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Giovanni Semeraro (Eds.)

LNAI 4203

# Foundations of Intelligent Systems

16th International Symposium, ISMIS 2006  
Bari, Italy, September 2006  
Proceedings



Springer

TP18-53

M592  
2006

Floriana Esposito Zbigniew W. Raś  
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Springer



E200604074

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Library of Congress Control Number: 2006932794

CR Subject Classification (1998): I.2, H.3, H.2.8, H.4, H.5, F.1, I.5

LNCS Sublibrary: SL 7 – Artificial Intelligence

ISSN           0302-9743  
ISBN-10       3-540-45764-X Springer Berlin Heidelberg New York  
ISBN-13       978-3-540-45764-0 Springer Berlin Heidelberg New York

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Printed in Germany

Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India  
Printed on acid-free paper   SPIN: 11875604   06/3142   5 4 3 2 1 0

Lecture Notes in Artificial Intelligence

4203

Edited by J. G. Carbonell and J. Siekmann

Subseries of Lecture Notes in Computer Science

## Preface

*“Human knowledge and human power meet in one,  
because where the cause is not known  
the effect cannot be produced.”*

Francis Bacon

The 16th International Symposium on Methodologies for Intelligent Systems (ISMIS 2006) held in Bari, Italy, September 27–29, 2006, presented works performed by many scientists, worldwide on the development and exploitation of intelligent methods for solving complex problems. Starting from 1986, the ISMIS series has been held in Knoxville (USA), Charlotte (North Carolina), Turin (Italy), Trondheim (Norway), Warsaw (Poland), Zakopane (Poland), Lyon (France), Maebashi City (Japan) and Saratoga Springs (USA).

Among more than 200 submissions, the Program Committee selected, based on the opinion of at least two reviewers, 81 contributions, to be presented as long papers (if containing more complete work), or as short papers (if reporting about ongoing research). Many topics of interest to Artificial Intelligence research were covered: Active Media Human–Computer Interaction, Computational Intelligence, Intelligent Agent Technology, Intelligent Information Retrieval, Intelligent Information Systems, Knowledge Representation and Integration, Knowledge Discovery and Data Mining, Logic for AI and Logic Programming, Machine Learning, Text Mining and Web Intelligence. The symposium program also included three invited lectures, by Ivan Bratko, Ramon López de Mántaras and Steffen Staab.

Many people contributed in different ways to the success of the symposium and to this volume. The authors who continue to show their enthusiastic interest in intelligent systems research are a very important part of the success of scientific conferences. We highly appreciate the contribution of the Steering Committee, of the Program Committee members, and of all the additional reviewers that evaluated the submitted papers with efficiency and dedication. A special thanks goes to the members of the Organizing Committee, Nicola Di Mauro, Nicola Fanizzi and Stefano Ferilli, as well as to Teresa M.A. Basile, who worked hard at solving problems before and during the congress. We wish to thank the Dipartimento di Informatica of the University of Bari for encouraging and supporting us in organizing the event.

September 2006

Floriana Esposito  
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Conference Chairs  
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