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Emilio Corchado Hujun Yin (Eds.)

# Intelligent Data Engineering and Automated Learning - IDEAL 2009

10th International Conference  
Burgos, Spain, September 23-26, 2009  
Proceedings

Volume Editors

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## Preface

The IDEAL conference boast a vibrant and successful history dating back to 1998, and this edition marked the 10<sup>th</sup> anniversary, an important milestone demonstrating the increasing popularity and high quality of the IDEAL conferences. Burgos, the capital of medieval Spain and a lively city today, was a perfect venue to celebrate such an occasion. The conference has become a unique, established and broad interdisciplinary forum for researchers and practitioners in many fields to interact with each other and with leading academics and industries in the areas of machine learning, information processing, data mining, knowledge management, bio-informatics, neuro-informatics, bio-inspired models, agents and distributed systems, and hybrid systems.

IDEAL 2009 received over 200 submissions. After a rigorous peer-review process, the International Programme Committee accepted 100 high-quality papers to be included in the conference proceedings. In this 10th edition, a special emphasis was given on the organization of workshops and special sessions. Two workshops were organized under the framework of IDEAL 2009: MIR Day 2009 and Nature-Inspired Models for Industrial Applications. Five special sessions were organized by leading researchers in their fields on various topics such as Soft Computing Techniques in Data Mining, Recent Advances on Swarm-Based Computing, Intelligent Computational Techniques in Medical Image Processing, Advances on Ensemble Learning and Information Fusion, and Financial and Business Engineering (Modelling and Applications).

The selection of papers was extremely rigorous in order to maintain the high standard of the conference and we would like to thank our members of the International Programme Committee for their hard work in providing expert and timely evaluations of the submitted manuscripts. Their effort and expertise are vital to the success and quality of the conference and the IDEAL conference would have not taken place without their support and professionalism.

IDEAL 2009 enjoyed outstanding keynote speeches by distinguished guest speakers: Isidro Laso of the European Commission, Xindong Wu of University of Vermont, Bruno Apolloni of the University of Milan, Colin Fyfe of the University of the West of Scotland and Francisco Herrera of the University of Granada.

A big thanks to the local organizing team, especially the Organizing Committee Chairs, Bruno Baruque and Álvaro Herrero, who dedicated their enthusiasm and limitless time to this demanding task and provided lively reception and entertainment for the delegates. Particular thanks also go to our sponsors, Junta de Castilla y León, University of Burgos, Diputación de Burgos, Ayuntamiento de Burgos, GCI, CSA, FAE and FEC, who jointly contributed in an active and constructive manner to the success of this event.

We would also like to thank Alfred Hoffman and Anna Kramer of Springer for their continued support of and collaboration in this conference series.

July 2009

Emilio Corchado  
Hujun Yin

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