



موسسه عالی آموزش و پژوهش مدیریت و برنامه ریزی

Finding the most influential group in a complex network

Dr. Foad Mahdavi Pajouh

(Assistant Professor at University of Massachusetts Boston)

Abstract:

Central clusters in social, financial and corporate networks have significant influence on the flow of information and funds across the network. Decision makers in the competitive world of marketing, finance and investment can greatly benefit from analytical tools that can help them identify and utilize such central groups. This talk focuses on the most closeness-central clique problem, which is to find a clique cluster of maximum closeness-centrality in a network. We address the computational complexity of this problem and develop exact algorithms for its solution. The performance of our proposed algorithm is tested on real life networks.