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Pattern Recognition Applications and Methods

4th International Conference, ICPRAM 2015
Lisbon, Portugal, January 10–12, 2015
Revised Selected Papers

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Preface

The present book includes extended and revised versions of a set of selected papers from the 4th International Conference on Pattern Recognition Applications and Methods (ICPRAM 2015), held in Lisbon, Portugal, during January 10–12, 2015.

The conference was sponsored by the Institute for Systems and Technologies of Information,Control and Communication (INSTICC) in cooperation with the ACM Special Interest Group on Artificial Intelligence (ACM SIGAI), the ACM Special Interest Group on Applied Computing (SIGAPP), the Association for the Advancement of Artificial Intelligence (AAAI), the European Association for Signal Processing (EURASIP), the Asia Pacific Neural Network Assembly (APNNA), the International Neural Network Society (INNS), and the Italian Association for Artificial Intelligence (AIIA).

The purpose of ICPRAM is to provide a major point of contact between researchers, engineers, and practitioners from several areas of pattern recognition, both from a theoretical and applications perspectives. Associated techniques can achieve relevant results for new research topics that continuously arise as technology advances. These aspects are reflected in the set of papers that make up this book. In particular, the focus is on the application of pattern recognition techniques to emerging real-world problems, interdisciplinary research, experimental and/or theoretical studies yielding new insights that advance pattern recognition methods. The final ambition is to spur new research lines and provide the occasion to start novel collaborations, mostly in interdisciplinary research scenarios.

ICPRAM 2015 received 145 submissions, from 45 countries in all continents, of which 17 % were presented at the conference as full papers, and their authors were invited to submit extended versions of their papers for this book. In order to evaluate each submission, double-blind reviewing was performed by the Program Committee. Finally, only the best 20 papers were included in this book.

We would like to highlight that ICPRAM 2015 also included four plenary keynote lectures, given by internationally distinguished researchers, namely: Hanan Samet (University of Maryland, USA), Nello Cristianini (University of Bristol, UK), Marcello Pelillo (University of Venice, Italy), and Luis Alexandre (University of Beira Interior, Portugal). We must acknowledge the invaluable contribution of all keynote speakers who, as renowned researchers in their areas, presented cutting-edge work, thus contributing toward enriching the scientific content of the conference.

We especially thank the authors, whose research and development efforts are recorded here. The knowledge and diligence of the reviewers were essential to ensure the quality of the papers presented at the conference and published in this book. Finally, a special thanks to all members of the INSTICC team, whose involvement was fundamental for organizing a smooth and successful conference.

September 2015

Ana Fred
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