Table 1: Classification Result Based on Different Oversample Methods

D + 0	Tation Result Based on				
Data Source	Method	Rec.	Pre.	F	G
	ADASYN	0.700	0.636	0.667	0.781
	No Sample	0.333	0.091	0.143	0.297
	SMOTE	0.625	0.455	0.526	0.660
ecoli					
	SMOTEBorderline-1	0.571	0.364	0.444	0.591
	SMOTEBorderline-2	0.727	0.727	0.727	0.835
	SVMSMOTE	0.500	0.273	0.353	0.511
	random	0.333	0.091	0.143	0.297
	ADASYN	0.981	0.912	0.945	0.954
	No Sample	0.980	0.860	0.916	0.926
	SMOTE	0.964	0.939	0.951	0.967
${f optical_digits}$	SMOTEBorderline-1		0.877		
		0.980		0.926	0.936
	SMOTEBorderline-2	0.962	0.877	0.917	0.935
	SVMSMOTE	0.946	0.930	0.938	0.962
	random	0.925	0.974	0.949	0.983
	ADASYN	0.519	0.824	0.637	0.867
	No Sample	0.746	0.570	0.646	0.746
. •	SMOTE	0.561	0.758	0.644	0.840
$\mathbf{satimage}$	SMOTEBorderline-1	0.563	0.836	0.673	0.880
	SMOTEBorderline-2	0.516	0.867	0.647	0.887
	SVMSMOTE	0.556	0.836	0.668	0.879
	random	0.496	0.842	0.625	0.872
	ADASYN	0.973	0.980	0.976	0.989
	No Sample	1.000	0.980	0.990	0.990
m or -1! - "	SMOTE	0.996	0.992	0.994	0.996
$\mathbf{pen_digits}$	SMOTEBorderline-1	1.000	0.965	0.982	0.982
	SMOTEBorderline 1 SMOTEBorderline-2	0.992	0.969	0.980	0.984
	SVMSMOTE	0.992	0.988	0.990	0.994
	random	0.992	0.992	0.992	0.996
	ADASYN	0.307	0.766	0.438	0.780
	No Sample	0.800	0.036	0.069	0.190
abalone	SMOTE	0.321	0.721	0.444	0.768
abalone	SMOTEBorderline-1	0.325	0.586	0.418	0.708
	SMOTEBorderline-2	0.331	0.541	0.411	0.686
	SVMSMOTE	0.312	0.523	0.391	0.672
	random	0.311	0.820	0.450	0.802
	ADASYN	0.824	0.893	0.857	0.934
	No Sample	0.860	0.881	0.871	0.931
$sick_euthyroid$	SMOTE	0.824	0.893	0.857	0.934
Sicin_cutting rota	SMOTEBorderline-1	0.841	0.881	0.860	0.929
	SMOTEBorderline-2	0.796	0.881	0.836	0.926
	SVMSMOTE	0.874	0.905	0.889	0.944
	_				
	random	0.808	0.952	0.874	0.963
	ADASYN	0.846	0.846	0.846	0.912
	No Sample	0.833	0.385	0.526	0.618
	SMOTE	0.714	0.769	0.741	0.862
spectrometer					
1	SMOTEBorderline-1	0.700	0.538	0.609	
					0.725
	SMOTEBorderline-2	0.727	0.538 0.615	0.667	$0.725 \\ 0.775$
		0.727	0.615	0.667	0.775
	SVMSMOTE	$0.727 \\ 0.750$	$0.615 \\ 0.692$	$0.667 \\ 0.720$	$0.775 \\ 0.822$
	SVMSMOTE random	0.727 0.750 0.700	0.615 0.692 0.538	0.667 0.720 0.609	0.775 0.822 0.725
	SVMSMOTE random ADASYN	0.727 0.750 0.700 0.951	0.615 0.692 0.538 1.000	0.667 0.720 0.609 0.975	0.775 0.822 0.725 0.997
	SVMSMOTE random	0.727 0.750 0.700	0.615 0.692 0.538	0.667 0.720 0.609	0.775 0.822 0.725
_	SVMSMOTE random ADASYN No Sample	0.727 0.750 0.700 0.951 0.951	0.615 0.692 0.538 1.000 1.000	0.667 0.720 0.609 0.975 0.975	0.775 0.822 0.725 0.997 0.997
car_eval_34	SVMSMOTE random ADASYN No Sample SMOTE	0.727 0.750 0.700 0.951 0.951 0.951	0.615 0.692 0.538 1.000 1.000	0.667 0.720 0.609 0.975 0.975 0.975	0.775 0.822 0.725 0.997 0.997 0.997
car_eval_34	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1	0.727 0.750 0.700 0.951 0.951 0.951 0.929	0.615 0.692 0.538 1.000 1.000 1.000	0.667 0.720 0.609 0.975 0.975 0.975 0.963	0.775 0.822 0.725 0.997 0.997 0.997
car_eval_34	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951	0.615 0.692 0.538 1.000 1.000 1.000 1.000	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975	0.775 0.822 0.725 0.997 0.997 0.996 0.997
car_eval_34	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1	0.727 0.750 0.700 0.951 0.951 0.951 0.929	0.615 0.692 0.538 1.000 1.000 1.000	0.667 0.720 0.609 0.975 0.975 0.975 0.963	0.775 0.822 0.725 0.997 0.997 0.997
car_eval_34	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000	0.667 0.720 0.609 0.975 0.975 0.963 0.975 0.907	0.775 0.822 0.725 0.997 0.997 0.996 0.997 0.990
car_eval_34	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 1.000	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907	0.775 0.822 0.725 0.997 0.997 0.996 0.997 0.990
car_eval_34	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 1.000 0.902	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918	0.775 0.822 0.725 0.997 0.997 0.996 0.997 0.990 0.991
car_eval_34	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 1.000	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907	0.775 0.822 0.725 0.997 0.997 0.996 0.997 0.990 0.991 0.936 0.905
	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 1.000 0.902	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918	0.775 0.822 0.725 0.997 0.997 0.996 0.997 0.990 0.991
car_eval_34	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.846	0.775 0.822 0.725 0.997 0.997 0.996 0.996 0.991 0.936 0.905 0.966
	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE SMOTE	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759 0.753	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955 0.902	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.846 0.821	0.775 0.822 0.725 0.997 0.997 0.996 0.999 0.991 0.936 0.905 0.966 0.939
	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-1	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759 0.753 0.702	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955 0.902 0.909	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.821 0.792	0.775 0.822 0.725 0.997 0.997 0.996 0.997 0.990 0.991 0.936 0.905 0.966 0.939 0.940
	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE SMOTE	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759 0.753	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955 0.902	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.846 0.821	0.775 0.822 0.725 0.997 0.997 0.996 0.997 0.990 0.991 0.936 0.905 0.966 0.939
	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-1	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759 0.753 0.702 0.678	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955 0.902 0.909	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.821 0.792	0.775 0.822 0.725 0.997 0.997 0.996 0.997 0.990 0.991 0.936 0.905 0.966 0.939 0.940
	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759 0.753 0.702 0.678 0.753	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955 0.902 0.909 0.939 0.970	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.821 0.792 0.787 0.848	0.775 0.822 0.725 0.997 0.997 0.996 0.999 0.991 0.936 0.905 0.966 0.939 0.940 0.953 0.973
	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-2 svMSMOTE random ADASYN	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759 0.753 0.678 0.753	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955 0.902 0.909 0.939 0.970	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.821 0.792 0.787 0.848	0.775 0.822 0.725 0.997 0.997 0.996 0.991 0.936 0.905 0.966 0.939 0.940 0.953 0.973
	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759 0.753 0.702 0.678 0.753 0.463 0.720	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955 0.902 0.909 0.939 0.970	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.821 0.792 0.787 0.848 0.494 0.590	0.775 0.822 0.725 0.997 0.997 0.996 0.999 0.991 0.936 0.905 0.966 0.939 0.940 0.953 0.973 0.709 0.702
isolet	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-2 svMSMOTE random ADASYN	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759 0.753 0.678 0.753	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955 0.902 0.909 0.939 0.970	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.821 0.792 0.787 0.848	0.775 0.822 0.725 0.997 0.997 0.996 0.991 0.936 0.905 0.966 0.939 0.940 0.953 0.973
	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTEBORDERLINE-2 SVMSMOTE SMOTEBORDERLINE-2 SVMSMOTE SMOTEBORDERLINE-2 SVMSMOTE SMOTEBORDERLINE-2 SVMSMOTE SMOTEBORDERLINE-2 SVMSMOTE SMOTEBORDERLINE-2 SVMSMOTE	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759 0.753 0.702 0.678 0.753 0.463 0.476	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955 0.902 0.909 0.939 0.970 0.528 0.500 0.556	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.821 0.792 0.787 0.848 0.494 0.590 0.513	0.775 0.822 0.725 0.997 0.997 0.996 0.997 0.996 0.991 0.936 0.905 0.966 0.939 0.940 0.953 0.973 0.709 0.702 0.727
isolet	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE SMOTEBORDERLINE-2 SVMSMOTE SMOTEBORDERLINE-2 SVMSMOTE SMOTEBORDERLINE-1 SMOTEBORDERLINE-1 SMOTEBORDERLINE-1	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759 0.753 0.702 0.678 0.753 0.463 0.476 0.477	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955 0.902 0.909 0.939 0.970 0.528 0.500 0.556 0.583	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.846 0.821 0.792 0.787 0.848 0.494 0.590 0.513 0.525	0.775 0.822 0.725 0.997 0.997 0.997 0.996 0.991 0.936 0.905 0.966 0.939 0.940 0.953 0.709 0.702 0.727 0.745
isolet	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-2 SVMSMOTE SMOTEBORDER SMOTE SMOTEBORDER SMOTE SMOTEBORDER SMOTE SMOTEBORDER SMOTEBORDER SMOTEBORDER SMOTEBORDER SMOTEBORDER	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759 0.753 0.702 0.678 0.753 0.463 0.476 0.477 0.479	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955 0.902 0.909 0.939 0.970 0.528 0.500 0.556 0.583 0.639	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.846 0.821 0.792 0.787 0.848 0.494 0.590 0.513 0.525 0.548	0.775 0.822 0.725 0.997 0.997 0.997 0.996 0.991 0.936 0.905 0.966 0.939 0.940 0.953 0.709 0.702 0.727 0.745 0.777
isolet	SVMSMOTE random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE SMOTEBORDERLINE-2 SVMSMOTE SMOTEBORDERLINE-2 SVMSMOTE SMOTEBORDERLINE-1 SMOTEBORDERLINE-1 SMOTEBORDERLINE-1	0.727 0.750 0.700 0.951 0.951 0.951 0.929 0.951 0.830 0.848 0.704 0.886 0.759 0.753 0.702 0.678 0.753 0.463 0.476 0.477	0.615 0.692 0.538 1.000 1.000 1.000 1.000 1.000 0.902 0.826 0.955 0.902 0.909 0.939 0.970 0.528 0.500 0.556 0.583	0.667 0.720 0.609 0.975 0.975 0.975 0.963 0.975 0.907 0.918 0.791 0.855 0.846 0.821 0.792 0.787 0.848 0.494 0.590 0.513 0.525	0.775 0.822 0.725 0.997 0.997 0.997 0.996 0.991 0.936 0.905 0.966 0.939 0.940 0.953 0.709 0.702 0.727 0.745

Table 2: Classification Result Based on Different Oversample Methods

yeast.ml8 ADASYN SMOTEE 0.008 0.128 0.111 0.332 SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBORDER 0.036 0.179 0.077 0.078 SWOTEBORDER 0.036 0.154 0.145 0.345 0.379 SWASMOTE 0.38 0.077 0.080 0.299 SWASMOTE 0.281 0.390 0.286 0.593 SKOTE 0.251 0.390 0.286 0.593 SMOTEBORDER 0.251 0.390 0.286 0.593 SMOTEBORDER 0.225 0.300 0.286 0.593 SWISMOTE 0.225 0.234 0.292 0.546 SWISMOTE 1.000 0.875 0.875 0.875 0.875 0.875 SWISMOTE 1.000 0.875 0.837 0.930 0.286 0.289 0.289 0.587 0.587 0.587 0.587 0.587 0.587 0.587 0.587 0.587 0.930 0.286 0.593 0.389 0.986 0.988 0.981 0.927 0.987 0.933 <th></th> <th>ication Result Based or</th> <th></th> <th></th> <th></th> <th></th>		ication Result Based or				
yeast_mla No Sample SMOTEBorderline-1 SMOTEBorderline-2 SMOTEBorderline-2 SMOTEBORD 0.000 0.130 0.100 0.177 0.039 0.077 0.039 0.080 0.269 0.080 0.260 0.080 0.260 0.090 0.260 0.090 0.260 0.090 0.260 0.090 0.260 0.090 0.260 0.090 0.260 0.090 0.270 0.090	Data Source	Method	Rec.	Pre.	F	G
yeast_ml8 SMOTEB 0.009 0.179 0.127 0.399 SMOTEBorderline-1 0.077 0.077 0.268 0.379 0.268 0.269 0.268 0.293 0.285 0.528 0.267 0.578 0.578 0.528 0.528 0.269 0.278 0.365 0.363 0.362 0.269 0.287 0.330 0.935 0.269 0.287 0.933 0.935 0.269 0.287 0.933 0.935 0.269 0.287 0.933 0.935 0.269 0.287 0.933 0.935 <th></th> <td>ADASYN</td> <td>0.098</td> <td>0.128</td> <td>0.111</td> <td>0.343</td>		ADASYN	0.098	0.128	0.111	0.343
yeast_ml8 SMOTEB 0.009 0.179 0.127 0.399 SMOTEBorderline-1 0.077 0.077 0.268 0.379 0.268 0.269 0.268 0.293 0.285 0.528 0.267 0.578 0.578 0.528 0.528 0.269 0.278 0.365 0.363 0.362 0.269 0.287 0.330 0.935 0.269 0.287 0.933 0.935 0.269 0.287 0.933 0.935 0.269 0.287 0.933 0.935 0.269 0.287 0.933 0.935 <th></th> <td></td> <td></td> <td></td> <td></td> <td></td>						
SMOTEBorderline-1 0.077				1		
SMO LEBorderline=1 0.136 0.154 0.154 0.298 SVMSMOTE 0.136 0.154 0.145 0.379 0.080 0.269 random 0.161 0.128 0.131 0.302 0.597 0.088 0.077 0.088 0.079 0.088 0.070 0.088 0.070 0.088 0.070 0.088 0.089 0.0	$veast_ml8$					
SVMSMOTE						
		SMOTEBorderline-2	0.136	0.154	0.145	0.379
		SVMSMOTE	0.083	0.077	0.080	0.269
NO Sample SMOTES SMOTES SMOTES SMOTES SMOTES SMOTES SMOTE SM		l .				
Scene No Sample 0.7571 0.090 0.266 0.593 SMOTEBOrderline-1 0.224 0.306 0.298 0.596 SMOTEBOrderline-2 0.224 0.366 0.278 0.576 SWOTSMOTE 0.283 0.293 0.289 0.526 NO Sample 1.000 0.750 0.857 0.865 SMOTEBOrderline-1 0.875 0.875 0.875 0.803 SMOTEBOrderline-1 1.000 0.875 0.833 0.935 SWISMOTE 1.000 0.875 0.833 0.935 SWISMOTE 1.000 0.875 0.833 0.935 SWISMOTE 0.867 0.860 0.903 0.935 SWISMOTE 0.867 0.960 0.904 MaDASYN 0.857 0.960 0.904 SWOTEBOrderline-1 0.862 0.991 0.982 SMOTEBOrderline-1 0.823 0.911 0.960 SMOTEBOrderline-1 0.224 0.681 0.932						
SMOTE		ADASYN	0.246	0.390	0.302	0.597
SMOTE		No Sample	0.571	0.098	0.167	0.312
Secing SMOTEBorderline-1 0.271 0.317 0.292 0.545 SMOTEBorderline-2 0.224 0.278 0.576 0.576 0.286 0.293 0.289 0.526 0.293 0.289 0.526 0.293 0.289 0.526 0.293 0.289 0.526 0.293 0.289 0.526 0.293 0.289 0.526 0.293 0.289 0.526 0.293 0.289 0.526 0.293 0.285 0.875 0.8						
SMOTEBorderline-2 0.224 0.366 0.278 0.576 0.280 0.289 0.266 0.293 0.289 0.266 0.293 0.289 0.266 0.293 0.244 0.278 0.485 0.286 0.293 0.244 0.278 0.485 0.286 0.293 0.244 0.278 0.485 0.286 0.286 0.286 0.286 0.286 0.286 0.286 0.286 0.286 0.286 0.286 0.287 0.865 0.933 0.935 0.865 0.865 0.865 0.933 0.935 0.865 0.865 0.966 0.904 0.865 0.904 0.865 0.904 0.865 0.904 0.865 0.904 0.865 0.904 0.865 0.904 0.865 0.905 0.905 0.865 0.905 0.865 0.905 0.865 0.905	scene					
SVMSMOTE 0.286 0.293 0.289 0.526 0.303 0.244 0.278 0.875 0				1		
No Sample		SMOTEBorderline-2	0.224	0.366	0.278	0.576
Bibras_move		SVMSMOTE	0.286	0.293	0.289	0.526
Bibras_move		random	0.323	0.244	0.278	0.485
No Sample						
SMOTE				1		
SMOTEBorderline-1 0.875 0.875 0.930 0.930 0.935 0.933 0.935			1.000	1	0.857	
SMOTEBorderline-1 0.875 0.875 0.933 0.935	191	SMOTE	0.875	0.875	0.875	0.930
thyroid.sick SMOTEBorderline-2 SVMSMOTE 1.000 1.875 1.933 1.935 1.935 1.936 1.000 0.875 1.933 1.935 1.935 1.936 1.935 1.936 1.935 1.936 1.935 1.936 1.935 1.936 1.935 1.936 1.935 1.936 1.935 1.936	nbras_move	SMOTEBorderline-1	0.875	0.875	0.875	0.930
thyroid.sick SVMSMOTE random 1.000 (N875) 0.933 (N935) 0.936 (N975) 0.933 (N935) 0.936 (N976) 0.937 (N936) 0.994 (N996) 0.990 (N986) 0.990 (N996) 0.990 (N996) 0.990 (N996) 0.990 (N996) 0.990 (N996) 0.991 (N996) 0.991 (N996) 0.994 (N996) 0.996 (N996) 0.994 (N						
thyroid_sick thyr						
thyroid_sick SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE SVMSMOTE SVMSMOTE SVMSMOTE SVMSMOTE SVMSMOTE SVMSMOTE SVMSMOTE SVMSMOTE SMOTEBorderline-1 SVMSMOTE SVMSMOTE SMOTEBorderline-1 SWMSMOTE SVMSMOTE SWMSMOTE SWMSMOTE SMOTEBorderline-1 SMO		SVMSMOTE				
thyroid_sick SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE SVMSMOTE SVMSMOTE SVMSMOTE SVMSMOTE SVMSMOTE SVMSMOTE SVMSMOTE SVMSMOTE SMOTEBorderline-1 SVMSMOTE SVMSMOTE SMOTEBorderline-1 SWMSMOTE SVMSMOTE SWMSMOTE SWMSMOTE SMOTEBorderline-1 SMO		random	1.000	0.875	0.933	0.935
thyroid_sick thyroid_sick						
thyroid_sick SMOTE 0.867 0.929 0.897 0.959 SMOTEBorderline-1 0.833 0.982 0.902 0.985 SMOTEBorderline-2 0.823 0.911 0.864 0.948 SVMSMOTE 0.852 0.929 0.889 0.959 random 0.797 0.982 0.880 0.983 ADASYN 0.00 0.012 0.025 0.111 SMOTEBorderline-1 0.228 0.093 0.141 0.303 SMOTEBorderline-1 0.274 0.143 0.188 0.373 SMOTEBorderline-2 0.388 0.099 0.155 0.313 SWMSMOTE 0.360 0.909 0.531 0.368 SMOTEBorderline-1 0.800 1.000 0.800 0.901 No Sample 0.500 0.500 0.700 0.800 0.991 arrhythmia ADASYN 0.667 1.000 0.800 0.991 shote 0.800TE 0.500 0.500 0.700 <td< th=""><th></th><td></td><td></td><td></td><td></td><td></td></td<>						
thyroid sick SMOTEBorderline-1 0.833 0.982 0.902 0.985 SMOTEBorderline-2 0.823 0.911 0.864 0.948 0.824 0.929 0.889 0.959 0.880 0.953 0.962 0.880 0.983 0.962 0.982 0.880 0.983 0.962 0.982 0.880 0.983 0.982 0.880 0.983 0.982 0.880 0.983 0.982 0.880 0.983 0.982 0.880 0.983 0.982 0.880 0.983 0.982 0.880 0.983 0.982 0.880 0.983 0.982 0.880 0.983 0.982 0.880 0.983 0.880 0.983 0.880 0.983 0.880 0.880 0.880 0.880 0.880 0.880 0.982 0.880 0.982 0.880 0.982 0.880 0.982 0.880 0.982 0.880 0.982 0.880 0.982 0.882				1		
SMOTEBorderline-1 0.833 0.912 0.902 0.995 SVMSMOTE 0.823 0.919 0.864 0.948 SVMSMOTE 0.852 0.929 0.889 0.959 random 0.797 0.982 0.880 0.983 ADASYN 0.302 0.081 0.127 0.282 No Sample 1.000 0.012 0.025 0.111 SMOTE 0.288 0.093 0.141 0.303 SMOTEBorderline-1 0.274 0.143 0.188 0.373 SVMSMOTE 0.383 0.149 0.210 0.382 SVMSMOTE 0.353 0.149 0.210 0.382 random 0.152 0.609 0.243 0.681 ADASYN 0.667 1.000 0.800 0.991 SMOTEBorderline-1 0.800 1.000 0.889 0.995 SMOTEBorderline-2 0.800 1.000 0.889 0.995 SMOTEBorderline-2 0.667 1.000 0.800 0.991 SMOTEBorderline-2 0.667 1.000 0.800 0.991 SMOTEBorderline-2 0.667 1.000 0.800 0.991 SMOTEBorderline-1 0.333 0.182 0.235 0.424 SMOTEBorderline-2 0.333 0.182 0.235 0.424 SMOTEBorderline-2 0.429 0.273 0.286 0.517 SMOTEBorderline-1 0.333 0.364 0.348 0.596 SMOTEBorderline-1 0.333 0.364 0.348 0.596 SMOTEBorderline-1 0.800 0.273 0.286 0.517 SMOTEBorderline-1 0.800 0.727 0.710 0.752 SMOTEBorderline-1 0.429 0.273 0.333 0.519 SMOTE 0.692 0.643 0.667 0.794 SMOTEBorderline-1 0.800 0.571 0.660 0.751 SMOTEBorderline-1 0.800 0.571 0.660 0.751 SMOTEBorderline-2 0.895 1.000 0.944 0.998 SMOTE 0.895 1.000 0.944 0.998 SMOTEBorderline-2 0.893 0.111 0.196 0.333 SMOTEBor	thyroid side	SMOTE	0.867	0.929	0.897	0.959
SMOTEBorderline-2 SVMSMOTE random 0.823 0.797 0.914 0.880 0.959 0.889 ADASYN No Sample SMOTE SMOTE SMOTEBorderline-1 Tandom 1.000 0.012 0.025 0.025 0.025 0.032 0.032 0.032 0.033 0.044 0.033 0.033 0.034 0.034 0.036 0.0348 0.099 0.0353 0.149 0.049 0.0243 0.030 0.030 0.0313 0.030 0.032 0.033 0.049 0.049 0.040 0.050 0.0500 0.0800 0.0991 0.0991 0.0991 0.0991 0.0992 0.0992 0.0993 0.0000 0.0994 0.0993 0.0993 0.0000 	onyroid_Sick	SMOTEBorderline-1	0.833	0.982	0.902	0.985
SVMSMOTE 0.852 0.929 0.889 0.958 0.988 0.988 0.988 0.988 0.988 0.988 0.988 0.988 0.988 0.988 0.988 0.888 0.988 0.888						
random 0.797 0.982 0.880 0.983 ADASYN 0.302 0.081 0.127 0.282 No Sample 1.000 0.012 0.025 0.111 SMOTEBorderline-1 0.288 0.093 0.141 0.303 SMOTEBorderline-2 0.348 0.099 0.155 0.313 SVMSMOTE 0.353 0.149 0.210 0.382 random 0.152 0.609 0.243 0.681 ADASYN 0.667 1.000 0.800 0.991 SMOTEBorderline-1 0.800 1.000 0.889 0.995 SMOTEBorderline-2 0.800 1.000 0.889 0.995 SMOTEBorderline-1 0.800 1.000 0.889 0.995 SMOTEBorderline-2 0.667 1.000 0.800 0.991 solar-flare-m0 0.667 1.000 0.800 0.991 solar-flare-m0 0.667 1.000 0.800 0.991 solar-flare-m0 0.667						
coil_2000 ADASYN No Sample SMOTE 0.302 0.288 0.093 0.093 0.141 0.130 0.303 0.141 0.303 0.141 0.303 0.141 0.303 0.313 SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE 0.348 0.353 0.099 0.155 0.313 0.681 ADASYN No Sample 0.500 0.500 0.500 0.500 0.690 0.500 0.500 0.500 0.701 0.500 SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE 0.800 0.800 1.000 0.889 0.995 0.995 SMOTEBorderline-2 SWOTEBorderline-1 SMOTEBorderl				1		
coil_2000 No Sample SMOTE 1.000 0.012 0.025 0.111 SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-2 SWMSMOTE 0.244 0.143 0.188 0.373 SVMSMOTE random 0.152 0.609 0.243 0.681 ADASYN No Sample SMOTE SMOTE SMOTE SMOTE SMOTE SMOTE Paradom 0.500 0.500 0.500 0.701 SMOTEBorderline-1 SMOTEBORDER SMOTE SMOTE SMOTE SMOTE Paradom 0.667 1.000 0.889 0.995 SMOTE SWISMOTE Paradom 0.667 1.000 0.800 0.991 SWISMOTE Paradom 0.333 0.182 0.235 0.424 SMOTEBorderline-1 Paradom 0.096 0.727 0.170 0.752 SWISMOTE Paradom 0.090 0.727 0.170 0.752		random	0.797	0.982	0.880	0.983
coil_2000 No Sample SMOTE 1.000 0.012 0.025 0.111 SMOTEBorderline-1 SMOTEBorderline-1 SMOTEBorderline-2 SWMSMOTE 0.244 0.143 0.188 0.373 SVMSMOTE random 0.152 0.609 0.243 0.681 ADASYN No Sample SMOTE SMOTE SMOTE SMOTE SMOTE SMOTE Paradom 0.500 0.500 0.500 0.701 SMOTEBorderline-1 SMOTEBORDER SMOTE SMOTE SMOTE SMOTE Paradom 0.667 1.000 0.889 0.995 SMOTE SWISMOTE Paradom 0.667 1.000 0.800 0.991 SWISMOTE Paradom 0.333 0.182 0.235 0.424 SMOTEBorderline-1 Paradom 0.096 0.727 0.170 0.752 SWISMOTE Paradom 0.090 0.727 0.170 0.752		ADASYN	0.302	0.081	0.127	0.282
coil_2000 SMOTE 0.288 0.093 0.141 0.303 SMOTEBorderline-1 0.274 0.143 0.188 0.373 SMOTEBorderline-2 0.348 0.099 0.155 0.313 SVMSMOTE 0.535 0.149 0.210 0.382 random 0.152 0.609 0.243 0.681 No Sample 0.500 0.500 0.500 0.991 No Sample 0.500 1.000 0.889 0.995 SMOTEBorderline-1 0.800 1.000 0.889 0.995 SMOTEBorderline-2 0.000 1.000 0.889 0.995 SMOTEBorderline-1 0.667 1.000 0.800 0.991 random 0.667 1.000 0.800 0.991 solar-flare-mo 0.667 1.000 0.800 0.991 random 0.667 1.000 0.800 0.991 solar-flare-mo 0.667 1.000 0.280 0.517 SMOTEBorderline-1				1	0.025	0.111
SMOTEBorderline-1 0.274 0.143 0.188 0.373 SMOTEBorderline-2 0.348 0.099 0.155 0.313 SVMSMOTE 0.353 0.149 0.210 0.382 random 0.152 0.609 0.243 0.681 ADASYN 0.667 1.000 0.800 0.991 No Sample 0.500 0.500 0.500 0.701 SMOTE 0.800 1.000 0.889 0.995 SMOTEBorderline-1 0.800 1.000 0.889 0.995 SMOTEBorderline-2 1.000 0.750 0.857 0.866 SVMSMOTE 0.667 1.000 0.800 0.991 random 0.667 1.000 0.800 0.991 random 0.667 1.000 0.800 0.991 No Sample 0.333 0.182 0.235 0.424 SMOTEBorderline-2 0.333 0.364 0.348 0.596 SMOTEBorderline-2 0.429 0.273 0.386 0.517 SMOTEBorderline-2 0.429 0.273 0.333 0.519 SVMSMOTE 0.333 0.273 0.300 0.518 Random 0.096 0.727 0.170 0.752 SVMSMOTE 0.692 0.643 0.667 0.794 SMOTEBorderline-1 0.800 0.571 0.667 0.753 SMOTEBorderline-2 0.833 0.714 0.769 0.841 SMOTEBorderline-1 0.800 0.571 0.667 0.753 SMOTEBorderline-1 0.895 1.000 0.944 0.998 SMOTE 0.895 1.000 0.944 0.998 SMOTE 0.895 1.000 0.944 0.998 SMOTEBorderline-1 0.895 1.000 0.944 0.998 SMOTEBorderline-2 0.833 0.111 0.196 0.333 SMOTEBorderline-3 0.422 0.533 0.312 0.704 Wine_quality SMOTEBorderline-1 0.220 0.533 0.312 0.704 SMOTEBorderline-1 0.203 0.533 0.312 0.704 SMOTEBorderline-1 0.203 0.533 0.312 0.704 SMOTEBorderline-2 0.220 0.531 0.328 0.630 SMOTEBorderline-3 0.220 0.531 0.328 0.630 SMOTEBorderline-4 0.220 0.531 0.328 0.630 SMOTEBorderline-2 0.220 0.511 0.289 0.687				1		
SMOTEBorderline-1 0.274 0.143 0.188 0.373 SMOTEBorderline-2 0.348 0.099 0.155 0.313 SVMSMOTE 0.353 0.149 0.210 0.382 random 0.152 0.609 0.243 0.681 ADASYN 0.667 1.000 0.800 0.991 No Sample 0.500 0.500 0.500 0.500 SMOTE 0.800 1.000 0.889 0.995 SMOTEBorderline-1 0.800 1.000 0.889 0.995 SMOTEBorderline-2 1.000 0.750 0.857 0.866 SVMSMOTE 0.667 1.000 0.800 0.991 RADASYN 0.300 0.273 0.286 0.517 No Sample 0.333 0.182 0.235 0.424 SMOTEBorderline-1 0.333 0.364 0.348 0.596 SMOTEBorderline-2 0.429 0.273 0.386 0.517 SMOTEBorderline-1 0.333 0.273 0.386 0.517 SMOTEBorderline-2 0.429 0.273 0.333 0.519 SVMSMOTE 0.333 0.273 0.300 0.518 Random 0.096 0.727 0.170 0.752 SMOTEBorderline-1 0.800 0.727 0.170 0.752 SMOTEBorderline-2 0.833 0.273 0.300 0.518 SMOTE 0.692 0.643 0.667 0.794 SMOTEBorderline-2 0.833 0.714 0.769 0.841 SWOTEBorderline-2 0.833 0.714 0.769 0.841 SWOTEBorderline-2 0.835 1.000 0.944 0.998 SMOTE 0.895 1.000 0.944 0.998 SMOTEBorderline-3 0.895 1.000 0.944 0.998 SMOTEBorderline-4 0.895 1.000 0.944 0.998 SMOTEBorderline-5 0.895 1.000 0.944 0.998 SMOTEBorderline-6 0.895 1.000 0.944 0.998 SMOTEBorderline-7 0.850 1.000 0.944 0.998 SMOTEBorderline-8 0.895 1.000 0.944 0.998 SMOTEBorderline-9 0.885 1.000 0.944 0.998 SMOTEBorderline-1 0.895 1.000 0.944 0.998 SMOTEBorderline-2 0.830 0.111 0.196 0.333 SMOTEBorderline-2 0.200 0.533 0.312 0.704 SMOTEBorderline-2 0.200 0.531 0.308 0.308 0.308	coil 2000	l .				
SVMSMOTE 0.353 0.149 0.210 0.382 1.0609 0.243 0.681 0.152 0.609 0.243 0.681 0.0500 0.500	00112	SMOTEBorderline-1	0.274		0.188	0.373
SVMSMOTE 0.353 0.149 0.210 0.382 1.0609 0.243 0.681 0.152 0.609 0.243 0.681 0.0500 0.500		SMOTEBorderline-2	0.348	0.099	0.155	0.313
Random		SVMSMOTE	0.353		0.210	
ADASYN 0.667 1.000 0.800 0.991						
arrhythmia No Sample SMOTE SMOTE (No.800) 0.500 (No.800) 0.500 (No.889) 0.995 SMOTEBorderline-1 SMOTEBorderline-2 SMOTEBorderline-2 (No.800) 1.000 (No.889) 0.995 SWMSMOTE (No.667) 1.000 (No.800) 0.8991 ADASYN (No.800) 0.667 (No.800) 0.800 (No.800) 0.991 No Sample (No.800) 0.300 (No.273) 0.286 (No.517) 0.500 (No.800) 0.991 SMOTEBorderline-1 (No.300) 0.273 (No.860) 0.991 0.900 (No.800) 0.991 SMOTEBorderline-1 (No.300) 0.273 (No.860) 0.910 0.900 (No.273) 0.286 (No.517) SMOTEBorderline-2 (No.300) 0.273 (No.300) 0.518 (No.800) 0.910 0.910 SMOTEBorderline-2 (No.300) 0.273 (No.300) 0.518 (No.800) 0.910 0.910 No Sample (No.800) 0.750 (No.800) 0.940 (No.800) 0.910 (No.800)<						
Arrhythmia SMOTE 0.800 1.000 0.889 0.995 SMOTEBorderline-1 0.800 1.000 0.857 0.866 SMOTEBorderline-2 1.000 0.750 0.857 0.866 SVMSMOTE 0.667 1.000 0.800 0.991 random 0.667 1.000 0.800 0.991 ADASYN 0.300 0.273 0.286 0.517 No Sample 0.333 0.182 0.235 0.424 SMOTEBorderline-1 0.300 0.273 0.286 0.517 SMOTEBorderline-2 0.429 0.273 0.286 0.517 SMOTEBorderline-2 0.333 0.364 0.348 0.596 SWSMOTE 0.333 0.273 0.300 0.518 random 0.096 0.727 0.170 0.752 SMOTEBorderline-2 0.333 0.284 0.596 No Sample 1.000 0.286 0.444 0.535 SMOTEBorderline-1 0.800			0.667	1.000	0.800	0.991
Arrhythmia SMOTE 0.800 1.000 0.889 0.995 SMOTEBorderline-1 0.800 1.000 0.857 0.866 SMOTEBorderline-2 1.000 0.750 0.857 0.866 SVMSMOTE 0.667 1.000 0.800 0.991 random 0.667 1.000 0.800 0.991 ADASYN 0.300 0.273 0.286 0.517 No Sample 0.333 0.182 0.235 0.424 SMOTEBorderline-1 0.300 0.273 0.286 0.517 SMOTEBorderline-2 0.429 0.273 0.286 0.517 SMOTEBorderline-2 0.333 0.364 0.348 0.596 SWSMOTE 0.333 0.273 0.300 0.518 random 0.096 0.727 0.170 0.752 SMOTEBorderline-2 0.333 0.284 0.596 No Sample 1.000 0.286 0.444 0.535 SMOTEBorderline-1 0.800		No Sample	0.500	0.500	0.500	0.701
arrhythmia SMOTEBorderline-1 0.800 1.000 0.889 0.995 SMOTEBorderline-2 1.000 0.750 0.857 0.866 SVMSMOTE 0.667 1.000 0.800 0.991 random 0.667 1.000 0.800 0.991 ADASYN 0.300 0.273 0.286 0.517 No Sample 0.333 0.182 0.235 0.424 SMOTEBorderline-1 0.333 0.364 0.348 0.596 SMOTEBorderline-2 0.429 0.273 0.333 0.519 SVMSMOTE 0.333 0.364 0.348 0.596 SVMSMOTE 0.333 0.273 0.333 0.519 SVMSMOTE 0.333 0.273 0.330 0.518 random 0.096 0.727 0.170 0.752 No Sample 1.000 0.286 0.444 0.535 SMOTEBorderline-1 0.802 0.643 0.667 0.794 SMOTEBorderline-2 0			0.800	1.000	0.889	0.995
SMOTEBorderline-2 1.000 0.750 0.857 0.866 SVMSMOTE 0.667 1.000 0.800 0.991 random 0.667 1.000 0.800 0.991 ADASYN 0.300 0.273 0.286 0.517 No Sample 0.333 0.182 0.235 0.424 SMOTEBorderline-1 0.300 0.273 0.286 0.517 SMOTEBorderline-2 0.300 0.273 0.286 0.517 SMOTEBorderline-2 0.300 0.273 0.333 0.519 SVMSMOTE 0.429 0.273 0.300 0.518 random 0.096 0.727 0.170 0.752 SVMSMOTE 0.642 0.643 0.692 0.796 No Sample 1.000 0.564 0.444 0.535 SMOTEBorderline-1 0.800 0.571 0.667 0.751 SMOTEBorderline-2 0.833 0.714 0.769 0.841 car_eval_4 No Sample	${f arrhythmia}$					
SVMSMOTE 0.667 1.000 0.800 0.991 solar_flare_mo ADASYN 0.300 0.273 0.286 0.517 No Sample 0.333 0.182 0.235 0.424 SMOTE 0.300 0.273 0.286 0.517 SMOTEBorderline-1 0.333 0.364 0.348 0.596 SMOTEBorderline-2 0.429 0.273 0.333 0.519 SVMSMOTE 0.333 0.273 0.333 0.519 SVMSMOTE 0.333 0.273 0.300 0.518 random 0.096 0.727 0.170 0.752 ADASYN 0.750 0.643 0.692 0.796 No Sample 1.000 0.286 0.444 0.535 SMOTEBorderline-1 0.800 0.571 0.667 0.794 SWMSMOTE 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 random 0.727						
random 0.667 1.000 0.800 0.991 ADASYN 0.300 0.273 0.286 0.517 No Sample 0.333 0.182 0.235 0.424 SMOTE 0.300 0.273 0.286 0.517 SMOTEBorderline-1 0.333 0.364 0.348 0.596 SMOTEBorderline-2 0.429 0.273 0.333 0.519 SVMSMOTE 0.333 0.273 0.300 0.518 random 0.096 0.727 0.170 0.752 ADASYN 0.750 0.643 0.692 0.796 No Sample 1.000 0.286 0.444 0.535 SMOTEBorderline-1 0.800 0.571 0.667 0.794 SMOTEBorderline-2 0.833 0.714 0.769 0.841 SVMSMOTE 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 SMOTEBorderline-1 0.895 1.000 <td< th=""><th></th><td>SMOTEBorderline-2</td><td>1.000</td><td>0.750</td><td>0.857</td><td>0.866</td></td<>		SMOTEBorderline-2	1.000	0.750	0.857	0.866
solar_flare_m0 ADASYN No Sample SMOTE 0.300 0.273 0.286 0.517 0.517 SMOTE 0.300 0.273 0.286 0.517 0.517 SMOTEBorderline-1 SMOTEBorderline-2 SWMSMOTE 1 SWMSMMSMOTE 1 SWMSMSMOTE 1 SWMSMSMOTE 1 SWMSMSMSMOTE 1 SWMSMSMSMOTE 1 SWMSMSMSMSMSMSMSMSMSMSMSMSM		SVMSMOTE	0.667	1.000	0.800	0.991
solar_flare_m0 ADASYN No Sample SMOTE 0.300 0.273 0.286 0.517 0.517 SMOTE 0.300 0.273 0.286 0.517 0.517 SMOTEBorderline-1 SMOTEBorderline-2 SWMSMOTE 1 SWMSMMSMOTE 1 SWMSMSMOTE 1 SWMSMSMOTE 1 SWMSMSMSMOTE 1 SWMSMSMSMOTE 1 SWMSMSMSMSMSMSMSMSMSMSMSMSM		random	0.667	1,000	0.800	0.991
solar_flare_m0 No Sample SMOTE 0.333 0.182 0.235 0.424 SMOTEBorderline-1 SMOTEBorderline-2 SMOTEBorderline-2 SWMSMOTE 0.333 0.364 0.348 0.596 SWMSMOTE 0.333 0.273 0.333 0.519 SVMSMOTE 0.333 0.273 0.300 0.518 random 0.096 0.727 0.170 0.752 ADASYN 0.750 0.643 0.692 0.796 No Sample 1.000 0.286 0.444 0.535 SMOTE SMOTE 0.692 0.643 0.667 0.794 SMOTEBorderline-1 0.800 0.571 0.667 0.753 SMOTEBorderline-2 0.833 0.714 0.769 0.841 SVMSMOTE 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 SMOTEBorderline-2 0.895 1.000 0.944 0.998 SMOTEBorderline-1 0.895 1.000 0.944 0.998						
solar_flare_m0 SMOTE 0.300 0.273 0.286 0.517 SMOTEBorderline-1 0.333 0.364 0.348 0.596 SMOTEBorderline-2 0.429 0.273 0.333 0.519 SVMSMOTE 0.333 0.273 0.300 0.518 random 0.096 0.727 0.170 0.752 ADASYN 0.750 0.643 0.692 0.796 No Sample 1.000 0.286 0.444 0.535 SMOTEBorderline-1 0.800 0.571 0.667 0.794 SMOTEBorderline-2 0.833 0.714 0.769 0.841 SVMSMOTE 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 SMOTEBorderline-2 0.895 1.000 0.944 0.998 SMOTEBorderline-1 0.895 1.000 0.944 0.998 SWMSMOTE 0.8		l .				
Solar_Hare_mo SMOTEBorderline-1 0.333 0.364 0.348 0.596 SMOTEBorderline-2 0.429 0.273 0.333 0.519 SVMSMOTE 0.333 0.273 0.300 0.518 random 0.096 0.727 0.170 0.752 ADASYN 0.750 0.643 0.692 0.796 No Sample 1.000 0.286 0.444 0.535 SMOTEBorderline-1 0.800 0.571 0.667 0.794 SMOTEBorderline-2 0.833 0.714 0.769 0.841 SVMSMOTE 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 SMOTEBorderline-2 0.895 1.000 0.944 0.998 SMOTEBorderline-1 0.895 1.000 0.944 0.998 SVMSMOTE 0.895 1.000 0.944 0.998 SVMSMOTE 0						
Solar_Hare_mo SMOTEBorderline-1 0.333 0.364 0.348 0.596 SMOTEBorderline-2 0.429 0.273 0.333 0.519 SVMSMOTE 0.333 0.273 0.300 0.518 random 0.096 0.727 0.170 0.752 ADASYN 0.750 0.643 0.692 0.796 No Sample 1.000 0.286 0.444 0.535 SMOTEBorderline-1 0.800 0.571 0.667 0.794 SMOTEBorderline-2 0.833 0.714 0.769 0.841 SVMSMOTE 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 SMOTEBorderline-2 0.895 1.000 0.944 0.998 SMOTEBorderline-1 0.895 1.000 0.944 0.998 SVMSMOTE 0.895 1.000 0.944 0.998 SVMSMOTE 0	1 0 ^	SMOTE	0.300	0.273	0.286	0.517
SMOTEBorderline-2 0.429 0.273 0.333 0.519 SVMSMOTE 0.333 0.273 0.300 0.518 random 0.096 0.727 0.170 0.752 ADASYN 0.750 0.643 0.692 0.796 No Sample 1.000 0.286 0.444 0.535 SMOTE 0.692 0.643 0.667 0.794 SMOTEBorderline-1 0.800 0.571 0.667 0.753 SMOTEBorderline-2 0.833 0.714 0.769 0.841 SVMSMOTE 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 ADASYN 0.895 1.000 0.944 0.998 No Sample 0.895 1.000 0.944 0.998 SMOTEBorderline-1 0.895 1.000 0.944 0.998 SVMSMOTE 0.895 1.000 0.944 0.998 SWOTEBorderline-2 0.895 1.000 <	solar_flare_m0	l .		1		
oil SVMSMOTE random 0.333 0.273 0.300 0.518 ADASYN No Sample No Sample SMOTE 1.000 0.286 0.444 0.535 SMOTE SMOTEBorderline-1 SMOTEBorderline-2 No Sample SWMSMOTE No Sample SWMSMOTE No Sample No Sample SWMSMOTE NO SAMOTE						
oil random ADASYN No Sample No Sample SMOTE 1.000 0.286 0.444 0.535 0.692 0.796 0.692 0.643 0.667 0.794 0.692 0.643 0.667 0.794 0.692 0.643 0.667 0.794 0.750 0.667 0.753 0.667 0.753 0.667 0.753 0.667 0.753 0.667 0.753 0.667 0.753 0.667 0.753 0.667 0.753 0.667 0.751 0.667 0.751 0.640 0.751 0.690 0.727 0.571 0.640 0.751 0.690 0.727 0.571 0.640 0.751 0.727 0.571 0.640 0.751 0.690 0.727 0.571 0.640 0.751 0.690 0.998 0.694 0.998 0.994 0.994 0.998 0.994 0.994 0.998 0.994 0.998 0.994 0.998 0.994 0.998 0.994 0.998 0.994 0.998 0.998 0.994 0.998 0.998 0.994 0.998 0						
oil ADASYN No Sample SMOTE 0.750 0.286 0.444 0.535 0.286 0.444 0.535 SMOTE 0.692 0.643 0.667 0.794 0.794 0.769 0.794 0.753 SMOTEBorderline-1 SMOTEBorderline-2 SMOTEBorderline-2 No.833 0.714 0.769 0.841 0.769 0.841 0.727 0.571 0.640 0.751 SVMSMOTE NO.727 0.571 0.640 0.751 0.727 0.571 0.640 0.751 0.727 0.571 0.640 0.751 0.727 0.571 0.640 0.751 ADASYN 0.895 1.000 0.944 0.998 No Sample 0.944 1.000 0.971 0.999 0.998 0.994 0.998 SMOTE NOTEBorderline-1 0.895 1.000 0.944 0.998 0.998 0.995 0.995 0.994 0.998 SMOTEBorderline-2 0.895 1.000 0.944 0.998 0.998 0.995 0.996 0.994 0.998 ADASYN 0.895 1.000 0.944 0.998 0.998 0.998 0.998 0.333 0.308 0.703 No Sample 0.833 0.111 0.196 0.333 0.308 0.703 No Sample 0.833 0.111 0.196 0.333 0.308 0.703 SMOTE 0.220 0.533 0.312 0.704 0.998 0.687 0.998 0.687						
oil ADASYN No Sample SMOTE 0.750 0.286 0.444 0.535 0.286 0.444 0.535 SMOTE 0.692 0.643 0.667 0.794 0.794 0.769 0.794 0.753 SMOTEBorderline-1 SMOTEBorderline-2 SMOTEBorderline-2 No.833 0.714 0.769 0.841 0.769 0.841 0.727 0.571 0.640 0.751 SVMSMOTE NO.727 0.571 0.640 0.751 0.727 0.571 0.640 0.751 0.727 0.571 0.640 0.751 0.727 0.571 0.640 0.751 ADASYN 0.895 1.000 0.944 0.998 No Sample 0.944 1.000 0.971 0.999 0.998 0.994 0.998 SMOTE NOTEBorderline-1 0.895 1.000 0.944 0.998 0.998 0.995 0.995 0.994 0.998 SMOTEBorderline-2 0.895 1.000 0.944 0.998 0.998 0.995 0.996 0.994 0.998 ADASYN 0.895 1.000 0.944 0.998 0.998 0.998 0.998 0.333 0.308 0.703 No Sample 0.833 0.111 0.196 0.333 0.308 0.703 No Sample 0.833 0.111 0.196 0.333 0.308 0.703 SMOTE 0.220 0.533 0.312 0.704 0.998 0.687 0.998 0.687		random	0.096	0.727	0.170	0.752
oil No Sample SMOTE 1.000 0.286 0.444 0.535 SMOTE 0.692 0.643 0.667 0.794 SMOTEBorderline-1 0.800 0.571 0.667 0.753 SMOTEBorderline-2 0.833 0.714 0.769 0.841 SVMSMOTE 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 ADASYN 0.895 1.000 0.944 0.998 No Sample 0.894 1.000 0.971 0.999 SMOTEBorderline-1 0.895 1.000 0.944 0.998 SMOTEBorderline-2 0.895 1.000 0.944 0.998 SVMSMOTE 0.895 1.000 0.944 0.998 SVMSMOTE 0.850 1.000 0.944 0.998 No Sample 0.895 1.000 0.944 0.998 No Sample 0.833 0.111 0.196 0.333 SMOTE 0.220 <td< th=""><th></th><td>ADASYN</td><td>0.750</td><td></td><td>0.692</td><td></td></td<>		ADASYN	0.750		0.692	
oil SMOTE SMOTEBorderline-1 SMOTEBorderline-2 0.692 0.800 0.643 0.571 0.667 0.753 0.794 0.753 SMOTEBorderline-2 SWMSMOTE 0.833 0.714 0.769 0.841 0.841 0.769 0.841 0.751 SVMSMOTE random 0.727 0.571 0.640 0.751 0.751 0.640 0.751 0.791 ADASYN No Sample 0.895 0.895 1.000 0.944 0.998 0.998 SMOTEBorderline-1 SMOTEBorderline-2 0.895 1.000 0.944 0.998 0.998 SVMSMOTE SVMSMOTE 0.895 0.895 1.000 0.944 0.998 0.998 ADASYN SVMSMOTE 0.895 0.895 1.000 0.944 0.998 0.998 ADASYN SMOTE 0.895 0.833 0.111 0.196 0.333 0.308 0.703 0.333 0.312 SMOTEBorderline-1 SMOTEBorderline-2 SMOTEBorderline-2 SMOTEBorderline-2 0.202 0.511 0.284 0.630 0.687						
SMOTEBorderline-1 0.800 0.571 0.667 0.753 SMOTEBorderline-2 0.833 0.714 0.769 0.841 SVMSMOTE 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 ADASYN 0.895 1.000 0.944 0.998 No Sample 0.944 1.000 0.971 0.999 SMOTE 0.895 1.000 0.944 0.998 SMOTEBorderline-1 0.895 1.000 0.944 0.998 SMOTEBorderline-2 0.895 1.000 0.944 0.998 SVMSMOTE 0.850 1.000 0.919 0.996 random 0.895 1.000 0.944 0.998 SVMSMOTE 0.850 1.000 0.944 0.998 ADASYN 0.216 0.533 0.308 0.703 No Sample 0.833 0.111 0.196 0.333 SMOTE 0.220 0.533 0.312 0.704 SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687						
SMOTEBorderline-1 0.800 0.571 0.667 0.753 SMOTEBorderline-2 0.833 0.714 0.769 0.841 SVMSMOTE 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 random 0.727 0.571 0.640 0.751 ADASYN 0.895 1.000 0.944 0.998 No Sample 0.944 1.000 0.971 0.999 SMOTE 0.895 1.000 0.944 0.998 SMOTEBorderline-1 0.895 1.000 0.944 0.998 SMOTEBorderline-2 0.895 1.000 0.944 0.998 SVMSMOTE 0.850 1.000 0.944 0.998 SVMSMOTE 0.895 1.000 0.944 0.998 Random 0.895 1.000 0.944 0.998 ADASYN 0.216 0.533 0.308 0.703 No Sample 0.833 0.111 0.196 0.333 SMOTE 0.220 0.533 0.312 0.704 SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687	oil	l .		1		
car_eval_4 SMOTEBorderline-2 SVMSMOTE 0.833 0.714 0.769 0.841 0.769 0.841 ADASYN random 0.727 0.571 0.640 0.751 0.640 0.751 ADASYN No Sample No Sample SMOTE 0.944 1.000 0.971 0.999 0.999 SMOTEBorderline-1 SMOTEBorderline-2 SMOTEBorderline-2 No S95 1.000 0.944 0.998 0.994 0.998 SMOTEBorderline-2 No S95 1.000 0.944 0.998 0.998 0.998 SVMSMOTE 0.850 1.000 0.919 0.996 0.919 0.996 random 0.895 1.000 0.944 0.998 No Sample 0.833 0.111 0.196 0.333 No Sample 0.833 0.111 0.196 0.333 SMOTEBorderline-1 0.220 0.533 0.312 0.704 SMOTEBorderline-1 SMOTEBorderline-2 0.202 0.511 0.289 0.687	011	SMOTEBorderline-1	0.800	0.571	0.667	0.753
car_eval_4 SVMSMOTE random 0.727 0.571 0.640 0.751 ADASYN No Sample SMOTE SMOTEBorderline-1 vine_quality 0.895 1.000 0.944 0.998 0.999 ADASYN No Sample SMOTE SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SMOTEBorderline-2 0.895 1.000 0.944 0.998 0.998 0.999 SMOTEBorderline-2 SWISMOTE SWISMOTE SWISMOTE 0.895 1.000 0.944 0.998 0.999 VMSMOTE SWISMOTE 0.895 1.000 0.919 0.996 0.999 ADASYN 0.216 0.533 0.308 0.703 0.308 0.703 0.308 0.703 0.308 0.703 0.308 0.703 0.309 0.309 SMOTE SWISMOTE 0.220 0.533 0.312 0.704 0.999 0.687 0.202 0.511 0.289 0.687		SMOTEBorderline-2		1	0.769	
random 0.727 0.571 0.640 0.751 ADASYN 0.895 1.000 0.944 0.998 No Sample 0.944 1.000 0.971 0.999 SMOTE 0.895 1.000 0.944 0.998 SMOTEBorderline-1 0.895 1.000 0.944 0.998 SMOTEBorderline-2 0.895 1.000 0.944 0.998 SVMSMOTE 0.850 1.000 0.919 0.996 random 0.895 1.000 0.944 0.998 ADASYN 0.216 0.533 0.308 0.703 No Sample 0.833 0.111 0.196 0.333 SMOTE 0.220 0.533 0.312 0.704 SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687				1		
car_eval_4 ADASYN No Sample SMOTE 0.895 0.944 1.000 1.000 0.944 0.998 0.998 0.998 SMOTEBorderline-1 SMOTEBorderline-2 SMOTEBorderline-2 SMOTEBorderline-2 OSPS 0.895 0.895 1.000 0.944 0.998 0.998 VMSMOTE SVMSMOTE Fandom 0.895 0.895 1.000 0.919 0.996 0.996 ADASYN No Sample SMOTE SMOTE 0.216 0.533 0.308 0.312 0.704 0.333 SMOTE SMOTEBorderline-1 SMOTEBorderline-2 0.213 0.202 0.511 0.289 0.687		SWMSMOTE			0.040	
car_eval_4 No Sample SMOTE 0.944 1.000 0.971 0.999 SMOTE 0.895 1.000 0.944 0.998 SMOTEBorderline-1 SMOTEBorderline-2 SMOTEBorderline-2 SMOTEBorderline-2 O.895 1.000 0.944 0.998 SVMSMOTE O.850 I.000 0.919 0.996 random O.895 I.000 0.944 0.998 ADASYN O.216 O.533 O.308 O.703 0.308 O.703 No Sample SMOTE O.220 O.533 O.312 O.704 0.333 SMOTEBorderline-1 SMOTEBorderline-2 O.202 O.511 O.289 O.687		l .		1	0.040	0 751
car_eval_4 No Sample SMOTE 0.944 1.000 0.971 0.999 SMOTE 0.895 1.000 0.944 0.998 SMOTEBorderline-1 0.895 1.000 0.944 0.998 SMOTEBorderline-2 0.895 1.000 0.944 0.998 SVMSMOTE 0.850 1.000 0.919 0.996 random 0.895 1.000 0.944 0.998 ADASYN 0.216 0.533 0.308 0.703 No Sample 0.833 0.111 0.196 0.333 SMOTE 0.220 0.533 0.312 0.704 SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687		random	0.727	0.571		
car_eval_4 SMOTE SMOTEBorderline-1 SMOTEBorderline-2 0.895 0.895 1.000 1.000 0.944 0.998 0.998 0.998 SMOTEBorderline-2 SMOTEBorderline-2 0.895 0.850 1.000 1.000 0.944 0.998 0.996 0.996 random 0.895 0.895 1.000 1.000 0.919 0.996 0.996 0.998 ADASYN 0.216 0.833 0.111 0.196 0.333 0.312 0.704 SMOTE SMOTEBorderline-1 SMOTEBorderline-2 0.213 0.202 0.511 0.289 0.687		random	0.727	0.571		
car_eval_4 SMOTEBorderline-1 SMOTEBorderline-2 SMOTEBorderline-2 0.895 0.895 0.994 0.998 1.000 0.944 0.998 0.998 0.996 0.996 SVMSMOTE random 0.895 1.000 0.919 0.996 0.998 0.998 ADASYN 0.216 0.533 0.308 0.703 0.533 0.308 0.703 0.703 0.333 No Sample 0.833 0.111 0.196 0.333 0.312 0.704 SMOTEBorderline-1 SMOTEBorderline-2 0.202 0.511 0.289 0.687 0.687		random ADASYN	0.727 0.895	0.571 1.000	0.944	0.998
SMOTEBorderline-2 0.895 1.000 0.944 0.998 SVMSMOTE 0.850 1.000 0.919 0.996 random 0.895 1.000 0.944 0.998 ADASYN 0.216 0.533 0.308 0.703 No Sample 0.833 0.111 0.196 0.333 SMOTE 0.220 0.533 0.312 0.704 SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687		random ADASYN No Sample	0.727 0.895 0.944	0.571 1.000 1.000	0.944 0.971	0.998 0.999
SVMSMOTE 0.850 1.000 0.919 0.996 random 0.895 1.000 0.944 0.998 ADASYN 0.216 0.533 0.308 0.703 No Sample 0.833 0.111 0.196 0.333 SMOTE 0.220 0.533 0.312 0.704 SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687	car_eval_4	random ADASYN No Sample SMOTE	0.727 0.895 0.944 0.895	0.571 1.000 1.000 1.000	0.944 0.971 0.944	0.998 0.999 0.998
random 0.895 1.000 0.944 0.998 ADASYN 0.216 0.533 0.308 0.703 No Sample 0.833 0.111 0.196 0.333 SMOTE 0.220 0.533 0.312 0.704 SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687	car_eval_4	random ADASYN No Sample SMOTE SMOTEBorderline-1	0.727 0.895 0.944 0.895 0.895	0.571 1.000 1.000 1.000 1.000	0.944 0.971 0.944 0.944	0.998 0.999 0.998 0.998
random 0.895 1.000 0.944 0.998 ADASYN 0.216 0.533 0.308 0.703 No Sample 0.833 0.111 0.196 0.333 SMOTE 0.220 0.533 0.312 0.704 SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687	car_eval_4	random ADASYN No Sample SMOTE SMOTEBorderline-1	0.727 0.895 0.944 0.895 0.895	0.571 1.000 1.000 1.000 1.000	0.944 0.971 0.944 0.944	0.998 0.999 0.998 0.998
wine_quality ADASYN No Sample No Sample SMOTE 0.216 0.533 0.308 0.703 0.308 0.303 0.703 0.333 0.311 0.196 0.333 0.312 0.704 0.220 0.533 0.312 0.704 0.220 0.533 0.312 0.704 0.630 0.213 0.422 0.284 0.630 0.202 0.511 0.289 0.687	car_eval_4	random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2	0.727 0.895 0.944 0.895 0.895 0.895	0.571 1.000 1.000 1.000 1.000 1.000	0.944 0.971 0.944 0.944 0.944	0.998 0.999 0.998 0.998 0.998
wine_quality No Sample 0.833 0.111 0.196 0.333 SMOTE 0.220 0.533 0.312 0.704 SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687	car_eval_4	random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE	0.727 0.895 0.944 0.895 0.895 0.895 0.850	0.571 1.000 1.000 1.000 1.000 1.000	0.944 0.971 0.944 0.944 0.944 0.919	0.998 0.999 0.998 0.998 0.998 0.996
wine_quality SMOTE 0.220 0.533 0.312 0.704 SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687	car_eval_4	random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random	0.727 0.895 0.944 0.895 0.895 0.895 0.850 0.895	0.571 1.000 1.000 1.000 1.000 1.000 1.000	0.944 0.971 0.944 0.944 0.944 0.919 0.944	0.998 0.999 0.998 0.998 0.998 0.996 0.998
wine_quality SMOTE 0.220 0.533 0.312 0.704 SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687	car_eval_4	random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN	0.727 0.895 0.944 0.895 0.895 0.895 0.850 0.895	0.571 1.000 1.000 1.000 1.000 1.000 1.000	0.944 0.971 0.944 0.944 0.944 0.919 0.944	0.998 0.999 0.998 0.998 0.998 0.996 0.998 0.703
wine_quality SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687	car_eval_4	random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN	0.727 0.895 0.944 0.895 0.895 0.895 0.850 0.895	0.571 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.533	0.944 0.971 0.944 0.944 0.944 0.919 0.944 0.308	0.998 0.999 0.998 0.998 0.998 0.996 0.998 0.703
SMOTEBorderline-1 0.213 0.422 0.284 0.630 SMOTEBorderline-2 0.202 0.511 0.289 0.687		random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample	0.727 0.895 0.944 0.895 0.895 0.895 0.850 0.895 0.216 0.833	0.571 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.533 0.111	0.944 0.971 0.944 0.944 0.944 0.919 0.944 0.308 0.196	0.998 0.999 0.998 0.998 0.998 0.996 0.998 0.703 0.333
		random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE	0.727 0.895 0.944 0.895 0.895 0.895 0.850 0.895 0.216 0.833 0.220	0.571 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.533 0.111 0.533	0.944 0.971 0.944 0.944 0.919 0.944 0.308 0.196 0.312	0.998 0.999 0.998 0.998 0.998 0.996 0.998 0.703 0.333 0.704
		random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE SMOTE SMOTE SMOTE	0.727 0.895 0.944 0.895 0.895 0.895 0.850 0.895 0.216 0.833 0.220 0.213	0.571 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.533 0.111 0.533 0.422	0.944 0.971 0.944 0.944 0.919 0.944 0.308 0.196 0.312 0.284	0.998 0.999 0.998 0.998 0.998 0.996 0.998 0.703 0.333 0.704 0.630
SVMSMOTE 0.328 0.444 0.377 0.655		random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE SMOTE SMOTE SMOTE	0.727 0.895 0.944 0.895 0.895 0.895 0.850 0.895 0.216 0.833 0.220 0.213	0.571 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.533 0.111 0.533 0.422 0.511	0.944 0.971 0.944 0.944 0.919 0.944 0.308 0.196 0.312 0.284	0.998 0.999 0.998 0.998 0.998 0.996 0.998 0.703 0.333 0.704 0.630
		random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE SMOTE SMOTE SMOTE SMOTEBorderline-1 SMOTEBorderline-2	0.727 0.895 0.944 0.895 0.895 0.895 0.850 0.895 0.216 0.833 0.220 0.213 0.202	0.571 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.533 0.111 0.533 0.422 0.511	0.944 0.971 0.944 0.944 0.919 0.944 0.308 0.196 0.312 0.284 0.289	0.998 0.999 0.998 0.998 0.998 0.996 0.998 0.703 0.333 0.704 0.630 0.687
10.100 0.100 0.210 0.001		random ADASYN No Sample SMOTE SMOTEBorderline-1 SMOTEBorderline-2 SVMSMOTE random ADASYN No Sample SMOTE SMOTE SMOTE SMOTE	0.727 0.895 0.944 0.895 0.895 0.895 0.850 0.895 0.216 0.833 0.220 0.213	0.571 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.533 0.111 0.533 0.422	0.944 0.971 0.944 0.944 0.919 0.944 0.308 0.196 0.312 0.284	0.998 0.999 0.998 0.998 0.998 0.996 0.998 0.703 0.333 0.704 0.630

Table 3: Classification Result Based on Different Oversample Methods

	Table 3: Classification Result Based on Different Oversample Methods					
Data Source	Method	Rec.	Pre.	F	G	
	ADASYN	0.871	0.985	0.924	0.989	
	No Sample	0.978	0.909	0.942	0.953	
1 44 .	SMOTE	0.873	0.970	0.919	0.982	
${f letter_img}$	SMOTEBorderline-1	0.949	0.944	0.947	0.971	
	SMOTEBorderline-2	0.853	0.848	0.851	0.918	
	SVMSMOTE	0.848	0.990	0.914	0.991	
	random	0.764	1.000	0.867	0.994	
	ADASYN	0.250	0.625	0.357	0.774	
	No Sample	0.667	0.250	0.364	0.499	
	SMOTE	0.235	0.500	0.320	0.694	
$\mathbf{yeast_me2}$	SMOTEBorderline-1	0.333	0.750	0.462	0.852	
	SMOTEBorderline-2	0.214	0.750	0.333	0.839	
	SVMSMOTE	0.333	0.625	0.435	0.780	
	random	0.278	0.625	0.385	0.776	
	ADASYN	0.367	0.598	0.455	0.761	
	No Sample	0.929	0.533	0.660	0.715	
_	SMOTE	0.494	0.612	0.552	0.713	
webpage	SMOTEBorderline-1	0.362	0.606	0.352 0.454	0.766	
	SMOTEBorderline 1 SMOTEBorderline-2	0.456	0.575	0.509	0.750	
	SVMSMOTE	0.481	0.689	0.566	0.750	
	random	0.413	0.843	0.554	0.021	
	ADASYN	0.407	0.407	0.407	0.630	
	No Sample	0.500	0.407	0.407	0.030 0.192	
	SMOTE	0.300	0.481	0.003	0.686	
ozone_level	SMOTEBorderline-1	0.500	0.259	0.341	0.506	
	SMOTEBorderline-1 SMOTEBorderline-2	0.333	0.233 0.222	0.267	0.360 0.467	
	SVMSMOTE	0.455	0.185	0.263	0.428	
	random	0.433	0.105 0.296	0.203	0.428 0.542	
	ADASYN	0.410	0.797	0.542	0.880	
	No Sample	0.410	0.449	0.542	0.670	
	SMOTE	0.495	0.449 0.739	0.593	0.851	
mammography	SMOTE SMOTEBorderline-1	0.495	0.739	0.593 0.627	0.831	
	SMOTEBorderline-1 SMOTEBorderline-2	0.380	0.667	0.027	0.320	
	SVMSMOTE SVMSMOTE	$0.269 \\ 0.562$	0.007 0.725	0.404	0.799	
	random	$0.302 \\ 0.478$	0.723 0.783	0.593	0.845	
	ADASYN	0.478	0.783	0.333	0.958	
	No Sample	0.317	0.930 0.738	0.473	0.859	
	SMOTE	0.344		0.545	0.839	
$protein_homo$	SMOTE SMOTEBorderline-1	1	0.913		l	
procent nome	SMOTEBorderline-2	0.579	$0.854 \\ 0.866$	0.690	0.922	
		0.360		0.509	0.924	
	SVMSMOTE	0.629	0.845	0.721	0.917	
	random	0.442	0.927	0.599	0.958	
	ADASYN	0.060	0.333	0.102	0.564	
	No Sample	0.000	0.000	0.000	0.000	
$abalone_{-}19$	SMOTE	0.098	0.556	0.167	0.729	
	SMOTEBorderline-1	0.000	0.000	0.000	0.000	
	SMOTEBorderline-2	0.000	0.000	0.000	0.000	
	SVMSMOTE	0.000	0.000	0.000	0.000	
	random	0.091	0.222	0.129	0.467	

Table 4: Classification Result Based on Different Oversample Methods

Data Source	random	SMOTE	E SMOTEBorderline-1 SMOTEBorderline-		SVMSMOTE	ADASYN
ecoli	0.001	0.002	0.003	0.003	0.004	0.002
optical_digits	0.003	0.034	0.200	0.209	0.686	0.235