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Alberto Sanfeliu

Manuel Lazo Cortés (Eds.)

Progress in Pattern Recognition, Image Analysis and Applications

10th Iberoamerican Congress
on Pattern Recognition, CIARP 2005
Havana, Cuba, November 2005, Proceedings



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Proceedings



Volume Editors

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Preface

CIARP 2005 (10th Iberoamerican Congress on Pattern Recognition, X CIARP) is the 10th event in the series of pioneer congresses on pattern recognition in the Iberoamerican community, which takes place in La Habana, Cuba. As in previous years, X CIARP brought together international scientists to promote and disseminate ongoing research and mathematical methods for pattern recognition, image analysis, and applications in such diverse areas as computer vision, robotics, industry, health, entertainment, space exploration, telecommunications, data mining, document analysis, and natural language processing and recognition, to name a few. Moreover, X CIARP was a forum for scientific research, experience exchange, share of new knowledge and increase in cooperation between research groups in pattern recognition, computer vision and related areas.

The 10th Iberoamerican Congress on Pattern Recognition was organized by the Cuban Association for Pattern Recognition (ACRP) and sponsored by the Institute of Cybernetics, Mathematics and Physics (ICIMAF), the Advanced Technologies Application Center (CENATAV), the University of Oriente (UO), the Polytechnic Institute “José A Echevarría” (ISPJAE), the Central University of Las Villas (UCLV), the Ciego de Avila University (UNICA), as well as the Center of Technologies Research on Information and Systems (CITIS-UAEH) in Mexico.

The conference was also co-sponsored by the Portuguese Association for Pattern Recognition (APRP), the Spanish Association for Pattern Recognition and Image Analysis (AERFAI), the Special Interest Group of the Brazilian Computer Society (SIGPR-SBC), and the Mexican Association for Computer Vision, Neurocomputing and Robotics (MACVNR). X CIARP was endorsed by the International Association for Pattern Recognition (IAPR).

The number of papers and interest in the congress grow every year, and on this occasion we received more than 200 papers from 29 countries. Of these, 107 were accepted for publication in these proceedings and for presentation at the conference. The review process was carried out by the Scientific Committee, on all contributions, double blind, and assessed by at least two reviewers who prepared an excellent selection dealing with outgoing research. We are especially indebted to them for their efforts and the quality of the reviews.

The conference was organized in four tutorials, three keynote addresses, and oral and poster presentations, that took place on November 15–18, 2005. The keynote addresses dealt with topics on computer vision, image annotation and computational geometry, with distinguished lectures by Dr. Josef Kittler, professor at the School of Electronics and Physical Sciences, University of Surrey, United Kingdom, Dr. Alberto Del Bimbo University of Florence, Italy, and Dr. Eduardo Bayro Corrochano, Computer Science Department, Center of Research and Advanced Studies, Guadalajara, Mexico.

We would like to thank the members of the Organizing Committee for their enormous effort that allowed for an excellent conference and proceedings. We hope that this congress was a fruitful precedent for future CIARP events.

November 2005

Manuel Lazo
Alberto Sanfeliu

Organization

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