Document details

Back to results | 1 of 1

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Detecting change from social networks using temporal analysis of email data (Conference Paper)

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Abstract

View references (14)

Social network analysis is one of the most recent areas of research which is being used to analyze behavior of a society, person and even to detect malicious activities. The information of time is very important while evaluating a social network and temporal information based analysis is being used in research to have better insight. Theories like similarity proximity, transitive closure and reciprocity are some well-known studies in this regard. Social networks are the representation of social relationships. It is quite natural to have a change in these relations with the passage of time. A longitudinal method is required to observe such changes. This research contributes to explore suitable parameters or features that can reflect the relationships between individual in network. Any foremost change in the values of these parameters can capture the change in network. In this paper we present a framework for extraction of parameters which can be used for temporal analysis of social networks. The proposed feature vector is based on the changes which are highlighted in a network on two consecutive time stamps using the differences in betweenness centrality, clustering coefficient and valued edges. This idea can further be used for detection of any specific change happening in a network. © Springer International Publishing AG 2018.

Author keywords

Clustering coefficient | Network measures | Social network analysis | Temporal analysis

Indexed keywords

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