Abstract

The privacy preservation using association rule mining is the base of this research. The concept of privacy preserving data mining has been proposed in response to the concerns of preserving personal information from data mining algorithms. The proposed method focuses on minimizing side effects caused by privacy preservation techniques. Side effects are loss of rules and generation of the false rules. One of the techniques in privacy preservation selectively modifies individual values from a database to prevent the discovery of a set of rules. There are two known algorithms for it, ISL (Increase Support of Left) and DSR (Decrease Support of Right). Since ISL & DSR techniques aim at hiding all sensitive rules, they cannot avoid the undesired side effects. ISL algorithm results in false rules generation while DSR results in loss of rules. The propose system suggest modification to both of these algorithms in such a way that output is generated with limited side effects. Also it takes the decision about which algorithm to be used to hide a specific rule.
Privacy Preservation using Association Rule Mining with Limited Side Effect

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Index Terms

Computer Science

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Keywords

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