

TABLE I
K-NEAREST NEIGHBORS

Data	Type	Precision	Recall	F1-Score	Support
SMOT EENN	bad	0.89	0.97	0.93	1062
	good	0.97	0.88	0.93	1058
	accuracy			0.93	2120
	macro avg	0.93	0.93	0.93	2120
Random Over Sampled	bad	0.80	1.00	0.89	1062
	good	1.00	0.75	0.86	1058
	accuracy			0.88	2120
	macro avg	0.90	0.88	0.87	2120
Down Sampled	bad	0.97	0.96	0.96	1060
	good	0.95	0.97	0.96	1057
	accuracy			0.96	2117
	macro avg	0.96	0.96	0.96	2117

TABLE II
DECISION TREES

Data	Type	Precision	Recall	F1-Score	Support
SMOT EENN	bad	0.67	0.97	0.79	1062
	good	0.95	0.52	0.67	1058
	accuracy			0.74	2120
	macro avg	0.81	0.74	0.73	2120
Random Over Sampled	bad	0.82	1.00	0.90	1062
	good	1.00	0.77	0.87	1058
	accuracy			0.88	2120
	macro avg	0.91	0.88	0.88	2120
Down Sampled	bad	0.94	0.95	0.94	1060
	good	0.94	0.94	0.94	1057
	accuracy			0.94	2117
	macro avg	0.94	0.94	0.94	2117

TABLE III
LOGISTIC REGRESSION

Data	Type	Precision	Recall	F1-Score	Support
SMOT EENN	bad	1.00	0.89	0.94	1062
	good	0.90	1.00	0.95	1058
	accuracy			0.94	2120
	macro avg	0.95	0.94	0.94	2120
Random Over Sampled	bad	1.00	0.85	0.92	1062
	good	0.87	1.00	0.93	1058
	accuracy			0.93	2120
	macro avg	0.94	0.93	0.93	2120
Down Sampled	bad	1.00	0.78	0.88	1060
	good	0.82	1.00	0.90	1057
	accuracy			0.89	2117
	macro avg	0.91	0.89	0.89	2117

TABLE IV
SUPPORT VECTOR MACHINES

Data	Type	Precision	Recall	F1-Score	Support
SMOT EENN	bad	1.00	0.87	0.93	1062
	good	0.89	1.00	0.9	1058
	accuracy			0.94	2120
	macro avg	0.94	0.94	0.94	2120
Random Over Sampled	bad	1.00	0.85	0.92	1062
	good	0.87	1.00	0.93	1058
	accuracy			0.93	2120
	macro avg	0.93	0.93	0.92	2120
Down Sampled	bad	1.00	0.76	0.87	1060
	good	0.81	1.00	0.89	1057
	accuracy			0.88	2117
	macro avg	0.90	0.88	0.88	2117

TABLE V
ARTIFICIAL NEURAL NETWORKS

Data	Type	Precision	Recall	F1-Score	Support
SMOT EENN	bad	1.00	0.93	0.96	1062
	good	0.93	1.00	0.96	1058
	accuracy			0.96	2120
	macro avg	0.96	0.96	0.96	2120
Random Over Sampled	bad	1.00	0.88	0.94	1062
	good	0.89	1.00	0.94	1058
	accuracy			0.94	2120
	macro avg	0.95	0.94	0.94	2120
Down Sampled	bad	1.00	0.88	0.93	1060
	good	0.89	1.00	0.94	1057
	accuracy			0.94	2117
	macro avg	0.95	0.94	0.94	2117