

## **Call For Papers**

### **The Computer Journal (<http://comjnl.oxfordjournals.org/>)**

#### **Special Issue on "Engineering Knowledge and Semantic Systems"**

##### **Guest editors:**

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##### **Background and Motivation**

In recent years, there has been growing interest in the application of formal ontology and ontological engineering to solve modelling problems in computer science that include software and data engineering, knowledge representation, natural language processing, information science.

Ontology is a cross-disciplinary field concerned with the study of concepts and theories for the representation of shared conceptualizations of specific domains. Ontology and Knowledge Engineering within computer and information science is concerned with the development of techniques, methods, languages and tools for the construction of artefacts that represent models (e.g., domain ontologies) and meta-models (e.g., upper-level ontologies).

A crucial question is whether ontologies can to a certain extent replace or complement other information models. While ontologies work quite well as virtual schemata in mediation systems, they may perform poorly as information models and at the user interface level. On the theoretical side, there is a lack of understanding of the effective relation and interplay of ontological and epistemological features in information models and systems. Furthermore there are still many open questions concerning good scientific practice in this field. On the practical side, there is also a lack of good practice of how to integrate existing information systems into ontology driven applications, and there is little experience concerning the creation of effective data structures directly from ontologies for interoperation in complex application environments.

The aim of this special issue is therefore to bring together researchers and practitioners in areas of knowledge and intelligence, semantics, agents and grid computing to share their research achievements and solutions about some of the issues discussed above.

##### **List of possible topics:**

- Ontology-based Information Systems
- Knowledge engineering
- Ontology mapping and merging
- Context and ontologies
- Semantic social networks
- Collaborative tagging on Web 2.0
- Semantic and knowledge grids
- Applications and case studies

##### **Submission Guidelines**

Submission of papers can take place immediately (as of now) and will be evaluated as they are submitted. Only original papers that are not or have not been submitted for publication elsewhere will be considered. Instructions for submission can be found at:

[http://www.oxfordjournals.org/our\\_journals/computer\\_journal/for\\_authors/msprep\\_submission.html](http://www.oxfordjournals.org/our_journals/computer_journal/for_authors/msprep_submission.html)

The submitted papers should be formatted according to the journal style and submitted directly to the journal. A copy of each submitted paper should also be sent by email to one of the guest editors (j2jung@gmail.com).

Each paper should be accompanied by a cover letter indicating that the submission is for "the Special Issue on Engineering Knowledge and Semantic Systems". All submitted papers will be refereed based on originality, quality and relevance.

**Important Dates**

Submission of full papers: Any time between January 2010 and 31 July 2010

First decision notification: Typically within 50 days of submission

Submission of revised papers: No later than 31 Jan 2011

Final decision notification: No later than 31 March 2011

Estimated publication date: second half 2011 or 2012