Abstract

Data mining aims at extracting hidden information from data. Data mining poses a threat to information privacy. Privacy preserving data mining hides the sensitive rules and prevents the data from being disclosed to the public. Attribute reduction techniques reduce the dimensionality of dataset. Rough sets are used for attribute reduction to yield reduced sets. An attribute reduct is a subset of attributes formed using rough sets. This paper proposes two approaches to hide sensitive fuzzy association rules namely, decreasing support value of item...
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in RHS of association rule and Particle Swarm Optimization (PSO). The proposed approach is implemented using map reduce paradigm. Experimental results demonstrate the performance of the proposed approach.

References

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Privacy Preservation with Attribute Reduction in Quantitative Association Rules using PSO and DSR


Index Terms

Computer Science
Information Science

Keywords

Rough Sets
Attribute Reduction
Map Reduce
Discernibility Matrix
Pso
Privacy Preserving Data Mining
Fuzzification
Dsr
Quantitative Association Rule
Lost Rule
Ghost Rule