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Pedro Latorre Carmona • J. Salvador Sánchez
Ana L.N. Fred
Editors

Mathematical Methodologies in Pattern Recognition and Machine Learning

Contributions from the International
Conference on Pattern Recognition
Applications and Methods, 2012

 Springer

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Preface

This volume features key contributions from the International Conference on Pattern Recognition Applications and Methods (ICPRAM 2012) held in Vilamoura, Algarve, Portugal from February 6 to 8, 2012.

ICPRAM was sponsored by the Institute for Systems and Technologies of Information Control and Communication (INSTICC) and held in cooperation with the Association for the Advancement of Artificial Intelligence (AAAI) and Pattern Analysis, Statistical Modelling and Computational Learning (PASCAL2). It was technically co-sponsored by IEEE Signal Processing Society, Machine Learning for Signal Processing (MLSP) Technical Committee of IEEE, AERFAI (Asociación Española de Reconocimiento de Formas y Análisis de Imagen) and APRP (Associação Portuguesa de Reconhecimento de Padrões).

ICPRAM received 259 paper submissions from 46 countries in all continents. To evaluate each submission, a double-blind paper review was performed by the Program Committee, whose members are highly qualified researchers in ICPRAM topic areas. Based on the classifications provided, only 115 papers were selected for oral presentation (61 full papers and 54 short papers) and 32 papers were selected for poster presentation. The full paper acceptance ratio was 24 %, and the total oral acceptance ratio (including full papers and short papers) was 44 %. These strict acceptance ratios show the intention to preserve a high quality forum which we expect to develop further next year.

The conference provided a major point of collaboration between researchers, engineers and practitioners in the areas of Pattern Recognition, both from theoretical and applied perspectives. Contributions described applications of pattern recognition techniques to real-world problems, interdisciplinary research, and experimental and theoretical studies.

This book will be suitable for scientists and researchers in optimization, numerical methods, computer science, statistics and for differential geometers and mathematical physicists.

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