

一种新的属性约简算法

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摘要:属性约简是粗糙集理论中的一个核心问题, 为了有效获取属性最小相对约简, 提出了一种新的基于相对差异比较表的属性约简算法。该算法给出了一种将信息表转化为相对差异比较表的方法, 且该方法对于不相容决策表也是可行的, 进而就将求解最小属性约简问题转化为求解一个 0—1 整数规划问题, 并分别采用一般求解规划问题的方法和遗传算法两种方法来求解这个 0—1 整数规划问题。实验结果证明该算法结合遗传算法能够更加快速有效地进行属性约简。

关键词:[粗糙集](#) [属性约简](#) [遗传算法](#)

分类号: [TP301.6](#) 文献标识码: A 文章编号: 1673-629X (2008) 05-0019-03

A New Attribute Reduction Algorithm

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Abstract:Attribute reduction is a key problem for rough set theory. In order to achieve effective attribute reductions, propcses a new rough set attribute reduction algorithm based on the relative difference comparison table. At first in this algorithm, a new method which information table is translated into the relative difference comparison table is discussed, and this method can calculate the incompatible decision table, then the problem about solving the best attribute reductions will be translated into a 0 - 1 integral programming problem, at the same time , use a general method and genetic algorithm to calculate the 0 - 1 integral programming problem respectively. The experimentation results show the algorithm is more fast and effective.

Key words:rough set; attribute reduction ;genetic algorithm

