

Preface

First of all, we want to congratulate two new research communities from Mexico and Brazil that have recently joined the Iberoamerican community and the International Association for Pattern Recognition. We believe that the series of congresses that started as the “Taller Iberoamericano de Reconocimiento de Patrones (TIARP)”, and later became the “Iberoamerican Congress on Pattern Recognition (CIARP)”, has contributed to these group consolidation efforts. We hope that in the near future all the Iberoamerican countries will have their own groups and associations to promote our areas of interest; and that these congresses will serve as the forum for scientific research exchange, sharing of expertise and new knowledge, and establishing contacts that improve cooperation between research groups in pattern recognition and related areas.

CIARP 2004 (9th Iberoamerican Congress on Pattern Recognition) was the ninth in a series of pioneering congresses on pattern recognition in the Iberoamerican community. As in the previous year, CIARP 2004 also included worldwide participation. It took place in Puebla, Mexico. The aim of the congress was 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.

CIARP 2004 was organized by the Computer Science Department of the National Institute of Astrophysics, Optics and Electronics (INAOE), the Center for Computing Research of the National Polytechnic Institute (CIC-IPN) and the University of Las Americas, Puebla (UDLAP), and was sponsored by the Institute of Cybernetics, Mathematics and Physics of Cuba (ICIMAF), the Center of Applications of Advanced Technology of Cuba (CENATAV), the University of La Salle, Mexico (ULSA), the Autonomous University of Puebla (BUAP), the International Association for Pattern Recognition (IAPR), the Cuban Association for Pattern Recognition (ACRP), the Portuguese Association for Pattern Recognition (APRP), the Spanish Association for Pattern Recognition and Image Analysis (AERFAI), the Special Interest Group on Pattern Recognition of the Brazilian Computer Society (SIGPR-SBC), and the Mexican Association for Computer Vision, Neurocomputing and Robotics (MACVNR).

We received contributions from 18 countries. In total 158 papers were submitted, out of which 87 were accepted for publication in these proceedings and for presentation at the conference. The review process was carried out by the Scientific Committee, each paper being assessed by at least two reviewers who, in conjunction with other reviewers prepared an excellent selection dealing with ongoing research. We are especially indebted to them for their efforts and the quality of the reviews.

Three professors were invited to give keynote addresses on topics in pattern recognition: Dr. Josef Kittler, Professor at the School of Electronics and Physical Sciences, University of Surrey, UK, 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 efforts that allowed for an excellent conference and proceedings.

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