

Test accuracy comparison on fourclass

Based on KNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.6961	0.2994	0.7042	0.7564	0.7598	0.7065	10%
10%	0.6879	0.2692	0.6914	0.7354	0.7436	0.7018	10%
15%	0.6927	0.2981	0.6890	0.6496	0.6858	0.6995	15%
20%	0.6323	0.2854	0.6764	0.6346	0.6800	0.6857	15%
25%	0.6218	0.3296	0.6763	0.6949	0.7120	0.7042	25%
30%	0.5774	0.3606	0.6346	0.5532	0.5891	0.6428	35%
40%	0.5929	0.3699	0.6508	0.6089	0.5660	0.6763	30%

Test accuracy comparison on diabetes

Based on KNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.6588	0.3476	0.6511	0.6082	0.6056	0.6550	5%
10%	0.6615	0.3515	0.6521	0.5648	0.5674	0.6627	10%
15%	0.6303	0.3723	0.6531	0.4997	0.5153	0.6589	10%
20%	0.6563	0.3554	0.6537	0.5248	0.5235	0.6667	15%
25%	0.6601	0.3463	0.6526	0.5158	0.5015	0.6641	15%
30%	0.6718	0.3489	0.6556	0.4966	0.5052	0.6706	20%
40%	0.6186	0.3398	0.6617	0.5237	0.6511	0.6654	35%

Test accuracy comparison on breastcancer

Based on KNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.8595	0.1888	0.7599	0.8155	0.8287	0.8492	5%
10%	0.8448	0.1888	0.7629	0.8097	0.8360	0.8463	10%
15%	0.8317	0.1830	0.7819	0.7156	0.7272	0.8477	15%
20%	0.8231	0.1634	0.7796	0.7339	0.7399	0.8357	20%
25%	0.8199	0.1463	0.7760	0.7251	0.7295	0.8213	25%
30%	0.8229	0.2743	0.8053	0.7207	0.7287	0.8259	25%
40%	0.7154	0.5308	0.7750	0.5634	0.5634	0.6278	40%

Test accuracy comparison on creditApproval

Based on KNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.6739	0.4445	0.5478	0.6464	0.6464	0.6826	10%
10%	0.6855	0.4391	0.5652	0.6884	0.6261	0.6870	10%
15%	0.6870	0.3449	0.6275	0.6029	0.6058	0.6899	10%
20%	0.6710	0.5101	0.5986	0.5773	0.6201	0.6739	15%
25%	0.6609	0.4203	0.5579	0.6159	0.6159	0.6826	10%
30%	0.6507	0.3826	0.5638	0.5768	0.5710	0.6695	30%
40%	0.5579	0.4797	0.5638	0.5696	0.5478	0.5986	35%

Test accuracy comparison on sonar

Based on KNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.4935	0.4954	0.4372	0.4761	0.4761	0.5005	10%
10%	0.5051	0.5042	0.4809	0.4858	0.4958	0.4813	10%
15%	0.4762	0.4414	0.4523	0.4858	0.4858	0.4859	15%
20%	0.4856	0.4905	0.5190	0.4566	0.4566	0.4858	15%
25%	0.4950	0.4707	0.5337	0.4763	0.4763	0.4904	25%
30%	0.5384	0.5045	0.4951	0.2401	0.2407	0.5094	30%
40%	0.4960	0.4819	0.4614	0.4037	0.4037	0.5037	35%

Test accuracy comparison on votes

Based on KNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.8846	0.1618	0.6183	0.8874	0.8874	0.8983	10%
10%	0.4888	0.4642	0.4706	0.8368	0.8550	0.4907	10%
15%	0.5221	0.4689	0.4906	0.8345	0.8230	0.5079	35%
20%	0.8308	0.1651	0.6166	0.7609	0.7586	0.8708	20%
25%	0.7908	0.2575	0.6322	0.7379	0.7172	0.7931	20%
30%	0.7425	0.1724	0.7379	0.7425	0.7195	0.7448	25%
40%	0.7149	0.1839	0.7218	0.7425	0.7195	0.7333	35%

Test accuracy comparison on mushrooms

Based on KNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.9935	0.0095	0.8909	0.9930	0.9931	0.9991	5%
10%	0.9730	0.0035	0.9078	0.9755	0.9751	0.9989	10%
15%	0.9405	0.0011	0.9216	0.9436	0.9359	0.9904	20%
20%	0.9019	0.0270	0.9535	0.8903	0.8886	0.9775	30%
25%	0.8448	0.0081	0.9684	0.8389	0.8379	0.9948	30%
30%	0.7797	0.0191	0.9768	0.7756	0.7772	0.8487	25%
40%	0.6478	0.1521	0.9639	0.6478	0.6556	0.6788	35%

Test accuracy comparison on splice

Based on KNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.6736	0.5012	0.6196	0.6890	0.6990	0.6916	10%
10%	0.6522	0.5164	0.6134	0.6620	0.6910	0.6772	20%
15%	0.6522	0.5164	0.6134	0.6180	0.6520	0.6772	20%
20%	0.6322	0.5108	0.6059	0.6520	0.6480	0.6614	25%
25%	0.6230	0.5114	0.5812	0.6390	0.6400	0.6482	30%
30%	0.6001	0.5146	0.5622	0.6090	0.6110	0.6162	30%
40%	0.5342	0.4990	0.5178	0.5080	0.5070	0.5569	35%

Test accuracy comparison on fourclass

Based on DT classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.6375	0.2961	0.6843	0.5141	0.5626	0.7167	10%
10%	0.5669	0.2812	0.6552	0.5789	0.5660	0.7160	10%
15%	0.5794	0.3163	0.6040	0.5220	0.5210	0.7102	25%
20%	0.5839	0.3945	0.5748	0.6228	0.5395	0.6875	25%
25%	0.5140	0.4218	0.5775	0.4898	0.4950	0.5818	40%
30%	0.5674	0.3971	0.6046	0.3887	0.4201	0.6143	30%
40%	0.5140	0.4218	0.5775	0.5696	0.5280	0.5818	40%

Test accuracy comparison on diabetes

Based on DT classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.5517	0.3542	0.6513	0.5298	0.5085	0.6695	5%
10%	0.5415	0.3931	0.6505	0.4999	0.4644	0.6634	10%
15%	0.5681	0.3542	0.6524	0.3682	0.3877	0.6362	25%
20%	0.4928	0.3815	0.6513	0.3942	0.3630	0.6247	25%
25%	0.5084	0.4922	0.6659	0.5183	0.4819	0.5878	25%
30%	0.5215	0.4793	0.6552	0.4498	0.3620	0.5934	30%
40%	0.5594	0.4785	0.6594	0.3242	0.3216	0.5734	40%

Test accuracy comparison on breastcancer

Based on DT classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.7303	0.2193	0.8005	0.8140	0.8273	0.8343	5%
10%	0.6953	0.2817	0.7952	0.8242	0.7074	0.8583	15%
15%	0.6803	0.2300	0.8009	0.2636	0.5273	0.8364	20%
20%	0.7005	0.3010	0.8041	0.5284	0.2225	0.8068	20%
25%	0.6084	0.2959	0.8062	0.6375	0.5087	0.7536	25%
30%	0.5744	0.5182	0.8272	0.3599	0.5823	0.7607	10%
40%	0.6148	0.4616	0.7991	0.6687	0.5498	0.6613	25%

Test accuracy comparison on creditApproval

Based on DT classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.5058	0.4478	0.5583	0.4551	0.4333	0.5496	20%
10%	0.5038	0.4614	0.5936	0.4855	0.4464	0.5246	15%
15%	0.4936	0.4652	0.5484	0.5043	0.4565	0.5369	20%
20%	0.4913	0.4675	0.5990	0.4449	0.4464	0.5207	25%
25%	0.4901	0.5188	0.5409	0.4580	0.4362	0.5041	20%
30%	0.5159	0.4597	0.5623	0.4928	0.4377	0.5461	40%
40%	0.5038	0.4765	0.5397	0.4739	0.4594	0.5365	40%

Test accuracy comparison on sonar

Based on DT classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.5143	0.5020	0.4932	0.4909	0.4719	0.5164	5%
10%	0.5088	0.4593	0.4912	0.4233	0.4330	0.5269	25%
15%	0.5076	0.5016	0.4815	0.4416	0.4319	0.5100	15%
20%	0.4999	0.5014	0.4942	0.4275	0.4224	0.5114	25%
25%	0.4982	0.4549	0.4715	0.4135	0.4276	0.5129	45%
30%	0.4711	0.4894	0.4931	0.4513	0.4230	0.5217	40%
40%	0.4854	0.5260	0.5125	0.4668	0.4568	0.5317	35%

Test accuracy comparison on votes

Based on DT classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.4797	0.4821	0.4866	0.6483	0.6184	0.5069	15%
10%	0.6285	0.2478	0.6367	0.7517	0.6322	0.8074	15%
15%	0.5940	0.2901	0.6041	0.4943	0.5103	0.7421	15%
20%	0.5315	0.3480	0.6257	0.4828	0.4828	0.7333	25%
25%	0.5489	0.3802	0.6593	0.6069	0.5310	0.6855	35%
30%	0.4689	0.3733	0.6543	0.5517	0.4552	0.6791	45%
40%	0.4827	0.4947	0.6094	0.4368	0.4023	0.5231	40%

Test accuracy comparison on mushrooms

Based on DT classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.9231	0.0043	0.9157	0.9165	0.9167	0.9990	5%
10%	0.8588	0.0033	0.9420	0.8596	0.8587	0.9922	10%
15%	0.8062	0.0078	0.9725	0.8082	0.8048	0.9813	15%
20%	0.7621	0.0156	0.9826	0.7564	0.7594	0.9902	35%
25%	0.7027	0.0348	0.9878	0.7058	0.7032	0.9730	45%
30%	0.6704	0.0640	0.9892	0.6583	0.6641	0.9005	45%
40%	0.5875	0.2117	0.9626	0.5828	0.5777	0.7116	40%

Test accuracy comparison on splice

Based on DT classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.5378	0.6212	0.5534	0.4630	0.4940	0.6256	35%
10%	0.5127	0.5807	0.5447	0.4950	0.4680	0.6020	40%
15%	0.5123	0.5996	0.5294	0.4570	0.4850	0.6122	50%
20%	0.5145	0.5876	0.5534	0.4590	0.4440	0.5921	50%
25%	0.5079	0.5582	0.5310	0.4940	0.4880	0.5622	40%
30%	0.5079	0.5578	0.5578	0.4980	0.5010	0.5630	50%
40%	0.5476	0.5178	0.5312	0.4440	0.4710	0.5680	40%

Test accuracy comparison on fourclass

Based on BPNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.6088	0.3332	0.6470	0.6341	0.6374	0.6529	10%
10%	0.6479	0.2821	0.6321	0.6478	0.6332	0.6536	15%
15%	0.6415	0.3234	0.6716	0.6427	0.6367	0.6849	50%
20%	0.6014	0.2956	0.6542	0.6340	0.6436	0.6573	30%
25%	0.6329	0.3121	0.6381	0.6368	0.6266	0.6399	20%
30%	0.6359	0.3445	0.6718	0.6382	0.6560	0.6437	25%
40%	0.6306	0.4385	0.6435	0.6334	0.6329	0.6318	40%

Test accuracy comparison on diabetes

Based on BPNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.6374	0.4083	0.6469	0.6004	0.5882	0.6471	5%
10%	0.5772	0.4282	0.6317	0.5681	0.5891	0.6334	5%
15%	0.5587	0.4847	0.6383	0.5937	0.5574	0.6121	5%
20%	0.5612	0.4234	0.6417	0.5242	0.5492	0.6078	5%
25%	0.5703	0.4301	0.6518	0.5505	0.5443	0.6075	5%
30%	0.5489	0.4671	0.6435	0.5178	0.5029	0.5781	10%
40%	0.5084	0.4038	0.6332	0.4737	0.4597	0.5549	10%

Test accuracy comparison on breastcancer

Based on BPNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.6029	0.2016	0.6851	0.6505	0.5560	0.7942	15%
10%	0.6167	0.3230	0.6576	0.6011	0.6085	0.7546	20%
15%	0.6049	0.4742	0.6335	0.6310	0.6336	0.7410	25%
20%	0.5762	0.5431	0.6409	0.6127	0.6279	0.6874	30%
25%	0.5455	0.4803	0.5440	0.6464	0.6279	0.6568	35%
30%	0.5036	0.5171	0.4266	0.6247	0.5833	0.7193	20%
40%	0.5954	0.5238	0.5435	0.5919	0.5690	0.6049	40%

Test accuracy comparison on creditApproval

Based on BPNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.4586	0.4388	0.5968	0.4728	0.4823	0.5988	20%
10%	0.4667	0.4991	0.6264	0.4729	0.4533	0.5678	25%
15%	0.4611	0.5307	0.5611	0.4816	0.4768	0.5414	30%
20%	0.4855	0.5130	0.5740	0.4752	0.4683	0.4968	20%
25%	0.5098	0.5573	0.5594	0.4504	0.4452	0.4574	5%
30%	0.4889	0.4751	0.5646	0.4719	0.4638	0.5211	5%
40%	0.4843	0.4704	0.5129	0.4620	0.5028	0.5156	35%

Test accuracy comparison on sonar

Based on BPNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.5122	0.4993	0.4771	0.4911	0.4911	0.5139	10%
10%	0.5214	0.4669	0.4896	0.5145	0.5145	0.5227	25%
15%	0.5279	0.4815	0.4992	0.5019	0.5019	0.5349	5%
20%	0.5099	0.4785	0.4684	0.4870	0.4865	0.5389	15%
25%	0.5155	0.5067	0.5011	0.4808	0.4832	0.5213	20%
30%	0.5289	0.5154	0.5049	0.5086	0.5091	0.5416	40%
40%	0.5194	0.4787	0.4767	0.5135	0.5135	0.5511	35%

Test accuracy comparison on votes

Based on BPNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.8579	0.1545	0.5729	0.8600	0.8294	0.9163	10%
10%	0.8262	0.1674	0.5968	0.7966	0.7998	0.8915	15%
15%	0.7885	0.1999	0.6317	0.7851	0.7625	0.8929	20%
20%	0.7444	0.2161	0.5995	0.7101	0.7186	0.8281	25%
25%	0.6919	0.2653	0.6175	0.6763	0.6880	0.8322	35%
30%	0.2717	0.6943	0.7954	0.6869	0.6680	0.7954	30%
40%	0.6059	0.4009	0.6772	0.5731	0.5653	0.6849	45%

Test accuracy comparison on mushrooms

Based on BPNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.6458	0.0439	0.9014	0.6748	0.6676	0.9643	15%
10%	0.6608	0.0173	0.9076	0.6343	0.6622	0.9432	15%
15%	0.6901	0.0266	0.9335	0.6319	0.6307	0.9424	30%
20%	0.6619	0.2490	0.9401	0.6186	0.6176	0.9564	45%
25%	0.6423	0.1774	0.9330	0.6124	0.6129	0.7537	35%
30%	0.6389	0.1604	0.9356	0.5869	0.5874	0.7356	50%
40%	0.6295	0.3908	0.9162	0.5553	0.5608	0.6407	40%

Test accuracy comparison on splice

Based on BPNN classifier.

NOISE RATE	original	RD	mCRF	GBS	IGBS	CFE	Best r value
5%	0.7176	0.4814	0.6680	0.6772	0.6714	0.7290	20%
10%	0.6989	0.5202	0.6416	0.6683	0.6662	0.7098	10%
15%	0.6828	0.4930	0.6656	0.6588	0.6597	0.6942	35%
20%	0.6694	0.4966	0.6292	0.6408	0.6512	0.6784	30%
25%	0.6182	0.5096	0.6124	0.6266	0.6497	0.6604	30%
30%	0.6026	0.5244	0.5904	0.5747	0.5924	0.6212	15%
40%	0.5658	0.5123	0.5492	0.5386	0.5378	0.5742	15%