

Research on fuzzy association rule mining algorithms

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Abstract: In-depth research project on fuzzy association rule mining algorithms, an important area in the field of Data Mining. The content begins with an overview of the Knowledge Discovery in Databases (KDD) process and the significance of association rules. The core of the project lies in analyzing the limitations of traditional data discretization methods (the boundary problem) for numerical attributes, thereby proposing a solution that applies fuzzy set theory to construct more effective fuzzy association rules. Algorithms for generating frequent itemsets and converting fuzzy rules are also clarified. Finally, the author implements a test program called FuzzyARM in C# to demonstrate its effectiveness.

Keywords: Data mining, association rules, fuzzy sets, fuzzy association rules, KDD, Data Mining

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