

TABLE I: precision result using normalized of removal features edges implemented in several classification models

Precision in Normalized of Removal Edges Data Patients							
Classification Models:	SVMl	SVMnl	GNB	KNN	DT	RF	GCNs
Feature Extraction:	Rank 2	Rank 7	Rank 4	Rank 3	Rank 5	Rank 6	Rank 1
Netpro2vecMeigraphs	0.966	0.897	0.859	0.967	0.925	0.906	1
Netpro2vecNDD	0.967	0.902	0.862	0.965	0.941	0.927	0.982
Netpro2vecTM1	0.979	0.925	0.853	0.957	0.946	0.924	1
Netpro2vecTM2	0.973	0.902	0.763	0.856	0.823	0.813	0.929
Netpro2vecNDD+TM1	0.978	0.869	0.836	0.951	0.940	0.865	0.982
Netpro2vecNDD+TM1+TM2	0.970	0.875	0.758	0.850	0.826	0.795	0.942
Graph2Vec	0.935	0.879	0.934	0.957	0.929	0.936	0.942
GL2Vec	0.936	0.911	0.947	0.948	0.942	0.932	0.972
FeatherGraph	0.704	0.707	0.579	0.712	0.636	0.693	0.759

TABLE II: recall result using normalized of removal features edges implemented in several classification models

Recall in Normalized of Removal Edges Data Patients							
Classification Models:	SVMl	SVMnl	GNB	KNN	DT	RF	GCNs
Feature Extraction:	Rank 2	Rank 7	Rank 5	Rank 3	Rank 4	Rank 6	Rank 1
Netpro2vecMeigraphs	0.963	0.892	0.854	0.962	0.919	0.901	1
Netpro2vecNDD	0.965	0.903	0.859	0.962	0.929	0.921	0.969
Netpro2vecTM1	0.977	0.918	0.847	0.952	0.937	0.919	1
Netpro2vecTM2	0.967	0.892	0.740	0.860	0.809	0.796	0.921
Netpro2vecNDD+TM1	0.974	0.887	0.825	0.944	0.937	0.869	0.981
Netpro2vecNDD+TM1+TM2	0.964	0.872	0.731	0.842	0.820	0.777	0.951
Graph2Vec	0.929	0.876	0.929	0.946	0.921	0.931	0.951
GL2Vec	0.929	0.895	0.933	0.936	0.931	0.924	0.969
FeatherGraph	0.672	0.668	0.526	0.703	0.621	0.667	0.749

TABLE III: F1-score result using normalized of removal features edges implemented in several classification models

F1 in Normalized of Removal Edges Data Patients							
Classification Models:	SVMl	SVMnl	GNB	KNN	DT	RF	GCNs
Feature Extraction:	Rank 2	Rank 7	Rank 5	Rank 3	Rank 4	Rank 6	Rank 1
Netpro2vecMeigraphs	0.962	0.878	0.848	0.962	0.918	0.896	1
Netpro2vecNDD	0.967	0.892	0.854	0.962	0.929	0.921	0.969
Netpro2vecTM1	0.977	0.915	0.822	0.952	0.936	0.919	1
Netpro2vecTM2	0.967	0.891	0.741	0.859	0.806	0.794	0.917
Netpro2vecNDD+TM1	0.975	0.869	0.819	0.944	0.937	0.861	0.976
Netpro2vecNDD+TM1+TM2	0.952	0.871	0.729	0.838	0.815	0.775	
Graph2Vec	0.928	0.859	0.927	0.945	0.919	0.927	0.946
GL2Vec	0.928	0.876	0.929	0.935	0.927	0.922	0.969
FeatherGraph	0.676	0.666	0.503	0.702	0.630	0.666	0.724