



CALL FOR PAPERS

The Sixth International Joint Conference on AUTONOMOUS AGENTS AND MULTI-AGENT SYSTEMS (AAMAS-07)

May 14-18, 2007

Honolulu, Hawaii

<http://www.aamas-conference.org/aamas2007>

AAMAS is the premier scientific conference for research in autonomous agents and multiagent systems. The AAMAS conference series was initiated in 2002 as a merger of three highly respected individual conferences: the International Conference on Autonomous Agents, the International Workshop on Agent Theories, Architectures, and Languages, and the International Conference on Multi-Agent Systems. The aim of the joint conference is to provide a single, high-profile, internationally respected archival forum for scientific research in the theory and practice of autonomous agents and multiagent systems. (See <http://www.aamas-conference.org/> for more information.) AAMAS-07 is the sixth conference in the AAMAS series, following enormously successful previous conferences at Bologna, Italy (2002), Melbourne, Australia (2003), New York, USA (2004), Utrecht, The Netherlands (2005), and Hakodate, Japan (2006). AAMAS-07 will be held at the Hawaii Convention Center, Honolulu, Hawaii, USA.

AAMAS-07 encourages the submission of theoretical, experimental, methodological, and application papers. Theory papers should make clear the significance and relevance of their results to the AAMAS community. Similarly, applied papers should make clear both their scientific and technical contributions, and are expected to

demonstrate a thorough evaluation of their strengths and weaknesses in practice. Papers that address isolated agent capabilities (for example, planning or learning) are discouraged unless they are placed in the overall context of autonomous agent architectures or multiagent system organization and performance. A thorough evaluation of all hypotheses is considered an essential component of any submission. Authors should also make clear the implications of any theoretical and empirical results, as well as how their work relates to the state of the art in autonomous agents and multiagent systems as evidenced in, for example, previous AAMAS conferences. All submissions will be peer reviewed rigorously and evaluated on the basis of originality, soundness, significance, presentation, understanding of the state of the art, and overall quality of their technical contribution.

Important Dates:

Oct 20, 2006: electronic abstract submission deadline

Oct 23, 2006: electronic paper submission deadline

Dec 19, 2006: notification

In addition to conventional conference papers, AAMAS-07 will also include a demonstration track for work focusing on implemented systems, software, or robot prototypes; and an industry track for descriptions of industrial applications of agents. The submission processes for the demonstration and industry tracks will be separate from the main paper submission process.



Topics of Interest

Agents (Does the research apply to an individual agent?)

- Architectures: reactive and deliberative
- Autonomous or humanoid robots
- Autonomy
- Cognitive models, including emotions and philosophies
- Embodied and believable agents
- Formal models of agency
- Learning, evolution, and adaptation
- Perception and action

Multiagent Systems (Does the research apply to more than one agent?)

- Argumentation, negotiation, and conflict handling
- Brokering and matchmaking
- Communication: languages, semantics, pragmatics, protocols, and conversations
- Cooperative distributed problem solving
 - Coordination, cooperation, and teamwork
 - Task and resource allocation
 - Distributed constraint processing
- Emergent behavior
- Mechanism design, auctions, and game theory
- Modeling other agents and self
- Multiagent planning
- Multiagent learning
- Societal aspects
 - Conventions, commitments, norms, obligations, and social laws
 - Social and organizational structures
 - Trust and reputation
- Social robots and robot teams



Tools and Techniques (How do we go about creating agents and MAS?)

- Agent-oriented software engineering, including implementation languages and frameworks
- Computational complexity
- Mobile agents
- Ontologies
- Performance, scalability, robustness, and dependability
- Verification and validation (e.g., model checking)

Applications and Environments (Where do we use agents and MAS?)

- Artificial social systems
- Autonomic computing
- Case studies and reports on deployments
- Computational infrastructures (e.g., Grid and P2P)
- Electronic markets and institutions
- Pervasive computing
- Privacy, safety, and security
- Simulation systems
- Web services and service-oriented computing

Systemic Matters

- Ethical and legal issues raised by agents and multiagent systems
- Standardization efforts in industry and commerce

Venue

The state-of-the-art Hawaii Convention Center has over 200,000 sq ft of meeting and exhibit space. It combines modern architecture, advanced technology, and artwork with a local flair. It has won several design awards and is located in Honolulu within walking distance of hotels, many shops and restaurants, and Waikiki beach. The Ala Moana Hotel is the headquarters hotel. It is situated just across the street from the convention center, and has over 1000 rooms.

Organizing Committee

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