Abstract

In this paper, the problem of finding sequential patterns from graph databases is investigated. Two serious issues dealt in this paper are efficiency and effectiveness of mining algorithm. A huge volume of sequential patterns has been generated out of which most of them are uninteresting. The users have to go through a large number of patterns to find interesting results. In order to improve the efficiency and effectiveness of the mining process, constraints are more essential. Constraint-based mining is used in many fields of data mining such as frequent pattern mining, sequential pattern mining, and subgraph mining. A novel algorithm called CSGP (Constraint-based Sequential Graph Pattern mining) is proposed for mining interesting sequential patterns from graph databases. CSGP algorithm is revised to mine top-k closed patterns and named as TCSGP (Top-k Closed constraint-based Sequential Graph Pattern mining).

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Index Terms

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Keywords

Sequential patterns, Closed patterns, Constraints.