研究、探讨

实例驱动的自适应本体学习

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针对知识管理中本体构建存在的问题,将聚类算法与ODP(Open Directory Project)目录有机结合,给 出了一种基于知识资源元数据的自适应本体学习方法。根据元数据对文档进行聚类形成本体概念,将生成的概念 分别映射到0DP中确定概念间的层次关系,生成初始本体,根据内聚性和相关性的变化进行自适应本体学习,实现<mark>▶加入我的书架</mark> 本体更新和概念丰富,以及时跟踪知识的变化。提出的自适应本体学习方法能够很好地反映研究领域的演变过程 和发展趋势,满足知识型组织进行知识管理和研究人员共享知识的需求。实验结果表明了方法的有效性。

知识管理 本体学习 开放式目录项目 聚类

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# Instances driven adaptive ontology learning

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#### Abstract

To solve problems in knowledge management, an adaptive ontology learning approach based on metadata of knowledge resources is proposed by integrating clustering algorithm and ODP (Open Directory Project). Ontology concepts are generated by clustering documents based on their metadata, and concept hierarchy is formed based on the hierarchy of mapped concepts in ODP.In order to track the changes in knowledge, adaptive ontology learning is conducted to update the ontology and enrich ontology concepts based on the changes of cohesion and correlation of clusters. The adaptive ontology learning approach proposed in this paper can reflect evolution process and tendency in research area, and meet demands for knowledge management of knowledge organization and knowledge sharing of researchers. Experimental result demonstrates the validity of the approach.

**Key words** knowledge management ontology learning Open Directory Project (ODP)

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