

## 不完备决策表中基于容差关系的属性约简方法

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**摘 要:** 针对不完备决策表提出一种基于容差关系的属性约简方法. 以粗糙集容差关系为基础, 定义相容块构造范式求取决策表的全体极大相容块, 将其转化为最全描述得到极大相容块最全描述系统, 为不完备决策表提供了一种有效的信息表达转换方式. 进而以该转换系统为基础定义属性分辨矩阵, 为不完备决策表求取全体属性约简给出了一种解决方案. 理论证明与实例分析说明了该方法的可行性与有效性.

**关键词:** 不完备决策表; 容差关系; 极大相容块; 属性约简

## Attribute Reduction Based on Tolerance Relation

### in Incomplete Decision Table

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**Abstract:** Attribute reduction based on tolerance relation is proposed for incomplete decision table. Tolerance relation is used to define normal form for constructing consistent block, and the most complete description system of maximal consistent block is obtained by translating all maximal consistent blocks to their most complete description, which provides an efficient way for transforming information description. Furthermore, this description system is used to define discernibility matrix, which gives a solution for searching attribution reduction in incomplete decision table. The theoretical derivation and simulation instance shows that this method is feasible and effective in practice.

**Key words:** incomplete decision table; tolerance relation; maximal consistent block; attribute reduction

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