0.048	0.072 ± 0.045	0.060 ± 0.039	<b>0.079 ± 0.044</b>	0.074 ± 0.063	0.055 ± 0.025	0.061 ± 0.041	0.060 ± 0.045	0.065 ± 0.047	0.050 ± 0.063	0.065 ± 0.037
winequality-white-3-9-vs-2	0.059 ± 0.048	<b>0.201 ± 0.174</b>	0.121 ± 0.041	0.116 ± 0.058	0.132 ± 0.087	0.107 ± 0.044	0.140 ± 0.054	0.123 ± 0.045	0.124 ± 0.075	0.105 ± 0.079	0.193 ± 0.276
winequality-white-3-vs-7	0.068 ± 0.047	0.055 ± 0.038	0.047 ± 0.042	0.045 ± 0.038	0.054 ± 0.067	<b>0.101 ± 0.029</b>	0.041 ± 0.024	0.059 ± 0.048	0.059 ± 0.055	0.029 ± 0.029	0.065 ± 0.060
winequality-white-3-vs-7	0.068 ± 0.047	0.111 ± 0.088	0.088 ± 0.054	0.085 ± 0.052	0.136 ± 0.052	<b>0.252 ± 0.070</b>	0.047 ± 0.044	0.068 ± 0.047	0.097 ± 0.056	0.122 ± 0.124	0.146 ± 0.113
winequality-white-9-vs-4	0.377 ± 0.294	0.345 ± 0.283	0.360 ± 0.282	<b>0.380 ± 0.277</b>	0.368 ± 0.277	0.363 ± 0.280	0.360 ± 0.282	0.377 ± 0.294	0.167 ± 0.300	0.167 ± 0.300	0.167 ± 0.300
zoo-3	0.196 ± 0.192	0.170 ± 0.169	0.301 ± 0.296	0.274 ± 0.293	0.246 ± 0.300	<b>0.579 ± 0.380</b>	0.334 ± 0.365	0.196 ± 0.192	0.104 ± 0.163	0.104 ± 0.163	0.104 ± 0.163
ecoli1	0.715 ± 0.043	0.705 ± 0.047	0.708 ± 0.040	<b>0.736 ± 0.048</b>	0.718 ± 0.024	0.666 ± 0.041	0.712 ± 0.038	0.731 ± 0.043	0.698 ± 0.085	0.296 ± 0.203	0.678 ± 0.049
ecoli2	0.706 ± 0.080	0.702 ± 0.097	<b>0.740 ± 0.129</b>	0.734 ± 0.082	0.714 ± 0.106	0.624 ± 0.078	0.692 ± 0.099	0.724 ± 0.092	0.609 ± 0.120	0.270 ± 0.271	0.630 ± 0.069
ecoli3	0.474 ± 0.059	0.504 ± 0.083	0.462 ± 0.084	0.503 ± 0.072	0.494 ± 0.078	0.462 ± 0.051	0.486 ± 0.068	0.482 ± 0.076	<b>0.516 ± 0.102</b>	0.198 ± 0.178	0.507 ± 0.175
glass0	0.637 ± 0.044	0.656 ± 0.076	0.689 ± 0.072	0.689 ± 0.067	0.683 ± 0.089	0.693 ± 0.069	<b>0.710 ± 0.111</b>	0.660 ± 0.066	0.646 ± 0.067	0.563 ± 0.126	0.613 ± 0.071
glass1	0.620 ± 0.044	<b>0.649 ± 0.047</b>	0.620 ± 0.053	0.629 ± 0.079	0.619 ± 0.051	0.610 ± 0.061	0.620 ± 0.072	0.625 ± 0.041	0.594 ± 0.092	0.441 ± 0.107	0.552 ± 0.068
haberman	0.366 ± 0.040	0.350 ± 0.027	0.352 ± 0.043	0.345 ± 0.055	0.353 ± 0.059	0.359 ± 0.047	0.344 ± 0.063	0.388 ± 0.055	<b>0.408 ± 0.051</b>	0.327 ± 0.105	0.398 ± 0.095
page-blocks0	0.763 ± 0.029	0.798 ± 0.020	0.756 ± 0.028	0.762 ± 0.033	0.787 ± 0.018	0.800 ± 0.016	0.765 ± 0.028	0.771 ± 0.024	<b>0.812 ± 0.025</b>	0.785 ± 0.025	0.776 ± 0.045
ptm	0.552 ± 0.030	<b>0.566 ± 0.022</b>	0.553 ± 0.038	0.556 ± 0.028	0.550 ± 0.033	0.564 ± 0.040	0.559 ± 0.031	0.559 ± 0.034	0.553 ± 0.047	0.484 ± 0.051	0.555 ± 0.043
vehicle1	0.495 ± 0.033	0.498 ± 0.039	<b>0.505 ± 0.024</b>	0.496 ± 0.034	0.482 ± 0.033	0.492 ± 0.044	0.491 ± 0.030	0.503 ± 0.025	0.489 ± 0.033	0.08 ± 0.031	0.485 ± 0.031
vehicle1	0.471 ± 0.033	<b>0.512 ± 0.040</b>	0.467 ± 0.042	0.477 ± 0.038	0.483 ± 0.028	0.486 ± 0.037	0.490 ± 0.025	0.473 ± 0.028			

Table 14. SVM – Precision

Dataset name	SMOTE	polynom-fit-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TomekLinks	JFOTS_pr	JFOTS_rc	JFOTS_prom
abalone19	0.019 ± 0.008	<b>0.026 ± 0.013</b>	0.019 ± 0.008	0.020 ± 0.008	0.022 ± 0.008	0.021 ± 0.006	0.019 ± 0.008	0.019 ± 0.008	0.017 ± 0.009	0.011 ± 0.004	0.012 ± 0.002
abalone18	0.247 ± 0.040	0.361 ± 0.092	0.299 ± 0.030	0.251 ± 0.052	0.250 ± 0.055	0.334 ± 0.077	0.240 ± 0.042	0.245 ± 0.039	<b>0.525 ± 0.103</b>	0.146 ± 0.090	0.361 ± 0.244
ecoli0-1-3-7_vs_2-6	0.775 ± 0.287	<b>0.842 ± 0.256</b>	0.544 ± 0.260	0.648 ± 0.273	0.802 ± 0.308	0.297 ± 0.239	0.725 ± 0.287	0.385 ± 0.252	0.284 ± 0.098	0.408 ± 0.250	
glass0-1-6_vs_2	0.294 ± 0.091	<b>0.315 ± 0.098</b>	0.276 ± 0.073	0.283 ± 0.081	0.285 ± 0.076	0.194 ± 0.057	0.292 ± 0.081	0.293 ± 0.093	0.260 ± 0.084	0.181 ± 0.089	0.262 ± 0.088
glass0-1-6_vs_2	0.837 ± 0.170	<b>0.845 ± 0.198</b>	0.837 ± 0.170	0.837 ± 0.170	0.840 ± 0.179	0.592 ± 0.267	0.837 ± 0.170	0.837 ± 0.170	0.636 ± 0.331	0.386 ± 0.134	0.465 ± 0.219
glass2	0.189 ± 0.107	0.210 ± 0.117	0.192 ± 0.106	0.185 ± 0.103	0.195 ± 0.107	<b>0.218 ± 0.126</b>	0.192 ± 0.112	0.188 ± 0.106	0.171 ± 0.126	0.147 ± 0.070	0.149 ± 0.073
glass3	0.768 ± 0.106	0.755 ± 0.111	0.749 ± 0.105	0.749 ± 0.105	<b>0.782 ± 0.125</b>	0.485 ± 0.113	0.770 ± 0.134	0.768 ± 0.106	0.741 ± 0.153	0.445 ± 0.230	0.738 ± 0.191
glass5	0.788 ± 0.151	<b>0.823 ± 0.151</b>	0.803 ± 0.139	0.803 ± 0.139	0.771 ± 0.179	0.454 ± 0.232	0.788 ± 0.151	0.788 ± 0.151	0.630 ± 0.202	0.566 ± 0.207	0.438 ± 0.245
page-blocks1-3_vs_4	0.650 ± 0.107	<b>0.801 ± 0.131</b>	0.658 ± 0.109	0.640 ± 0.112	0.637 ± 0.128	0.490 ± 0.089	0.613 ± 0.102	0.650 ± 0.107	0.516 ± 0.318	0.411 ± 0.263	0.584 ± 0.217
yeast-0-5-6-7-9_vs_4	0.384 ± 0.063	0.448 ± 0.079	0.390 ± 0.066	0.410 ± 0.082	0.388 ± 0.083	0.391 ± 0.051	0.392 ± 0.073	0.381 ± 0.064	<b>0.508 ± 0.106</b>	0.096 ± 0.033	0.361 ± 0.142
yeast-1-2-8-9_vs_7	0.072 ± 0.020	0.072 ± 0.023	0.070 ± 0.021	0.074 ± 0.028	0.088 ± 0.032	0.125 ± 0.029	0.071 ± 0.025	0.074 ± 0.020	<b>0.236 ± 0.297</b>	0.032 ± 0.000	0.121 ± 0.138
yeast-1-4-5-8_vs_7	0.076 ± 0.024	0.080 ± 0.027	0.073 ± 0.021	0.070 ± 0.016	0.080 ± 0.023	<b>0.095 ± 0.017</b>	0.068 ± 0.014	0.076 ± 0.023	0.060 ± 0.038	0.044 ± 0.000	0.061 ± 0.011
yeast-1_vs_7	0.194 ± 0.039	0.211 ± 0.044	0.193 ± 0.039	0.195 ± 0.058	0.190 ± 0.041	0.205 ± 0.054	0.184 ± 0.052	0.193 ± 0.040	<b>0.556 ± 0.217</b>	0.068 ± 0.007	0.266 ± 0.261
yeast-2_vs_4	0.685 ± 0.065	0.710 ± 0.067	0.667 ± 0.066	0.683 ± 0.058	0.651 ± 0.089	0.641 ± 0.070	0.670 ± 0.063	0.689 ± 0.068	<b>0.826 ± 0.137</b>	0.291 ± 0.297	0.696 ± 0.104
yeast-2_vs_8	0.429 ± 0.292	<b>0.888 ± 0.121</b>	0.451 ± 0.277	0.493 ± 0.285	0.518 ± 0.321	0.588 ± 0.095	0.355 ± 0.206	0.429 ± 0.292	0.617 ± 0.343	0.044 ± 0.004	0.433 ± 0.331
yeast4	0.201 ± 0.031	0.255 ± 0.033	0.204 ± 0.030	0.208 ± 0.030	0.207 ± 0.028	0.197 ± 0.036	0.205 ± 0.029	0.201 ± 0.031	<b>0.387 ± 0.131</b>	0.034 ± 0.001	0.211 ± 0.108
yeast5	0.502 ± 0.067	0.541 ± 0.081	0.502 ± 0.065	0.504 ± 0.072	0.515 ± 0.077	0.347 ± 0.043	0.502 ± 0.064	0.502 ± 0.067	<b>0.555 ± 0.125</b>	0.030 ± 0.000	0.445 ± 0.179
yeast6	0.306 ± 0.042	0.336 ± 0.045	0.309 ± 0.044	0.279 ± 0.039	0.320 ± 0.042	0.168 ± 0.014	0.297 ± 0.045	0.306 ± 0.042	<b>0.464 ± 0.139</b>	0.025 ± 0.003	0.359 ± 0.156
cleveand4_0_vs_4	0.797 ± 0.159	0.792 ± 0.195	0.805 ± 0.158	<b>0.813 ± 0.153</b>	0.788 ± 0.163	0.665 ± 0.093	0.802 ± 0.158	0.797 ± 0.159	0.481 ± 0.172	0.369 ± 0.229	0.317 ± 0.181
ecoli0-1-4-7_vs_2-3-5-6	0.732 ± 0.067	<b>0.814 ± 0.037</b>	0.710 ± 0.057	0.733 ± 0.068	0.711 ± 0.099	0.588 ± 0.080	0.688 ± 0.108	0.732 ± 0.067	0.713 ± 0.140	0.191 ± 0.166	0.617 ± 0.182
ecoli0-1_vs_2-3-5	0.777 ± 0.103	0.808 ± 0.090	0.790 ± 0.102	0.768 ± 0.123	<b>0.810 ± 0.093</b>	0.669 ± 0.131	0.739 ± 0.152	0.771 ± 0.105	0.755 ± 0.165	0.388 ± 0.291	0.628 ± 0.217
ecoli0-2-6-7_vs_3-5	0.766 ± 0.189	<b>0.863 ± 0.167</b>	0.777 ± 0.212	0.813 ± 0.192	0.803 ± 0.216	0.619 ± 0.127	0.767 ± 0.173	0.766 ± 0.189	0.813 ± 0.154	0.245 ± 0.120	0.660 ± 0.198
ecoli0-6-7_vs_3-5	0.805 ± 0.190	<b>0.858 ± 0.147</b>	0.768 ± 0.211	0.825 ± 0.180	0.813 ± 0.185	0.627 ± 0.161	0.800 ± 0.183	0.805 ± 0.190	0.817 ± 0.092	0.373 ± 0.306	0.691 ± 0.210
ecoli0-6-7_vs_2	0.786 ± 0.181	0.808 ± 0.179	0.813 ± 0.175	0.768 ± 0.203	0.772 ± 0.198	0.643 ± 0.152	0.771 ± 0.220	0.792 ± 0.176	<b>0.831 ± 0.114</b>	0.300 ± 0.328	0.809 ± 0.107
glass0-1-4-6_vs_2	<b>0.253 ± 0.082</b>	0.251 ± 0.122	0.237 ± 0.071	0.243 ± 0.096	0.228 ± 0.109	0.191 ± 0.071	0.243 ± 0.090	0.251 ± 0.083	0.127 ± 0.042	0.141 ± 0.041	0.140 ± 0.069
glass0-1-5_vs_2	0.278 ± 0.062	0.300 ± 0.086	0.278 ± 0.058	0.289 ± 0.055	<b>0.325 ± 0.103</b>	0.215 ± 0.090	0.270 ± 0.057	0.279 ± 0.061	0.246 ± 0.066	0.195 ± 0.121	0.201 ± 0.084
yeast-0-2-5-6_vs_3-7-8-9	0.503 ± 0.061	<b>0.636 ± 0.085</b>	0.489 ± 0.093	0.500 ± 0.067	0.494 ± 0.108	0.502 ± 0.076	0.485 ± 0.088	0.504 ± 0.061	0.449 ± 0.145	0.178 ± 0.155	0.439 ± 0.085
yeast-0-5-8-9_vs_7-8	0.272 ± 0.039	<b>0.518 ± 0.126</b>	0.256 ± 0.036	0.259 ± 0.040	0.283 ± 0.039	0.319 ± 0.082	0.272 ± 0.047	0.270 ± 0.042	0.251 ± 0.182	0.103 ± 0.008	0.187 ± 0.118
abalone-17_vs_7-8-9-10	0.174 ± 0.025	<b>0.246 ± 0.055</b>	0.172 ± 0.026	0.177 ± 0.029	0.183 ± 0.030	0.198 ± 0.041	0.174 ± 0.027	0.173 ± 0.025	0.244 ± 0.121	0.085 ± 0.062	0.111 ± 0.068
abalone-19_vs_10-11-12-13	0.051 ± 0.010	<b>0.063 ± 0.028</b>	0.052 ± 0.009	0.053 ± 0.008	0.057 ± 0.012	0.061 ± 0.018	0.051 ± 0.012	0.051 ± 0.010	0.063 ± 0.027	0.029 ± 0.007	0.032 ± 0.013
abalone-20_vs_8-9-10	0.189 ± 0.054	0.231 ± 0.049	0.191 ± 0.056	0.188 ± 0.052	0.202 ± 0.048	0.173 ± 0.027	0.182 ± 0.048	0.189 ± 0.055	<b>0.266 ± 0.146</b>	0.050 ± 0.047	0.153 ± 0.099
abalone-21_vs_2	0.466 ± 0.088	<b>0.623 ± 0.171</b>	0.452 ± 0.101	0.441 ± 0.083	0.463 ± 0.101	0.454 ± 0.112	0.462 ± 0.117	0.472 ± 0.084	0.414 ± 0.169	0.268 ± 0.209	0.497 ± 0.170
flare-F	0.166 ± 0.019	<b>0.305 ± 0.056</b>	0.157 ± 0.021	0.173 ± 0.021	0.161 ± 0.022	0.197 ± 0.033	0.169 ± 0.025	0.166 ± 0.019	0.137 ± 0.039	0.051 ± 0.018	0.182 ± 0.084
kidcup-buffer_zeroflow_vs_back	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	0.988 ± 0.035	0.988 ± 0.035	0.988 ± 0.035
kidcup-rookite_insp_vs_back	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	<b>1.000 ± 0.000</b>	0.992 ± 0.025	0.992 ± 0.025	0.992 ± 0.025
kr-vs-kc_eros_vs_right	0.785 ± 0.139	0.787 ± 0.141	0.785 ± 0.139	0.781 ± 0.142	0.796 ± 0.151	0.513 ± 0.089	<b>0.799 ± 0.143</b>	0.785 ± 0.139	<b>0.262 ± 0.159</b>	0.044 ± 0.014	0.409 ± 0.302
poker-8-9_vs_5	0.068 ± 0.025	0.079 ± 0.047	0.065 ± 0.020	0.063 ± 0.021	0.079 ± 0.033	0.060 ± 0.028	0.067 ± 0.015	0.068 ± 0.025	<b>0.084 ± 0.091</b>	0.021 ± 0.013	0.066 ± 0.025
poker-8-9_vs_6	0.958 ± 0.068	<b>0.969 ± 0.062</b>	0.958 ± 0.068	0.940 ± 0.105	0.879 ± 0.146	0.541 ± 0.085	0.887 ± 0.150	0.958 ± 0.068	0.941 ± 0.176	0.941 ± 0.176	0.941 ± 0.176
poker-8-9_vs_6	0.942 ± 0.092	0.910 ± 0.111	0.942 ± 0.092	0.917 ± 0.105	0.865 ± 0.149	0.579 ± 0.135	0.942 ± 0.092	0.942 ± 0.092	0.933 ± 0.206	<b>1.000 ± 0.000</b>	0.901 ± 0.296
poker-9_vs_7	<b>0.617 ± 0.435</b>	<b>0.617 ± 0.435</b>	<b>0.617 ± 0.435</b>	<b>0.617 ± 0.435</b>	0.525 ± 0.453	0.435 ± 0.361	0.567 ± 0.416	<b>0.617 ± 0.435</b>	0.613 ± 0.474	0.459 ± 0.450	0.369 ± 0.424
winequality-red-3_vs_4	0.068 ± 0.080	0.079 ± 0.088	0.067 ± 0.080	0.067 ± 0.080	0.071 ± 0.082	<b>0.153 ± 0.107</b>	0.094 ± 0.094	0.068 ± 0.080	0.052 ± 0.072	0.029 ± 0.025	0.024 ± 0.042
winequality-red-4	0.102 ± 0.010	0.108 ± 0.017	0.109 ± 0.008	0.105 ± 0.010	0.107 ± 0.019	<b>0.125 ± 0.033</b>	0.105 ± 0.008	0.102 ± 0.009	0.076 ± 0.042	0.049 ± 0.011	0.074 ± 0.019
winequality-red-5_vs_6-7	0.058 ± 0.028	0.055 ± 0.038	0.055 ± 0.038	0.052 ± 0.027	0.051 ± 0.039	0.038 ± 0.024	0.055 ± 0.029	0.058 ± 0.028	0.033 ± 0.021	0.024 ± 0.017	0.040 ± 0.022
winequality-red-8_vs_9	0.122 ± 0.019	0.144 ± 0.035	0.122 ± 0.019	0.123 ± 0.019	<b>0.151 ± 0.030</b>	0.095 ± 0.031	0.132 ± 0.032	0.122 ± 0.019	0.102 ± 0.038	0.069 ± 0.030	0.106 ± 0.059
winequality-white-3_vs_2	0.054 ± 0.028	0.039 ± 0.037	0.049 ± 0.028	0.053 ± 0.027	0.065 ± 0.044	<b>0.172 ± 0.066</b>	0.052 ± 0.029	0.054 ± 0.028	0.068 ± 0.095	0.020 ± 0.008	0.049 ± 0.034
winequality-white-3_vs_7	0.051 ± 0.044	0.054 ± 0.056	0.061 ± 0.047	0.058 ± 0.045	0.089 ± 0.058	<b>0.430 ± 0.151</b>	0.062 ± 0.046	0.051 ± 0.044	0.055 ± 0.032	0.049 ± 0.027	0.067 ± 0.029
winequality-white-9_vs_4-2	0.900 ± 0.213	0.900 ± 0.213	0.900 ± 0.213	0.433 ± 0.473	<b>0.917 ± 0.171</b>	0.308 ± 0.384	0.900 ± 0.213	0.900 ± 0.213	0.190 ± 0.166	0.190 ± 0.166	0.190 ± 0.166
zoo-3	<b>0.317 ± 0.411</b>	<b>0.317 ± 0.411</b>	<b>0.317 ± 0.411</b>	0.217 ± 0.350	<b>0.317 ± 0.411</b>	0.150 ± 0.241	<b>0.317 ± 0.411</b>	<b>0.317 ± 0.411</b>	0.122 ± 0.191	0.122 ± 0.191	0.122 ± 0.191
ecoli1	0.679 ± 0.037	<b>0.789 ± 0.050</b>	0.690 ± 0.026	0.695 ± 0.031	0.693 ± 0.045	0.652 ± 0.031	0.681 ± 0.036	0.678 ± 0.035	0.637 ± 0.025	0.320 ± 0.184	0.691 ± 0.046
ecoli2	0.833 ± 0.047	<b>0.859 ± 0.042</b>	0.837 ± 0.050	0.845 ± 0.053	0.839 ± 0.051	0.790 ± 0.065	0.831 ± 0.055	0.837 ± 0.055	0.637 ± 0.177	0.286 ± 0.220	0.664 ± 0.110
ecoli3	0.504 ± 0.032	<b>0.555 ± 0.052</b>	0.494 ± 0.027	0.531 ± 0.049	0.590 ± 0.026	0.447 ± 0.037	0.506 ± 0.039	0.507 ± 0.031	0.500 ± 0.081	0.178 ± 0.122	0.505 ± 0.150
glass0	0.585 ± 0.058	<b>0.636 ± 0.050</b>	0.594 ± 0.057	0.579 ± 0.064	0.607 ± 0.062	0.573 ± 0.069	0.600 ± 0.056	0.582 ± 0.057	0.519 ± 0.043	0.492 ± 0.070	0.569 ± 0.066
glass1	0.550 ± 0.062	0.528 ± 0.056	0.542 ± 0.069	0.548 ± 0.060	0.555 ± 0.074	0.555 ± 0.076	0.555 ± 0.077	0.552 ± 0.068	<b>0.578 ± 0.103</b>	0.414 ± 0.041	0.505 ± 0.061
haberman	0.421 ± 0.064	<b>0.507 ± 0.059</b>	0.428 ± 0.040	0.382 ± 0.047	0.400 ± 0.048	0.455 ± 0.046	0.409 ± 0.055	0.419 ± 0.052	0.444 ± 0.039	0.341 ± 0.118	0.430 ± 0.083
page-blocks0	0.664 ± 0.017	<b>0.801 ± 0.026</b>	0.667 ± 0.019	0.690 ± 0.023	0.668 ± 0.017	0.778 ± 0.044	0.659 ± 0.016	0.664 ± 0.017	0.637 ± 0.165	0.393 ± 0.083	0.692 ± 0.094
ptms	0.600 ± 0.040	0.640 ± 0.033	0.606 ± 0.030	0.607 ± 0.031	0.608 ± 0.038	0.620 ± 0.032	0.608 ± 0.035	0.600 ± 0.040	<b>0.670 ± 0.049</b>	0.471 ± 0.032	0.626 ± 0.057
vehicle1	0.538 ± 0.022	0.530 ± 0.033	0.538 ± 0.027	0.542 ± 0.028	0.549 ± 0.028	0.541 ± 0.025	0.544 ± 0.025	0.540 ± 0.022	<b>0.594 ± 0.044</b>	0.518 ± 0.017	0.542 ± 0.039
vehicle5	0.515 ± 0.016	0.549 ± 0.027	0.513 ± 0.020	0.515 ± 0.020	0.516 ± 0.023	0.515 ± 0.022	0.514 ± 0.020	0.515 ± 0.017	<b>0.617 ± 0.088</b>		

Table 15. KNN – Recall

Dataset name	SMOTE	polynom-fit-SMOTE	Lee	SMOBD	G-SMOTE	LVQ-SMOTE	Assembled-SMOTE	SMOTE-TonekLinks	JFOTS-pr	JFOTS-re	JFOTS-prom
abalone19	<b>0.200 ± 0.139</b>	0.062 ± 0.056	<b>0.200 ± 0.139</b>	<b>0.200 ± 0.139</b>	0.138 ± 0.087	0.175 ± 0.092	0.194 ± 0.126	<b>0.200 ± 0.139</b>	0.062 ± 0.062	0.013 ± 0.025	0.169 ± 0.128
abalone19	<b>0.543 ± 0.068</b>	0.486 ± 0.090	0.514 ± 0.076	0.521 ± 0.088	0.486 ± 0.106	0.462 ± 0.083	0.529 ± 0.086	<b>0.543 ± 0.068</b>	0.305 ± 0.140	0.186 ± 0.166	0.314 ± 0.109
ecoli-0-1-3-7-vs-2-6	<b>0.700 ± 0.155</b>	<b>0.700 ± 0.155</b>	<b>0.700 ± 0.155</b>	<b>0.700 ± 0.155</b>	<b>0.700 ± 0.155</b>	<b>0.700 ± 0.155</b>	<b>0.700 ± 0.155</b>	<b>0.700 ± 0.155</b>	0.642 ± 0.224	0.642 ± 0.224	0.675 ± 0.199
glass0-1-6-vs-2	0.600 ± 0.142	0.531 ± 0.083	0.587 ± 0.145	0.589 ± 0.143	0.544 ± 0.110	0.497 ± 0.142	<b>0.603 ± 0.145</b>	0.600 ± 0.142	0.414 ± 0.098	0.314 ± 0.207	0.431 ± 0.195
glass0-1-6-vs-2	<b>0.850 ± 0.196</b>	<b>0.850 ± 0.196</b>	<b>0.850 ± 0.196</b>	<b>0.850 ± 0.196</b>	0.810 ± 0.270	0.810 ± 0.246	<b>0.850 ± 0.196</b>	<b>0.850 ± 0.196</b>	0.790 ± 0.237	0.725 ± 0.386	0.640 ± 0.322
glass2	0.424 ± 0.259	0.426 ± 0.270	0.436 ± 0.310	<b>0.460 ± 0.292</b>	0.411 ± 0.280	0.438 ± 0.236	0.435 ± 0.303	0.424 ± 0.259	0.424 ± 0.200	0.365 ± 0.236	0.318 ± 0.159
glass5	<b>0.850 ± 0.111</b>	0.802 ± 0.114	0.819 ± 0.105	0.805 ± 0.132	0.783 ± 0.078	0.833 ± 0.099	0.833 ± 0.099	<b>0.850 ± 0.111</b>	0.674 ± 0.122	0.555 ± 0.299	0.550 ± 0.139
glass5	<b>0.885 ± 0.226</b>	<b>0.885 ± 0.226</b>	0.865 ± 0.241	<b>0.885 ± 0.226</b>	0.865 ± 0.224	0.780 ± 0.212	<b>0.885 ± 0.226</b>	<b>0.885 ± 0.226</b>	0.670 ± 0.241	0.775 ± 0.287	0.700 ± 0.273
page-blocks-1-3-vs-4	<b>0.986 ± 0.043</b>	0.979 ± 0.046	<b>0.986 ± 0.043</b>	<b>0.986 ± 0.043</b>	0.914 ± 0.188	<b>0.986 ± 0.029</b>	0.971 ± 0.047	<b>0.986 ± 0.043</b>	0.736 ± 0.207	0.707 ± 0.158	0.793 ± 0.222
yeast-0-5-6-7-9-vs-4	0.604 ± 0.090	<b>0.627 ± 0.078</b>	0.608 ± 0.086	0.604 ± 0.085	0.596 ± 0.108	0.592 ± 0.081	0.576 ± 0.069	0.600 ± 0.090	0.388 ± 0.134	0.000 ± 0.000	0.385 ± 0.139
yeast-1-2-8-9-vs-2	<b>0.500 ± 0.100</b>	0.493 ± 0.095	0.493 ± 0.085	0.480 ± 0.088	0.400 ± 0.133	0.453 ± 0.111	0.487 ± 0.108	<b>0.500 ± 0.100</b>	0.213 ± 0.093	0.000 ± 0.000	0.173 ± 0.100
yeast-1-4-5-8-vs-2	0.407 ± 0.081	0.340 ± 0.125	<b>0.413 ± 0.083</b>	0.367 ± 0.100	0.280 ± 0.102	0.333 ± 0.079	0.393 ± 0.081	0.407 ± 0.075	0.127 ± 0.096	0.000 ± 0.000	0.100 ± 0.131
yeast-1-vs-2	0.620 ± 0.073	0.600 ± 0.079	0.627 ± 0.080	<b>0.647 ± 0.085</b>	0.547 ± 0.107	0.540 ± 0.075	0.580 ± 0.069	0.620 ± 0.073	0.260 ± 0.092	0.000 ± 0.000	0.180 ± 0.171
yeast-2-vs-4	0.792 ± 0.071	0.784 ± 0.082	0.788 ± 0.077	0.792 ± 0.070	<b>0.800 ± 0.069</b>	0.777 ± 0.065	<b>0.800 ± 0.067</b>	0.792 ± 0.071	0.698 ± 0.096	0.214 ± 0.329	0.690 ± 0.097
yeast-2-vs-8	<b>0.700 ± 0.134</b>	0.650 ± 0.102	0.690 ± 0.122	<b>0.700 ± 0.134</b>	0.670 ± 0.110	0.680 ± 0.125	<b>0.700 ± 0.134</b>	<b>0.700 ± 0.134</b>	0.580 ± 0.087	0.070 ± 0.210	0.640 ± 0.143
yeast4	0.537 ± 0.057	0.537 ± 0.075	0.537 ± 0.057	0.533 ± 0.062	0.490 ± 0.072	<b>0.548 ± 0.098</b>	0.544 ± 0.082	0.537 ± 0.057	0.340 ± 0.072	0.000 ± 0.000	0.313 ± 0.112
yeast5	0.886 ± 0.077	0.864 ± 0.073	0.877 ± 0.076	0.873 ± 0.073	0.845 ± 0.071	<b>0.914 ± 0.103</b>	0.886 ± 0.071	0.886 ± 0.077	0.745 ± 0.115	0.000 ± 0.000	0.650 ± 0.261
yeast6	0.687 ± 0.094	0.675 ± 0.080	0.687 ± 0.094	0.687 ± 0.094	0.670 ± 0.096	<b>0.766 ± 0.073</b>	0.675 ± 0.094	0.687 ± 0.094	0.482 ± 0.147	0.000 ± 0.000	0.576 ± 0.081
evland-0-vs-4	0.802 ± 0.140	0.786 ± 0.070	<b>0.817 ± 0.052</b>	0.802 ± 0.140	0.783 ± 0.078	0.662 ± 0.147	<b>0.817 ± 0.052</b>	0.802 ± 0.140	0.536 ± 0.185	0.493 ± 0.275	0.502 ± 0.232
ecoli-0-1-4-7-vs-2-3-5-6	<b>0.834 ± 0.034</b>	0.806 ± 0.056	0.827 ± 0.048	0.813 ± 0.048	0.814 ± 0.049	0.826 ± 0.060	<b>0.834 ± 0.034</b>	<b>0.834 ± 0.034</b>	0.492 ± 0.247	0.179 ± 0.222	0.665 ± 0.178
ecoli-0-1-vs-2-3-5	0.808 ± 0.065	0.808 ± 0.065	0.800 ± 0.067	0.800 ± 0.067	0.792 ± 0.067	0.800 ± 0.076	<b>0.817 ± 0.073</b>	0.808 ± 0.065	0.658 ± 0.209	0.417 ± 0.348	0.700 ± 0.119
ecoli-0-2-6-7-vs-3-5	0.745 ± 0.114	0.736 ± 0.118	0.755 ± 0.129	0.736 ± 0.118	0.755 ± 0.129	<b>0.764 ± 0.093</b>	0.745 ± 0.114	0.745 ± 0.114	0.636 ± 0.081	0.245 ± 0.279	0.727 ± 0.070
ecoli-0-6-7-vs-3-5	0.764 ± 0.109	0.764 ± 0.109	<b>0.773 ± 0.124</b>	0.764 ± 0.109	0.755 ± 0.129	0.745 ± 0.106	0.764 ± 0.109	0.764 ± 0.109	0.645 ± 0.111	0.273 ± 0.293	0.655 ± 0.145
ecoli-0-6-7-vs-2	0.790 ± 0.104	0.790 ± 0.125	0.790 ± 0.104	0.790 ± 0.122	0.790 ± 0.104	<b>0.810 ± 0.094</b>	0.790 ± 0.104	0.790 ± 0.104	0.680 ± 0.140	0.230 ± 0.257	0.760 ± 0.143
glass0-1-4-6-vs-2	<b>0.497 ± 0.184</b>	0.472 ± 0.166	0.496 ± 0.198	0.496 ± 0.198	0.424 ± 0.191	0.399 ± 0.126	0.474 ± 0.204	0.485 ± 0.179	0.243 ± 0.169	0.268 ± 0.258	0.261 ± 0.213
glass0-1-5-vs-2	0.574 ± 0.135	0.561 ± 0.115	<b>0.597 ± 0.137</b>	0.562 ± 0.131	0.514 ± 0.158	0.460 ± 0.120	0.575 ± 0.123	0.574 ± 0.135	0.485 ± 0.172	0.322 ± 0.314	0.344 ± 0.209
yeast-0-2-5-6-vs-3-7-8-9	0.609 ± 0.071	0.663 ± 0.057	<b>0.707 ± 0.057</b>	0.697 ± 0.052	0.681 ± 0.063	0.649 ± 0.056	0.699 ± 0.061	0.699 ± 0.071	0.405 ± 0.157	0.092 ± 0.126	0.424 ± 0.076
yeast-0-5-5-9-vs-7-8	0.536 ± 0.062	0.492 ± 0.059	<b>0.540 ± 0.070</b>	0.520 ± 0.076	0.520 ± 0.078	0.504 ± 0.108	0.520 ± 0.067	<b>0.540 ± 0.068</b>	0.220 ± 0.138	0.008 ± 0.021	0.216 ± 0.172
abalone-17-vs-7-8-9-10	0.559 ± 0.092	0.469 ± 0.069	<b>0.566 ± 0.094</b>	0.552 ± 0.094	0.466 ± 0.089	0.531 ± 0.097	0.545 ± 0.088	0.559 ± 0.092	0.224 ± 0.069	0.210 ± 0.175	0.262 ± 0.154
abalone-19-vs-10-11-12-13	0.281 ± 0.085	0.156 ± 0.050	0.287 ± 0.094	<b>0.294 ± 0.105</b>	0.188 ± 0.097	0.237 ± 0.092	0.250 ± 0.101	0.281 ± 0.085	0.112 ± 0.073	0.138 ± 0.142	0.150 ± 0.135
abalone-20-vs-8-9-10	0.538 ± 0.119	0.346 ± 0.052	0.554 ± 0.132	<b>0.562 ± 0.142</b>	0.302 ± 0.119	0.469 ± 0.116	0.523 ± 0.175	0.531 ± 0.126	0.285 ± 0.119	0.115 ± 0.180	0.338 ± 0.134
abalone-21-vs-2	<b>0.686 ± 0.178</b>	0.557 ± 0.162	0.657 ± 0.159	0.657 ± 0.159	0.614 ± 0.170	0.614 ± 0.129	0.671 ± 0.170	<b>0.686 ± 0.178</b>	0.429 ± 0.202	0.357 ± 0.241	0.429 ± 0.181
flame-F	0.465 ± 0.092	0.415 ± 0.079	0.460 ± 0.103	0.465 ± 0.091	0.410 ± 0.094	<b>0.470 ± 0.081</b>	0.465 ± 0.081	0.465 ± 0.092	0.111 ± 0.083	0.009 ± 0.018	0.148 ± 0.114
kiddeup-buffer-overflow-vs-back	0.913 ± 0.095	0.913 ± 0.095	0.913 ± 0.095	0.913 ± 0.095	0.883 ± 0.100	<b>0.920 ± 0.083</b>	0.893 ± 0.085	0.913 ± 0.095	0.913 ± 0.090	0.913 ± 0.090	0.913 ± 0.090
kiddeup-rookit-innp-vs-back	<b>0.945 ± 0.045</b>	<b>0.945 ± 0.045</b>	<b>0.945 ± 0.045</b>	<b>0.945 ± 0.045</b>	0.909 ± 0.091	0.891 ± 0.055	0.909 ± 0.100	<b>0.945 ± 0.045</b>	0.927 ± 0.070	0.927 ± 0.070	0.927 ± 0.070
kr-vs-k-zero-vs-eight	0.887 ± 0.098	0.865 ± 0.105	0.895 ± 0.098	0.895 ± 0.098	0.857 ± 0.121	<b>0.902 ± 0.119</b>	0.864 ± 0.118	0.887 ± 0.098	0.520 ± 0.329	0.000 ± 0.000	0.503 ± 0.353
poker-8-9-vs-2	0.265 ± 0.121	0.177 ± 0.072	0.280 ± 0.135	0.263 ± 0.127	0.119 ± 0.092	<b>0.373 ± 0.103</b>	0.272 ± 0.129	0.265 ± 0.121	0.112 ± 0.138	0.038 ± 0.079	0.121 ± 0.156
poker-8-9-vs-6	0.920 ± 0.081	0.841 ± 0.068	0.919 ± 0.081	0.919 ± 0.081	0.823 ± 0.110	<b>0.983 ± 0.050</b>	0.896 ± 0.063	0.920 ± 0.081	0.975 ± 0.075	0.952 ± 0.096	0.952 ± 0.096
poker-8-vs-6	0.910 ± 0.120	0.719 ± 0.112	0.910 ± 0.120	0.910 ± 0.120	0.768 ± 0.107	<b>0.989 ± 0.033</b>	0.887 ± 0.157	0.910 ± 0.120	0.812 ± 0.244	0.963 ± 0.225	0.728 ± 0.334
poker-9-vs-7	<b>0.700 ± 0.312</b>	<b>0.700 ± 0.312</b>	<b>0.700 ± 0.312</b>	<b>0.700 ± 0.312</b>	0.650 ± 0.278	0.600 ± 0.255	0.675 ± 0.297	<b>0.700 ± 0.312</b>	0.600 ± 0.450	0.625 ± 0.375	0.475 ± 0.378
winequality-red-3-vs-2	<b>0.200 ± 0.126</b>	0.180 ± 0.108	<b>0.200 ± 0.126</b>	<b>0.200 ± 0.126</b>	0.180 ± 0.108	<b>0.200 ± 0.126</b>	0.180 ± 0.108	<b>0.200 ± 0.126</b>	0.120 ± 0.133	0.020 ± 0.060	0.160 ± 0.120
winequality-red-4	0.317 ± 0.052	0.271 ± 0.093	0.317 ± 0.059	0.317 ± 0.044	0.280 ± 0.072	0.184 ± 0.059	<b>0.328 ± 0.047</b>	0.317 ± 0.052	0.124 ± 0.064	0.083 ± 0.110	0.200 ± 0.093
winequality-red-5-vs-6-7	0.167 ± 0.134	0.167 ± 0.143	<b>0.178 ± 0.133</b>	<b>0.178 ± 0.133</b>	0.144 ± 0.112	0.133 ± 0.120	0.167 ± 0.114	0.167 ± 0.134	0.144 ± 0.132	0.122 ± 0.144	0.133 ± 0.083
winequality-red-8-vs-6	<b>0.378 ± 0.113</b>	0.344 ± 0.105	0.356 ± 0.120	<b>0.378 ± 0.113</b>	0.267 ± 0.102	0.278 ± 0.102	0.367 ± 0.100	<b>0.378 ± 0.113</b>	0.256 ± 0.122	0.233 ± 0.168	0.300 ± 0.165
winequality-white-3-9-vs-2	<b>0.313 ± 0.068</b>	0.272 ± 0.075	<b>0.313 ± 0.076</b>	<b>0.313 ± 0.076</b>	0.184 ± 0.064	0.234 ± 0.115	0.272 ± 0.083	<b>0.313 ± 0.068</b>	0.121 ± 0.100	0.089 ± 0.068	0.184 ± 0.107
winequality-white-3-vs-2	0.320 ± 0.172	0.180 ± 0.133	<b>0.230 ± 0.185</b>	0.300 ± 0.190	0.180 ± 0.117	0.300 ± 0.173	0.320 ± 0.204	0.320 ± 0.172	0.210 ± 0.130	0.250 ± 0.186	0.170 ± 0.119
winequality-white-9-vs-4	<b>0.800 ± 0.208</b>	<b>0.800 ± 0.208</b>	<b>0.800 ± 0.208</b>	<b>0.800 ± 0.208</b>	0.567 ± 0.359	<b>0.800 ± 0.208</b>	0.567 ± 0.359	<b>0.800 ± 0.208</b>	0.517 ± 0.391	0.517 ± 0.391	0.517 ± 0.391
zoo-3	<b>0.700 ± 0.306</b>	<b>0.700 ± 0.306</b>	<b>0.700 ± 0.306</b>	<b>0.700 ± 0.306</b>	0.467 ± 0.393	<b>0.700 ± 0.306</b>	0.417 ± 0.352	<b>0.700 ± 0.306</b>	0.300 ± 0.267	0.300 ± 0.267	0.300 ± 0.267
ecoli1	0.837 ± 0.048	0.829 ± 0.056	0.847 ± 0.055	0.845 ± 0.053	<b>0.850 ± 0.054</b>	0.837 ± 0.063	0.839 ± 0.067	0.844 ± 0.043	0.721 ± 0.127	0.146 ± 0.292	0.784 ± 0.086
ecoli2	<b>0.908 ± 0.062</b>	0.904 ± 0.067	<b>0.908 ± 0.062</b>	<b>0.908 ± 0.062</b>	0.904 ± 0.065	<b>0.908 ± 0.049</b>	<b>0.908 ± 0.062</b>	<b>0.908 ± 0.062</b>	0.758 ± 0.139	0.188 ± 0.299	0.812 ± 0.118
ecoli3	0.840 ± 0.033	0.817 ± 0.041	<b>0.846 ± 0.035</b>	0.823 ± 0.039	0.811 ± 0.067	0.835 ± 0.063	0.828 ± 0.037	0.840 ± 0.023	0.670 ± 0.114	0.185 ± 0.288	0.558 ± 0.223
glass0	0.854 ± 0.052	<b>0.874 ± 0.053</b>	0.851 ± 0.061	0.866 ± 0.057	0.869 ± 0.055	0.843 ± 0.052	0.869 ± 0.060	0.871 ± 0.041	0.803 ± 0.104	0.657 ± 0.241	0.786 ± 0.034
glass1	0.732 ± 0.076	<b>0.758 ± 0.069</b>	0.729 ± 0.063	0.732 ± 0.067	0.718 ± 0.068	0.708 ± 0.057	0.726 ± 0.054	0.732 ± 0.085	0.629 ± 0.156	0.184 ± 0.260	0.647 ± 0.082
haberman	0.546 ± 0.083	0.502 ± 0.096	0.516 ± 0.127	0.516 ± 0.078	0.486 ± 0.090	0.469 ± 0.090	0.509 ± 0.091	<b>0.548 ± 0.073</b>	0.393 ± 0.061	0.313 ± 0.152	0.408 ± 0.103
page-blocks0	0.896 ± 0.023	0.846 ± 0.025	0.893 ± 0.026	0.875 ± 0.027	0.884 ± 0.024	0.789 ± 0.032	<b>0.901 ± 0.021</b>	0.897 ± 0.023	0.810 ± 0.041	0.841 ± 0.025	0.826 ± 0.031
ptms	0.660 ± 0.035	0.669 ± 0.037	0.654 ± 0.035	0.663 ± 0.030	0.651 ± 0.033	0.640 ± 0.036	0.661 ± 0.034	<b>0.675 ± 0.040</b>	0.578 ± 0.044	0.530 ± 0.101	0.637 ± 0.034
vehicle1	0.717 ± 0.054	0.713 ± 0.037	0.711 ± 0.044	<b>0.736 ± 0.057</b>	0.710 ± 0.040	0.679 ± 0.052	0.726 ± 0.052	0.721 ± 0.057	0.508 ± 0.090	0.671 ±	