

Preface

These are the proceedings of the German conference on Multiagent System Technologies (MATES 2003), which was the first conference organized by the German special interest group on Distributed Artificial Intelligence to promote the theory and application of agents and multiagent systems. Its goals were to cover the whole range from the theory to applications of agent and multiagent technology and reflect the national and international state of the art. The conference provided an excellent interdisciplinary forum for both researchers and members of business and industry to present and discuss the latest advances in theoretical work on and prototyped or fielded systems of intelligent agents.

Building on the sequence of agent-related events in Germany in the past, such as VDI 1998 (Chemnitz), VertIS 2001 (Bamberg), and KI 2002 (Aachen), MATES 2003 was exclusively devoted to agents and multiagent systems, and the cross-fertilization between agent theory and application. In addition, it built on the success of the past international workshop on “Agent Technology and Software Engineering (AgeS 2002)”, and the international symposium on “Multiagent Systems, Large Complex Systems, and E-Businesses” (MALCEB 2002). MATES 2003 was co-located with the fourth international Net.ObjectDays conference in an exciting event held in Erfurt during September 22–24.

The MATES 2003 conference featured a sequence of regular and invited talks of excellence given by leading experts in the field. Among these were two keynotes, an invited talk and 18 paper presentations selected from 49 submissions. The conference talks covered a broad area of topics of interest, such as the semantic web and issues of interoperability, agent-based engineering, systems and applications, models and architectures, and issues of collaboration and negotiation. The result of the review of all contributions by an international program committee is included in these proceedings, rich in interesting, inspiring, and advanced work on research and development of multiagent systems. During the conference, tutorials were held on adaptive agents, agents and the semantic web, and interaction protocol design in multiagent systems.

The MATES 2003 conference was organized in cooperation with the Distributed Artificial Intelligence chapter of the German Computing Society (GI). In addition, we are very much indebted to our sponsors, whose financial support helped to make this event possible and contributed to its success. The sponsors of MATES 2003 were:

NET.OBJECT DAYS
KTWEB

We are also grateful to the authors and invited speakers for contributing to this conference, as well as to all the members of the program committee and the external reviewers for their very careful, critical, and thoughtful reviews of all submissions. Finally, our thanks go to each of the brave members of the local

organization team of Net.ObjectDays in Erfurt for their hard work in providing MATES 2003 with a modern, comfortable location, and an exclusive social program.

We hope you enjoyed MATES 2003, and will help us to make MATES a successful conference series with many events to come!

July 2003

Michael Schillo, Matthias Klusch,
Jörg Müller, Huaglory Tianfield

Program Co-chairs

Matthias Klusch	DFKI, Germany
Jörg Müller	Siemens AG, Germany
Michael Schillo	DFKI, Germany
Huaglory Tianfield	Glasgow Caledonian University, UK

Local Chair

Rainer Unland	University of Duisburg-Essen, Germany
---------------	---------------------------------------

Program Committee

Elisabeth Andre	University of Augsburg, Germany
Bernhard Bauer	University of Augsburg, Germany
Wolfgang Benn	Technical University, Chemnitz, Germany
Michael Berger	Siemens AG, Germany
Hans-Dieter Burkhard	Humboldt University, Berlin, Germany
Wilfried Brauer	Technical University, München, Germany
Cristiano Castelfranchi	NRC Rome, Italy
Paolo Ciancarini	University of Bologna, Italy
Rosaria Conte	NRC Rome, Italy
Hans Czap	University of Trier, Germany
Kerstin Dautenhahn	University of Hertfordshire, UK
Klaus Fischer	DFKI Saarbrücken, Germany
Norbert Fuhr	University of Dortmund, Germany
Ulrich Furbach	University of Koblenz-Landau, Germany
Petra Funk	Whitestein Technologies, Switzerland
Otthein Herzog	University of Bremen, Germany
Michael Huhns	University of South Carolina, USA
Heinrich Hussmann	Technical University, Dresden, Germany
Matthias Jarke	RWTH Aachen, Germany
Liz Kendall	Monash University, Australia
Stefan Kirn	Technical University, Ilmenau, Germany
Franziska Klügl	University of Würzburg, Germany
Ryszard Kowalczyk	Swinburne University of Technology, Australia
Gerhard Kraetzschmar	University of Ulm, Germany
Karl Kurbel	University of Frankfurt/Oder, Germany
Gerhard Lakemeyer	RWTH Aachen, Germany
Winfried Lamersdorf	University of Hamburg, Germany
Jürgen Lind	Iteratec GmbH, Germany
Gabriele Lindemann	Humboldt University, Berlin, Germany
Jiming Liu	Hong-Kong Baptist University, China
Kecheng Liu	University of Reading, UK

VIII Organization

Jürgen Müller	BeeBetter GmbH, Germany
James Odell	James Odell Associates, USA
Lin Padgham	RMIT, Australia
Mike Papazoglou	University of Tilburg, The Netherlands
Anna Perini	ITC Trento, Italy
Paolo Petta	Technical University, Wien, Austria
Frank Puppe	University of Würzburg, Germany
Giovanni Rimassa	University of Parma, Italy
Michael Rovatsos	Technical University, München, Germany
Rudi Studer	University of Karlsruhe, Germany
Ingo Timm	Technical University, Ilmenau, Germany
Robert Tolksdorf	Technical University, Berlin, Germany
Mihaela Ulieru	University of Calgary, Canada
Gerhard Weiss	Technical University, München, Germany
Mike Wooldridge	University of Liverpool, UK
Hong Zhu	Oxford Brookes University, UK

External Reviewers

Matthias Nickles	Technical University, München, Germany
Stefan Römer	Technical University, München, Germany
Christian Zirpins	University of Hamburg, Germany