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*** Preliminary CALL FOR PAPERS ***

**Third International IFIP Workshop on Semantic Web & Web Semantics
(IFIP SWWS 2007)**

In conjunction with OnTheMove Federated Conferences (OTM '07)
<http://www.cs.rmit.edu.au/fedconf>



Albufeira, Portugal
25 – 30, Nov 2007.

Proceedings will be
published by [Springer LNCS](#)



MOTIVATION

The IFIP Working Group 2.12 & 12.4 on Semantic Web (<http://www.ceebi.curtin.edu.au/IFIP/>) is a timely active international community of scientists, engineers, and practitioners dedicated to advancing the state of the art of research and practice in the emerging field of Semantic Web, and meanwhile providing input and guidance on the direction, scope, and importance of different aspects of artificial intelligence, data modelling, and software theory and practice to Web semantics. It is unique in that it targets to synthesize the concepts from these diverse fields in a comprehensive fashion in the context of the semantics Web.

The Web has now been in existence for quite some time and its pervasive in its influence on all aspects of society and commerce. It has also produced a major shift in our thinking on the nature and scope of information processing. However in its technological nature and its supporting theoretical foundations, it has remained relatively rudimentary, being currently largely suitable for information dissemination. It is rapidly moving away from this, to application deployment and knowledge deployment that require complex interactions and properly structured underlying semantics. This has been a sudden upsurge of research activity in the problems associated with adding semantics to the Web. This work on semantics will involve data, knowledge, and process semantics. The 3rd IFIP SWWS '07 will provide a forum for presenting original, unpublished research results, and innovative ideas related to this voluminous quantity of research.

In SWWS 2007, as a complementary to the main OTM '07 conference themes, special focus is aimed at looking some of the evolving areas of interest for the Semantic Web, namely Security & Trust, Biomedical Informatics, Fuzzy Semantics and Context-driven Methods for Ontologies. Thus, as part of SWWS 2007, there are four special tracks on;

1. Security & Trust,
2. Fuzzy Semantics
3. Biomedical Informatics
4. Context-driven Methods for Ontologies.

Trust and Reputation are assuming an increasing importance in interaction and commerce over the web. There are several trust and Reputation Systems (albeit simple) increasingly finding development by major development by major internet companies such as Amazon, eBay and Epinion. Also, there is a growing intend in using an attention formulation for web semantics based on Fuzzy set, models and protoforms.

Conversely, ontologies are now adopted to represent semantic metadata and to characterize different kind of information resources. Current reasoning techniques still lack of context-dependent tools to enhance the sifting of ontology instances, e.g., techniques to organize resources at different levels of abstraction and to assess their similarity. This track encourages the discussion on context-dependent

instruments tailored to improve the browsing and search of semantics annotated resources, taking advantage from the semantics embedded in ontologies.

The intention of the SWWS '07 is to bring together a community of researchers and practitioners who will provide a collection of work that is of utmost importance to the advancement of the web semantics and its future, reviewed by the top experts and minds in the field, in an area of the utmost importance to business, IT and industry.

WHOM SHOULD ATTEND

The workshop is intended for researchers, academic, practitioners, IFIP workgroup WG 2.12/12.4 members and organizations who are actively involved in present and upcoming semantic web technologies. Moreover, the workshop concepts covered is a good reference point for academic and industrial researchers who want to familiarize themselves with emerging trends in semantic web research, technologies and applications.

TOPICS OF INTEREST

Topics of interest may include one or more of the following (but are not limited to) themes;

- Security & Trust
- Fuzzy Semantics
- Biomedical Informatics
- Context-driven Methods for Ontologies

The following topics related to these themes including, but are not limited to:

- Formal and practical knowledge representation and inference for the semantic Web
- Design, evaluation, and use of ontology
- Metadata and knowledge markup
- Knowledge Sharing
- Interoperability of data and Web services
- Semantics of agent and Web interaction
- Automated extraction of Information from regulatory documents.
- Content-based information and knowledge retrieval
- Information extraction, automatic, and semi-automatic generation of metadata
- Database technologies for the Semantic Web
- Multimodality and visualization technologies for the Semantic Web
- Applications on mobile devices
- Human centred aspects specifically for the Semantic Web
- Impact of Semantic Web computing on organizations and society
- Evaluation of the quality of Web semantics
- Semantics for ubiquitous computing
- Engineering of regulatory ontologies: conceptual analysis, representation, modularization and layering, reusability, evolution and dynamics, etc;
- Multilingual and terminological aspects of regulatory ontologies;
- Models of legal reasoning (from ontological viewpoint): regulatory compliance, case-based reasoning, reasoning with uncertainty, etc.
- Sensitivity on and harmonization of regulations;
- Regulatory metadata and content standardization (e.g. legal-XML/LeXML, ADR/ODR-XML,...);
- Regulatory ontologies of: property rights, persons and organizations, legal procedures, contracts, legal causality, etc;
- Task models for socially regulated activities;
- Experiences with projects and applications involving regulatory ontologies in legal knowledge based systems, legal information retrieval, e-governments, e-commerce;
- Providing semantics for the web using Fuzzy set methods
- Fuzzy models for the Semantic Web
- Protoforms
- Security and trust for the Semantic Web
- Reputation Systems for the Semantic Web
- Biomedical Ontologies for Genetics, Proteomics, Diseases, Privacy etc.

- Conceptual Models for Biological and Medical Data
- Semantics in Biological Data Modeling
- Use of semantics to manage Interoperation in Biomedical Databases
- Semantic Web technologies and formalisms for Biomedical Data
- Ontology representation and exchange languages for Bioinformatics
- Support of Ontologies for Biological Information Retrieval and Web Services
- Change Management in Biomedical Ontologies
- Tools for Development and Management of Biomedical Ontologies
- Context-driven methods for ontology exploitation
 - Semantic similarity among ontology instances
 - Semantic granularity
 - Semantic ranking
- Context-driven methods in specialized domains, e.g.:
 - Context-driven methods for geographical information resources
 - Context-driven methods for Multidimensional Media
 - Context-driven methods for Digital Library
- Context-awareness for the Semantic Web
- Ontology views
- Human centred aspects in sifting information resources w.r.t. context
 - Context representation
 - Context elicitation
 - Context visualization

SUBMISSION REQUIREMENTS

All submitted papers will be carefully evaluated based on originality, significance, technical soundness, clarity of expression, and relevance to IFIP WG 2.12 & WG 12.4. All submissions must be in English, and will be refereed by a program committee comprising members of the Working Group. Research submissions must not exceed 10 pages following the Springer format. Submissions should be made in PDF format. Detailed formatting instructions can be found at:

<http://www.springer.de/comp/lncs/authors.html>

The final proceedings will be published by Springer Verlag as LNCS. Failure to commit to presentation at the conference automatically excludes a paper from the proceedings.

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IMPORTANT DATES

Abstract Submission Deadline	June 25, 2007
Paper Submission Deadline	July 1, 2007
Acceptance Notification	August 25, 2007
CR Version Due	September 10, 2007
Registration Due	September 10, 2007
OTM Conferences and workshops	Nov 25 – 30, 2007

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