



## **Call for Papers: International Workshop on 'Ontology-Driven Software Engineering'**

***ACM Conference on Object-Oriented Programming, Systems, Languages and Applications, October 25-29, Orlando, Florida.***

### **Overview**

This workshop represents the 6th in a series of related OOPSLA workshops focusing on the impact of semantics on the development and re-engineering of software systems. These workshops include three on 'Semantics of Enterprise Integration' (2001-2003), one on 'Legacy Transformation' (2004) and one on 'Semantic-Based Systems Development' (2007).

The main theme of the workshop is Ontology-Driven Software Engineering (ODiSE). ODiSE here refers to the different ways in which ontologies (i.e., formalized conceptual models of real world domains) can contribute to improving Software Engineering – its processes and its artifacts. This use of the term encompasses different and interrelated aspects of Software Engineering as a discipline. For example: (1) ontological principles can be used as the basis of improved development languages; (2) ontologies can help improve the way in which software development projects are organized; and (3) ontological domain models can drive or refine typical development phases, such as requirements, design and implementation.

The motivation for organizing a workshop on ODiSE derives from the increased interest that ontologies have generated in recent years within the software community. The relevance of ontologies in Software Engineering is exemplified, for instance, by the successful OOPSLA 2007 workshop on 'Semantic-Based Systems Development', various OMG and W3C initiatives, and commercial products based on 'semantic technologies'. However, regardless of such developments, these efforts still represent pioneering initiatives in the field of Software Engineering. As the state-of-the-art stands, ODiSE is still in its infancy. The adoption of theory and technologies developed by the Semantic Web community to enhance Software Engineering appears promising, with many areas that are worth investigating and exploring.

The workshop therefore aims to bring together researchers and practitioners with diverse cultural and professional backgrounds in order to discuss and analyze the different perspectives, issues and challenges of Ontology-Driven Software Engineering. Researchers and practitioners are invited to

provide contributions in the form of research/case study (max. 15 pages) or position/idea papers (2-3 pages) related to the workshop theme. Topics include, but are not limited to the following:

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- Novel ODiSE lifecycle models (for example, dual-lifecycles as in domain engineering).
- Project/risk management of ontology-based software systems.
- Ontology-driven guidance of software processes.
- New methodologies, techniques and tools or specializations of existing ones.
- Languages: RDF, OWL, UML and novel ontology-based development/programming languages.
- Integrated modeling (e.g., UML and OWL).
- Ontological modeling paradigms (e.g., endurantism vs. perdurantism) and resolution of their semantic mismatches.
- Persistence, indexing and mapping of semantic models.
- Relationships between ontology, epistemology and system behavior/performance.
- Semantic discovery from legacy sources.
- Model Driven Architecture/Development with ontologies.
- Automated ontology generation and management for software development purposes.
- Traceability of software artifacts with ontologies.

## Important Dates

Key dates are as follows:

- Intent to submit (optional) - anytime.
- Paper submission deadline - August 21<sup>st</sup> 2009.
- Notification to authors - at least one week prior to early bird registration deadline (to be confirmed).
- Submission of revised papers - October 2<sup>nd</sup> 2009.
- Accepted papers uploaded to website - October 9<sup>th</sup> 2009.
- Workshop - either October 25<sup>th</sup> or 26<sup>th</sup> 2009 (to be confirmed).

## Submission

Authors are invited to submit papers by e-mail to Sergio de Cesare ([sergio.decesare@brunel.ac.uk](mailto:sergio.decesare@brunel.ac.uk)), the workshop's primary contact. Submissions can be in the form of completed research, research in progress, case study (maximum 15 pages) or position papers (2-3 pages). Papers can be submitted in RTF, MS Word or Open Office formats. Authors should submit papers according to the LNCS style templates available at <http://www.springer.com/sgw/cda/frontpage/0,11855,5-164-2-72376-0,00.html>. This template is adopted in order to provide consistency across workshop papers.

Revised versions of the best workshop papers will be considered for publication in a special issue of [Applied Ontology](#).

## **Program Structure**

The ODiSE workshop is aimed at promoting discussion among the workshop participants, identifying key research areas of Ontology Driven Software Engineering and fostering future research collaborations in the form of joint research projects and/or papers. The format is therefore interactive in its nature and will broadly follow a structure where:

1. Papers will be grouped into related sets and presented.
2. Participants will be divided into groups to discuss issues and challenges arising from each set of presentations.
3. A general discussion will be used to synthesize key points.

The results of the workshop will be disseminated as follows:

4. A summary of the discussions, key issues and shared research agenda will be published on the workshop website, with a view to publishing workshop proceedings.
5. The organizers will organize a journal special issue of revised versions on the best papers.

## **Information for Attendees**

At least one author of each accepted paper will be expected to register for the conference and attend the workshop. Workshop participation is not restricted only to authors of accepted papers. Any researcher or practitioner interested in ontology-driven software engineering can participate (subject to registration).

There are two mandatory steps for the registration of workshop participants:

1. Contact the organizers of the workshop (in order to ensure that the participant limit has not been exceeded).
2. Register via the [OOPSLA 2009 Web site](#).

## **Organisers**

The organizing committee is as follows:

- Sergio de Cesare, (Brunel University, U.K.).
- Guido L. Geerts, (University of Delaware, U.S.A.).
- Grant Holland, (Sun Microsystems, Inc., U.S.A.).
- Mark Lycett, (Brunel University, U.K.).
- Chris Partridge, (BORO Solutions Ltd., U.K.).

## **Program Committee**

The program committee is as follows:

- David Bell (Brunel University, U.K.).

- Tony Clarke (Thames Valley University, U.K.).
- Marija Cubric (University of Hertfordshire, U.K.).
- Thierry Declerck (DFKI GmbH, Language Technology Lab, Germany).
- Martin Hepp (University of Innsbruck, Austria).
- Laurence Tratt (Bournemouth University, U.K.).
- Jakob Henriksson (Intelligent Automation, U.S.A.).
- Dragan Gasevic (Athabasca University, Canada).
- Nicola Guarino (CNR, Italy).
- Michael Lambert (QinetiQ, U.K.).
- Dirk Siebert (University of Leipzig, Germany).
- Karoly Tilly (Oracle, Hungary).
- Karsten Tolle (Frankfurt University, Germany).
- Roberto Zicari (Frankfurt University, Germany).