Metric	Algorithm	Benchmarks								Avg Wins
		breast_ cancer	churn	JS_ Vuln	Ambari_ Vuln	Defect_ Eclipse_JDT	Defect_ Eclipse_PDE	Moodle_ Vuln	Defect_ Mylyn	
Accuracy	random_oversampling	0.67	0.93	0.86	0.96	0.80	0.81	0.98	0.82	3.50
	smote	0.67	0.92	0.85	0.91	0.79	0.80	0.97	0.81	1.25
	svm_smote	0.67	0.92	0.85	0.95	0.79	0.79	0.97	0.81	1.00
	gaussian_copula(SDV-G)	0.66	0.90	0.86	0.96	0.78	0.80	0.97	0.81	1.37
	RRP	0.71	0.91	0.82	0.96	0.79	0.80	0.96	0.82	1.25
	no_sampling	0.66	0.91	0.86	0.96	0.78	0.80	0.97	0.81	0.50
	random_pruning	0.66	0.91	0.85	0.95	0.77	0.80	0.97	0.81	0.37
	intelligent_pruning	0.67	0.92	0.85	0.96	0.78	0.80	0.97	0.79	1.25
Precision	random_oversampling	0.39	0.72	0.51	0.22	0.54	0.32	0.00	0.34	3.88
	smote	0.43	0.67	0.50	0.18	0.53	0.33	0.00	0.33	3.75
	svm_smote	0.43	0.67	0.50	0.18	0.53	0.30	0.00	0.33	2.13
	gaussian_copula(SDV-G)	0.39	0.63	0.49	0.17	0.50	0.26	0.00	0.32	1.25
	RRP	0.44	0.65	0.48	0.33	0.51	0.29	0.00	0.34	2.38
	no_sampling	0.38	0.66	0.51	0.17	0.49	0.27	0.00	0.32	0.63
	random_pruning	0.40	0.66	0.46	0.25	0.49	0.32	0.04	0.31	0.75
	intelligent_pruning	0.42	0.67	0.48	0.23	0.50	0.30	0.08	0.32	5.00
Recall	random_oversampling	0.47	0.77	0.54	0.40	0.52	0.31	0.00	0.36	0.00
	smote	0.44	0.80	0.56	0.40	0.56	0.43	0.00	0.39	0.00
	svm_smote	0.50	0.78	0.56	0.40	0.57	0.36	0.00	0.40	0.00
	gaussian_copula(SDV-G)	0.50	0.79	0.52	0.25	0.50	0.32	0.00	0.35	0.00
	RRP	0.50	0.78	0.55	0.38	0.57	0.39	0.00	0.44	0.00
	no_sampling	0.42	0.75	0.52	0.14	0.48	0.29	0.00	0.36	0.00
	random_pruning	0.53	0.83	0.71	0.60	0.74	0.62	0.67	0.66	0.88
	intelligent_pruning	0.64	0.83	0.72	0.80	0.73	0.66	0.71	0.67	2.63
F1-Score	random_oversampling	0.41	0.73	0.53	0.29	0.51	0.30	0.00	0.33	2.38
	smote	0.46	0.72	0.52	0.22	0.54	0.37	0.00	0.36	5.00
	svm_smote	0.46	0.72	0.52	0.22	0.52	0.33	0.00	0.36	2.50
	gaussian_copula(SDV-G)	0.41	0.67	0.51	0.18	0.48	0.29	0.00	0.32	1.12
	RRP	0.46	0.69	0.50	0.36	0.54	0.34	0.00	0.36	2.12
	no_sampling	0.38	0.70	0.52	0.18	0.47	0.27	0.00	0.33	0.38
	random_pruning	0.43	0.71	0.51	0.25	0.54	0.35	0.06	0.37	2.12
	intelligent_pruning	0.47	0.71	0.51	0.29	0.53	0.36	0.13	0.36	8.50

Table 1: **Model comparison scores for DT. All the tasks are evaluated by Accuracy, Precision, Recall, and F1-Score using different sampling algorithms. Higher values are better. The dark grey cells mark the algorithms in the Rank 0 of the Skott Knott plots. Avg Wins refers to the average number of times a sampling algorithm came in Rank 0 across all the 8 datasets. Due to space constraints Recursive Random Projection is simplified to RRP.**

Metric	Algorithm	Benchmarks								Avg Wins
		breast_ cancer	churn	JS_ Vuln	Ambari_ Vuln	Defect_ Eclipse_JDT	Defect_ Eclipse_PDE	Moodle_ Vuln	Defect_ Mylyn	
Accuracy	random_oversampling	0.71	0.86	0.88	0.93	0.83	0.83	0.97	0.82	0.50
	smote	0.71	0.86	0.88	0.93	0.84	0.84	0.96	0.85	0.88
	svm_smote	0.72	0.87	0.88	0.93	0.83	0.84	0.97	0.85	0.50
	gaussian_copula(SDV-G)	0.71	0.85	0.88	0.95	0.85	0.86	0.98	0.87	3.13
	RRP	0.72	0.86	0.87	0.93	0.84	0.84	0.96	0.85	0.25
	no_sampling	0.76	0.88	0.88	0.95	0.84	0.86	0.99	0.87	1.00
	random_pruning	0.72	0.87	0.88	0.94	0.84	0.85	0.99	0.87	2.00
	intelligent_pruning	0.74	0.87	0.88	0.94	0.85	0.86	0.99	0.87	5.62
Precision	random_oversampling	0.50	0.41	0.66	0.00	0.68	0.41	0.12	0.39	0.50
	smote	0.54	0.46	0.65	0.03	0.62	0.42	0.12	0.36	1.00
	svm_smote	0.54	0.52	0.64	0.00	0.65	0.42	0.12	0.40	0.63
	gaussian_copula	0.50	0.47	0.72	0.46	0.74	0.54	0.00	0.57	1.88
	RRP	0.54	0.45	0.71	0.07	0.68	0.41	0.09	0.39	1.13
	no_sampling	0.55	0.57	0.78	0.00	0.74	0.56	0.00	0.5	0.75
	random_pruning	0.50	0.53	0.69	0.06	0.70	0.42	0.00	0.47	0.75
	intelligent_pruning	0.53	0.57	0.74	0.10	0.72	0.50	0.11	0.50	4.75
Recall	random_oversampling	0.60	0.78	0.57	0.00	0.64	0.61	0.43	0.61	0.50
	smote	0.50	0.76	0.59	0.12	0.63	0.60	0.50	0.65	0.37
	svm_smote	0.46	0.73	0.58	0.00	0.62	0.50	0.14	0.50	0.00
	gaussian_copula(SDV-G)	0.56	0.66	0.22	0.00	0.44	0.21	0.00	0.16	0.00
	RRP	0.58	0.81	0.54	0.20	0.69	0.63	0.43	0.62	0.75
	no_sampling	0.33	0.20	0.18	0.00	0.42	0.19	0.00	0.13	0.00
	random_pruning	0.62	0.79	0.38	0.57	0.67	0.65	0.50	0.62	0.87
	intelligent_pruning	0.67	0.67	0.66	0.25	0.68	0.67	0.57	0.65	1.62
F1-Score	random_oversampling	0.51	0.49	0.48	0.00	0.57	0.41	0.13	0.37	1.75
	smote	0.47	0.49	0.50	0.06	0.57	0.41	0.15	0.37	3.13
	svm_smote	0.47	0.49	0.49	0.00	0.56	0.40	0.15	0.37	1.63
	gaussian_copula	0.49	0.42	0.34	0.00	0.56	0.31	0.00	0.24	0.50
	RRP	0.50	0.49	0.46	0.10	0.58	0.41	0.11	0.38	2.50
	no_sampling	0.41	0.30	0.29	0.00	0.52	0.28	0.00	0.20	0.00
	random_pruning	0.49	0.48	0.47	0.08	0.59	0.41	0.05	0.34	0.88
	intelligent_pruning	0.52	0.46	0.48	0.12	0.61	0.41	0.16	0.36	5.75

Table 2: **Model comparison scores for LR. All the tasks are evaluated by Accuracy, Precision, Recall, and F1-Score using different sampling algorithms. Higher values are better. The dark grey cells mark the algorithms in the Rank 0 of the Skott Knott plots. Avg Wins refers to the average number of times a sampling algorithm came in Rank 0 across all the 8 datasets. Due to space constraints Recursive Random Projection is simplified to RRP.**