

> REPLACE THIS LINE WITH YOUR MANUSCRIPT ID NUMBER (DOUBLE-CLICK HERE TO EDIT) <

SMOTEBW-Nearmiss	BBO	DE	SAB	whale	ANT	ZOA	SMOTEBW-SUSD	BBO	DE	SAB	whale	ANT	ZOA
abalone-21-vs-8	0.9135	0.9109	0.8614	0.9171	0.9083	0.9042	abalone-21-vs-8	0.885	0.885	0.8868	0.8842	0.8784	0.8858
abalone-3-vs-11	1	1	1	1	1	1	abalone-3-vs-11	1	1	1	1	1	1
car-good	0.8809	0.8934	0.9108	0.9053	0.8928	0.9154	car-good	0.9741	0.975	0.9597	0.9429	0.9523	0.9705
dermatology-6	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	dermatology-6	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985
ecoli1	0.8865	0.8824	0.8912	0.8884	0.9033	0.8856	ecoli1	0.9012	0.9126	0.9103	0.8966	0.8957	0.9101
ecoli2	0.9036	0.9024	0.886	0.9115	0.8953	0.8951	ecoli2	0.9045	0.9138	0.9212	0.9139	0.9123	0.9127
ecoli3	0.8142	0.8358	0.8262	0.8242	0.8242	0.835	ecoli3	0.8992	0.8938	0.8921	0.8921	0.9004	0.8954
flare-F	0.6951	0.6937	0.659	0.6825	0.6822	0.6829	flare-F	0.8463	0.8452	0.8552	0.8414	0.8498	0.8587
glass-0-1-2-3-vs-4-5-6	0.9329	0.9381	0.936	0.9216	0.9345	0.9460	glass-0-1-2-3-vs-4-5-6	0.9464	0.9528	0.9496	0.9432	0.9532	0.9532
glass0	0.8214	0.826	0.8388	0.8462	0.815	0.8347	glass0	0.8408	0.8362	0.8347	0.839	0.829	0.8419
glass1	0.8186	0.8284	0.8285	0.7966	0.8424	0.8403	glass1	0.8014	0.797	0.8004	0.8069	0.7582	0.7868
glass6	0.9506	0.9531	0.9496	0.9449	0.9558	0.9532	glass6	0.937	0.9362	0.933	0.933	0.9341	0.945
haberman	0.6474	0.6448	0.6304	0.6305	0.6517	0.6466	haberman	0.6413	0.6453	0.6495	0.619	0.6349	0.646
kddcup-rootkit	1	1	1	1	1	1	kddcup-rootkit	1	1	1	1	1	1
new-thyroid1	0.9859	0.9859	0.9829	0.9859	0.9806	0.9805	new-thyroid1	0.9832	0.9802	0.9915	0.9888	0.9832	0.9888
pima	0.7211	0.7181	0.698	0.7338	0.7109	0.7205	pima	0.7277	0.7259	0.7433	0.7309	0.7302	0.7215
vehicle0	0.9398	0.9468	0.9338	0.9446	0.9429	0.9408	vehicle0	0.9523	0.9519	0.9455	0.947	0.951	0.9466
winequality-red-8-vs-6	0.814	0.7997	0.752	0.7717	0.808	0.7835	winequality-red-8-vs-6	0.8506	0.8397	0.8491	0.8086	0.7763	0.8167
winequality-white-3-vs-7	0.8072	0.8278	0.771	0.8369	0.8329	0.8260	winequality-white-3-vs-7	0.6635	0.8432	0.7675	0.6983	0.6674	0.7924
wisconsin	0.9568	0.9598	0.952	0.9582	0.9589	0.9556	wisconsin	0.9658	0.965	0.9639	0.9606	0.9647	0.9651
yeast6	0.8161	0.8102	0.7869	0.8181	0.8204	0.8007	yeast6	0.8908	0.8899	0.8897	0.8813	0.8943	0.896
OREM-SUSD	BBO	DE	SAB	whale	ANT	ZOA	OREM-Nearmiss	BBO	DE	SAB	whale	ANT	ZOA
abalone-21-vs-8	0.9109	0.8596	0.8614	0.8464	0.8469	0.9224	abalone-21-vs-8	0.8535	0.8686	0.8605	0.8623	0.8578	0.8797
abalone-3-vs-11	1	1	1	1	1	1	abalone-3-vs-11	1	1	1	1	1	1
car-good	0.8874	0.9235	0.9147	0.9217	0.8844	0.9032	car-good	0.9146	0.9179	0.9117	0.9075	0.9018	0.9124
dermatology-6	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985	dermatology-6	0.9985	0.9985	0.9985	0.9985	0.9985	0.9985
ecoli1	0.8825	0.9018	0.8922	0.895	0.9023	0.8877	ecoli1	0.8972	0.9058	0.8957	0.8957	0.8957	0.8961
ecoli2	0.8953	0.886	0.886	0.8613	0.8909	0.8911	ecoli2	0.8768	0.8803	0.8843	0.8854	0.8701	0.8792
ecoli3	0.775	0.7836	0.7986	0.7936	0.7657	0.7817	ecoli3	0.8324	0.8357	0.8221	0.8407	0.8257	0.85
flare-F	0.628	0.6489	0.6482	0.6331	0.6525	0.6661	flare-F	0.6521	0.6693	0.6591	0.6664	0.6244	0.6606
glass-0-1-2-3-vs-4-5-6	0.9235	0.9428	0.9296	0.9334	0.9423	0.9329	glass-0-1-2-3-vs-4-5-6	0.952	0.9529	0.9523	0.9491	0.9391	0.9562
glass0	0.8248	0.8287	0.8205	0.8381	0.8211	0.8464	glass0	0.8077	0.8358	0.8336	0.829	0.8118	0.816
glass1	0.8089	0.8155	0.7956	0.8073	0.7617	0.8403	glass1	0.7998	0.8192	0.7956	0.7942	0.8202	0.8224
glass6	0.9506	0.9333	0.933	0.9303	0.9504	0.9478	glass6	0.9413	0.9469	0.9413	0.9388	0.9473	0.9551
haberman	0.6395	0.6528	0.6281	0.648	0.6325	0.6489	haberman	0.6416	0.6417	0.6158	0.6099	0.6271	0.6272
kddcup-rootkit	1	1	1	1	1	1	kddcup-rootkit	1	1	1	1	1	1
new-thyroid1	0.9806	0.9802	0.9829	0.9773	0.9793	0.9806	new-thyroid1	0.9829	0.9829	0.9802	0.9829	0.9829	0.9829
pima	0.7198	0.7185	0.7096	0.7032	0.703	0.715	pima	0.7191	0.71	0.7174	0.7056	0.7196	0.7205
vehicle0	0.9434	0.9271	0.9335	0.945	0.9326	0.954	vehicle0	0.9379	0.9325	0.9321	0.9338	0.9327	0.9403
winequality-red-8-vs-6	0.7523	0.8251	0.7644	0.8009	0.7893	0.7812	winequality-red-8-vs-6	0.7941	0.7774	0.7636	0.7957	0.7784	0.794
winequality-white-3-vs-7	0.7647	0.8123	0.7789	0.7238	0.7314	0.7738	winequality-white-3-vs-7	0.7954	0.8	0.8131	0.8215	0.8011	0.8307
wisconsin	0.9597	0.9564	0.9565	0.959	0.9558	0.9599	wisconsin	0.958	0.958	0.9512	0.9569	0.9585	0.9589
yeast6	0.7757	0.7614	0.7729	0.7573	0.7989	0.8095	yeast6	0.8264	0.8264	0.8245	0.8087	0.8277	0.8284

> REPLACE THIS LINE WITH YOUR MANUSCRIPT ID NUMBER (DOUBLE-CLICK HERE TO EDIT) <

Table GNB 算法下的启发式算法比较

SMOTEBW-Nearmiss	BBO	DE	SAB	whale	ANT	ZOA	SMOTEBW-SUSD	BBO	DE	SAB	whale	ANT	ZOA
abalone-21-vs-8	0.9198	0.9207	0.8933	0.9181	0.9163	0.9198	abalone-21-vs-8	0.9198	0.8912	0.8983	0.8921	0.8866	0.8851
abalone-3-vs-11	1	1	1	1	1	1	abalone-3-vs-11	1	1	1	1	1	1
car-good	0.9577	0.9606	0.9593	0.9581	0.9577	0.9599	car-good	0.9587	0.9594	0.9606	0.96	0.9606	0.9604
dermatology-6	0.9852	0.9852	0.9792	0.9837	0.9852	0.9852	dermatology-6	0.9717	0.9748	0.9748	0.9778	0.9763	0.9748
ecoli1	0.9011	0.9138	0.9149	0.9127	0.9122	0.9150	ecoli1	0.9363	0.9233	0.9306	0.9318	0.9162	0.9251
ecoli2	0.9554	0.9546	0.9593	0.9554	0.9534	0.9559	ecoli2	0.9518	0.9555	0.9577	0.9579	0.9559	0.9585
ecoli3	0.925	0.9242	0.9352	0.9242	0.9236	0.9244	ecoli3	0.9225	0.9257	0.9267	0.9381	0.9265	0.9253
flare-F	0.9051	0.908	0.8922	0.9087	0.9043	0.9071	flare-F	0.8788	0.8879	0.884	0.8849	0.8878	0.8849
glass-0-1-2-3-vs-4-5-6	0.9625	0.9613	0.9565	0.9671	0.96	0.9656	glass-0-1-2-3-vs-4-5-6	0.9701	0.9502	0.9665	0.9714	0.9541	0.9662
glass0	0.8375	0.8402	0.8017	0.8463	0.8379	0.8388	glass0	0.785	0.7968	0.8171	0.8138	0.8086	0.8249
glass1	0.7408	0.7429	0.6995	0.7343	0.7328	0.7386	glass1	0.7072	0.6935	0.6855	0.6987	0.6762	0.687
glass6	0.9688	0.9707	0.9556	0.9643	0.9679	0.9669	glass6	0.9623	0.9545	0.9579	0.9563	0.965	0.9643
haberman	0.7034	0.7028	0.6933	0.7016	0.7007	0.6959	haberman	0.6679	0.674	0.6766	0.6774	0.679	0.6726
kddcup-rootkit	1	1	1	1	1	1	kddcup-rootkit	1	1	1	1	1	1
new-thyroid1	1	1	1	1	1	1	new-thyroid1	1	1	1	1	1	1
pima	0.8212	0.8202	0.8192	0.8221	0.8199	0.8213	pima	0.8193	0.8192	0.8171	0.8106	0.815	0.8148
vehicle0	0.8743	0.9493	0.9448	0.9298	0.947	0.9484	vehicle0	0.8542	0.8163	0.8792	0.8723	0.8267	0.8536
winequality-red-8-vs-6	0.8264	0.8421	0.8038	0.8458	0.8343	0.8459	winequality-red-8-vs-6	0.872	0.848	0.8657	0.8576	0.8636	0.8636
winequality-white-3-vs-7	0.8973	0.9002	0.8869	0.8902	0.8993	0.8970	winequality-white-3-vs-7	0.884	0.8828	0.8845	0.8861	0.8822	0.8955
wisconsin	0.9829	0.983	0.9828	0.9837	0.9829	0.9836	wisconsin	0.9875	0.9915	0.994	0.9938	0.9915	0.9942
yeast6	0.9472	0.9487	0.9511	0.944	0.9514	0.9517	yeast6	0.9264	0.9456	0.9496	0.9422	0.939	0.9434
OREM-SUSD	BBO	DE	SAB	whale	ANT	ZOA	OREM-Nearmiss	BBO	DE	SAB	whale	ANT	ZOA
abalone-21-vs-8	0.9136	0.9104	0.893	0.8939	0.8724	0.9198	abalone-21-vs-8	0.8894	0.8939	0.8945	0.8942	0.8974	0.893
abalone-3-vs-11	1	1	1	1	1	1	abalone-3-vs-11	1	1	1	1	1	1
car-good	0.9575	0.9599	0.959	0.959	0.9589	0.958	car-good	0.9587	0.9577	0.959	0.959	0.9583	0.9581
dermatology-6	0.9675	0.9822	0.9807	0.9359	0.9674	0.9837	dermatology-6	0.9792	0.957	0.9792	0.9792	0.957	0.9792
ecoli1	0.9084	0.9107	0.9104	0.8966	0.9262	0.9131	ecoli1	0.9111	0.9083	0.9091	0.9125	0.9155	0.9159
ecoli2	0.9519	0.9555	0.9588	0.9572	0.96	0.9525	ecoli2	0.9567	0.9589	0.9586	0.9596	0.9606	0.9587
ecoli3	0.9206	0.9314	0.93	0.9319	0.9377	0.925	ecoli3	0.9305	0.9267	0.9338	0.931	0.9281	0.9314
flare-F	0.8635	0.8952	0.8924	0.8686	0.8582	0.904	flare-F	0.8838	0.8927	0.8999	0.8965	0.8732	0.8907
glass-0-1-2-3-vs-4-5-6	0.9347	0.9541	0.9541	0.9595	0.9341	0.9597	glass-0-1-2-3-vs-4-5-6	0.9545	0.9577	0.9584	0.9572	0.962	0.9632
glass0	0.8342	0.8145	0.8102	0.8091	0.7914	0.8317	glass0	0.8052	0.8052	0.8103	0.8028	0.8106	0.8102
glass1	0.7098	0.7224	0.7133	0.7112	0.6287	0.7367	glass1	0.7144	0.6919	0.7216	0.7117	0.7254	0.7233
glass6	0.9596	0.9545	0.9497	0.9542	0.9304	0.968	glass6	0.9604	0.9616	0.9604	0.9571	0.9555	0.9593
haberman	0.6884	0.6908	0.686	0.689	0.6841	0.7015	haberman	0.6902	0.6838	0.6879	0.6842	0.6916	0.687
kddcup-rootkit	1	1	1	1	1	1	kddcup-rootkit	1	1	1	1	1	1
new-thyroid1	1	1	1	1	1	1	new-thyroid1	1	1	1	1	1	1
pima	0.7913	0.8155	0.8154	0.819	0.8074	0.8208	pima	0.8207	0.8179	0.82	0.8218	0.82	0.8203
vehicle0	0.9428	0.948	0.9451	0.9463	0.9448	0.9444	vehicle0	0.9613	0.9589	0.9589	0.9548	0.9589	0.9608
winequality-red-8-vs-6	0.7988	0.7892	0.7881	0.7818	0.8273	0.8365	winequality-red-8-vs-6	0.7626	0.7596	0.7602	0.7731	0.7878	0.7895
winequality-white-3-vs-7	0.8882	0.8823	0.8854	0.8842	0.885	0.8936	winequality-white-3-vs-7	0.8851	0.8864	0.8831	0.8849	0.8857	0.8864
wisconsin	0.9829	0.983	0.983	0.983	0.9844	0.9837	wisconsin	0.9831	0.9828	0.9872	0.9831	0.9831	0.9883
yeast6	0.9336	0.9438	0.9446	0.9343	0.9348	0.9393	yeast6	0.9456	0.9443	0.9444	0.948	0.9513	0.9452

> REPLACE THIS LINE WITH YOUR MANUSCRIPT ID NUMBER (DOUBLE-CLICK HERE TO EDIT) <

Talbe KNN 分类方法下的启发式算法比较

SMOTEBW-Nearmiss	BBO	DE	SAB	whale	ANT	ZOA	SMOTEBW-SUSD	BBO	DE	SAB	whale	ANT	ZOA
abalone-21-vs-8	0.917	0.9179	0.8559	0.9179	0.9166	0.9192	abalone-21-vs-8	0.8839	0.8549	0.8536	0.8472	0.8198	0.8877
abalone-3-vs-11	1	1	1	1	1	1	abalone-3-vs-11	1	1	1	1	1	1
car-good	0.9876	0.9892	0.9929	0.9895	0.9891	0.9880	car-good	0.9843	0.9836	0.9835	0.9852	0.978	0.9781
dermatology-6	1	1	1	1	1	1	dermatology-6	1	1	1	1	1	1
ecoli1	0.9352	0.944	0.95	0.9414	0.9315	0.9431	ecoli1	0.9434	0.9385	0.9339	0.9184	0.9219	0.9379
ecoli2	0.9392	0.9505	0.954	0.9505	0.9459	0.9514	ecoli2	0.9268	0.9448	0.9672	0.9461	0.9446	0.9562
ecoli3	0.8993	0.911	0.929	0.9143	0.9051	0.9111	ecoli3	0.9322	0.9152	0.939	0.9207	0.9278	0.9394
flare-F	0.85	0.8505	0.8255	0.8483	0.8491	0.8475	flare-F	0.8709	0.8697	0.8687	0.8677	0.8543	0.8543
glass-0-1-2-3-vs-4-5-6	0.9732	0.979	0.9805	0.9822	0.9757	0.9815	glass-0-1-2-3-vs-4-5-6	0.965	0.9611	0.9756	0.9653	0.9646	0.9708
glass0	0.8791	0.8904	0.8944	0.8861	0.8781	0.8887	glass0	0.8643	0.8482	0.8759	0.8416	0.8613	0.8767
glass1	0.8745	0.8868	0.8649	0.8793	0.8788	0.8912	glass1	0.8591	0.8576	0.8582	0.8596	0.8464	0.8434
glass6	0.9725	0.9734	0.954	0.9717	0.9699	0.9672	glass6	0.963	0.9634	0.9618	0.9515	0.9619	0.9652
haberman	0.6624	0.6632	0.6309	0.6449	0.6479	0.6560	haberman	0.6435	0.6438	0.6536	0.6428	0.6609	0.664
kddcup-rootkit	1	1	1	1	1	1	kddcup-rootkit	1	1	1	1	1	1
new-thyroid1	0.9944	0.9968	0.9996	0.9947	0.9949	0.9993	new-thyroid1	0.9944	0.996	0.9972	0.9916	0.9928	0.9995
pima	0.7788	0.79	0.7792	0.7867	0.7764	0.7851	pima	0.7737	0.7729	0.7798	0.7812	0.7607	0.7775
vehicle0	0.9712	0.9807	0.9797	0.9798	0.9762	0.9812	vehicle0	0.9538	0.9666	0.9687	0.9519	0.948	0.9648
winequality-red-8-vs-6	0.842	0.829	0.7917	0.8365	0.8239	0.8157	winequality-red-8-vs-6	0.8289	0.8495	0.8486	0.8519	0.8099	0.8307
winequality-white-3-vs-7	0.8948	0.8925	0.8375	0.8945	0.8914	0.8908	winequality-white-3-vs-7	0.686	0.7294	0.7284	0.6807	0.7294	0.7326
wisconsin	0.9871	0.9882	0.9881	0.9869	0.9875	0.9893	wisconsin	0.9873	0.987	0.988	0.988	0.9867	0.9893
yeast6	0.9531	0.9407	0.9153	0.9466	0.9428	0.9194	yeast6	0.8965	0.9106	0.9123	0.9086	0.904	0.9155
OREM-SUSD	BBO	DE	SAB	whale	ANT	ZOA	OREM-Nearmiss	BBO	DE	SAB	whale	ANT	ZOA
abalone-21-vs-8	0.9398	0.8884	0.8099	0.8885	0.8799	0.8706	abalone-21-vs-8	0.8885	0.8889	0.8884	0.8879	0.8878	0.8895
abalone-3-vs-11	1	1	1	1	1	1	abalone-3-vs-11	1	1	1	1	1	1
car-good	0.986	0.9945	0.994	0.9943	0.9902	0.9885	car-good	0.9909	0.9932	0.9943	0.9936	0.9915	0.9915
dermatology-6	1	1	1	1	1	1	dermatology-6	1	1	1	1	1	1
ecoli1	0.9074	0.9371	0.9372	0.9398	0.949	0.9336	ecoli1	0.9516	0.954	0.954	0.9539	0.9434	0.9456
ecoli2	0.9351	0.9508	0.95	0.9515	0.9654	0.9505	ecoli2	0.9589	0.9568	0.9597	0.9597	0.9546	0.961
ecoli3	0.8792	0.9217	0.9205	0.9088	0.9354	0.9057	ecoli3	0.9257	0.9321	0.9314	0.9355	0.9283	0.926
flare-F	0.7732	0.7803	0.7785	0.7781	0.812	0.7919	flare-F	0.8323	0.8316	0.8337	0.8217	0.8273	0.8317
glass-0-1-2-3-vs-4-5-6	0.9726	0.9785	0.98	0.9741	0.9773	0.9834	glass-0-1-2-3-vs-4-5-6	0.9776	0.982	0.9826	0.982	0.9744	0.9775
glass0	0.868	0.8897	0.8911	0.8888	0.877	0.8874	glass0	0.8955	0.8998	0.9011	0.8999	0.8911	0.8904
glass1	0.8682	0.8554	0.8509	0.8507	0.8195	0.878	glass1	0.8732	0.8703	0.8712	0.871	0.863	0.8727
glass6	0.9143	0.9218	0.9375	0.9304	0.9733	0.9582	glass6	0.9689	0.9689	0.9688	0.9725	0.9649	0.9725
haberman	0.602	0.6253	0.6298	0.6068	0.649	0.6493	haberman	0.677	0.6841	0.6843	0.6845	0.6726	0.6821
kddcup-rootkit	1	1	1	1	1	1	kddcup-rootkit	1	1	1	1	1	1
new-thyroid1	0.9935	0.9972	0.9964	0.9948	0.996	0.9984	new-thyroid1	0.9968	1	1	0.9996	0.9972	0.9972
pima	0.7702	0.7734	0.7741	0.7739	0.7669	0.7888	pima	0.794	0.7951	0.8	0.7954	0.7911	0.7955
vehicle0	0.9682	0.9784	0.9779	0.9781	0.9679	0.9811	vehicle0	0.9808	0.983	0.9845	0.9865	0.9826	0.986
winequality-red-8-vs-6	0.6439	0.6974	0.6914	0.6953	0.6514	0.6526	winequality-red-8-vs-6	0.8047	0.8021	0.8124	0.8155	0.82	0.8201
winequality-white-3-vs-7	0.7924	0.8398	0.8169	0.8166	0.7525	0.84	winequality-white-3-vs-7	0.8825	0.8638	0.8838	0.863	0.894	0.8863
wisconsin	0.9861	0.9878	0.988	0.9865	0.9863	0.9905	wisconsin	0.9872	0.981	0.9889	0.9891	0.9869	0.9903
yeast6	0.8918	0.9136	0.9135	0.9144	0.8966	0.8979	yeast6	0.9473	0.9369	0.9388	0.9422	0.9374	0.9404

> REPLACE THIS LINE WITH YOUR MANUSCRIPT ID NUMBER (DOUBLE-CLICK HERE TO EDIT) <

Table LR 算法下的启发式算法比较

SMOTEBW-Nearmiss	BBO	DE	SAB	whale	ANT	ZOA	SMOTEBW-SUSD	BBO	DE	SAB	whale	ANT	ZOA
abalone-21-vs-8	0.9866	0.9857	0.9508	0.9857	0.9857	0.9857	abalone-21-vs-8	0.938	0.918	0.9198	0.905	0.8838	0.9444
abalone-3-vs-11	1	1	1	1	1	1	abalone-3-vs-11	1	1	1	1	1	1
car-good	0.9442	0.9429	0.9442	0.9435	0.9429	0.9442	car-good	0.9447	0.9439	0.9447	0.9448	0.9445	0.946
dermatology-6	1	1	1	1	1	1	dermatology-6	1	1	1	1	1	1
ecoli1	0.9552	0.9612	0.9604	0.9559	0.9574	0.9612	ecoli1	0.9525	0.9552	0.9535	0.9587	0.9554	0.9621
ecoli2	0.9439	0.942	0.9407	0.9434	0.9413	0.9419	ecoli2	0.9419	0.9399	0.9421	0.9406	0.9364	0.9415
ecoli3	0.9567	0.9572	0.9543	0.9528	0.9558	0.9572	ecoli3	0.9517	0.9448	0.9524	0.9519	0.9445	0.9461
flare-F	0.8904	0.8893	0.8941	0.8895	0.8874	0.8896	flare-F	0.8916	0.8966	0.8916	0.8946	0.8867	0.8906
glass-0-1-2-3-vs-4-5-6	0.9851	0.9851	0.9799	0.9826	0.9842	0.9854	glass-0-1-2-3-vs-4-5-6	0.984	0.9829	0.9837	0.9835	0.9771	0.9779
glass0	0.829	0.83	0.838	0.8322	0.829	0.8310	glass0	0.8268	0.8335	0.8345	0.8345	0.8264	0.8312
glass1	0.6502	0.6598	0.6367	0.639	0.6432	0.6527	glass1	0.6163	0.6287	0.6498	0.6344	0.5984	0.6325
glass6	0.9728	0.9747	0.9722	0.9773	0.9749	0.9747	glass6	0.9701	0.9721	0.9758	0.975	0.9695	0.9728
haberman	0.7045	0.7134	0.71	0.7094	0.7054	0.7146	haberman	0.6951	0.6962	0.6976	0.7146	0.7041	0.7165
kddcup-rootkit	1	1	1	1	1	1	kddcup-rootkit	1	1	1	1	1	1
new-thyroid1	0.9963	0.9949	0.9976	0.9949	0.9949	0.9986	new-thyroid1	0.9949	0.9984	0.9976	0.996	0.9986	0.9986
pima	0.8354	0.835	0.8344	0.8355	0.834	0.8359	pima	0.8319	0.8303	0.8298	0.8329	0.8241	0.8217
vehicle0	0.9925	0.9925	0.9919	0.9923	0.9925	0.9923	vehicle0	0.9855	0.9852	0.9849	0.9836	0.9837	0.9848
winequality-red-8-vs-6	0.9035	0.9019	0.8764	0.9019	0.9027	0.9034	winequality-red-8-vs-6	0.8878	0.8821	0.8873	0.876	0.8765	0.8796
winequality-white-3-vs-7	0.8324	0.8169	0.8399	0.8146	0.8108	0.8266	winequality-white-3-vs-7	0.818	0.8217	0.8274	0.8081	0.823	0.8248
wisconsin	0.9959	0.9959	0.9955	0.9958	0.996	0.9959	wisconsin	0.9961	0.9956	0.9957	0.9958	0.9959	0.9959
yeast6	0.9403	0.9404	0.9468	0.9388	0.9399	0.9396	yeast6	0.935	0.9462	0.9471	0.9476	0.9289	0.9321
OREM-SUSD	BBO	DE	SAB	whale	ANT	ZOA	OREM-Nearmiss	BBO	DE	SAB	whale	ANT	ZOA
abalone-21-vs-8	0.9275	0.9295	0.9366	0.9292	0.9137	0.9848	abalone-21-vs-8	0.9667	0.962	0.9561	0.9522	0.9638	0.9764
abalone-3-vs-11	1	1	1	1	1	1	abalone-3-vs-11	1	1	1	1	1	1
car-good	0.9429	0.9435	0.9435	0.9435	0.9448	0.9433	car-good	0.944	0.9444	0.9446	0.9444	0.9447	0.9443
dermatology-6	1	1	1	1	1	1	dermatology-6	1	1	1	1	1	1
ecoli1	0.9547	0.9599	0.9609	0.9593	0.959	0.9611	ecoli1	0.9607	0.9616	0.9609	0.9607	0.9604	0.9607
ecoli2	0.9385	0.9436	0.9423	0.9402	0.9429	0.9421	ecoli2	0.9433	0.9436	0.9405	0.9412	0.9436	0.9424
ecoli3	0.9456	0.9538	0.9524	0.9452	0.9521	0.9547	ecoli3	0.95	0.9552	0.9543	0.9495	0.9533	0.9514
flare-F	0.8793	0.8826	0.8838	0.859	0.8922	0.887	flare-F	0.8897	0.895	0.8933	0.8922	0.8875	0.89
glass-0-1-2-3-vs-4-5-6	0.9802	0.9773	0.9769	0.9798	0.9786	0.983	glass-0-1-2-3-vs-4-5-6	0.9798	0.9792	0.9798	0.9762	0.9799	0.9805
glass0	0.827	0.8355	0.8369	0.833	0.8243	0.83	glass0	0.834	0.8375	0.8375	0.837	0.835	0.834
glass1	0.6308	0.6517	0.6385	0.6242	0.6285	0.6902	glass1	0.6493	0.6564	0.6276	0.6274	0.6436	0.6429
glass6	0.9712	0.9732	0.9732	0.9695	0.9677	0.9694	glass6	0.9722	0.9722	0.9731	0.968	0.9732	0.973
haberman	0.6952	0.7093	0.6908	0.6805	0.6793	0.7091	haberman	0.6955	0.7096	0.7044	0.7053	0.7015	0.6962
kddcup-rootkit	1	1	1	1	1	1	kddcup-rootkit	1	1	1	1	1	1
new-thyroid1	0.9949	0.9976	0.9976	0.9976	0.9981	0.9986	new-thyroid1	0.9984	0.9992	0.9984	0.9992	0.9992	0.9992
pima	0.8332	0.8319	0.8323	0.832	0.8189	0.835	pima	0.8315	0.8302	0.8333	0.8329	0.8326	0.8416
vehicle0	0.9926	0.9925	0.9923	0.9916	0.99	0.9923	vehicle0	0.9893	0.9805	0.9899	0.9895	0.9899	0.99
winequality-red-8-vs-6	0.9098	0.8859	0.8794	0.8769	0.9003	0.9105	winequality-red-8-vs-6	0.8735	0.8701	0.8734	0.8736	0.876	0.8831
winequality-white-3-vs-7	0.8191	0.8499	0.8445	0.8476	0.7928	0.8237	winequality-white-3-vs-7	0.8374	0.8277	0.83	0.8345	0.8351	0.8366
wisconsin	0.9959	0.9956	0.9955	0.9953	0.9953	0.9959	wisconsin	0.9954	0.9954	0.9955	0.9954	0.9953	0.9953
yeast6	0.9393	0.9481	0.948	0.9479	0.9377	0.9396	yeast6	0.9473	0.9481	0.9474	0.948	0.9473	0.9479

> REPLACE THIS LINE WITH YOUR MANUSCRIPT ID NUMBER (DOUBLE-CLICK HERE TO EDIT) <

Table SVC 算法下的启发式算法比较

SMOTEBW-Nearmiss	BBO	DE	SAB	whale	ANT	ZOA	SMOTEBW-SUSD	BBO	DE	SAB	whale	ANT	ZOA
abalone-21-vs-8	0.9562	0.9571	0.9112	0.9536	0.9545	0.9536	abalone-21-vs-8	0.9528	0.8967	0.9048	0.862	0.8692	0.9569
abalone-3-vs-11	1	1	1	1	1	1	abalone-3-vs-11	1	1	1	1	1	1
car-good	0.9913	0.9913	0.9918	0.9914	0.9914	0.9912	car-good	0.9838	0.9841	0.985	0.9834	0.984	0.9853
dermatology-6	1	1	1	1	1	1	dermatology-6	1	1	1	1	1	1
ecoli1	0.9535	0.9624	0.9657	0.9625	0.9538	0.9625	ecoli1	0.9504	0.9551	0.9551	0.9543	0.9569	0.9578
ecoli2	0.9632	0.9678	0.9691	0.9664	0.9645	0.9677	ecoli2	0.9608	0.9684	0.9691	0.9704	0.9629	0.9656
ecoli3	0.9633	0.9636	0.9624	0.9522	0.9567	0.9633	ecoli3	0.9556	0.96	0.9595	0.9595	0.9508	0.9619
flare-F	0.8732	0.8794	0.865	0.8757	0.8743	0.8687	flare-F	0.8944	0.8973	0.8986	0.9	0.8936	0.9024
glass-0-1-2-3-vs-4-5-6	0.9967	0.9967	0.992	0.9967	0.9942	0.9966	glass-0-1-2-3-vs-4-5-6	0.9931	0.9907	0.9895	0.9895	0.9826	0.9855
glass0	0.8407	0.8411	0.846	0.8432	0.8444	0.8397	glass0	0.838	0.8341	0.8437	0.8396	0.8336	0.8487
glass1	0.7922	0.7928	0.7844	0.8022	0.7822	0.8024	glass1	0.7785	0.7927	0.7918	0.7769	0.7599	0.7814
glass6	0.9833	0.987	0.9813	0.9852	0.9852	0.9870	glass6	0.9852	0.981	0.9836	0.9818	0.9841	0.988
haberman	0.7161	0.7377	0.7264	0.736	0.7022	0.7359	haberman	0.6919	0.6971	0.7085	0.7059	0.7148	0.7156
kddcup-rootkit	1	1	1	1	1	1	kddcup-rootkit	1	1	1	1	1	1
new-thyroid1	1	1	1	1	1	1	new-thyroid1	1	1	1	1	0.9991	1
pima	0.8334	0.8397	0.8384	0.8378	0.8329	0.8377	pima	0.8383	0.8413	0.8397	0.836	0.8294	0.8322
vehicle0	0.9952	0.9954	0.9951	0.9953	0.9953	0.9955	vehicle0	0.9928	0.9934	0.9929	0.9914	0.991	0.9927
winequality-red-8-vs-6	0.8759	0.8497	0.8464	0.8531	0.8616	0.8664	winequality-red-8-vs-6	0.8901	0.8957	0.8977	0.9044	0.8623	0.8866
winequality-white-3-vs-7	0.9277	0.9323	0.8828	0.9272	0.9187	0.9249	winequality-white-3-vs-7	0.889	0.8666	0.8823	0.8885	0.8757	0.8682
wisconsin	0.9855	0.9901	0.9889	0.9884	0.9851	0.9889	wisconsin	0.9857	0.9861	0.9881	0.9867	0.9866	0.9896
yeast6	0.9485	0.9497	0.9554	0.9466	0.9488	0.9491	yeast6	0.9424	0.9506	0.9513	0.952	0.9338	0.9349
OREM-SUSD	BBO	DE	SAB	whale	ANT	ZOA	OREM-Nearmiss	BBO	DE	SAB	whale	ANT	ZOA
abalone-21-vs-8	0.9438	0.9071	0.9053	0.9095	0.9034	0.9322	abalone-21-vs-8	0.8865	0.8871	0.9094	0.8811	0.8835	0.8882
abalone-3-vs-11	1	1	1	1	1	1	abalone-3-vs-11	1	1	1	1	1	1
car-good	0.992	0.9922	0.9919	0.9922	0.9915	0.9916	car-good	0.9915	0.9912	0.9912	0.9914	0.9912	0.9912
dermatology-6	1	1	1	1	1	1	dermatology-6	1	1	1	1	1	1
ecoli1	0.9525	0.9627	0.962	0.9632	0.9597	0.961	ecoli1	0.9658	0.9652	0.9662	0.9652	0.9594	0.9601
ecoli2	0.9617	0.9695	0.9688	0.9682	0.969	0.9664	ecoli2	0.9694	0.9704	0.9694	0.9707	0.9688	0.9694
ecoli3	0.9539	0.9576	0.9581	0.9552	0.9528	0.9633	ecoli3	0.9543	0.9624	0.9619	0.9595	0.9524	0.9514
flare-F	0.8705	0.8631	0.862	0.8639	0.8642	0.8668	flare-F	0.8743	0.8783	0.8641	0.868	0.8758	0.8788
glass-0-1-2-3-vs-4-5-6	0.9894	0.9926	0.992	0.992	0.988	0.9967	glass-0-1-2-3-vs-4-5-6	0.9913	0.9926	0.992	0.992	0.992	0.9926
glass0	0.8352	0.8443	0.84	0.8447	0.8282	0.8403	glass0	0.8427	0.8459	0.844	0.8362	0.844	0.8457
glass1	0.778	0.7807	0.7813	0.751	0.7266	0.7985	glass1	0.7707	0.7852	0.78	0.7847	0.7712	0.7773
glass6	0.9815	0.9758	0.9789	0.9753	0.9857	0.9852	glass6	0.9829	0.984	0.9858	0.9836	0.9816	0.9859
haberman	0.6939	0.7106	0.7162	0.71	0.66	0.7426	haberman	0.6974	0.7235	0.7198	0.7329	0.693	0.6978
kddcup-rootkit	1	1	1	1	1	1	kddcup-rootkit	1	1	1	1	1	1
new-thyroid1	1	1	1	1	0.9995	1	new-thyroid1	1	1	1	0.9992	1	1
pima	0.8307	0.8391	0.837	0.8387	0.8225	0.8395	pima	0.8371	0.8351	0.84	0.8383	0.8369	0.8375
vehicle0	0.9956	0.9955	0.9958	0.9957	0.9953	0.9955	vehicle0	0.9943	0.994	0.9943	0.9944	0.9933	0.994
winequality-red-8-vs-6	0.8451	0.8573	0.8388	0.8566	0.8665	0.8705	winequality-red-8-vs-6	0.8302	0.8374	0.8323	0.8503	0.8292	0.8553
winequality-white-3-vs-7	0.8919	0.9021	0.8902	0.8934	0.8861	0.9164	winequality-white-3-vs-7	0.9053	0.8903	0.8948	0.8899	0.8965	0.9083
wisconsin	0.9845	0.9893	0.9889	0.9889	0.9859	0.9912	wisconsin	0.988	0.9854	0.9891	0.9892	0.9867	0.9886
yeast6	0.9504	0.9557	0.9525	0.954	0.944	0.9501	yeast6	0.9555	0.9565	0.9558	0.954	0.9542	0.9553