Abstract

Social networks are flourishing because of fast growing Internet and the World Wide Web, and more research efforts have been put on Social Network Analysis (SNA). A social network can be modeled like a graph, where the nodes represent persons, and an edge between them represent direct relationship between the persons. One of the issues in SNA is to identifying criminals from groups of individuals. In a real social network, there must have various relationships between individuals, like friendships, business relationships, and common interest relationships etc. The internet itself is a huge social network. To model such a network, link analysis need to be proposed. A page in web may treat as a node, and hyperlink between them can be represented as relationships. After social network graph is constructed, link analysis and graph partitioning algorithms may be applied to identify the hidden links in that network. Most of the existing algorithms related to social network analysis assume that their existing only one single social network, with relatively multiple relationship like Web page linkage. In typical social networks, there always have various kinds of relations. Every relation can be identified as a relation network. These different types of relations play different tasks in different roles. The work here attempts to find the problem of mining hidden relationships on social networks. Social network analysis (SNA) is a set of powerful techniques that can be used to identify clusters, patterns and hidden structures within social networks. Here the problem is identified
with the following steps. 1. Analyzing information flow through the network using affected dataset, 2. Discovering non-obvious relations between actors, and 3. Identifying nodes that are directly or indirectly connected to most other nodes in the social network. This is done with the help of mining algorithms like Min-cut and Regression.

References

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Index Terms

Computer Science Information Sciences
Detection and Analysis of Hidden Activities in Social Networks

Keywords
Graph Mining  Social network analysis  Community Detection.