

Preface

This year marks the 25th anniversary of the *Annual German Conference on Artificial Intelligence*. When starting in 1975 as the *German Workshop on AI (GWAJ)* in Bonn, the meetings were primarily intended as a forum for the German AI community and thus, over the years, also reflected the development of AI research in Germany. Right from the beginning, the goal of the meetings has been to bring together AI researchers working in academia and industry to share their research results and interests in the field of artificial intelligence. In 1993, the name of the meeting changed to its current form *Annual German Conference on Artificial Intelligence*, or KI for short. Since KI-94 in Saarbrücken presentations have been in English and the proceedings have been published in the Springer LNAI Series. With that the meeting has become a truly international event, and still is in 2002.

This volume contains the proceedings of the *25th Annual German Conference on Artificial Intelligence*. For the technical program we had 58 submissions from 17 countries and from all continents except Australia. Out of these contributions slightly less than 30% (20 papers in total) were selected for presentation at the conference and for inclusion in the proceedings.

The contributions in this volume reflect the richness and diversity of artificial intelligence research. They cover important areas such as multi-agent systems, machine learning, natural language processing, constraint reasoning, knowledge representation, planning, and temporal reasoning. The paper

“On the problem of computing small representations of least common subsumers” by Franz Baader and Anni-Yasmin Turhan (Dresden University of Technology)

stood out for its exceptional quality and the program committee selected it for the Springer Best Paper Award. Congratulations to the authors for their excellent contribution.

In addition to the technical papers, this volume contains the abstracts of the three invited presentations of the conference:

- Elisabeth André (University of Augsburg): *From Simulated Dialogues to Interactive Performances with Virtual Actors*.
- Michael Wooldridge (University of Liverpool): *Time, Knowledge, and Cooperation: Alternating-Time Temporal Epistemic Logic and Its Applications*.
- Dieter Fensel (Vrije Universiteit Amsterdam): *Semantic Web Enabled Web Services*.

Lastly, the volume features summaries of the three DFG Priority Programs on agent technology, also presented at the conference. These, together with their respective speakers, are:

- Thomas Malsch (Hamburg-Harburg University of Technology): *Socionics*
- Stefan Kirn (Ilmenau University of Technology): *Intelligent Agents and Realistic Commercial Application Scenarios*
- Thomas Christaller (Fraunhofer AIS): *Cooperating Teams of Mobile Robots in Dynamic Environments*

A large number of people were involved in making this conference a success. As for the technical program, we thank all those authors who submitted papers to the conference and provided the basis from which we could select a high-quality technical program. The members of the program committee and the additional reviewers helped us in this process by providing timely, qualified reviews and participating in the discussion during the paper selection process. Many thanks to all of you!

We are very grateful to Gerhard Weiss, who served as the Workshop Chair, and Andreas Becks, who served as the Local Arrangements Chair. The Organizing Committee Members took care of the many important details that are needed to make a conference work and that require so much effort and time. Besides Andreas Becks we thank Frank Dylla, Alexander Ferrein, Günter Gans, and Irene Wicke. Günter Gans deserves a special mention for wrestling with the *ConfMan* system and for formatting this volume. We hope you will enjoy its contents!

July 2002

Matthias Jarke, Jana Koehler, and Gerhard Lakemeyer.

KI 2002 Conference Organization

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Matthias Jarke
*RWTH Aachen,
Germany*

Program Co-chair

Jana Koehler
*IBM Zurich Research Laboratory,
Switzerland*

Program Co-chair

Gerhard Lakemeyer
*RWTH Aachen,
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Workshop Chair

Gerhard Weiss
*TU Munich,
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Cyrille Artho
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Ali Ghodsi Boushehri
Felix Brandt
Ralph Breithaupt
Michael Brenner
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Viktor Schuppan
Klaus Stein
Frieder Stolzenburg
Heiko Timm
Thilo Weigel

KI 2002 Workshops

Workshop Chair

Gerhard Weiss

TU Munich,

Germany

Foundations of Multiagent Systems: The Economic Theory Perspective

Stefan Kirn
Andreas Will

Germany
Germany

Resolving Conflicts between Self-interested Agents (RCSIA 2002)

Ingo J. Timm
Torsten Eymann

Germany
Germany

Modeling Artificial Societies and Hybrid Organizations (MASHO 2002)

Gabriela Lindemann Germany
Catholijn M. Jonker The Netherlands
Pietro Panzarasa U.K.

Workshop on Agent Standards in Theory and Practice (ASTAP 2002)

Michael Berger Germany
Stefan Kirn Germany
Jens Nimis Germany
Ingo J. Timm Germany
Ubbo Visser Germany

Workshop on Applications of Description Logics (ADL 2002)

Günther Görz Germany
Volker Haarslev Germany
Carsten Lutz Germany
Ralf Möller Germany

Workshop on Cognitive Agents

Michael Thielscher Germany