CALL FOR PAPERS

Workshop on <u>Uncertainty Reasoning for the Semantic Web</u>

In conjunction with the 4th International Semantic Web Conference

> Galway, Ireland November 7, 2005

You are invited to participate in the upcoming workshop on Uncertainty Reasoning for the Semantic Web (URSW), to be held as part of the 4th International Semantic Web Conference (ISWC) in November of 2005 in Galway, Ireland.

ISWC is a major international forum for presenting visionary research on all aspects of the Semantic Web. The Uncertainty Reasoning Workshop is an exciting opportunity for collaboration and cross-fertilization between the uncertain reasoning community and the Semantic Web community. Effective methods for reasoning under uncertainty are vital for realizing many aspects of the Semantic Web vision, but the ability of current-generation web technology to handle uncertainty is extremely limited. Recently, there has been a groundswell of demand for uncertainty reasoning technology among Semantic Web researchers and developers. This surge of interest creates a unique opening to bring together two communities with a clear commonality of interest but little history of interaction. By capitalizing on this opportunity, URSW could spark dramatic progress toward realizing the Semantic Web vision.

Audience

The intended audience for this workshop includes the following

- Researchers in uncertainty reasoning technologies with interest in Semantic Web.
- Semantic web developers and researchers.
- People in the knowledge representation community with interest in the Semantic Web.
- Ontology researchers and ontological engineers.
- Web services researchers and developers with interest in the Semantic Web.
- Developers of tools designed to support semantic web implementation, e.g., Jena developers, Protege and Protege-OWL developers.

Topic List

We intend to have an open discussion on any topic relevant to the general subject of uncertainty in the Semantic Web. Therefore, the following list should be just an initial guide.

- Syntax and semantics for probability extensions to Semantic Web languages
- Logical formalisms to support uncertainty in Semantic Web languages
- Probability theory as a means of assessing the likelihood that terms in different ontologies refer to the same or similar concepts
- Architectures for applying plausible reasoning to the problem of ontology mapping

- The concept of a probabilistic ontology and its relevance to the Semantic Web
- Best practices for representing uncertain, incomplete, ambiguous, or controversial information in the Semantic Web
- The role of uncertainty as it relates to Web services
- Probabilistic-friendly interface protocols as a means to improve interoperability among Web services
- Probabilistic reasoning techniques applied to trust issues in the Semantic Web
- Existing implementations of uncertainty reasoning tools in the context of the Semantic Web
- Issues and techniques for integrating probabilistic inference tools
- The future of uncertainty reasoning for the Semantic Web

Important Dates

July 30, 2005	Paper submissions due
September 6, 2005	Paper acceptance notification
September 27, 2005	Camera-ready papers due
November 7, 2005	Uncertainty Reasoning for the Semantic Web Workshop

Submission Details

The URSW will be accepting submissions of *technical papers* and *position papers*. Each submission will be evaluated for acceptability by at least four members of the Program Committee. Decisions about acceptance will be based on relevance to the topic of Uncertainty Reasoning for the Semantic Web, originality, potential significance, topicality and clarity. Since all accepted papers will be presented at the workshop, we require that at least one of the submitting authors must be a registered participant at the ISWC 2005 Conference, and committed to attend the URSW Workshop.

Technical papers should follow the same submission format used by the ISWC 2005 Conference for papers submitted to its Academic Research track, i.e., the Springer Publications format Notes Computer (LNCS). which is for Lecture in Science available at http://www.springeronline.com/sgw/cda/frontpage/0,11855,5-164-2-72376-0,00.html. Technical papers submitted to the URSW Workshop must not exceed 10 pages, including figures. Submissions exceeding this limit will not be reviewed.

Position papers consist of a summary of ideas, projects, or any research efforts that are relevant to the URSW Workshop and <u>must not exceed 2 pages</u>. Submission of position papers should comply with the IJCAI format guidelines, which the IJCAI organizing committee have kindly allowed us to make available for download using this link: <u>http://www.iet.com/iswc/2005/ursw/IJCAI_format.pdf</u>.

Further, both technical and position papers must be submitted in PDF format (Adobe's Portable Document Format). Submission to the Workshop is only accepted in electronic format and should be sent to the organizing committee via the workshop email address: ISWC_URSW@iet.com.

Following the general acceptance rules of the ISWC2005 conference, papers that, at the time of submission, are under review for or have already been published in or accepted for publication in a journal or another conference will not be accepted to the URSW workshop.

Presentation and Publication

All papers accepted to the URSW will be presented during the workshop and published in the specific workshop proceedings, which will be available as a separate publication after the Conference.

Authors of accepted technical papers will have 20 minutes to present their work, while authors of accepted position papers will have a 5-minute slot to share their ideas.

In addition, both technical and position papers will be published in the URSW Workshop proceedings, to be available after the ISWC 2005 Conference.

Program Committee

The program committee is as follows (in alphabetic order):

- Paulo C. G. Costa George Mason University, USA.
- Bruce D'Ambrosio Cleverset, Inc., USA.
- Yoshio Fukushige Matshushita Electric Industrial Co., Japan. W3C Fellow.
- Kathryn B. Laskey George Mason University, USA.
- Kenneth J. Laskey MITRE Corporation, USA. Member of the W3C advisory board.
- Anders Madsen Hugin Expert A/S, Denmark.
- Scott Marshall Universiteit van Amsterdam, The Netherlands.
- Bill McDaniel Adobe Systems, Inc., USA.
- Leo Obrst MITRE Corporation, USA.
- Yun Peng University of Maryland, Baltimore County, USA.
- Michael Pool Information Extraction & Transport, Inc., USA.
- Masami Takikawa Information Extraction & Transport, Inc., USA.

Organizing Committee

The organizing committee is as follows (in alphabetic order):

- Paulo C. G. Costa George Mason University
- Kathryn B. Laskey George Mason University
- Kenneth J. Laskey MITRE Corporation
- Michael Pool Information Extraction & Transport, Inc.

We are looking forward to seeing you in Ireland!