



基于区间映射的约束拓扑关联规则挖掘

方刚, 熊江, 吴鸿娟, 钟静

重庆三峡学院数学与计算机科学学院, 重庆万州404000

Constraint topology association rules mining based on interval mapping

FANG Gang, XIONG Jiang, WU Hong-juan, ZHONG Jing

College of Mathematics and Computer Science, Chongqing Three Gorges University, Chongqing 404000, China

- 摘要
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摘要 针对现有拓扑关联规则挖掘算法不能够有效地提取长频繁约束拓扑关联规则,提出一种基于区间映射的约束拓扑关联规则挖掘算法,该算法适合挖掘带约束空间布局关系的长频繁拓扑关联规则;该算法用区间映射法的下行搜索策略产生候选频繁拓扑项目集,利用逻辑"与"运算计算拓扑关系事务的支持数.实验证明在挖掘长频繁约束拓扑项目集时,该算法比现有算法更快速更有效.

关键词: 空间数据挖掘 拓扑关联规则 约束空间布局关系 区间映射 下行搜索

Abstract: For present topology association rules mining algorithm is not able to efficient extract long frequent constraint topology association rules,this paper proposed an algorithm of constraint topology association rules mining based on interval mapping,which is suitable for mining long frequent topology association rules with constraint spatial layout relation.The algorithm uses interval mapping to generate candidate frequent topology itemsets via down search strategy,and uses logic "and" operation to compute support of topology relation transaction.The experiment indicated that the algorithm is faster and more efficient than presented algorithms when mining long frequent constraint topology itemsets.

Key words: spatial data mining topology association rules constraint spatial layout relation interval mapping down search

收稿日期: 2011-03-31;

基金资助: 重庆市教委科技项目(KJ091108); 重庆三峡学院重点科研项目(11ZD-18)资助

引用本文:


方刚,熊江,吴鸿娟等. 基于区间映射的约束拓扑关联规则挖掘[J]. 云南大学学报(自然科学版), 2011, (5): 521-526.

FANG Gang,XIONG Jiang,WU Hong-juan et al. Constraint topology association rules mining based on interval mapping[J]. , 2011, (5): 521-526.

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电话: 0871-5033829(传真) 5031498 5031662 E-mail: yndxxb@ynu.edu.cn yndxxb@163.com