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Knowledge-Based and Intelligent Information and Engineering Systems

15th International Conference, KES 2011
Kaiserslautern, Germany, September 12-14, 2011
Proceedings, Part II

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Preface

The 15th International Conference on Knowledge-Based and Intelligent Information and Engineering Systems was held during September 12–14, 2011 in Kaiserslautern, Germany. The conference was hosted by the University of Kaiserslautern and the German Research Center for Artificial Intelligence (DFKI) GmbH, Germany, and KES International.

KES 2011 provided a scientific forum for the presentation of the results of high-quality international research including recent results of large-scale projects, new exciting techniques, and models, as well as innovative solutions in challenging application fields. The conference attracted contributions from 32 countries and 5 continents: Australia, Canada, China, Colombia, Croatia, Czech Republic, Finland, France, Germany, Greece, Indonesia, Iran, Italy, Japan, Jordan, Korea, Latvia, Malaysia, Mexico, Norway, Poland, Romania, Russia, Spain, Sweden, Switzerland, Taiwan, Thailand, Tunisia, Turkey, UK, and USA.

The conference consisted of 6 keynote talks, 9 general tracks and 25 invited sessions and workshops, on the advance and application of knowledge-based and intelligent systems and related areas. The distinguished keynote speakers were:

Ansgar Bernardi

German Research Center for Artificial Intelligence, Kaiserslautern, Germany

“Growing Together: Opening the Way for Comprehensive Public–Private Knowledge Management”

Knut Manske

Vice President SAP Research, SAP AG, Darmstadt, Germany

“Future Urban Management: Towards Best Managed Cities”

Nikhil R. Pal

Indian Statistical Institute, Calcutta, India

“Selection of Useful Sensors/Features with Controlled Redundancy Using Neural Networks”

Peter Schütt

Leader Software Strategy & Knowledge Management, Executive Engagement Manager, IBM Software Group Germany

“Knowledge Sharing in Enterprise Networks”

Ulrich Reimer

Institute for Information and Process Management University of Applied Sciences St. Gallen, Switzerland

“(Meta-) Modeling of Process-Oriented Information Systems”

Keiji Yamada

General Research Manager, C&C innovation Laboratories, NEC Corporation
Professor, Nara Institute of Science and Technology

*“Symbiotic System as a New Social Infrastructure Based on Intelligent
Interaction Among the Society, Human Beings, and Information Systems”*

Overall 244 oral presentations, complemented by focused lab tours at the organizing institutions, provided excellent opportunities for the presentation of intriguing new research results and vivid discussion on these, paving the way to efficient knowledge transfer and the incubation of new ideas and concepts.

As in the previous years, extended versions of selected papers were considered for publication in follow-up journal publications.

We would like to acknowledge the contribution of the Track Chairs, Invited Sessions Chairs, all members of the Program Committee and external reviewers for coordinating and monitoring the review process. We are grateful to the editorial team of Springer led by Alfred Hofmann. Our sincere gratitude goes to all participants and the authors of the submitted papers.

September 2011

Andreas Dengel
Andreas König
Koichi Kise
Knut Hinkelmann
Robert Howlett
Lakhmi Jain

Organization

KES 2011 was hosted and organized by the Chair's Knowledge-Based Systems, Computer Science department, and Integrated Sensor Systems, Electrical and Computer Engineering department at the University of Kaiserslautern, the German Research Center for Artificial Intelligence (DFKI) GmbH, Germany, and KES International. The conference was held at the University of Kaiserslautern, September 12–14, 2011.

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Computational Intelligence Methods to Benefit Society

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Knowledge-Based Interface Systems (I)

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Advances in Theory and Application of Hybrid Intelligent Systems

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Methods and Techniques of Artificial and Computational Intelligence in Economics, Finance and Decision Making

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Human Activity Support in Knowledge Society

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Knowledge Engineering Applications in Process Systems and Plant Operations

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Knowledge - Based Interface Systems (II)

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Skill Acquisition and Ubiquitous Human-Computer Interaction

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Japan Advanced Institute Science and
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