



KES-AMSTA-2010

4th International KES Symposium on Agents and Multi-agent Systems – Technologies and Applications

Gdynia, Poland
23 – 25 June 2010

<http://amsta-10.kesinternational.org>



Welcome! KES-AMSTA-2010 is an international scientific symposium for research in the field of agent and multi-agent systems. The aim of the symposium is to provide an internationally respected forum for scientific research in the technologies and applications of agent and multi-agent systems. Agents and multi-agent systems are related to a modern software paradigm which has long been recognized as a promising technology for constructing autonomous, complex and intelligent systems. This symposium will provide an excellent opportunity for researchers to discuss modern approaches and techniques for agent and multi-agent systems and their applications. KES-AMSTA-2010 is organized by [KES International](#) and [Gdynia Maritime University](#) in Poland. The university in which it will take place is located in the port city Gdynia known for its picturesque seashore with marinas, promenades and yacht clubs. However there is more to enjoy nearby, as Gdynia is a part of the Tricity, which also includes a thousand-year-old Gdańsk, Poland's cultural gem, and Sopot, a health-resort with its beautiful Landscape Park and splendid sandy beaches. The many attractions of the area are easily reached via *Gdansk Lech Walesa International Airport*, and all three cities are linked by frequent and comfortable commuter lines. Gdynia Maritime University is a specialized technical university and the largest Polish and European Centre for higher maritime education. The University is actively involved in numerous national and European research projects. The scope of KES-AMSTA-2010 includes the following topics:

Agent Systems: Formal models of agency. Agent architectures. BDI architecture. Learning, evolution, and adaptation. Perception and action. Communication: languages, semantics, pragmatics, protocols, and conversations. Knowledge representation Computational complexity. Autonomous or humanoid robots. Social robots and robot teams. Autonomy aspect. Cognitive models, including emotions and philosophies. Embodied and believable agents. Emergent behavior. Ontologies.

Multi-agent Systems: Cooperative distributed problem solving. Task and resource allocation. Mechanism design, auctions, and game theory. Modeling other agents and self. Multi-agent planning. Negotiation protocols. Multi-agent learning. Conflict resolution. Trust and reputation management. Privacy, safety and security. Scalability, robustness and dependability. Social and organizational structures. Verification and validation. Novel computing paradigms (autonomic, grid, P2P, ubiquitous computing). Brokering and matchmaking. Agent-oriented software engineering, including implementation languages and frameworks. Mobile agents. Performance, scalability, robustness, and dependability. Verification and validation. E-business agents. Pervasive computing. Privacy, safety, and security.

Tools and Applications: Simulation systems. Web services and service-oriented computing. Artificial social systems. Autonomic computing. Case studies and reports on deployments. Computational infrastructures. Information retrieval. Web services and semantic web. E-learning systems. E-institutions. E-commerce.

CALL FOR PAPERS

Papers are invited from prospective authors with interests on the indicated symposium topics and related areas of application. All contributions should be original and not published elsewhere or intended to be published during the review period. Contributions from more applied related fields in industry and commerce are very welcome. All accepted papers must be presented by one of the authors who must register for the conference and pay the fee. To ensure high quality, all papers will be thoroughly reviewed by the KES-AMSTA-10 International Programme Committee. The symposium proceedings are planned to be published by [Springer-Verlag](#) in [LNCS/LNAI](#) series (subject to confirmation). Submitted papers should be prepared in LNCS/LNAI style and should not exceed 10 pages. Extended versions of selected papers will be considered for publication in special issues to be included in several journals indexed by ISI/SCI and [Int. Journal of Intelligent Information and Database Systems](#) (indexed by EI, SCOPUS, DBLP). Ph.D. students are invited to submit papers to Doctoral Track. Special sessions are also welcome.

IMPORTANT DATES

Submission of papers: 30 Nov. 2009
Notification of acceptance: 31 Jan. 2010
Final papers to be received: 28 Feb. 2010
Authors / Early registration: 5 Mar. 2010
Symposium: 23 Jun. – 25 Jun. 2010

ORGANIZATION

Honorary Chair: R. Cwilewicz, Rector, Gdynia Maritime University, Poland
General Co-Chairs: P. Jędrzejowicz, Gdynia Maritime University, Poland and N.T. Nguyen, Wrocław University of Technology, Poland
Executive Chair: R.J. Howlett, University of Brighton, UK
Program Co-Chairs: D. Barbuca, Gdynia Maritime University, Poland,
R. Katarzyniak, Wrocław University of Technology, Poland and A. Sharpanskykh, VU University Amsterdam, The Netherlands
Local Organizing Chair: I. Czarnowski, Gdynia Maritime University, Poland
Publicity Co-Chairs: E. Ratajczak-Ropel, Gdynia Maritime University, Poland and I. Wierzbowska, Gdynia Maritime University, Poland
Invited Session Chair: L.C. Jain, University of South Australia, Australia
Doctoral Track Chair: D. Król, Wrocław University of Technology, Poland

KES-AMSTA-2010 is part of the AMSTA Series chaired by N.T. Nguyen, which is a sub-series of KES International Conference Series, Chairs L.C. Jain and R.J. Howlett

Web Site: <http://www.amsta-10.kesinternational.org>

Email Enquiries: amsta-10@kesinternational.org

