Fifth German Conference on Multi-Agent System Technologies

September 24-26, 2007 University of Leipzig, Leipzig, Germany, EU <u>http://winf.in.tu-clausthal.de/mates07/</u>

Co-located with SABRE 2007

IMPORTANT DATES

Submission of papers: Notification of authors: Camera-ready papers: March 12, 2007 May 28, 2007 June 15, 2007

AIMS & SCOPE

The German Conference on Multi-Agent system Technologies (MATES) provides an interdisciplinary forum for researchers, users and developers to present and discuss latest advances in research work as well as prototyped or fielded systems of intelligent agents and multi-agent systems. The conference aims to promote theory and application and covers the whole range of agent- and multi-agent technologies. For the fifth time, the German special interest group on Distributed Artificial Intelligence organizes this international conference in cooperation with the steering committee of MATES in order to promote theory and application of agents and multi-agent systems. Building on the four successful predecessors in 2003, 2004, 2005, and 2006, MATES 2007 takes place from September 24 to 26, 2007 in Leipzig in the context of SABRE 2007.

SABRE (Software Agents and Services for Business, Research, and E-Sciences) is the umbrella for a set of conferences – including CEEMAS (International Central and Eastern European Conference on Multi-Agent Systems); GSEM (International Conference on Grid Service Engineering and Management); MAGS*BIOMED 2007 (International Workshop on Multi-Agent and Grid Systems for Medicine, Computational Biology, and Bioinformatics); POSE (Process-Oriented Software Engineering); and SOAS (International Conference on Self-Organization and Adaptation of Multi-Agent and Grid Systems) – providing ample coverage of agent technologies; autonomic computing; self-*; and process modelling, as well as the intersections of these research areas.

EXHIBITION & COURSES

As integral part of the technical program, an exhibition at the conference venue will feature showcases of a variety of tools for the development, and prototypes of a broad range of practical applications of agent and multiagent technology. Introductory and advanced courses offered by experts in the field will focus particularly on practical aspects of agent technology, including the engineering and effective use of software agents and multi-agent systems in industrial applications in different domains. Those wishing to present a course should specify the topic, contents, and length of their course.

AWARDS

MATES issues a "MATES 2007 Best Paper Award".

TOPICS OF INTEREST

We solicit papers that report on recent advances in the domain of intelligent agents and multi-agent systems in general, but specifically encourage elaborated vision and challenge papers that discuss mid-term and long-term directions for these domains. Topics of interest for MATES 2007 include, but are not limited to:

- Adaptive agents and multi-agent learning
- Advanced theories of collaboration: Modelling and formation of teams, coalitions, groups, and organizations
- Agents and autonomic computing
- Agent and multi-agent architectures
- Agents and peer-to-peer computing
- Agents and pervasive computing
- Agent-based service discovery, matchmaking, brokering, and composition
- Agent communication languages
- Agents for e-business and egovernment
- Agent technologies in the context of service-oriented computing and architectures
- Agent to non-agent interoperability
- Agents in novel applications, e.g. bioinformatics and the Semantic Web
- Application of agent-technologies in industrial practice
- Artificial social systems: Conventions, norms, institutions; trust and reputation
- Autonomous robots and robot teams
- Commitment, delegation, responsibility, and obligations in artificial and hybrid societies

- Complex systems and their management
- Coordination, negotiation, argumentation, and conflict resolution
- Deployed agent-based business applications
- Hybrid human and agent societies
- User modelling and interface agents
- Embodied conversational actors and believable agents
- Mobile agents
- Model-driven design of multi-agent systems
- Multi-agent planning and scheduling
- Multi-agent platforms and tools
- Multi-agent (social) simulation and (cognitive) modelling with agents
- Practical aspects of programming agent systems: Robustness, fault tolerance, scalability and performance measurement
- Roles and structures, adaptive learning and cognition in organizational models
- Semantics of the dynamics of organizational models
- Standards for agents and multi-agent systems

DOCTORAL MENTORING PROGRAM

MATES 2007 will include a doctoral mentoring program, aimed at PhD students at advanced stages of their research. This program will provide an opportunity for students to interact closely with established researchers in their fields, to receive feedback on their work and to get advice on managing their careers.

PROCEEDINGS

The proceedings of MATES 2007 will appear in the Springer-Verlag series, "Lecture Notes in Artificial Intelligence" (LNAI).

SUBMISSION DETAILS

The **only** acceptable document format is **PDF**. All papers must be written in English.

Submissions should be made through the Easychair site of MATES 2007, where you will need to register as an author: <u>http://www.easychair.org/MATES2007/</u>

For preparation of papers to be submitted please follow the instructions for authors available at the Springer LNCS Web page: <u>http://www.springer.de/comp/lncs/authors.html</u>

The length of each paper, including figures and references, should not exceed *12 pages*. Papers that have been accepted or are under review by other conferences or journals are not eligible for submission. However, we encourage interdisciplinary contributions submitted or presented in part to a forum outside of agent technology.

Submissions not conforming to the above requirements may be rejected without review.

CONFERENCE OFFICIALS

General Co-Chairs:

Matthias Klusch (DFKI, Germany) Mike Georgeff (Monash U, Australia)

Doctoral Consortium Chair:

Franziska Klügl (U Würzburg, Germany)

Steering Committee:

Hans-Dieter Burkhard (HU Berlin, Germany) Stefan Kirn (U Hohenheim, Germany) Matthias Klusch (DFKI, Germany)

Program Co-Chairs:

Jörg P. Müller (TU Clausthal, Germany) Paolo Petta (MUW, Vienna, Austria)

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