Abstract

Online social networks are dynamic social interaction platforms for billions of users worldwide. Information and ideas are rapidly disseminated among these users through online social interactions. The online interactions among online social network users generate a huge volume of data that provides the opportunity to study human behavioral patterns. A social network is generally assumed to be viewed as graphs, where vertices denote users and edges represent relationships among users. The importance of a user in a network can be calculated by using metrics imported from graph theory. Social influence is recognized as a key factor that governs human behavior. It indicates the attitude of certain individuals to be affected by other subjects’ actions and decisions. A social network, in reality, is evolving dynamically and continuously. Such evolution is coupled with the spread of information on top of the network: the network topology affects the channels of information diffusion; the birth and death of connections in the network are, in turn, triggered by the traffic. As Information spread on networks, it can be observed that the cascades which ensue as agents can get infected. The diffusion process is affected by both the actions of agents and the underlying network structure. This paper focuses
on existing research in this domain and possible research methodology for ongoing research.

References


Index Terms

Computer Science

Networks
Keywords

Trend detection, online social network, network topology, machine learning, graph theory, influential nodes