

THE UNIVERSITY OF HONG KONG

Faculty of Science

HKU-TCL Joint Research Centre for Artificial Intelligence

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Project Title: Recommendation Systems Using Feature-Rich and Feedback-Rich
Graph Neural Networks

Abstract:

In this project, we develop session-based recommendation systems using feature-rich and feedback-rich graph neural networks (GNNs) with bidirectional encoder representations.

The GNN word embedding model can link text and image information that can be incorporated in the recommendation systems to enhance the predication performance. We develop cross-domain adaptive heterogeneous graph embeddings so that information from different domains can be integrated together. We also consider modelling short- and long-term interests of users in order to deliver more accurate recommendation over time.