



## 基于本体VSM的兴趣型社区自组织分组算法

Grouping Algorithm for Learning Community of Interest Based on

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英文关键词: [Grouping Algorithm](#) [Ontology](#) [Interest Eigenvector Vector Space Model](#) [Concept Indexing](#)

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### 中文摘要

优化分组是计算机支持的协作学习(CSCL)中的一个重要研究内容。兴趣型学习社区建立的重点和难点在于学习者之间兴趣相似度的向量空间模型(VSM), 计算学习者的兴趣向量, 克服了传统的VSM有术语间语义相关性被忽略的不足, 提高了兴趣相似性比较和学习者兴趣匹配浓度的学习社区自组织分组算法。针对模型使用本体中的概念构造向量空间表现出的巨大维数, 运用概念索引降维复杂性。最后通过应用案例验证分析了该模型算法具有较高的分组效率和良好的扩展性。

### 英文摘要

optimized division is a research of great importance in computer-supported collaborative learning (CSCL). The key interest is to determine and calculate the interest similarity between the learners. To get rid of the disadvantages terms in the traditional vector space model, ontology-based Vector Space Model(VSM) using semantic web technology is eigenvector, which can enhance the relative accuracy of the interest similarity. And a self-organization grouping all the learners' interest similarity match-degree and its concentration. Great dimensions would take place with the ontology indexing(CI) method and reasonable treatment to matrix of interest Eigen value are here used to promote the calculation analysis of online education cases is carried out to verify the model algorithm with high efficiency and good scalability.