

CommunityNetSimulator: Using Simulations to Study Online Community Networks

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Abstract

Research is proceeding to design new systems and algorithms for online communities, by taking into account their social network characteristics. However, differing network structures and dynamics will affect possible algorithms that attempt to make use of these networks. We lack an understanding of these impacts. In this paper, we present the CommunityNetSimulator (CNS), a simulator that enables the exploration of various network models with social network analysis techniques that are of particular relevance to online communities, especially help-seeking communities. CNS provides substantial capabilities to understand network formation and dynamics and to consider new augmentations for those networks.