

Doctoral Track

Ph.D students are invited to submit papers to the Doctoral Track. Proposals for work- shops and special sessions are also welcome.

Call for papers

If you are a PhD student in agents and multi-agent systems, ...

- interested in feedback on your research plans;
- wish to improve your communication and presentation skills;
- eager to widen your horizon of professional interests;
- looking for some fun moments during work,

you should submit to Doctoral Track @ KES-AMSTA 2012. It offers you ...

- means to publish your paper in the well known LNCS/LNAI series;
- a dedicated feedback from prominent professors, experienced researchers and experts in your field of research;
- an international forum to present your research in a poster session;
- a dedicated LinkedIn group as a network building platform;
- a friendly atmosphere to meet other PhD students and researchers.

All contributions should be high quality, original and not published elsewhere or submitted for publication during the review period. To ensure high quality, all papers will be thoroughly reviewed by the KES-AMSTA 2012 International Programme Committee. Submitted papers should be prepared in Springer LNCS/LNAI style and should not exceed 10 pages. Please see the web site for details of the required paper format.

Different from other KES-AMSTA 2012 papers, Doctoral Track paper addresses specifically the Ph.D. student's thesis! The paper should:

- have a PhD student as a single author, or as first author with his/her advisor(s) as additional author(s);
- clearly formulate the research question;
- identify significant problems in the field of research;
- outline the current knowledge of the problem domain, as well as the state-of-the-art in the research domain;
- clearly present preliminary ideas, the proposed approach and the results achieved so far;
- sketch the applied research methodology;
- point out the contributions of the PhD student to the problem solution;
- state in what aspects the suggested solution is different, novel or better when compared to existing approaches to the problem.

Scope of the Doctoral Track 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 behaviour. Ontologies.

Multi-agent Systems

Cooperative distributed problem solving. Task and resource allocation. Mechanism design, auctions, and game theory. Modelling 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.

*****Feature Topics*****

Intelligent technologies and applications in the area of e-health, social networking, self-organizing systems and trust management.