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Angel Kuri-Morales Guillermo R. Simari (Eds.)

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Preface

IBERAMIA is the international conference series of the Ibero-American artificial intelligence community, which has met every two years since the 1988 meeting in Barcelona. The conference is supported by the main Ibero-American societies of AI and provides researchers from Latin America, Portugal, and Spain the opportunity to meet AI researchers from all over the world. Since its inception IBERAMIA has been a widely recognized international conference. Its papers have been written, presented, and published in English. Papers of the main track have been published by Springer in the LNCS/LNAI series. This volume contains the papers accepted for presentation at IBERAMIA 2010, held in Bahía Blanca, Argentina, in November 2010. A total of 178 papers were submitted for the main track, and 61 papers were accepted for publication and oral presentation. Each paper was reviewed by five members of the Program Committee (PC), coordinated by a PC Chair. The PC consisted of 110 researchers from 74 universities and research centers from 17 different countries. The statistics of the PC members are shown in the following table; the full list of PC members and reviewers can be found on the pages that follow.

Statistics by Country (PC Members)

Country	Members
Argentina	8
Australia	2
Austria	1
Brazil	14
Chile	2
Colombia	1
Czech Republic	1
France	1
Germany	2
Japan	1
Mexico	34
Netherlands	1
Poland	2
Portugal	10
Spain	18
Sweden	1
UK	4
USA	1
Venezuela	1

The authors of the submitted papers represent members of 24 countries, 9 from Ibero-America and 15 from other regions of the world, attesting to the truly international nature of the conference. The topics cover 23 main areas: commonsense reasoning; cognitive modeling and human interaction; uncertainty and fuzzy systems; game playing and interactive entertainment; probabilistic reasoning; constraint satisfaction; distributed AI; argumentation; genetic algorithms; model-based systems; search; AI in education; planning and scheduling; evolutionary computation and artificial life; semantic web; knowledge acquisition and ontologies; robotics, vision, and pattern recognition; natural language processing; multiagent systems; information integration and extraction; neural networks; knowledge representation and reasoning; and machine learning and data mining.

Statistics by Country (Papers)

Country	Authors Submitted	Accepted
Argentina	64	26.83
Brazil	134	58.13
Chile	7	3.00
Colombia	3	2.00
Cuba	4	4.00
Czech Republic	1	1.00
France	3	1.50
South Korea	1	1.00
Mexico	118	51.55
Pakistan	1	1.00
Portugal	20	8.33
Spain	48	15.37
Tunisia	2	1.00
UK	1	0.33
USA	4	0.95

The program for IBERAMIA 2010 also included three invited speakers: Helder Coelho (On Selecting and Guiding AI PhD Students), Jaime Carbonell (Active and Proactive Machine Learning), and Carles Sierra (Information-Based Trust and Reputation). Dr. Coelho is full professor of the University of Lisbon (UL), in the Department of Informatics of the Faculty of Sciences. Dr. Carbonell is Director of the Language Technologies Institute and Allen Newell Professor of Computer Science at Carnegie Mellon University. Dr. Carles Sierra is professor at the Artificial Intelligence Research Institute (IIIA) of the Spanish Research Council (CSIC) in Bellaterra, Barcelona.

Papers where students were involved were carefully analyzed by a selection committee. A Best Student Paper prize was awarded to Eunice López Camacho from the Tecnológico de Monterrey, Mexico, for the paper *Defining a Problem-State Representation with Data Mining within a Hyper-heuristic Model which Solves 2D Irregular Bin Packing Problems*. Special Student Paper

Mentions were awarded to Andrea Cohen from the Universidad Nacional del Sur, Argentina, for the paper *Extending DeLP with Attack and Support for Defeasible Rules*; Augusto Baffa from the Universidade Federal do Estado do Rio de Janeiro, Brazil, for the paper *Planning under the Uncertainty of the Technical Analysis of Stock Markets*, and Wildener Monteiro Rodovalho from the Universidade Federal de Goiás, Brazil, for the paper *Studying the Emergence of Money by Means of Swarm Multi-Agent Simulation*.

We want to thank all those involved in the organization of this conference. In the first place, these are the authors of the papers constituting this book: it is the excellence of their research work that gives value to the book and sense to the work of all of the other people involved. We thank the members of the Program Committee and additional reviewers for their great and very professional work on reviewing and selecting the papers for the conferences. Our very special thanks are due to the local organizing committee, the members of the Department of Science and Engineering of Computation of the Universidad Nacional del Sur. We wish to express our deepest gratitude to the students of the Doctoral Program of Ciencia e Ingeniería de la Computación of the Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas (IIMAS) at UNAM. Special thanks are also due to Dr. José Galaviz Casas, for his participation in the committee to select the best students paper. An activity which was re-instated for IBERAMIA 2010. Last but not least, we wish to express our gratitude to Edwin Aldana-Bobadilla for his invaluable help throughout the process of arbitration and edition of these proceedings.

November 2010

Angel Kuri-Morales

Organization

IBERAMIA 2010 was organized by the Department of Computer Science and Engineering, Universidad Nacional del Sur (DCSE-UNS), Argentina. The conference was sponsored by the main Ibero-American artificial intelligence and computer science societies.

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DCIC - Departamento de Ciencias e Ingeniería de la Computación

UNS - Universidad Nacional del Sur

AIJ - Artificial Intelligence Journal

Special thanks are due to the members of the Department of Science and Engineering of Computation of UNS (Departamento de Ciencias e Ingeniería de la Computación de la UNS).

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