A New Approach on Rare Association Rule Mining

Abstract

Association rule mining is the process of finding some relations among the attributes/attribute values of huge database based on support value. Most existing association mining techniques are developed to generate frequent rules based on frequent itemsets generated on market basket datasets. A common property of these techniques is that they extract frequent itemsets and prune the infrequent itemsets. However, such infrequent or rare itemsets and consequently the rare rules may provide valuable information. So, many applications demand to mine such rare association rules which have low support but higher confidence. This paper presents a method to generate both frequent and rare itemsets and consequently the rules. The effectiveness of the rules has been validated over several real life datasets.

References

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- B. Liu, W. Hsu, and Y. Ma. Mining association rules with multiple minimum supports. pages 337–341. ACM Special Interest Group on Knowledge Discovery and Data Mining Explorations, 1999.


**Index Terms**

Computer Science

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**Keywords**

Association rule, rare rule, minimum constraint, confidence, multi-objective