Abstract

Graph mining is the use of most important structure of graph to obtain frequent patterns of information. It has board range of applications. This technique can be used to find the probability of persons doing crime in the stock market. Some case studies of people involved in stock crime were studied to obtain the attributes such as persons involved in crime, whether they are educated or not, style of crime, earning from the particular threat. These attribute lead to the construction of graph database and an algorithm has been proposed which replaces previously existing graph mining algorithm which was unable to generate subgraph for non immediate nodes. Proposed algorithm deals with large database including the features which captures the properties of graph in few parameters and establish relationship among nodes. It then adopts depth first search approach to traverse the graph in top down manner which finds the common node in the graph & establishing subgraph for both immediate & non immediate nodes. Supervised approach has been used that provides correct segmentation of training data. For the prediction of future crime, a new framework as been designed which determines the suspicious behaviour if similar crime has been occurred before based on property such as style of crime which therefore can prevent many crimes that can occur in future. We have used the NetBeans for implementing the algorithm, Neo4j for graph database and NeoEclipse for analysis of graph.
Analysis of Stock Crime using Graph Mining

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Index Terms

Computer Science

Information Sciences
Keywords
Graph database  Graph mining  Common Node  Sub graph.