Multi-Agent Systems and Applications III

3rd International Central and Eastern European Conference on Multi-Agent Systems, CEEMAS 2003
Prague, Czech Republic, June 16-18, 2003
Proceedings
Preface

Recently, the area of agents and multi-agent systems has grown into a respected research field and a promising technology that has already been exploited in several industrial cases. There have been many novel methods, algorithms and theories investigated and formulated. These enrich and enhance classical software engineering and computer science, the areas of distributed systems and parallel computing, various fields of robotics, collaborative systems, Internet services and technologies, and grid computing, as well as knowledge management, computer-supported manufacturing or coalition formation and teamwork. Researchers have participated in a vast number of international and national research projects which have resulted in networks of excellence, thematic clusters and large-scale standardization efforts. Even though there has been noteworthy success in applying the research achievements of the areas of multi-agent systems and autonomous agents in design and manufacturing, transport and logistics, military and space applications, the tourism industry, e-commerce, and many other areas, there is still a gap between the state of the art achieved in the theoretical foundations of agent technologies and their potential for industry-wide deployment.

This volume continues in a successful series, “Multi-Agent Systems and Applications”, of proceedings of important international events organized by the Gerstner Laboratory, CTU, Prague under EU support within the framework of the MIRACLE Center of Excellence project (IST No. ICA1-CT-2000-70002). The first volume in this series (LNAI vol. 2086) represented the proceedings of the Joint Summer School of ECCAI – 9th ACAI 2001 (Advanced Course on Artificial Intelligence) and AgentLink – 3rd EASSS 2001 (European Agent Systems Summer School) held in July 2001. The second volume (LNAI vol. 2322) contained selected papers from HoloMAS 2001 (2nd International Workshop on Holonic and Multi-Agent Systems) and AEMAS 2001 (International Workshop on Adaptability and Embodiment Using Multi-Agent Systems).

This volume represents the official proceedings of the CEEMAS 2003 “Central and Eastern Europe Multi-Agents Systems” international conference. After the success of two earlier workshops, namely CEEMAS 1999 (St. Petersburg, Russia) and CEEMAS 2001 (Cracow, Poland), CEEMAS2003 took place in Prague, Czech Republic on June 16–18th, 2003, having been upgraded into a form of conference. CEEMAS 2003 was really a world-wide conference event. It brought together research scientists, academics, industrial experts and key decision-makers from all over the world in one location, where world-wide technological advances met the research potential of Central and Eastern European countries. The reputation of the conference has been enhanced by the three invited keynote speakers, namely Jeff Bradshaw (University of West Florida, USA), Austin Tate (University of Edinburgh, UK), and Onn Shehory (IBM Research Center, Haifa, Israel).
In this book we have managed to collect a selection of 58 high-quality papers (out of 109 excellent or very good submissions) as well as three contributions from the keynote speakers. The papers cover a wide range of technological areas in the field of agent technologies and multi-agent systems. There are theoretical papers providing formal models of various aspects of agents’ individual and collective behavior as well as papers on agents’ social behavior, meta-reasoning and reflectivity. The papers from well-known researchers are aimed at protocols, policies and inter-agent negotiations. The conference covered topics of planning, decision-making and coalition formation, but also adaptivity and evolution. A substantial part of the proceedings were devoted to agents’ knowledge, ontologies and languages. The practical balance of the proceedings is provided by a selection of papers on applications of multi-agent systems in manufacturing, virtual enterprises, business processes, and the Internet.

We would like to thank all the contributors, PC members and referees (the full list is attached) for their outstanding contribution to the success of the CEEMAS conference. We are especially thankful to Jiří Hodík, Jaroslav Bárta and Aleš Říha for their technical support, to Milena Zeithamlová, Zuzana Hochmeisterová and Hana Krautwurmová for all their excellent organizational activities, and, finally, to Jiří Lažanský who carried out the main portion of the computer work related to the preparation of both the camera-ready and electronic versions of this volume.

April 2003

Vladimír Mařík
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CEEMAS 2003

Third International/Central and Eastern European Conference on Multi-Agent Systems

Multi-Agent Systems and Applications III
Prague, Czech Republic, June 16–18, 2003

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