

Research on the Apriori algorithm in association rule mining and some extensions

Vu Thi Xuan My

Abstract: This topic focuses on studying the Apriori algorithm - a typical method for discovering association rules from data. The context of the topic stems from the increasing demand for extracting information from large volumes of data in business practice and market analysis. The objective of this research is to explore the limitations of the current Apriori algorithm and propose some extensions to improve computational performance and the accuracy of association rule discovery. The method uses both theoretical and empirical approaches to evaluate the performance of the improved versions. The expected results of the topic not only contribute to the field of artificial intelligence research but also have potential applications in modern data analysis systems.

Keywords: Apriori algorithm, Association rule mining, Algorithm extension, Data analysis, Business market