

TABLE I: precision result on new patients data implemented in several models using their normalized features

Precision New Normalized Data Patients							
Classification Models:	SVMl	SVMnl	GNB	KNN	DT	RF	GCNs
Feature Extraction:	Rank 1	Rank 5	Rank 4	Rank 3	Rank 7	Rank 6	Rank 2
Netpro2vecMetgraphs	0.970	0.947	0.879	0.952	0.818	0.904	0.765
Netpro2vecNDD	<b>0.981</b>	<b>0.958</b>	0.882	0.962	0.797	0.935	0.778
Netpro2vecTM1	0.961	0.955	0.817	0.909	0.759	0.878	0.708
Netpro2vecTM2	0.908	0.885	0.762	0.793	0.576	0.796	0.552
Netpro2vecNDD+TM1	0.940	0.902	0.807	0.925	0.685	0.853	0.726
Netpro2vecNDD+TM1+TM2	0.851	0.783	0.729	0.753	0.546	0.731	0.585
Graph2Vec	0.906	0.887	0.939	0.959	0.905	0.943	0.817
GL2Vec	0.969	0.925	<b>0.971</b>	<b>0.977</b>	<b>0.934</b>	<b>0.957</b>	<b>0.978</b>
FeatherGraph	0.628	0.649	0.594	0.614	0.533	0.623	0.581

TABLE II: recall result on new patients data implemented in several models using their normalized features

Recall New Normalized Data Patients							
Classification Models:	SVMl	SVMnl	GNB	KNN	DT	RF	GCNs
Feature Extraction:	Rank 1	Rank 5	Rank 4	Rank 2	Rank 7	Rank 6	Rank 3
Netpro2vecMetgraphs	0.969	0.945	0.877	0.949	0.814	0.899	0.703
Netpro2vecNDD	<b>0.981</b>	<b>0.957</b>	0.864	0.959	0.778	0.932	0.756
Netpro2vecTM1	0.959	0.953	0.761	0.895	0.742	0.848	0.657
Netpro2vecTM2	0.906	0.884	0.719	0.701	0.511	0.779	0.496
Netpro2vecNDD+TM1	0.933	0.890	0.786	0.919	0.672	0.841	0.674
Netpro2vecNDD+TM1+TM2	0.814	0.778	0.696	0.615	0.495	0.719	0.580
Graph2Vec	0.899	0.890	0.936	0.958	0.892	0.936	0.801
GL2Vec	0.969	0.920	<b>0.970</b>	<b>0.977</b>	<b>0.928</b>	<b>0.954</b>	<b>0.975</b>
FeatherGraph	0.567	0.597	0.522	0.619	0.519	0.598	0.549

TABLE III: F1 score result on new patients data implemented in several models using their normalized features

F1 Score New Normalized Data Patients							
Classification Models:	SVMl	SVMnl	GNB	KNN	DT	RF	GCNs
Feature Extraction:	Rank 1	Rank 5	Rank 4	Rank 2	Rank 7	Rank 6	Rank 3
Netpro2vecMetgraphs	0.969	0.945	0.875	0.949	0.814	0.898	0.692
Netpro2vecNDD	<b>0.981</b>	<b>0.957</b>	0.862	0.959	0.759	0.932	0.750
Netpro2vecTM1	0.959	0.953	0.755	0.891	0.739	0.838	0.636
Netpro2vecTM2	0.906	0.884	0.698	0.691	0.502	0.777	0.512
Netpro2vecNDD+TM1	0.931	0.890	0.784	0.913	0.592	0.838	0.640
Netpro2vecNDD+TM1+TM2	0.812	0.772	0.697	0.598	0.483	0.712	0.564
Graph2Vec	0.898	0.889	0.936	0.958	0.893	0.936	0.799
GL2Vec	0.969	0.919	<b>0.970</b>	<b>0.977</b>	<b>0.927</b>	<b>0.955</b>	<b>0.975</b>
FeatherGraph	0.553	0.581	0.502	0.604	0.519	0.595	0.478