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### **RESEARCH ARTICLE**

# Mining Multilevel Fuzzy Association Rule from Transaction Data

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**Abstract:-** Mining multilevel association rules in transaction dataset is most commonly and widely used in data mining. It is more challenging when some form of uncertainty like fuzziness is present in data or relationships in data. Present a model of mining multilevel association rules based on frequency. Due to this reason, the different minimum support at each level must be set a low value; otherwise, a lot of valuable patterns may not be found. We have employed fuzzy set concepts, multi-level taxonomy and different minimum supports to find fuzzy multilevel association rules in a given transaction data set. Apriori concept is used in model to find the item sets. The proposed model adopts a top-down progressively deepening approach to derive large itemsets. This approach incorporates fuzzy boundaries instead of sharp boundary intervals.

**Keywords:-** association rules, data mining, fuzziness, multilevel rules

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