



Special Track on

Logics, General Ontologies, Categorization, and Semantic Annotation

By recognizing the need for large domain-independent ontologies, different groups of collaborators from the fields of engineering, philosophy and information science have come to work together to upper-ontologies like CyC. They suggested upper merged ontology or linguistic ontologies as SUMO, DOLCE, and GOLD. These ontologies give a formalized account of the most basic categories and relations used in the scientific description of human language.

What are the specific relations between the semantic web and ontologies? What is an ontology of a domain? What are the relations between texts relative to a domain and an ontology of this domain? How can we build a domain ontology from texts? For a theoretical perspective, it would be necessary to clarify what type of ontologies we can build, that is, domain, lexical, upper-level or applicative ontologies. It is also necessary to use linguistic theories to build ontologies instead of designing a clean, elegant ontology with a clear semantic and based only on sound logical principles and scientific evidence.

The relations between some type of logics, ontologies and some procedures of annotation have to be studied further. Ontologies are closely related to categorization and to some types of logics such as logics of objects and description logics. Semantic annotation and information retrieval are closely related to ontologies.

The logical structures and logic organizations more appropriated to building ontologies, on one hand, and ontologies needed for semantic annotation, on the other hand, have to be studied as well.

This track puts together four subfields of IA: logics, ontologies, categorization, and automatic text annotation. It begins with the talk of keynote speaker Jean-Pierre Desclés, from the Sorbonne, about the deep relation between logic, semantic categorization, ontologies and automatic semantic annotation.