

**ISDA 2011 SPECIAL SESSION ON
MULTIAGENT SYSTEMS: CONSCIOUSNESS AND AGENT ORIENTED SOFTWARE ENGINEERING**

CALL FOR PAPERS

Scope

Agents represent a powerful abstraction tool in software development; particularly multiagent systems constitute the focus in Software Engineering in the latest years. There is a general agreement in the fact that *Agency* and *Consciousness* are tightly related, although there is not a generally accepted scientific definition of any of them.

Different research communities and disciplines have several definitions of these terms. In the particular case of consciousness, the recent approach of the CHIST-ERA European coordination and co-operation activity (<http://www.chistera.eu/node/1>), introduces that a conscious system: is aware of past and present actions and decisions and is capable of critical analysis of same; possesses rich internal dynamics and through a variety of sensory modalities, is aware of the environment in which it resides; has a perception of its internal states – for example its internal health, energy, performance; is capable of constructing internal representations of projected future scenarios and their dynamics, is capable of autonomously and selectively directing its attention and computational processing power to address a current important situation, external or internal to itself, etc.

Many of these capabilities are also present and must be addressed when constructing multiagent systems. Therefore, this intends to provide the opportunity to share expertise and knowledge to researchers and developers working on the Agent oriented field. It will serve as forum for discussion about agent-based processes techniques, methods, and tools and their use in the construction of new distributed and complex systems based on the idea of consciousness.

Moreover, the session tries to constitute a showroom of how these technologies and concepts can be applied in real world to provide support to systems that have a real application in industrial or business domains.

Topics

Topics of the special session include (but are not limited to):

- Applications of Multiagent Systems in real world
- Agent Oriented Development
- Autonomous Systems
- Agent Models and Architectures
- Agent Communication Languages
- Processes, Techniques and Methods for Agent Orientation
- Requirements analysis and specification for Agent Orientation
- New approaches for agent oriented software engineering
- Agent development tools
- Service-Oriented Computing and Agents

Paper Submission

Please follow the instructions given for the main conference in the corresponding section.

Website

<http://www.uco.es/isda2011/>

Session Chairs and Contacts

Prof. Juan Carlos González Moreno (jcmoreno@uvigo.es)

Prof. Francisco Javier Rodríguez Martínez (franjrm@uvigo.es)

Prof. Alma María Gómez Rodríguez (alma@uvigo.es)

Departamento de Informática - E.S. Enxeñería Informática (Universidade de Vigo)

Campus As Lagoas, s/n. 32004 OURENSE. Spain