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# Progress in Pattern Recognition, Image Analysis and Applications

10th Iberoamerican Congress  
on Pattern Recognition, CIARP 2005  
Havana, Cuba, November 15-18, 2005  
Proceedings

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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

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# Table of Contents

## Regular Papers

CT and PET Registration Using Deformations Incorporating Tumor-Based Constraints <i>Antonio Moreno, Gaspar Delso, Oscar Camara, Isabelle Bloch</i> . . . . .	1
Surface Grading Using Soft Colour-Texture Descriptors <i>Fernando López, José-Miguel Valiente, José-Manuel Prats</i> . . . . .	13
Support Vector Machines with Huffman Tree Architecture for Multiclass Classification <i>Gexiang Zhang</i> . . . . .	24
Automatic Removal of Impulse Noise from Highly Corrupted Images <i>Vitaly Kober, Mikhail Mozerov, Josué Álvarez-Borrego</i> . . . . .	34
Smoothing of Polygonal Chains for 2D Shape Representation Using a $G^2$ -Continuous Cubic A-Spline <i>Sofía Behar, Jorge Estrada, Victoria Hernández, Dionne León</i> . . . . .	42
A Robust Statistical Method for Brain Magnetic Resonance Image Segmentation <i>Bo Qin, JingHua Wen, Ming Chen</i> . . . . .	51
Inference Improvement by Enlarging the Training Set While Learning DFAs <i>Pedro García, José Ruiz, Antonio Cano, Gloria Alvarez</i> . . . . .	59
A Computational Approach to Illusory Contour Perception Based on the Tensor Voting Technique <i>Marcus Hund, Bärbel Mertsching</i> . . . . .	71
A Novel Clustering Technique Based on Improved Noising Method <i>Yongguo Liu, Wei Zhang, Dong Zheng, Kefei Chen</i> . . . . .	81
Object Recognition in Indoor Video Sequences by Classifying Image Segmentation Regions Using Neural Networks <i>Nicolás Amezcuita Gómez, René Alquézar</i> . . . . .	93

Analysis of Directional Reflectance and Surface Orientation Using Fresnel Theory <i>Gary A. Atkinson, Edwin R. Hancock</i> .....	103
Lacunarity as a Texture Measure for Address Block Segmentation <i>Jacques Facon, David Menoti, Arnaldo de Albuquerque Araújo</i> .....	112
Measuring the Quality Evaluation for Image Segmentation <i>Rodrigo Janasiewicz Gomes Pinheiro, Jacques Facon</i> .....	120
Frame Deformation Energy Matching of On-Line Handwritten Characters <i>Jakob Sternby</i> .....	128
Nonlinear Civil Structures Identification Using a Polynomial Artificial Neural Network <i>Francisco J. Rivero-Angeles, Eduardo Gomez-Ramirez, Ruben Garrido</i> .....	138
A Method of Automatic Speaker Recognition Using Cepstral Features and Vectorial Quantization <i>José Ramón Calvo de Lara</i> .....	146
Classification of Boar Spermatozoid Head Images Using a Model Intracellular Density Distribution <i>Lidia Sánchez, Nicolai Petkov, Enrique Alegre</i> .....	154
Speech Recognition Using Energy Parameters to Classify Syllables in the Spanish Language <i>Sergio Suárez Guerra, José Luis Oropeza Rodríguez, Edgardo M. Felipe Riveron, Jesús Figueroa Nazuno</i> .....	161
A Strategy for Atherosclerotic Lesions Segmentation <i>Roberto Rodríguez, Oriana Pacheco</i> .....	171
Image Scale-Space from the Heat Kernel <i>Fan Zhang, Edwin R. Hancock</i> .....	181
A Naive Solution to the One-Class Problem and Its Extension to Kernel Methods <i>Alberto Muñoz, Javier M. Moguerza</i> .....	193
Nonlinear Modeling of Dynamic Cerebral Autoregulation Using Recurrent Neural Networks <i>Max Chacón, Cristopher Blanco, Ronney Panerai, David Evans</i> .....	205

Neural Network Approach to Locate Motifs in Biosequences <i>Marcelino Campos, Damián López</i> .....	214
Free-Shaped Object Recognition Method from Partial Views Using Weighted Cone Curvatures <i>Santiago Salamanca, Carlos Cerrada, Antonio Adán, Jose A. Cerrada, Miguel Adán</i> .....	222
Automatic Braille Code Translation System <i>Hamid Reza Shahbazkia, Telmo Tavares Silva, Rui Miguel Guerreiro</i> .....	233
Automatic Extraction of DNA Profiles in Polyacrilamide Gel Electrophoresis Images <i>Francisco Silva-Mata, Isneri Talavera-Bustamante, Ricardo González-Gazapo, Noslén Hernández-González, Juan R. Palau-Infante, Marta Santiesteban-Vidal</i> .....	242
The Use of Bayesian Framework for Kernel Selection in Vector Machines Classifiers <i>Dmitry Kropotov, Nikita Ptashko, Dmitry Vetrov</i> .....	252
Genetic Multivariate Polynomials: An Alternative Tool to Neural Networks <i>Angel Fernando Kuri-Morales, Federico Juárez-Almaraz</i> .....	262
Non-supervised Classification of 2D Color Images Using Kohonen Networks and a Novel Metric <i>Ricardo Pérez-Aguila, Pilar Gómez-Gil, Antonio Aguilera</i> .....	271
Data Dependent Wavelet Filtering for Lossless Image Compression <i>Oleksiy Pogrebnyak, Pablo Manrique Ramírez, Luis Pastor Sanchez Fernandez, Roberto Sánchez Luna</i> .....	285
A Robust Matching Algorithm Based on Global Motion Smoothness Criterion <i>Mikhail Mozerov, Vitaly Kober</i> .....	295
Dynamic Hierarchical Compact Clustering Algorithm <i>Reynaldo Gil-García, José M. Badía-Contelles, Aurora Pons-Porrata</i> .....	302
A Robust Footprint Detection Using Color Images and Neural Networks <i>Marco Mora, Daniel Sbarbaro</i> .....	311

Computing Similarity Among 3D Objects Using Dynamic Time Warping  
*A. Angeles-Yreta, J. Figueroa-Nazuno* . . . . . 319

Estimation of Facial Angular Information Using a Complex-Number-  
 Based Statistical Model  
*Mario Castelan, Edwin R. Hancock* . . . . . 327

An Efficient Path-Generation Method for Virtual Colonoscopy  
*Jeongjin Lee, Helen Hong, Yeong Gil Shin, Soo-Hong Kim* . . . . . 339

Estimation of the Deformation Field for the Left Ventricle Walls in 4-D  
 Multislice Computerized Tomography  
*Antonio Bravo, Rubén Medina, Gianfranco Passariello,  
 Mireille Garreau* . . . . . 348

Edition Schemes Based on BSE  
*J. Arturo Olvera-López, J.F. Martínez-Trinidad,  
 J. Ariel Carrasco-Ochoa* . . . . . 360

Conceptual K-Means Algorithm with Similarity Functions  
*I.O. Ayaquica-Martínez, J.F. Martínez-Trinidad,  
 J.A. Carrasco-Ochoa* . . . . . 368

Circulation and Topological Control in Image Segmentation  
*Luis Gustavo Nonato, Antonio M. da Silva Junior, João Batista,  
 Odemir Martinez Bruno* . . . . . 377

Global k-Means with Similarity Functions  
*Saúl López-Escobar, J.A. Carrasco-Ochoa,  
 J.F. Martínez-Trinidad* . . . . . 392

Reconstruction-Independent 3D CAD for Calcification Detection in  
 Digital Breast Tomosynthesis Using Fuzzy Particles  
*G. Peters, S. Muller, S. Bernard, R. Iordache, F. Wheeler,  
 I. Bloch* . . . . . 400

Simple and Robust Hard Cut Detection Using Interframe Differences  
*Alvaro Pardo* . . . . . 409

Development and Validation of an Algorithm for Cardiomyocyte  
 Beating Frequency Determination  
*Demián Wassermann, Marta Mejail* . . . . . 420

A Simple Feature Reduction Method for the Detection of Long Biological Signals <i>Max Chacón, Sergio Jara, Carlos Defilippi, Ana Maria Madrid, Claudia Defilippi</i> . . . . .	431
A Fast Motion Estimation Algorithm Based on Diamond and Simplified Square Search Patterns <i>Yun Cheng, Kui Dai, Zhiying Wang, Jianjun Guo</i> . . . . .	440
Selecting Prototypes in Mixed Incomplete Data <i>Milton García-Borroto, José Ruiz-Shulcloper</i> . . . . .	450
Diagnosis of Breast Cancer in Digital Mammograms Using Independent Component Analysis and Neural Networks <i>Lúcio F.A. Campos, Aristófanés C. Silva, Allan Kardec Barros</i> . . . . .	460
Automatic Texture Segmentation Based on Wavelet-Domain Hidden Markov Tree <i>Qiang Sun, Biao Hou, Li-cheng Jiao</i> . . . . .	470
Reward-Punishment Editing for Mixed Data <i>Raúl Rodríguez-Colín, J.A. Carrasco-Ochoa, J.F. Martínez-Trinidad</i> . . . . .	481
Stable Coordinate Pairs in Spanish: Statistical and Structural Description <i>Igor A. Bolshakov, Sofia N. Galicia-Haro</i> . . . . .	489
Development of a New Index to Evaluate Zooplanktons' Gonads: An Approach Based on a Suitable Combination of Deformable Models <i>M. Ramiro Pastorinho, Miguel A. Guevara, Augusto Silva, Luis Coelho, Fernando Morgado</i> . . . . .	498
The Performance of Various Edge Detector Algorithms in the Analysis of Total Hip Replacement X-Rays <i>Alfonso Castro, José Carlos Dafonte, Bernardino Arcay</i> . . . . .	506
An Incremental Clustering Algorithm Based on Compact Sets with Radius $\alpha$ <i>Aurora Pons-Porrata, Guillermo Sánchez Díaz, Manuel Lazo Cortés, Leydis Alfonso Ramírez</i> . . . . .	518
Image Registration from Mutual Information of Edge Correspondences <i>N.A. Alvarez, J.M. Sanchiz</i> . . . . .	528

A Recursive Least Square Adaptive Filter for Nonuniformity Correction of Infrared Image Sequences  
*Flavio Torres, Sergio N. Torres, César San Martín* . . . . . 540

MSCT Lung Perfusion Imaging Based on Multi-stage Registration  
*Helen Hong, Jeongjin Lee* . . . . . 547

Statistical and Linguistic Clustering for Language Modeling in ASR  
*R. Justo, I. Torres* . . . . . 556

A Comparative Study of KBS, ANN and Statistical Clustering Techniques for Unattended Stellar Classification  
*Carlos Dafonte, Alejandra Rodríguez, Bernardino Arcay, Iciar Carricajo, Minia Manteiga* . . . . . 566

An Automatic Goodness Index to Measure Fingerprint Minutiae Quality  
*Edel García Reyes, José Luis Gil Rodríguez, Mabel Iglesias Ham* . . . . . 578

Classifier Selection Based on Data Complexity Measures  
*Edith Hernández-Reyes, J.A. Carrasco-Ochoa, J.F. Martínez-Trinidad* . . . . . 586

De-noising Method in the Wavelet Packets Domain for Phase Images  
*Juan V. Lorenzo-Ginori, Héctor Cruz-Enriquez* . . . . . 593

A Robust Free Size OCR for Omni-Font Persian/Arabic Printed Document Using Combined MLP/SVM  
*Hamed Pirsiavash, Ramin Mehran, Farbod Razzazi* . . . . . 601

A Modified Area Based Local Stereo Correspondence Algorithm for Occlusions  
*Jungwook Seo, Ernie W. Hill* . . . . . 611

An Evaluation of Wavelet Features Subsets for Mammogram Classification  
*Cristiane Bastos Rocha Ferreira, Dívio Leandro Borges* . . . . . 620

A New Method for Iris Pupil Contour Delimitation and Its Application in Iris Texture Parameter Estimation  
*José Luis Gil Rodríguez, Yaniel Díaz Rubio* . . . . . 631

Flexible Architecture of Self Organizing Maps for Changing Environments  
*Rodrigo Salas, Héctor Allende, Sebastián Moreno, Carolina Saavedra* . . . . . 642

Automatic Segmentation of Pulmonary Structures in Chest CT Images <i>Yeny Yim, Helen Hong</i> .....	654
Blind Deconvolution of Ultrasonic Signals Using High-Order Spectral Analysis and Wavelets <i>Roberto H. Herrera, Eduardo Moreno, Héctor Calas, Rubén Orozco</i> .....	663
Statistical Hypothesis Testing and Wavelet Features for Region Segmentation <i>David Menoti, DÍbio Leandro Borges, Arnaldo de Albuquerque Araújo</i> .....	671
Evaluating Content-Based Image Retrieval by Combining Color and Wavelet Features in a Region Based Scheme <i>Fernanda Ramos, Herman Martins Gomes, DÍbio Leandro Borges</i> . . . .	679
Structure in Soccer Videos: Detecting and Classifying Highlights for Automatic Summarization <i>Ederson Sgarbi, DÍbio Leandro Borges</i> .....	691
Multiscale Vessel Segmentation: A Level Set Approach <i>Gang Yu, Yalin Miao, Peng Li, Zhengzhong Bian</i> .....	701
Quantified and Perceived Unevenness of Solid Printed Areas <i>Albert Sadovnikov, Lasse Lensu, Joni-Kristian Kamarainen, Heikki Kälviäinen</i> .....	710
Active Contour and Morphological Filters for Geometrical Normalization of Human Face <i>Gabriel Hernández Sierra, Edel Garcia Reyes, Gerardo Iglesias Ham</i> .....	720
Medical Image Segmentation and the Use of Geometric Algebras in Medical Applications <i>Rafael Orozco-Aguirre, Jorge Rivera-Rovelo, Eduardo Bayro-Corrochano</i> .....	729
Similarity Measures in Documents Using Association Graphs <i>José E. Medina Pagola, Ernesto Guevara Martínez, José Hernández Palancar, Abdel Hechavarría Díaz, Raudel Hernández León</i> .....	741
Real-Time Kalman Filtering for Nonuniformity Correction on Infrared Image Sequences: Performance and Analysis <i>Sergio K. Sobarzo, Sergio N. Torres</i> .....	752

Maximum Correlation Search Based Watermarking Scheme Resilient to RST <i>Sergio Bravo, Felix Calderón</i> .....	762
Phoneme Spotting for Speech-Based Crypto-key Generation <i>L. Paola García-Perera, Juan A. Nolasco-Flores, Carlos Mex-Perera</i> .....	770
Evaluation System Based on EFuNN for On-Line Training Evaluation in Virtual Reality <i>Ronei Marcos de Moraes, Liliane dos Santos Machado</i> .....	778
Tool Insert Wear Classification Using Statistical Descriptors and Neuronal Networks <i>E. Alegre, R. Aláiz, J. Barreiro, M. Viñuela</i> .....	786
Robust Surface Registration Using a Gaussian-Weighted Distance Map in PET-CT Brain Images <i>Ho Lee, Helen Hong</i> .....	794
Optimal Positioning of Sensors in 3D <i>Andrea Bottino, Aldo Laurentini</i> .....	804
Automatic Window Design for Gray-Scale Image Processing Based on Entropy Minimization <i>David C. Martins Jr., Roberto M. Cesar Jr., Junior Barrera</i> .....	813
On Shape Orientation When the Standard Method Does Not Work <i>Joviša Žunić, Lazar Kopanja</i> .....	825
Fuzzy Modeling and Evaluation of the Spatial Relation “Along” <i>Celina Maki Takemura, Roberto Cesar Jr., Isabelle Bloch</i> .....	837
A Computational Model for Pattern and Tile Designs Classification Using Plane Symmetry Groups <i>José M. Valiente, Francisco Albert, José María Gomis</i> .....	849
Spectral Patterns for the Generation of Unidirectional Irregular Waves <i>Luis Pastor Sanchez Fernandez, Roberto Herrera Charles, Oleksiy Pogrebnyak</i> .....	861
Recognition of Note Onsets in Digital Music Using Semitone Bands <i>Antonio Pertusa, Anssi Klapuri, José M. Iñesta</i> .....	869

Tool-Wear Monitoring Based on Continuous Hidden Markov Models <i>Antonio G. Vallejo Jr., Juan A. Nolasco-Flores, Rubén Morales-Menéndez, L. Enrique Sucar, Ciro A. Rodríguez</i> . . . . .	880
Hand Gesture Recognition Via a New Self-organized Neural Network <i>E. Stergiopoulou, N. Papamarkos, A. Atsalakis</i> . . . . .	891
Image Thresholding of Historical Documents Using Entropy and ROC Curves <i>Carlos A.B. Mello, Antonio H.M. Costa</i> . . . . .	905
De-noising of Underwater Acoustic Signals Based on ICA Feature Extraction <i>Kong Wei, Yang Bin</i> . . . . .	917
Efficient Feature Extraction and De-noising Method for Chinese Speech Signals Using GGM-Based ICA <i>Yang Bin, Kong Wei</i> . . . . .	925
Adapted Wavelets for Pattern Detection <i>Hector Mesa</i> . . . . .	933
Edge Detection in Contaminated Images, Using Cluster Analysis <i>Héctor Allende, Jorge Galbiati</i> . . . . .	945
Automatic Edge Detection by Combining Kohonen SOM and the Canny Operator <i>P. Sampaziotis, N. Papamarkos</i> . . . . .	954
An Innovative Algorithm for Solving Jigsaw Puzzles Using Geometrical and Color Features <i>M. Makridis, N. Papamarkos, C. Chamzas</i> . . . . .	966
Image Dominant Colors Estimation and Color Reduction Via a New Self-growing and Self-organized Neural Gas <i>A. Atsalakis, N. Papamarkos, I. Andreadis</i> . . . . .	977
Oversegmentation Reduction Via Multiresolution Image Representation <i>Maria Frucci, Giuliana Ramella, Gabriella Sanniti di Baja</i> . . . . .	989
A Hybrid Approach for Image Retrieval with Ontological Content-Based Indexing <i>Oleg Starostenko, Alberto Chávez-Aragón, J. Alfredo Sánchez, Yulia Ostróvszkaya</i> . . . . .	997

Automatic Evaluation of Document Binarization Results <i>E. Badekas, N. Papamarkos</i> .....	1005
A Comparative Study on Support Vector Machine and Constructive RBF Neural Network for Prediction of Success of Dental Implants <i>Adriano L.I. Oliveira, Carolina Baldisserotto, Julio Baldisserotto</i> ....	1015
A Fast Distance Between Histograms <i>Francesc Serratosa, Alberto Sanfeliu</i> .....	1027
Median Associative Memories: New Results <i>Humberto Sossa, Ricardo Barrón</i> .....	1036
Language Resources for a Bilingual Automatic Index System of Broadcast News in Basque and Spanish <i>G. Bordel, A. Ezeiza, K. Lopez de Ipina, J.M. López, M. Peñagarikano, E. Zulueta</i> .....	1047
<b>Keynote Lectures</b>	
3D Assisted 2D Face Recognition: Methodology <i>J. Kittler, M. Hamouz, J.R. Tena, A. Hilton, J. Illingworth, M. Ruiz</i> .....	1055
Automatic Annotation of Sport Video Content <i>Marco Bertini, Alberto Del Bimbo, Walter Nunziati</i> .....	1066
Conformal Geometric Algebra for 3D Object Recognition and Visual Tracking Using Stereo and Omnidirectional Robot Vision <i>Eduardo Bayro-Corrochano, Julio Zamora-Esquivel, Carlos López-Franco</i> .....	1079
<b>Author Index</b> .....	1091