

工程与应用

基于Rough Sets的中医指症挖掘研究与应用

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摘要 针对中医病历数据库中指症样本维数较大、数据特征和属性冗余量较多等特征, 在对Rough Sets基本理论和属性约简算法研究的基础上, 提出了将属性频度和属性重要性相结合的GENRED_GROWTH中医指症挖掘算法, 并进行了基于GENRED_GROWTH的中医指症挖掘原型系统设计与实现。通过分析和实验结果表明: 该算法能较好地进行中医指症属性约简, 分类精度较高, 并且能抽取中医指症相关诊断规则以辅助医生的诊断和治疗。

关键词 [Rough Sets](#) [属性约简](#) [中医指症](#) [数据挖掘](#)

分类号

Research and application on TCM diagnosis mining base on Rough Sets

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Abstract

According to the problems existing which include the much larger numbers of dimensions of the sample, much heavier data features and redundant attribution of TCM (Traditional Chinese Medicine) diagnosis, the paper provid the GENRED_GROWTH TCM diagnosis algorithm combining the frequency with the importance of attribution on the basic of research and study of the basic theory and attribution reduction of Rough Sets. Meanwhile the algorithm is applied in the prototype data mining experiment on TCM diagnosis. The results show that the algorithm can be used to reduce redundant attributes in data mining on TCM diagnosis, and the classification accuracy is higher. And it performs accurately on TCM diagnosis datasets. The useful information for the diagnosis can be extracted in order to help to provide some decision-making for the assistant diagnoses.

Key words [Rough Sets](#) [attribute reduction](#) [TCM \(Traditional Chinese Medical\) diagnosis](#) [data mining](#)

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