

SAGPool

key improvement compared with gPool: SAGPooling uses the first order approximation of the graph Laplacian to calculate the attention scores of nodes. Whose performance is improved.

Unlearned prior knowledge

Self-attention mask
Attention mechanisms
graph convolution

compared with variants

change GNN type

consider two-hop connection

serial

augmentation

average from multiple GNN

pros

stable

cons

computational performance

the computational complexity is reduced to $O(|E|)$ where E represents the edges

requires $O(|V| + |E|)$ of storage for sparse pooling.

? locally

code available

cons

cannot parameterize the pooling ratios to find optimal values for each graph.

pros

It can be both H architecture and G architecture. Therefore, it can be used to learn both many vertexes and few vertexes graph.

consideration of both node features and graph topology

end-to-end representation learning