

Table 13a:Accuracy Ranking for Perturbation with Normalized Features Data

Classification Models	Ranking Order	Underlying Graph within 400 Normalized Patient data	Scheme	Treshold	Dimension
GCN	1	Netpro2VecMetgraphs	meanSum	2.80	128
		Netpro2VecTM1	minMax	1.80	128
SVM Linear (SVMl)	2	Netpro2VecTM1	minSum	1.80	196
KNN	3	Netpro2VecMetgraphs	minMax	1.80	196
		Netpro2VecNDD		1.80	196
Decission Tree (DT)	4	Netpro2VecTM1	minSum	2.80	196
		Netpro2VecNDD+TM1	minMax	2.80	196
Gaussian Naive Bayes (GNB)	5	GL2Vec	minSum	1.80	196
Random Forest (RF)	6	Netpro2VecMetgraphs	minSum	1.80	64
SVM Non Linear (SVMnl)	7	Netpro2VecTM1	minMax	2.80	196

Table 13b: Precision Ranking for Perturbation with Normalized Features Data

Classification Models	Ranking Order	Underlying Graph within 400 Normalized Patient Data	Scheme	Treshold	Dimension
GCN	1	Netpro2Metgraphs	meanSum	2.80	64
		Netpro2TM1	minMax	1.80	64
SVM Linear (SVMl)	2	Netpro2VecTM1	minSum	1.80	196
KNN	3	Netpro2VecMetgraphs	minMax	1.80	196
		Netpro2VecNDD	minMax	1.80	196
Gaussian Naive Bayes (GNB)	4	GL2Vec	minSum	1.80	196
Decision Tree (DT)	5	Netpro2VecTM1	minSum	2.80	196
Random Forest (RF)	6	GL2Vec	mInSum	1.80	64
SVM Non Linear (SVMnl)	7	Netpro2VecTM1	minMax	2.80	196

Table 13c: Recall Ranking for Perturbation with Normalized Features Data

Classification Models	Ranking Order	Underlying Graph within 400 Normalized Patient Data	Scheme	Treshold	Dimension
GCN	1	Netpro2VecMetgrahs	meanSum	2.80	128
		Netpro2VecTM1	minMax	1.80	128
SVM Linear (SVMl)	2	Netpro2VecNDD+TM1	minSum	1.80	196
KNN	3	Netpro2VecMetgraphs	minMax	1.80	196
		Netpro2VecNDD	minMax	1.80	196
Decission Tree (DT)	4	Netpro2VecNDD+TM1	minMax	2.80	196
Gaussian Naive Bayes (GNB)	5	Netpro2VecTM1	minSum	1.80	196
Random Forest (RF)	6	Graph2Vec	minSum	1.80	64
SVM Non Linear (SVMnl)	7	Netpro2VecTM1	minMax	2.80	196

Table 13d:F1 Score Ranking for Perturbation with Normalized Features Data

Classification Models	Ranking Order	Underlying Graph within 400 Normalized Patient Data	Scheme	Treshold	Dimension
GCN	1	Netpro2vecMetgraphs	meanSum	2.80	128
		Netpro2vecTM1	minMax	1.80	128
SVM Linear (SVMl)	2	Netpro2VecMetgraph	minMax	1.80	196
		Netpro2VecNDD	minMax	1.80	196
KNN	3	Netpro2VecMetgraphs	minMax	1.80	196
		Netpro2VecNDD	minMax	1.80	196
Decission Tree (DT)	4	Netpro2VecNDD+TM1	minSum	2.80	196
Gaussian Naive Bayes (GNB)	5	Netpro2VecTM1	meanSum	1.80	196
Random Forest (RF)	6	GL2Vec	minSum	1.80	64
SVM Non Linear (SVMnl)	7	Netpro2VecTM1	minMax	2.80	196