ANALYZING THE ROLE OF INFORMATION PROPAGATION ON NODE PROMINENCE IN ONLINE SOCIAL NETWORKS

In this thesis, the major contribution involves measuring prominence of different types of entities in the form of influence and popularity, by leveraging on the dynamics of information diffusion in various online social network platforms. Specifically, the thesis focused on finding influential users in Twitter, measuring prominence of nodes in large-scale online social networks through scalable network embedding as well as measuring popularity of businesses in the Yelp location-based social network and groups in the Meetup event-based social network. This resulted in the implementation of several useful frameworks such as SmartInf, LouvainNE, DeepPop, which will benefit different OSN stakeholders in the respective platforms.