Ontology-based Query Expansion for Supporting Information Retrieval in Agriculture

Abstrak

The demand for relevant knowledge related to effective and efficient agricultural development has increased tremendously recently in all over the world. The web can be considered as a distributed mass of simple hypertext pages and this gives rise not only to the redundancy of information but also difficulty in managing the relationship among the concepts of information. Thus, a formal way to represent knowledge on agricultural development is crucial. Information related to agricultural development can be represented using ontological modeling that enables the integration of knowledge obtained from heterogeneous sources. Despite this fact, the semantic interpretation of users' information needs become crucial in retrieval mechanisms. One of the successful techniques used to ensure relevant information is obtained, is to expand the input query by employing the query-related terms derived from the ontology in order to approximate the actual user's intention. This paper reviews various relevant researches conducted in ontology-based query expansion, particularly in agriculture domain.