
GRAPH-REVISED CONVOLUTIONAL NETWORK

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This paper [1] proposes the graph-revised convolutional network (GRCN), which contains two GCN models. The first GCN is applied on the original graph and its output node embeddings are used to construct a similarity graph based on a certain kernel function (e.g., dot product). A sparse similarity matrix is further constructed based on KNN sparsification. Then the revised adjacency matrix is formed by an elementwise summation of the original graph and the sparse similarity matrix. The second classification GCN is applied on the revised adjacency matrix.

References

- [1] Donghan Yu, Ruohong Zhang, Zhengbao Jiang, Yuexin Wu, and Yiming Yang. Graph-revised convolutional network. In *Joint European Conference on Machine Learning and Knowledge Discovery in Databases*, pages 378–393. Springer, 2020.