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New Frontiers in Artificial Intelligence

Joint JSAI 2005 Workshop Post-Proceedings
Preface

Intelligent information technology has significantly progressed along with the rapid growth of computer communication networks in the last decade. The research in this domain became highly active under the worldwide growing environment providing the objective study issues. The research situation in Japan is no exception in this trend. An enormous number of studies in intelligent information technology are presented every year in Japanese domestic conferences associated with this field. Many of them are outstanding in terms of the technical originality, quality and significance. The annual conference of JSAI (Japan Society for Artificial Intelligence) is one of the key and representative domestic meetings in the field of intelligent information technology. In particular, award papers in this conference have an excellent quality in international standards. The annual conference of JSAI also organizes co-located international workshops to provide excellent study reports for worldwide researchers.

The objectives of this book are to present the award papers from the 19th annual conference of JSAI 2005 and the selected papers from the five co-located international workshops and to promote the study exchange among worldwide researchers. Five papers received awards among more than 200 presentations in the conference, and 40 papers were selected from the workshops of Logic and Engineering of Natural Language Semantics 2005 (LENLS 2005), Learning with Logics and Logics for Learning (LLLL 2005), Agent Network Dynamics and Intelligence (ANDI 2005), Conversational Informatics (CI 2005) and Risk Management Systems with Intelligent Data Analysis (RMSIDA 2005).

The award papers in the 19th annual conference of JSAI 2005 were selected from all presentations covering the wide fields of artificial intelligence through the processes of candidate recommendations, detailed open discussions and voting by Program Committee members of the conference. LENLS 2005 workshop was organized with the aim of bringing together researchers working on information structure and/or dynamic semantics, and of advancing the understanding of information structure and the development of dynamic semantics for natural language. LLLL 2005 workshop was held so as to bring together researchers who are interested in both the areas of machine learning and computational logic to have intensive discussions on various relations between the two and making their interchange more active. ANDI 2005 aimed at the investigation of network structures of agents, network structures made by agents and network structures and phenomena made by the agents' rational behavior. CI 2005 was to bring together researchers and practitioners from various backgrounds and projects to collect, process and utilize conversations as knowledge contents under recent advancement of media processing, ubiquitous computing and artificial intelligence technologies. RMSIDA 2005 was held with the goal of bringing together
researchers working on advanced intelligent data analysis and practitioners working on risk analysis/management systems in real fields.

We believe this book will introduce excellent AI studies in Japan to the world and contribute to the growth of the worldwide community of AI researchers.

March 2006

Takashi Washio
Primary Volume Editor
JSAI 2005
Organization and Editorial Board

The award papers were selected by the Program Committee of the annual conference of JSAI (Japan Society for Artificial Intelligence) 2005. The paper selection of each co-located international workshop was made by the Program Committee of the respective workshop. Based on the decisions of the paper awards and the paper selections, each chapter was edited by the Program Chairs of the 19th annual conference of JSAI 2005 and the co-located international workshops. The entire contents and structure of the book were managed and edited by the volume editors.

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