

**Third International Conference on
Autonomous Agents and Multi-Agent
Systems (AAMAS)**

**6th International Workshop on
Agent-Oriented Information
Systems (AOIS)**

New York, USA

20th July 2004

Paolo Giorgini and Michael Winikoff (editors)

<http://www.aois.org>

Preface

Information systems have become the backbone of all kinds of organizations today. In almost every sector – manufacturing, education, health care, government, and businesses large and small– information systems are relied upon for everyday work, communication, information gathering, and decision-making. Yet the inflexibilities in current technologies and methods have also resulted in poor performance, incompatibilities, and obstacles to change. As many organizations are reinventing themselves to meet the challenges of global competition and e-commerce, there is increasing pressure to develop and deploy new technologies that are flexible, robust, and responsive to rapid and unexpected change.

Agent concepts hold great promise for responding to the new realities of information systems. They offer higher level abstractions and mechanisms which address issues such as knowledge representation and reasoning, communication, coordination, cooperation among heterogeneous and autonomous parties, perception, commitments, goals, beliefs, intentions, etc. all of which need conceptual modelling. On the one hand, the concrete implementation of these concepts can lead to advanced functionalities, e.g., in inference-based query answering, transaction control, adaptive workflows, brokering and integration of disparate information sources, and automated communication processes. On the other hand, their rich representational capabilities allow more faithful and flexible treatments of complex organizational processes, leading to more effective requirements analysis, and architectural/detailed design. The workshop will focus on how agent concepts and techniques will contribute to meeting information systems needs today and tomorrow.

Workshop Format

To foster greater communication and interaction between the Information Systems and Agents communities, we are organizing the workshop as a bi-conference event. It is intended to be a single “logical” event with two “physical” venues. It is hoped that this arrangement will encourage greater participation from, and more exchange between, both communities. The first part of the workshop was held on the 8th of June at **CAISE*04** - the 16th International Conference on Advanced Information Systems Engineering¹.

These proceedings are for the second part of the workshop, in New York on the 20th of July, as part of the third international conference on Autonomous Agents and Multi-Agent Systems (AAMAS-2004).

For the AOIS-2004 workshop at AAMAS 24 paper submissions were received. These were peer-reviewed, primarily by members of the programme and steering committees, and 14 papers were accepted (for an acceptance rate of 58%). Of the 14 papers, half were accepted as “short papers” – these were papers that were considered by the reviewers to be weaker, but nonetheless had content that was worthy of publication. These “short papers” were given the same number of pages in the proceedings, but were allocated a shorter presentation time at the workshop.

¹ <http://www.cs.rtu.lv/caise2004/>

We would like to gratefully acknowledge all the contributions to the workshop: those by the authors, the participants, and the reviewers. We believe that these accepted papers reflect the field's state of the art very well. Furthermore, we anticipate that they constitute an excellent basis for an in-depth and fruitful exchange of thoughts and ideas on the various issues of agent-oriented information systems.

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(Workshop co-chairs)

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