

CALL FOR PAPERS
IEEE Transactions on Systems, Man, and Cybernetics - Part A: Systems and Humans

The Human Semantic Web
Personalization, Management of Personal Knowledge and Identity, Systems for the
Knowledge Society”
Special Issue in Late 2009

IEEE Transactions on Systems, Man, and Cybernetics Part A: Systems and Humans seeks original manuscripts for a Special Issue on **The Human Semantic Web** scheduled to appear in a late 2009 issue.

The Semantic Web vision has evolved in the last years as a blueprint for a knowledge-based framework aimed at crossing the chasm from the current Web of unstructured information resources to a Web equipped with metadata and oriented to delegation of tasks to software agents. Ontologies are the key piece of this framework in that they provide shared semantics to metadata, thus enabling a degree of semantic interoperability. The requirements of large-scale deployment and interoperability of the Semantic Web vision represent a major challenge to data and knowledge engineering, which raises a number of issues and requirements regarding how to represent, create, manage and use both ontologies as shared knowledge representations, but also large volumes of metadata records used to annotate Web resources of a diverse kind. The special issue aims at helping in communicating and disseminating relevant recent research in knowledge and data engineering as applied to the context of Information Systems. The scope of the call includes Knowledge Engineering for organizational applications, Semantic Web approaches to Information Systems and Ontology-Based Information Systems research, as well as the diverse underlying Database and Knowledge Representation aspects. Papers dealing with aspects that touch both aspects are especially sought. This is intended to initiate a dialog between the organizational and more technical views of the field.

Topics include, but are not limited to, the following:

1. Applications of the Human Semantic Web to the Knowledge Society:

- Potentially large-scale applications (e.g. to Personal Knowledge Management, Semantic Desktop, Knowledge Portals)
- Data Semantics and Web Semantics in peer-to-peer systems, grids, multimedia
- Communication, dialogue and argumentation models
- Mediation, negotiation and conflict resolution

2. Representing and Managing Semantic Web Data and Services:

- Languages, Tools, Methodologies, Rules
- Database, IR and AI technologies
- Integration, Analysis and Visualization
- Robust and scalable logics, knowledge management and reasoning
- Machine learning and information extraction
- Semantic Interoperability, Workflows, Web Mining
- Semantic Web Services and Processes (description, discovery, invocation, composition, choreography, cleaning, assurance, trust, provenance, etc.)
- Middleware and services for Personalization and User Modelling
- Semantic matching of user needs and web resources

3. Ontologies:

- Ontology Alignment (mapping, matching, merging, mediation and reconciliation)
- Ontology Learning and Metadata Generation (e.g. HLT and ML approaches)
- Ontology Management (creation, evolution, evaluation, etc.)
- Ontology Modeling, reuse, extraction, and evolution
- Searching and Ranking ontologies

4. Social Semantic Web:

- Social networks and processes on the Semantic Web
- Semantic web technology for collaboration and cooperation
- Representing and reasoning about Trust, Privacy, Security and Intellectual Property Rights
- Tools and processes for sense-making, analysis and decision-making
- Supporting strategic communication

5. User Interfaces:

- Interacting with Semantic Web Data
- Semantic Web content creation and annotation
- Mashing up Semantic Web data and processes

Submitted articles must not have been previously published or currently submitted for journal publication elsewhere. As an author, you are responsible for understanding and adhering to our submission guidelines. You can access them by clicking on <http://www.computer.org/mc/tkde/author.htm>. Please thoroughly read these before submitting your manuscript.

Please submit your paper to Manuscript Central at <http://smca-ieee.manuscriptcentral.com/>

Please feel free to contact the guest editors at Lytras@ceid.upatras.gr if you have any questions.

Please note the following important dates.

Important dates:

WORKSHOP FOR THE SPECIAL ISSUE ON 1ST WORLD SUMMIT ON THE KNOWLEDGE SOCIETY:

Submission through <http://www.open-knowledge-society.org/submissions>

Presentation on SUMMIT: 24-26 September 2008

Selected Papers from Summit - Submission Deadline through IEEE T-SMC:

15-Nov-08

Completion of First-Round Reviews: 15-Dec-05

Revised Papers (after Minor Revisions): 19-Feb-09

Publication Materials Due: 23-March-09

Publication: in a Late 2009 issue.

Please address all other correspondence regarding this special issue to

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