

基于 AHP-熵权决策的个体映射优化算法

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摘 要: 针对现阶段语义网个体映射结果缺乏针对性, 映射效率低下等问题, 现提出一种基于 AHP(Analytic hierarchy process)层次分析法及熵权决策的个体映射优化算法.该方法首先解析目标个体, 列出个体的各个特征向量, 依据相应的公式计算出特征向量的置信度.其次, 给出各映射策略, 依据所提出的层次分析-熵权决策组合优化算法, 进行映射多策略权值计算.最终, 计算出映射结果.该方法有效的减少了映射冗余, 更合理的分配了多策略权值, 实验结果证明了其择优性.

关键词: 个体映射; 置信度; 层次分析法; 熵权决策; 配准策略

An Ontology Mapping Optimization Algorithm Based on

AHP and Entropy Weight Decision

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Abstract: Currently, there are many problems in mapping Semantic Web ontology. For example, Ontology mapping results are inaccurate or time complexity is too high. This paper presents an ontology mapping algorithm based on Firstly, we should analysis the ontology and list the feature vector. Secondly, according to the proposed AHP and entropy weight decision, we map the multi-strategy weights. Finally, the result of the mapping is calculated. The method effectively reduces redundant and improve the efficiency. Experiment result has proved the effectiveness of these proposed methods.

Key words: ontology mapping; confidence; analytic hierarchy process; entropy decision; registration strategy

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