CALL FOR PAPERS

--- Extended deadline: 20 March 2005! ---

The Workshop on

SERVICE-ORIENTED COMPUTING AND AGENT-BASED ENGINEERING (SOCABE-2005)


to be held at

The Fourth International Joint Conference on
Autonomous Agents & Multi-Agent Systems
AAMAS-2005

http://www.aamas2005.nl/

Utrecht, The Netherlands

25 - 29 July 2005 (SOCABE date TBC)

-------------------

AIMS AND SCOPE

Service-Oriented Computing (SOC) is a newly emerging paradigm for distributed computing and e-business processing that utilizes services as fundamental elements to enable building agile networks of collaborating business applications distributed within and across organizational boundaries. Services are self-contained, platform-independent computational elements that can be described, published, discovered, orchestrated and deployed for the purpose of developing distributed applications across networks, including the Internet. Service-based approaches include Web services, Semantic Web services, and Grid services.

While a service need not fulfill all characteristics of a strong definition of agency, the SOC approach for building complex software systems bears many similarities to the development of agent-based systems. In particular, large systems are assembled from distributed heterogeneous software components providing specialized services and communicating using agreed-upon protocols. Similarly to certain multi-agent engineering paradigms, the design process of such systems focuses on the declarative characterization of the agents’ capabilities and on a message-based paradigm of interoperation. Also similarly to multi-agent systems, management of the service provision processes is dynamic and distributed, and takes into account the requirements both at the individual services and system levels of the composed application. It also needs to be adaptive in response to the changing requirements, services and exceptions in the dynamic Web and Grid environments.

The area of Service Oriented Computing offers much of real interest to the Multi Agent System community, including similarities in system architectures and provision processes, powerful tools, and the focus on issues such as quality of service, security and reliability. Similarly, techniques developed in the MAS research community promise to have a strong impact on this fast growing technology.

It continues the theme of the former WSABE workshops held at AAMAS'03 (http://agentus.com/WSABE2003) and AAMAS'04 (http://agentus.com/WSABE2004), with an expanded theme reflecting the broader scope encompassed by Service Oriented Computing.

TOPICS

The purpose of this workshop is to discuss the recent and significant developments in the general area of Service Oriented Computing and Software Agents and to promote cross-fertilization of techniques. We seek original and high quality submissions that apply Multi Agent research to Web Service frameworks, and vice versa, in innovative and interesting ways. Possible topics include, but are not limited to:
Architectures and infrastructure for distributed agent- or service-oriented frameworks;
* Agent-based modeling and design techniques in service-oriented system development;
* Multi-agent techniques to describing, organizing, and discovering services;
* Process modeling and planning for service/agent composition, orchestration and coordination;
* Security support for agents and services, and agent-based approaches to service security;
* Intelligent matchmaking, service brokering and service level agreement negotiation;
* Services and the Semantic Web, including initiatives such as OWL-S;
* Deployment, packaging, and distribution of services and software agents;
* Agent-based quality of service management;
* Intelligent services and service agents;
* Agent and service interoperability and integration
* Functional and non-functional aspects of agents and services;
* Agent-based service business models and applications (e.g. in e-Business, e-Science, Enterprise, Telecom etc.)

SUBMISSION GUIDELINES

Two types of submissions are available: regular submissions of length 3000-4000 words (approx. 8-12 printed pages) and position papers of length 1200-2000 words (approx. 4-6 printed pages). Position papers (and some regular papers) may be presented as part of themed discussion panels; preference may be given to position papers that take strong or challenging positions on important emergent topics.

Full papers must not exceed 15 pages and follow the author instructions of Springer-Verlag that can be found at http://www.springer.de/comp/lncs/authors.html. All papers should be in Adobe portable document format (PDF) or PostScript format. Authors should submit a full paper via electronic submission to imueller@it.swin.edu.au.

Submissions will be peer-reviewed by multiple reviewers. Selection criteria will include: relevance, significance, impact, originality, technical soundness, quality of presentation. Some preference may also be given to papers which address emergent trends or important common themes, or which enhance balance of workshop topics.

Since this is associated with the AAMAS conference, accepted papers must be of real relevance to the multi-agent research community.

Accepted papers will be made available in electronic form prior to the workshop and a printed collection will be available at the workshop. The former WSABE2003 workshop formed the basis of a volume in Kluwer's MASA Series (http://www.wkap.nl/prod/s/MASA); the proceedings of SOCABE2005 may also be used as the basis of a published volume, subject to appropriate quality.

IMPORTANT DATES

Submission due: March 20, 2005 (extended)
Notification sent: April 18, 2005
Final papers due: May 20, 2005
Workshop: July 25-26, 2005 (TBC)

ORGANIZERS COMMITTEE
* Ryszard Kowalczyk (Swinburne University of Technology, Australia)
* Zakaria Maamar (Zayed University, UAE)
* Lawrence Cavedon (Stanford University, USA)
* David Martin (SRI International, USA)
* Ingo Mueller (Swinburne University of Technology, Australia)

PROGRAM COMMITTEE
* Stanislaw Ambroszkiewicz (Polish Academy of Sciences, Poland)