Abstract

Association Rule Mining (ARM) is a most vital field of data mining to discover interesting relationship between items from huge transaction databases. It analyzes the data and discovers strong rules using different measures such as (support, confidence, lift, conviction) etc. Various ARM algorithms are available in literature for discovering frequent patterns. Market Basket analysis is one of the most essential applications of ARM; other applications are pattern recognition, weblog data mining, and special data analysis etc. In this paper, we proposed B2DCARM algorithm to discover frequent patterns which use Boolean matrix-based technique. This algorithm adopts binary to decimal conversion approach to discover frequent itemsets from huge transaction database which outperforms in both of the cases where support threshold is low or high and also better performs from efficiency point of view compared to available tree-based approaches.
An Efficient Binary to Decimal Conversion Approach for Discovering Frequent Patterns


Index Terms
Keywords
ARM  B2DCARM  Frequent Pattern mining  Boolean matrix