

A12: Ontological Engineering

The aim of this course is to discuss on the scientific, methodological and technological foundations that need to be considered when building ontologies. In particular, sessions in this course will cover: the concepts of ontologies and ontology-based annotations in the context of the Semantic Web and the Web of Linked Data; the theoretical foundations in ontology development; some of the most widely-known ontologies; the RDF(S) and OWL languages; methodologies, methods and techniques used in ontology development, including requirements specification, planning, conceptualisation, reuse, reengineering, etc.; methods and techniques for ontology-based annotation and for the generation of Linked Data; and relevant applications. Throughout the entire course open research problems will be presented and discussed collaboratively for each subtopic.