Abstract

Association rule mining is one of the most significant tasks in data mining. The essential concept of association rule is to mine the positive patterns from transaction database. But mining the negative patterns has also received the interest of publishers in this region. This paper shows an efficient algorithm (IMLMS-GA) for mining both positive and negative association rules in transaction databases. The goal of this study is to build up a new model for mining negative and positive (PR & NR) association rules out of transaction data sets. The proposed model is based on two models, the MLMS model and the Interesting Multiple Level Minimum Supports (IMLMS) model. This paper proposes a new approach (IMLMS-GA) for mining both negative and positive association rules. The interesting frequent patterns and infrequent patterns mined by the IMLMS-GA algorithm. This algorithm is accomplished in two phase: a. First phase find all frequent patterns & infrequent patterns b. Second phase efficiently generate positive and negative association rule by using useful frequent pattern set. The experimental results prove that the IMLMS-GA can remove the scale of uninteresting association rules and generates better results than the previous positive and negative association rule mining algorithm.
References

- By Xiangjun Dong (2011) "Mining Interesting frequent and frequent itemsets based on minimum correlation strength". @ Springer- Verlag Berlin Hedelberg.

Index Terms

Computer Science
Artificial Intelligence
Keywords
Positive and Negative rules  Correlation coefficient  Frequent pattern set and Infrequent pattern set.