Call for Papers
International Workshop on
Agent-Oriented Software Development Methodology
(AOSDM ’2005)
(URL:  http://cms.brookes.ac.uk/computing/AOSDM  )

At the 17th International Conference on
Software Engineering and Knowledge Engineering
(SEKE ’05)
(URL:  http://www.ksi.edu/seke/seke05.html  )

July 14 to 16, 2005, Taipei

Software engineering has been confronted with many new challenges, arising from new paradigms of computing such as Grid computing, service-oriented computing, autonomic/adaptive computing, dynamic configuration and integration of autonomous components, distributed and mobile computing, applications on Internet and Web platform, etc. On the other side, agent technology has been perceived as a viable solution for large complex applications in dynamic environments. Recent years have seen a rapid growth of research and development in agent-oriented methodology. However, current agent-based systems are mostly developed in ad hoc contexts without a sound foundation of methodologies and the support of effective language and tools. This has hampered the wide adoption of agent technology in large complex applications and more broadly the IT industry.

The workshop on Agent-Oriented Software Development Methodology (AOSDM ’2005) aims to provide an active interdisciplinary forum for both researchers and practitioners in agent-oriented methodologies and application development to assess where we are so far and envision what will be in the near future.

Theme and topics

The theme of the workshop is the development of agent-oriented software methodology - moving towards a new software engineering paradigm.

The indicative topics of the workshop will include, but not limited to, the following.

- Agent-oriented software development methodology (AOSDM): Concepts and analysis
  - Conceptual models of agent-based systems
  - Basic concepts and their roles in developing agent-based systems and their interrelationships
  - Meta-models of agent-based systems
  - Meta-models of agent-orientation versus meta-models of object-orientation
  - System analysis and modelling of agent-based systems
  - Requirements analysis and specification, of agent-based systems
  - Domain analysis of agent-based systems

- AOSDM: design, construction and processes
  - Design of multi-agent systems at architectural and detailed levels
  - Development of ontology for agent-based systems
  - Integration methods that supports the collaboration, cooperation and coordination among agents
  - Development of agent communication languages and protocols
- Programming and implementation for agent-based systems
- Test, validation and verification for agent-based systems
- Process models the link various activities for agent-based systems
- Maintenance and evolution of multi-agent systems

- **AOSDM: Languages and Tools**
  - Modelling languages and tools of multi-agent systems
  - Agent UML
  - Programming languages, facilities and environments for implementing multi-agent systems
  - Specification languages and reasoning of multi-agent systems
  - Agent-communication languages
  - Ontology description and definition languages
  - Languages for the descriptions of collaboration, cooperation and coordination between agents

- **AOSDM for new paradigms of computing**
  - service-oriented computing by agent technology
  - agent based web services, semantic web
  - agent oriented Grid middleware
  - Autonomous/adaptive computing based on multi-agent systems

- **AOSDM: Applications and experiences**
  - Enterprise information systems,
  - E-commerce,
  - E-government,
  - E-learning,
  - E-sciences,
  - Games and online entertainments,
  - Industrial process control and real-time systems, etc.

**Submission of papers**

Manuscript for submission should be written in English and have no more than 5000 words. Please see SEKE’05 website http://www.ksi.edu/seke/seke05.html for instructions of the format of the papers. Electronic version of the papers in PDF or postscript files should be sent to the workshop chairs by email before the submission deadline on 20 Feb. 2005.

**Important dates**

Deadline for submission: **20 February 2005**
Notification of acceptance: **1 April 2005**
Camera-ready copy of final version: **1 May 2005**

**Evaluation of papers**

Each paper will be reviewed by 3 members of the program committee according to the paper’s technical relevance and quality. The final decision lies in the workshop chairs with consideration of the comments and recommendations made by the program committee members.

**Publication of the proceedings**

Accepted papers will be published in the SEKE’05 conference proceedings. For each accepted paper, at least one of the co-authors is required to register to the conference and present the paper at the workshop. Immediately after the workshop, authors of accepted papers will also be invited to submit a thoroughly revised and expanded version of the paper for consideration of publication in a journal special issue on the same theme of the workshop.
Workshop Chairs

Dr. Hong Zhu,
Department of Computing, Oxford Brookes University,
Wheatley Campus, Oxford OX33 1HX, UK,
Tel: ++44 1865 484580, Fax ++44 1865 484545
Email: hzhu@brookes.ac.uk,

Prof. Huaglory Tianfield
School of Computing and Mathematical Sciences, Glasgow Caledonian University
70 Cowcaddens Road, Glasgow, G4 0BA, UK,
Tel: +44 141 331 8025, Fax: +44 141 331 3608
E-mail: h.tianfield@gcal.ac.uk

Programme Committee

- Dr. Michael Berger, Siemens Corporate Technology, Germany
- Prof. Sheng-Uei Guan, National University of Singapore, Singapore
- Prof. Xudong He, Florida International University, USA
- Prof. Tom Holvoet, Katholieke Universiteit Leuven, Belgium
- Prof. Zhi Jin, Academy of Mathematics and System Science, China
- Prof. Carlos José Pereira de Lucena, Pontificia Catholic University of Rio de Janeiro, Brazil
- Prof. Jiming Liu, Hong Kong Baptist University, Hong Kong
- Dr. Gregory O’Hare, University College Dublin (UCD), Ireland
- Prof. Manish Parashar, Rutgers University, USA
- Prof. David Riaño, Universitat Rovira i Virgili, Spain
- Prof. Rainer Unland, University of Essen, Germany
- Prof. Eric Yu, University of Toronto, Canada
- Prof. Chengqi Zhang, University of Technology, Sydney, Australia