

数据库、信号与信息处理

改进的隐私保护关联规则挖掘算法

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收稿日期 2008-9-18 修回日期 2008-12-9 网络版发布日期 2010-3-11 接受日期

摘要 数据挖掘技术可以从收集到的大量数据集中挖掘出潜在的知识, 这就可能把涉及到个人隐私的信息挖掘出来, 从而产生了隐私保护下的数据挖掘。首先分析了国外学者Rizvi提出的隐私保护关联规则挖掘算法MASK, 然后使用分治策略对MASK进行了改进。时间复杂度分析和实验结果均表明, 对MASK算法的改进是有效的。

关键词 [关联规则](#) [隐私保护](#) [分治策略](#)

分类号 [TP301](#)

Improved algorithm of association rule mining in privacy preserving

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Abstract

The knowledge which is potential and hidden behind lots of data can be mined in means of data mining technology and part of the knowledge may infringe personal privacy, then privacy reserving in data mining is studied. Firstly, a privacy reserving association rule mining algorithm called MASK which is presented by Rizvi is analyzed. Secondly, MASK algorithm is improved by divide-and-conquer strategy. Time complexity analysis and experiment result show that the improvement of MASK algorithm is effective.

Key words [association rule](#) [privacy preserving](#) [divide-and-conquer strategy](#)

DOI: 10.3778/j.issn.1002-8331.2010.08.038

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