

Due skala niezbilansowania prowadzi to sprowadzenia klasy mniejszociowej to licznoci, ktra nie pozwala na efektywne wykorzystanie bardziej zoonych metod, takich jak ADASYN czy SMOTE. Due niezbilansowanie powoduje te znaczny wzrost licznoci komitetu, a wic poza jego waeniem zaproponowana zostaa redukcja do modelu dwuetapowego.

GNB																								
Dataset	Reg	OS	US	Without OS										With OS										
				Nonreduced					Reduced					Nonreduced					Reduced					
				reg	wei	cwei	nwei	ncwei	reg	wei	cwei	nwei	ncwei	reg	wei	cwei	nwei	ncwei	reg	wei	cwei	nwei	ncwei	
ecoli-0-1-3-7-vs-2-6	0.825	0.806	0.884	0.845	0.845	0.845	0.845	0.839	0.845	0.845	0.845	0.837	0.835	0.845	0.845	0.845	0.821	0.819	0.845	0.845	0.845	0.835	0.835	
ecoli4	0.878	0.859	0.704	0.834	0.859	0.859	0.901	0.902	0.743	0.790	0.815	0.876	0.895	0.896	0.915	0.902	0.894	0.896	0.767	0.842	0.840	0.898	0.895	
glass-0-1-6-vs-2	0.580	0.577	0.605	0.583	0.577	0.580	0.610	0.607	0.574	0.574	0.574	0.577	0.574	0.610	0.585	0.549	0.588	0.588	0.577	0.577	0.577	0.577	0.577	
glass-0-1-6-vs-5	0.941	0.941	0.980	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.991	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.991	0.991	
glass2	0.591	0.639	0.552	0.644	0.644	0.644	0.614	0.611	0.641	0.641	0.641	0.611	0.611	0.644	0.644	0.644	0.614	0.611	0.641	0.641	0.641	0.611	0.611	
glass4	0.587	0.704	0.686	0.786	0.819	0.819	0.786	0.819	0.781	0.781	0.781	0.784	0.781	0.791	0.791	0.794	0.791	0.796	0.781	0.781	0.781	0.784	0.784	
glass5	0.938	0.938	0.935	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	
page-blocks-1-3-vs-4	0.763	0.794	0.854	0.823	0.823	0.822	0.847	0.847	0.833	0.833	0.833	0.832	0.832	0.810	0.808	0.808	0.832	0.830	0.833	0.833	0.833	0.832	0.832	
shuttle-c0-vs-c4	0.991	0.991	0.991	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.987	0.987	0.994	0.994	0.994	0.991	0.991	
shuttle-c2-vs-c4	0.996	0.988	0.967	0.967	0.971	0.967	0.984	0.975	0.996	0.996	0.996	0.996	0.996	0.980	0.980	0.980	0.980	0.980	0.996	0.996	0.996	0.996	0.996	
vowel0	0.917	0.906	0.906	0.909	0.909	0.909	0.908	0.909	0.909	0.909	0.909	0.909	0.910	0.910	0.910	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.910	
yeast-0-5-6-7-9-vs-4	0.504	0.499	0.592	0.634	0.646	0.633	0.762	0.752	0.627	0.709	0.670	0.781	0.757	0.670	0.721	0.721	0.770	0.773	0.668	0.693	0.694	0.780	0.753	
yeast-1-2-8-9-vs-7	0.544	0.539	0.610	0.579	0.584	0.583	0.614	0.595	0.568	0.595	0.589	0.621	0.628	0.585	0.597	0.595	0.612	0.588	0.560	0.586	0.580	0.617	0.624	
yeast-1-4-5-8-vs-7	0.547	0.541	0.549	0.530	0.532	0.528	0.548	0.570	0.556	0.561	0.560	0.565	0.552	0.532	0.539	0.543	0.552	0.561	0.565	0.569	0.555	0.563	0.548	
yeast-1-vs-7	0.604	0.587	0.670	0.712	0.713	0.715	0.720	0.718	0.700	0.708	0.691	0.710	0.708	0.671	0.635	0.685	0.719	0.711	0.700	0.695	0.680	0.709	0.708	
yeast-2-vs-4	0.561	0.542	0.638	0.869	0.869	0.869	0.868	0.869	0.822	0.824	0.829	0.875	0.866	0.762	0.811	0.775	0.867	0.863	0.810	0.830	0.829	0.875	0.866	
yeast-2-vs-8	0.657	0.615	0.771	0.773	0.773	0.798	0.798	0.798	0.773	0.773	0.773	0.773	0.773	0.795	0.797	0.796	0.798	0.798	0.773	0.773	0.773	0.773	0.773	
yeast4	0.551	0.522	0.575	0.693	0.691	0.692	0.765	0.761	0.715	0.744	0.712	0.818	0.819	0.717	0.728	0.714	0.758	0.760	0.710	0.737	0.726	0.816	0.817	
yeast5	0.831	0.778	0.895	0.940	0.940	0.940	0.939	0.940	0.933	0.939	0.942	0.957	0.955	0.892	0.905	0.898	0.939	0.934	0.931	0.937	0.939	0.956	0.955	
yeast6	0.650	0.628	0.825	0.750	0.755	0.754	0.853	0.789	0.830	0.862	0.844	0.873	0.880	0.704	0.702	0.697	0.852	0.783	0.813	0.858	0.840	0.873	0.880	
ecoli-0-1-4-6-vs-5	0.877	0.883	0.635	0.906	0.906	0.906	0.896	0.894	0.712	0.737	0.737	0.910	0.912	0.908	0.908	0.908	0.904	0.902	0.737	0.738	0.788	0.910	0.912	
ecoli-0-1-4-7-vs-2-3-5-6	0.630	0.663	0.613	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.677	0.680	0.630	0.630	0.647	0.663	0.663	0.630	0.630	0.630	0.678	0.678	
ecoli-0-1-4-7-vs-5-6	0.735	0.851	0.604	0.617	0.617	0.617	0.617	0.617	0.617	0.617	0.617	0.879	0.867	0.617	0.617	0.677	0.855	0.859	0.617	0.617	0.617	0.864	0.867	
ecoli-0-1-vs-2-3-5	0.638	0.655	0.605	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.658	0.618	0.638	0.635	0.635	0.635	0.635	0.558	0.618	0.618	0.655	0.618	
ecoli-0-1-vs-5	0.782	0.800	0.684	0.666	0.666	0.691	0.693	0.693	0.641	0.641	0.641	0.743	0.743	0.714	0.741	0.766	0.818	0.818	0.639	0.689	0.714	0.816	0.816	
ecoli-0-2-3-4-vs-5	0.754	0.638	0.756	0.633	0.683	0.708	0.853	0.831	0.708	0.708	0.708	0.878	0.878	0.764	0.767	0.814	0.837	0.826	0.697	0.783	0.758	0.875	0.878	
ecoli-0-2-6-7-vs-3-5	0.563	0.578	0.580	0.596	0.591	0.593	0.633	0.633	0.563	0.613	0.588	0.696	0.656	0.598	0.598	0.596	0.638	0.636	0.588	0.610	0.613	0.663	0.663	
ecoli-0-3-4-6-vs-5	0.784	0.747	0.784	0.807	0.832	0.832	0.868	0.868	0.865	0.865	0.873	0.887	0.884	0.871	0.866	0.860	0.857	0.852	0.862	0.857	0.857	0.882	0.882	
ecoli-0-3-4-7-vs-5-6	0.775	0.740	0.633	0.673	0.693	0.673	0.705	0.729	0.633	0.653	0.633	0.781	0.761	0.761	0.781	0.767	0.787	0.787	0.633	0.671	0.673	0.848	0.812	
ecoli-0-3-4-vs-5	0.817	0.731	0.714	0.739	0.767	0.739	0.797	0.789	0.661	0.661	0.708	0.886	0.886	0.794	0.783	0.814	0.808	0.803	0.656	0.733	0.731	0.883	0.886	
ecoli-0-4-6-vs-5	0.854	0.885	0.746	0.703	0.728	0.753	0.903	0.878	0.781	0.853	0.856	0.901	0.903	0.834	0.862	0.876	0.901	0.903	0.820	0.878	0.873	0.903	0.901	
ecoli-0-6-7-vs-3-5	0.508	0.528	0.550	0.623	0.583	0.618	0.623	0.578	0.548	0.508	0.508	0.657	0.617	0.583	0.603	0.603	0.620	0.595	0.548	0.508	0.508	0.657	0.640	
ecoli-0-6-7-vs-5	0.780	0.855	0.747	0.745	0.762	0.767	0.850	0.855	0.640	0.758	0.713	0.863	0.865	0.860	0.855	0.863	0.843	0.843	0.660	0.853	0.782	0.863	0.865	
glass-0-1-4-6-vs-2	0.577	0.556	0.622	0.625	0.659	0.659	0.659	0.659	0.597	0.597	0.594	0.622	0.622	0.625	0.625	0.625	0.625	0.659	0.600	0.600	0.592	0.595	0.595	
glass-0-1-5-vs-2	0.519	0.553	0.470	0.526	0.526	0.548	0.603	0.583	0.522	0.545	0.525	0.639	0.646	0.589	0.585	0.569	0.513	0.516	0.539	0.551	0.586	0.623	0.613	
glass-0-4-vs-5	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	
glass-0-6-vs-5	0.945	0.945	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	
led7digit-0-2-4-5-6-7-8-9-vs-1	0.836	0.869	0.866	0.881	0.881	0.881	0.881	0.881	0.882	0.882	0.882	0.882	0.882	0.866	0.866	0.881	0.881	0.881	0.882	0.882	0.882	0.882	0.882	
yeast-0-2-5-6-vs-3-7-8-9	0.670	0.780	0.580	0.581	0.581	0.581	0.586	0.586	0.576	0.576	0.576	0.749	0.729	0.686	0.710	0.719	0.780	0.765	0.576	0.576	0.576	0.777	0.761	
yeast-0-2-5-7-9-vs-3-6-8	0.577	0.523	0.702	0.844	0.844	0.844	0.893	0.854	0.898	0.897	0.895	0.900	0.903	0.757	0.786	0.743	0.898	0.863	0.897	0.904	0.894	0.905	0.908	
yeast-0-3-5-9-vs-7-8	0.557	0.537	0.623	0.60																				

kNN																								
Dataset	Reg	OS	US	Without OS										With OS										
				Nonreduced					Reduced					Nonreduced					Reduced					
				reg	wei	cwei	nwei	ncwei	reg	wei	cwei	nwei	ncwei	reg	wei	cwei	nwei	ncwei	reg	wei	cwei	nwei	ncwei	
ecoli-0-1-3-7-vs-2-6	0.850	0.835	0.821	0.845	0.843	0.842	0.838	0.838	0.845	0.842	0.838	0.847	0.844	0.867	0.869	0.828	0.832	0.830	0.847	0.849	0.851	0.853	0.856	
ecoli4	0.848	0.909	0.921	0.934	0.934	0.938	0.949	0.949	0.938	0.938	0.940	0.959	0.953	0.949	0.953	0.945	0.958	0.958	0.940	0.940	0.945	0.950	0.958	
glass-0-1-6-vs-2	0.555	0.656	0.663	0.724	0.726	0.724	0.699	0.729	0.724	0.726	0.715	0.702	0.726	0.740	0.732	0.775	0.730	0.705	0.727	0.739	0.740	0.766	0.777	
glass-0-1-6-vs-5	0.739	0.933	0.799	0.821	0.821	0.827	0.830	0.830	0.827	0.827	0.830	0.827	0.830	0.850	0.861	0.890	0.924	0.921	0.830	0.830	0.836	0.833	0.839	
glass2	0.485	0.715	0.676	0.736	0.739	0.729	0.724	0.726	0.694	0.716	0.696	0.719	0.704	0.711	0.734	0.769	0.720	0.720	0.711	0.719	0.767	0.705	0.743	
glass4	0.781	0.925	0.847	0.861	0.861	0.861	0.861	0.861	0.861	0.861	0.861	0.861	0.861	0.863	0.863	0.888	0.913	0.915	0.861	0.861	0.861	0.891	0.893	
glass5	0.695	0.830	0.809	0.809	0.811	0.816	0.823	0.823	0.813	0.813	0.863	0.813	0.813	0.830	0.840	0.855	0.901	0.916	0.816	0.818	0.826	0.823	0.830	
page-blocks-1-3-vs-4	0.808	0.917	0.872	0.877	0.877	0.875	0.888	0.881	0.871	0.872	0.887	0.900	0.894	0.899	0.901	0.922	0.918	0.920	0.876	0.879	0.894	0.916	0.919	
shuttle-c0-vs-c4	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	
shuttle-c2-vs-c4	0.600	1.000	0.870	0.879	0.879	0.859	0.883	0.879	0.863	0.879	0.859	0.879	0.879	0.996	0.996	1.000	1.000	1.000	0.879	0.883	0.891	0.919	0.964	
vowel0	0.977	0.999	0.944	0.944	0.944	0.944	0.944	0.943	0.943	0.943	0.943	0.944	0.946	0.954	0.956	0.967	0.997	0.998	0.949	0.949	0.956	0.985	0.988	
yeast-0-5-6-7-9-vs-4	0.667	0.795	0.761	0.799	0.799	0.802	0.807	0.806	0.799	0.799	0.794	0.797	0.787	0.799	0.804	0.815	0.817	0.823	0.801	0.800	0.821	0.816	0.818	
yeast-1-2-8-9-vs-7	0.499	0.627	0.678	0.662	0.663	0.659	0.677	0.674	0.678	0.679	0.658	0.671	0.665	0.623	0.632	0.622	0.626	0.626	0.672	0.657	0.679	0.685	0.689	
yeast-1-4-5-8-vs-7	0.499	0.615	0.537	0.580	0.580	0.562	0.578	0.573	0.573	0.555	0.565	0.561	0.568	0.643	0.617	0.614	0.611	0.607	0.592	0.602	0.592	0.660	0.648	
yeast-1-vs-7	0.517	0.705	0.660	0.727	0.726	0.726	0.739	0.735	0.736	0.747	0.749	0.750	0.748	0.696	0.695	0.709	0.700	0.698	0.750	0.739	0.710	0.692	0.699	
yeast-2-vs-4	0.819	0.885	0.913	0.913	0.914	0.916	0.915	0.915	0.914	0.914	0.916	0.915	0.914	0.919	0.919	0.908	0.909	0.904	0.918	0.917	0.919	0.910	0.909	
yeast-2-vs-8	0.774	0.803	0.725	0.708	0.709	0.709	0.721	0.715	0.720	0.720	0.725	0.734	0.735	0.753	0.753	0.754	0.803	0.803	0.732	0.738	0.755	0.758	0.754	
yeast4	0.574	0.749	0.808	0.849	0.849	0.850	0.851	0.849	0.838	0.839	0.840	0.839	0.840	0.841	0.844	0.851	0.773	0.774	0.842	0.843	0.843	0.844	0.842	
yeast5	0.850	0.964	0.959	0.956	0.956	0.955	0.958	0.958	0.956	0.956	0.956	0.958	0.957	0.959	0.959	0.962	0.967	0.969	0.958	0.958	0.958	0.960	0.961	
yeast6	0.739	0.840	0.882	0.883	0.883	0.883	0.884	0.884	0.884	0.884	0.884	0.885	0.884	0.897	0.899	0.876	0.835	0.851	0.887	0.887	0.887	0.892	0.892	
ecoli-0-1-4-6-vs-5	0.898	0.917	0.860	0.888	0.888	0.888	0.892	0.892	0.892	0.892	0.892	0.892	0.892	0.894	0.894	0.898	0.910	0.913	0.892	0.892	0.892	0.892	0.896	
ecoli-0-1-4-7-vs-2-3-5-6	0.847	0.856	0.879	0.893	0.891	0.891	0.890	0.888	0.895	0.895	0.893	0.906	0.901	0.878	0.881	0.882	0.891	0.889	0.871	0.869	0.874	0.882	0.884	
ecoli-0-1-4-7-vs-5-6	0.838	0.899	0.893	0.880	0.881	0.880	0.886	0.885	0.885	0.885	0.883	0.891	0.894	0.891	0.891	0.881	0.894	0.894	0.889	0.889	0.891	0.884	0.889	
ecoli-0-1-vs-2-3-5	0.830	0.887	0.907	0.885	0.885	0.887	0.896	0.894	0.892	0.892	0.872	0.916	0.896	0.894	0.894	0.894	0.885	0.885	0.874	0.894	0.894	0.890	0.890	
ecoli-0-1-vs-5	0.900	0.916	0.891	0.907	0.907	0.905	0.902	0.909	0.907	0.907	0.907	0.909	0.905	0.911	0.911	0.911	0.914	0.914	0.911	0.911	0.911	0.914	0.914	
ecoli-0-2-3-4-vs-5	0.894	0.909	0.889	0.900	0.900	0.900	0.903	0.903	0.900	0.900	0.900	0.903	0.903	0.900	0.900	0.900	0.900	0.900	0.900	0.900	0.900	0.900	0.900	
ecoli-0-2-6-7-vs-3-5	0.787	0.890	0.811	0.836	0.836	0.841	0.848	0.820	0.831	0.828	0.828	0.848	0.846	0.848	0.850	0.858	0.860	0.860	0.843	0.846	0.848	0.860	0.860	
ecoli-0-3-4-6-vs-5	0.875	0.911	0.918	0.876	0.876	0.879	0.890	0.893	0.876	0.876	0.876	0.893	0.893	0.893	0.893	0.895	0.895	0.898	0.893	0.893	0.893	0.895	0.895	
ecoli-0-3-4-7-vs-5-6	0.876	0.894	0.884	0.908	0.908	0.906	0.873	0.893	0.904	0.904	0.900	0.911	0.891	0.891	0.893	0.899	0.890	0.892	0.888	0.888	0.895	0.885	0.885	
ecoli-0-3-4-vs-5	0.875	0.911	0.897	0.903	0.903	0.903	0.903	0.903	0.900	0.900	0.903	0.903	0.903	0.906	0.906	0.903	0.903	0.903	0.906	0.906	0.906	0.903	0.903	
ecoli-0-4-6-vs-5	0.900	0.914	0.890	0.890	0.890	0.890	0.892	0.892	0.890	0.890	0.890	0.892	0.892	0.890	0.890	0.890	0.895	0.895	0.890	0.890	0.890	0.892	0.892	
ecoli-0-6-7-vs-3-5	0.835	0.892	0.832	0.853	0.853	0.855	0.865	0.857	0.860	0.860	0.863	0.870	0.870	0.868	0.870	0.870	0.860	0.863	0.872	0.872	0.872	0.860	0.855	
ecoli-0-6-7-vs-5	0.847	0.863	0.860	0.855	0.855	0.863	0.875	0.877	0.855	0.858	0.853	0.875	0.872	0.872	0.875	0.877	0.895	0.893	0.865	0.868	0.868	0.895	0.893	
glass-0-1-4-6-vs-2	0.512	0.732	0.673	0.712	0.712	0.704	0.722	0.717	0.712	0.712	0.704	0.728	0.722	0.756	0.723	0.722	0.724	0.718	0.738	0.746	0.714	0.714	0.727	
glass-0-1-5-vs-2	0.527	0.658	0.636	0.687	0.690	0.684	0.650	0.687	0.687	0.687	0.680	0.684	0.674	0.728	0.710	0.731	0.701	0.737	0.686	0.699	0.716	0.751	0.764	
glass-0-4-vs-5	0.850	0.988	0.897	0.921	0.921	0.927	0.921	0.921	0.939	0.939	0.939	0.939	0.939	0.951	0.951	0.951	0.951	0.951	0.944	0.944	0.951	0.951	0.951	
glass-0-6-vs-5	0.745	0.985	0.843	0.868	0.868	0.868	0.868	0.868	0.868	0.868	0.873	0.873	0.873	0.913	0.913	0.933	0.959	0.985	0.878	0.878	0.893	0.893	0.933	
led7digit-0-2-4-5-6-7-8-9-vs-1	0.655	0.884	0.893	0.870	0.870	0.867	0.867	0.865	0.864	0.864	0.875	0.867	0.865	0.867	0.867	0.865	0.859	0.857	0.863	0.863	0.878	0.859	0.873	
yeast-0-2-5-6-vs-3-7-8-9	0.762	0.784	0.768	0.786	0.786	0.786	0.781	0.783	0.786	0.786	0.784	0.781	0.783	0.801	0.802	0.804	0.791	0.797	0.793	0.800	0.802	0.790	0.791	
yeast-0-2-5-7-9-vs-3-6-8	0.902	0.904	0.912	0.905	0.905	0.905	0.906	0.905	0.904	0.904	0.906	0.905	0.910	0.908	0.908	0.898	0.905	0.906	0.908	0.908	0.902	0.907	0.900	
yeast-0-3-5-9-vs-7-8	0.639	0.709	0.723	0.737	0.737	0.735	0.718	0.732	0.743	0.743	0.762	0.730	0.742	0.769	0.739	0.730	0.721							

DTC																								
Dataset	Reg	OS	US	Without OS										With OS										
				Nonreduced					Reduced					Nonreduced					Reduced					
				reg	wei	cwei	nwei	ncwei	reg	wei	cwei	nwei	ncwei	reg	wei	cwei	nwei	ncwei	reg	wei	cwei	nwei	ncwei	
ecoli-0-1-3-7-vs-2-6	0.841	0.641	0.781	0.705	0.705	0.703	0.716	0.714	0.809	0.807	0.807	0.814	0.814	0.740	0.745	0.754	0.719	0.730	0.809	0.809	0.809	0.825	0.825	
ecoli4	0.867	0.816	0.904	0.853	0.853	0.849	0.851	0.851	0.912	0.909	0.909	0.864	0.864	0.860	0.860	0.860	0.847	0.848	0.912	0.912	0.912	0.875	0.875	
glass-0-1-6-vs-2	0.580	0.649	0.596	0.679	0.679	0.673	0.643	0.629	0.682	0.713	0.713	0.685	0.685	0.647	0.647	0.650	0.601	0.601	0.699	0.696	0.696	0.642	0.642	
glass-0-1-6-vs-5	0.886	0.844	0.811	0.926	0.926	0.926	0.943	0.940	0.926	0.926	0.926	0.931	0.931	0.937	0.937	0.937	0.957	0.957	0.926	0.926	0.926	0.940	0.940	
glass2	0.571	0.652	0.706	0.752	0.752	0.752	0.790	0.788	0.782	0.779	0.779	0.830	0.830	0.764	0.767	0.780	0.611	0.613	0.766	0.797	0.797	0.787	0.787	
glass4	0.802	0.838	0.872	0.890	0.890	0.890	0.895	0.895	0.903	0.903	0.903	0.915	0.915	0.898	0.898	0.898	0.920	0.918	0.910	0.910	0.910	0.920	0.920	
glass5	0.948	0.898	0.800	0.917	0.917	0.917	0.939	0.929	0.934	0.934	0.934	0.941	0.941	0.934	0.934	0.937	0.956	0.956	0.934	0.934	0.934	0.951	0.951	
page-blocks-1-3-vs-4	0.996	0.998	0.951	0.984	0.984	0.984	0.989	0.990	0.989	0.989	0.989	0.990	0.990	0.987	0.987	0.988	0.993	0.993	0.990	0.989	0.989	0.990	0.990	
shuttle-c0-vs-c4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
shuttle-c2-vs-c4	1.000	1.000	0.964	0.964	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
vowel0	0.941	0.917	0.960	0.962	0.961	0.961	0.959	0.959	0.960	0.964	0.964	0.965	0.965	0.958	0.958	0.958	0.965	0.965	0.960	0.960	0.960	0.961	0.961	
yeast-0-5-6-7-9-vs-4	0.651	0.666	0.782	0.820	0.820	0.820	0.789	0.789	0.803	0.811	0.811	0.800	0.800	0.804	0.806	0.807	0.747	0.730	0.807	0.804	0.804	0.762	0.762	
yeast-1-2-8-9-vs-7	0.633	0.640	0.676	0.722	0.722	0.722	0.753	0.757	0.758	0.758	0.758	0.757	0.757	0.758	0.717	0.700	0.620	0.621	0.779	0.776	0.776	0.752	0.752	
yeast-1-4-5-8-vs-7	0.524	0.515	0.584	0.592	0.592	0.607	0.603	0.600	0.608	0.595	0.595	0.586	0.586	0.612	0.603	0.611	0.587	0.557	0.608	0.608	0.608	0.592	0.592	
yeast-1-vs-7	0.664	0.615	0.652	0.699	0.698	0.699	0.718	0.717	0.729	0.737	0.737	0.759	0.759	0.717	0.718	0.718	0.687	0.679	0.728	0.728	0.728	0.705	0.705	
yeast-2-vs-4	0.855	0.850	0.908	0.928	0.928	0.928	0.925	0.925	0.936	0.936	0.936	0.946	0.946	0.926	0.926	0.926	0.874	0.865	0.925	0.925	0.925	0.885	0.885	
yeast-2-vs-8	0.664	0.692	0.719	0.780	0.778	0.798	0.797	0.792	0.766	0.766	0.766	0.771	0.771	0.775	0.777	0.783	0.770	0.772	0.784	0.806	0.806	0.790	0.790	
yeast4	0.644	0.655	0.778	0.846	0.846	0.847	0.835	0.836	0.844	0.842	0.842	0.849	0.849	0.818	0.819	0.835	0.616	0.616	0.847	0.847	0.847	0.835	0.835	
yeast5	0.834	0.868	0.931	0.963	0.963	0.963	0.968	0.968	0.964	0.964	0.964	0.967	0.967	0.967	0.967	0.967	0.932	0.922	0.966	0.966	0.966	0.957	0.957	
yeast6	0.731	0.766	0.817	0.847	0.847	0.847	0.854	0.869	0.861	0.861	0.861	0.863	0.863	0.859	0.859	0.863	0.885	0.875	0.849	0.848	0.848	0.840	0.840	
ecoli-0-1-4-6-vs-5	0.802	0.833	0.781	0.838	0.838	0.838	0.877	0.873	0.906	0.906	0.906	0.908	0.908	0.856	0.856	0.858	0.827	0.827	0.917	0.915	0.915	0.921	0.921	
ecoli-0-1-4-7-vs-2-3-5-6	0.815	0.852	0.865	0.847	0.863	0.863	0.843	0.842	0.870	0.863	0.863	0.857	0.857	0.859	0.859	0.861	0.822	0.822	0.865	0.863	0.863	0.884	0.884	
ecoli-0-1-4-7-vs-5-6	0.844	0.847	0.815	0.851	0.851	0.850	0.823	0.823	0.883	0.880	0.880	0.881	0.881	0.871	0.851	0.856	0.854	0.857	0.881	0.881	0.881	0.873	0.873	
ecoli-0-1-vs-2-3-5	0.783	0.770	0.777	0.853	0.853	0.853	0.851	0.851	0.855	0.855	0.855	0.855	0.855	0.786	0.786	0.786	0.789	0.791	0.842	0.840	0.840	0.842	0.842	
ecoli-0-1-vs-5	0.861	0.843	0.823	0.823	0.823	0.823	0.825	0.825	0.836	0.836	0.836	0.836	0.836	0.841	0.841	0.841	0.848	0.848	0.845	0.843	0.843	0.845	0.845	
ecoli-0-2-3-4-vs-5	0.781	0.839	0.872	0.872	0.872	0.872	0.889	0.889	0.886	0.886	0.886	0.889	0.889	0.881	0.881	0.881	0.908	0.908	0.892	0.892	0.892	0.900	0.900	
ecoli-0-2-6-7-vs-3-5	0.768	0.793	0.831	0.828	0.828	0.833	0.843	0.843	0.838	0.836	0.836	0.820	0.820	0.848	0.848	0.850	0.835	0.840	0.818	0.818	0.818	0.838	0.838	
ecoli-0-3-4-6-vs-5	0.786	0.803	0.833	0.916	0.916	0.916	0.891	0.891	0.918	0.918	0.918	0.901	0.901	0.899	0.899	0.899	0.895	0.895	0.915	0.907	0.907	0.862	0.862	
ecoli-0-3-4-7-vs-5-6	0.818	0.845	0.799	0.888	0.888	0.888	0.880	0.880	0.886	0.886	0.886	0.888	0.888	0.899	0.899	0.901	0.908	0.910	0.906	0.897	0.897	0.897	0.897	
ecoli-0-3-4-vs-5	0.856	0.836	0.922	0.894	0.894	0.919	0.922	0.922	0.928	0.928	0.928	0.911	0.911	0.919	0.919	0.919	0.919	0.919	0.900	0.917	0.917	0.919	0.919	
ecoli-0-4-6-vs-5	0.806	0.859	0.835	0.857	0.857	0.857	0.865	0.865	0.857	0.857	0.857	0.876	0.876	0.873	0.873	0.873	0.889	0.892	0.873	0.873	0.873	0.876	0.876	
ecoli-0-6-7-vs-3-5	0.853	0.872	0.823	0.838	0.835	0.835	0.835	0.835	0.838	0.838	0.838	0.840	0.840	0.853	0.853	0.853	0.840	0.847	0.857	0.853	0.853	0.840	0.840	
ecoli-0-6-7-vs-5	0.792	0.792	0.842	0.860	0.860	0.860	0.870	0.867	0.885	0.877	0.877	0.877	0.877	0.887	0.887	0.887	0.875	0.878	0.882	0.882	0.882	0.863	0.863	
glass-0-1-4-6-vs-2	0.610	0.685	0.688	0.778	0.778	0.775	0.778	0.778	0.781	0.775	0.775	0.794	0.794	0.771	0.771	0.779	0.709	0.692	0.771	0.771	0.771	0.742	0.742	
glass-0-1-5-vs-2	0.570	0.566	0.636	0.743	0.743	0.743	0.750	0.713	0.759	0.747	0.747	0.736	0.736	0.687	0.665	0.669	0.607	0.577	0.715	0.715	0.715	0.584	0.584	
glass-0-4-vs-5	0.994	0.994	0.958	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.988	0.982	0.982	0.982	0.982	
glass-0-6-vs-5	0.940	0.945	0.879	0.939	0.939	0.939	0.949	0.949	0.949	0.949	0.949	0.985	0.985	0.944	0.944	0.944	0.954	0.949	0.970	0.970	0.970	0.985	0.985	
led7digit-0-2-4-5-6-7-8-9-vs-1	0.894	0.893	0.893	0.872	0.872	0.856	0.862	0.859	0.875	0.871	0.853	0.871	0.859	0.880	0.880	0.865	0.870	0.870	0.877	0.877	0.871	0.877	0.865	
yeast-0-2-5-6-vs-3-7-8-9	0.734	0.728	0.726	0.786	0.786	0.786	0.767	0.765	0.782	0.782	0.782	0.789	0.789	0.782	0.786	0.781	0.734	0.727	0.800	0.802	0.802	0.791	0.791	
yeast-0-2-5-7-9-vs-3-6-8	0.859	0.855	0.879	0.894	0.894	0.894	0.886	0.888	0.901	0.901	0.901	0.907	0.907	0.908	0.908	0.910	0.890	0.886	0.905	0.909	0.909	0.915	0.915	
yeast-0-3-5-9-vs-7-8	0.687	0.594	0.628	0.707	0.707	0.703	0.705	0.699	0.714	0.714	0.714	0.711	0.711	0.712	0.714	0.717	0.576	0.576	0.700	0.693	0.693	0.637	0.637	
ecoli-0-vs-1	0.973	0.969	0.938	0.970	0.970	0.970	0.970	0.970	0.962	0.970	0.970	0.970	0.970	0.973	0.973	0.973	0.966	0.966	0.973	0.973	0.973	0.966	0.966	
ecoli1	0.841	0.845	0.867	0.882	0.882	0.882	0.849	0.849	0.882	0.882	0.882	0.849	0.849	0.872	0.872	0.872	0.847	0.847	0.858	0.872	0.872	0.847	0.847	
ecoli2	0.846	0.876	0.822	0.873	0.873	0.873	0.859	0.859	0.882	0.882	0.878	0.877	0.877	0.891	0.891	0.892	0.871	0.871	0.891	0.891	0.891	0.864	0.864	
ecoli3	0.710	0.704	0.870	0.882	0.882	0.881	0.863	0.863	0.884	0.884	0.884	0.851	0.851	0.859	0.859	0.859	0.818	0.804	0.861	0.859	0.859	0.842	0.842	
glass-0-1-2-3-vs-4-5-6	0.892	0.892	0.905	0.927	0.927	0.927	0.920	0.920	0.927	0.927	0.927	0.920	0.920	0.926	0.926	0.926	0.896	0.896	0.926	0.926	0.926	0.896	0.896	
glass0	0.774	0.756	0.756	0.771	0.771	0.771	0.771	0.771	0.770	0.771	0.771	0.771	0.771	0.803	0.803	0.803	0.770	0.770	0.803	0.803	0.80			