

# 多维多层数据的无冗余跨层挖掘算法

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**摘要:** 针对传统的挖掘方法一直存在实现过程复杂的问题, 提出基于免疫遗传的多维多层数据无冗余跨层挖掘算法, 首先通过罗杰斯特回归函数对多维多层数据进行采集, 并通过多维多层数据目标域和源域的一致性对多维多层数据进行分类, 在此基础上, 通过对免疫遗传算法实现多维多层数据无冗余跨层挖掘的基本思想进行分析, 确定其编码方案和适应度函数, 并通过遗传操作和群体更新, 完成基于免疫遗传的多维多层数据无冗余跨层挖掘算法. 实验结果表明, 使用此算法进行多维多层数据无冗余跨层挖掘, 实现过程较为简单, 对计算机网络运行速度影响较小, 使用范围较广, 为该领域的研究发展提供新的思路.

**关键词:** 多维多层数据; 无冗余; 跨层挖掘

## **Non-redundant Multilayer Mining Algorithm for Multidimensional Multilayer Data**

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**Abstract:** According to the traditional mining method has been the realization process of complex problems, proposed multi-dimensional data based on immune genetic algorithm for mining non redundant cross layer, first through the Rodgers regression function to collect the multi-dimensional data, and through the consistency of the multi-dimensional data source and target domain to classify the multi-dimensional data, on the basis of through the analysis, the basic idea of immune genetic algorithm to realize the multi-dimensional data mining non redundant cross layer, determine the encoding scheme and the fitness function, and through genetic manipulation and group updates, complete multi-dimensional data based on immune genetic algorithm for mining non redundant cross layer. The experimental results show that the proposed algorithm for multi-dimensional data mining non redundant cross layer, the implementation process is relatively simple, less impact on the computer network running speed, wide application, to provide new ideas for the development of this field.

**Key words:** multi-dimensional multi-layer data; no redundancy; cross-layer mining

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