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Ngoc Thanh Nguyen
Adam Grzech
Robert J. Howlett
Lakhmi C. Jain (Eds.)

Agent and Multi-Agent Systems: Technologies and Applications

First KES International Symposium, KES-AMSTA 2007
Wroclaw, Poland, May/June 2007
Proceedings



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Lecture Notes in Artificial Intelligence

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Preface

This volume contains papers selected for presentation at the 1st KES Symposium on Agent and Multi-Agent Systems – Technologies and Applications (KES-AMSTA 2007), held in Wroclaw, Poland, May 31 – June 1, 2007. The symposium was organized by the Institute of Information Science and Engineering, Wroclaw University of Technology, and KES International, as part of the KES Conference Series.

The aim of the symposium was to provide an international forum for scientific research in the technologies and applications of agent and multi-agent systems. Agents and multi-agent systems are related to the modern software which has long been recognized as a promising technology for constructing autonomous, complex and intelligent systems. A key development in the field of agent and multi-agent systems has been the specification of agent communication languages and formalization of ontologies. Agent communication languages are intended to provide standard declarative mechanisms for agents to communicate knowledge and make requests of each other, whereas ontologies are intended for conceptualization of the knowledge domain.

Despite being the first KES event of its type, the symposium attracted a very large number of scientists and practitioners, who submitted their papers for eight main tracks concerning the methodology and applications of agent and multi-agent systems, a doctoral track and three special sessions. There were 464 submissions for KES-AMSTA 2007 and only 110 papers were selected for presentation and inclusion in the proceedings. The resulting acceptance rate was 23.7 %. The Program Committee defined the following main tracks: Methodological Aspects of Agent Systems; Agent-oriented Web Applications; Mobility Aspects of Agent Systems and Ontology Management; Multi-agent Resource Allocation; Negotiating Agents; Agents for Network Management; Agent Approaches to Robotic Systems and Market Agents and Other Applications. Jointly with the main tracks of the symposium there was also the doctoral track and the following three special sessions: Mobile Agent Application and Its Development; Agent on Networked Media and Its Applications on Next-Generation Convergence Network (ANM07) and Intelligent and Secure Agent for Digital Content Management.

We would like to thank Jerzy Świątek, Dean of Faculty of Computer Science and Management, Wroclaw University of Technology, and Jerzy Józefczyk, Director of the Institute of Information Science and Engineering, for their enthusiastic and valued support of the project.

Thanks are also due to the many experts who contributed to making the event a success.

We would like to thank the Program Committee and Board of Reviewers, essential for reviewing the papers to ensure a high standard. We thank the members of the Local Organizing Committee, the Doctoral Track Chair, Publicity Chair and Special Session Chairs. We thank the invited speakers for their interesting and informative talks of world-class standard. We extend thanks to the KES Secretariat for support

with central administration and the registration process. Finally, we thank authors, presenters and delegates for their contribution to a successful event.

We hope that KES-AMSTA 2007 demonstrated the KES mission of academic excellence, leading on to even greater successes in the future.

May 2007

Ngoc Thanh Nguyen
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2. *Agent on Networked Media and Its Applications on Next-Generation*

Convergence Network (ANM07)

Il Soek Ko

Dongguk University, Republic of Korea

3. *Intelligent and Secure Agent for Digital Content Management*

Geuk Lee

Hannam University, Republic of Korea

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