Abstract

The main objective of this paper is how to use the ontology for semantic image annotation and search in huge collection of images. We have presented a framework for applying the semantics to enhance image retrieval. The entire problem is considered in two levels. First, An ontology is created to define the semantic space. Secondly, Natural language sentences are converted into SPARQL statements and the relevant images are accessed using SPARQL
query. The ontologies are represented in RDF form and these are based on existing data standard and knowledge corpura. Since the RDF structure provides the formal way of annotating the images, the image retrieval task is simplified as compared with earlier approaches. Retrieval is done by using the keyword (thesauri) description. We also show that we are able to retrieve desired images using the SPARQL query language (7).

Reference

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Index Terms

Computer Science Wireless Networks

Key words

Information retrieval
Semantic Web Image retrieval
Ontology
Thesaurus

RDF and OWL