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Pattern Recognition

4th Mexican Conference, MCPR 2012 Huatulco, Mexico, June 27-30, 2012 Proceedings



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Preface

The Mexican Conference on Pattern Recognition 2012 (MCPR 2012) was the fourth event in the series organized by the Computer Science Department of the National Institute for Astrophysics Optics and Electronics (INAOE) of Mexico, under the auspices of the Mexican Association for Computer Vision, Neurocomputing and Robotics (MACVNR), which is affiliated to the International Association for Pattern Recognition (IAPR). It followed the three successful previous editions held in Guadalajara (2009), Puebla (2010), and Cancun (2011).

This conference aims to provide a forum for the exchange of scientific results, practice, and new knowledge, as well as promoting co-operation among research groups in pattern recognition and related areas in Mexico, Central America, and around the world.

MCPR 2012 was held in Huatulco, Mexico. As with previous editions, MCPR 2012 attracted worldwide participation. Contributions were received from 18 countries. In total, 64 papers were submitted, out of which 32 were accepted for publication in these proceedings and for presentation at the conference.

We were very honored to have as invited speakers such internationally recognized researchers as:

- Professor Gabriella Sanniti di Baja (IAPR invited speaker), Director of Research, Institute of Cybernetics E. Caianiello, CNR, Italy
- Professor Sven Dickinson, Department of Computer Science, University of Toronto, Canada
- Professor Humberto Sossa, Center for Computing Research, National Polytechnic Institute, Mexico

We would like to thank all the authors for submitting their papers and thus making these proceedings possible. We give special thanks to the invited speakers, who contributed with their keynotes and tutorials to the high quality of the conference. We are also grateful to Professor Kim Boyer for the help and discussions concerning the organization of this edition of the MCPR.

The review process was carried out by the Scientific Committee, composed of internationally recognized scientists, all experts in their respective fields, which resulted in these excellent conference proceedings. We are indebted to them for their efforts and the quality of the reviews.

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We are sure that MCPR 2012 provided a fruitful forum that helped to enrich the collaboration between the Mexican pattern recognition researchers and the broader international pattern recognition community.

The next edition of the MCPR will be held in Queretaro, Mexico in 2013.

 $\mathrm{July}\ 2012$

Jesús Ariel Carrasco-Ochoa José Francisco Martínez-Trinidad José Arturo Olvera López Kim L. Boyer

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MCPR 2012 was hosted and sponsored by the Computer Science Department of the National Institute of Astrophysics, Optics and Electronics (INAOE).

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