

6th Mexican Conference on Pattern Recognition

M CPR2014

June 25–28, 2014, Cancun, Mexico

Grand Park Royal Cancun Caribe Hotel
Convention and Meeting Center

PROGRAM

Wednesday June 25 (Salón Laguna)	
8:00-9:00	Registration
9:00-10:00	Keynote Address Methodologies in Enhancing the Performance of Pattern Recognition Systems Professor Ching Y. Suen Director of Centre for Pattern Recognition and Machine Intelligence Concordia University, Montreal Canada IAPR Invited speaker
10:00-10:20	Coffee break
	Session 1: Pattern Recognition and Artificial Intelligence
10:20-10:40	Improved Performance of Computer Networks by Embedded Pattern Detection Angel Kuri-Morales and Iván Cortés-Arce
10:40-11:00	On Two Definitions of Reduct Manuel S. Lazo-Cortés, José Fco. Martínez-Trinidad, and J. A. Carrasco-Ochoa
11:00-11:20	A Family of Two-Dimensional Benchmark Data Sets and its Application to Comparing Different Cluster Validation Indices Jorge M. Santos and Mark Embrechts
11:20-11:40	Studying Netconf in Hybrid Rule Ordering Strategies for Associative Classification Raudel Hernández-León, José Hernández-Palancar, J. A. Carrasco-Ochoa, and José Fco. Martínez-Trinidad
11:40-12:00	Coffee break
	Session 2: Pattern Recognition and Artificial Intelligence
12:00-12:20	Multilayer Neural Network with Multi-Valued Neurons in Time Series Forecasting of Oil Production Igor Aizenberg, Leonid Sheremetov, and Luis Villa-Vargas
12:20-12:40	Developing Architectures of Spiking Neural Networks by Using Grammatical Evolution based on Evolutionary Strategy Andrés Espinal, Martín Carpio, Manuel Ornelas, Héctor Puga, Patricia Melín and Marco Sotelo-Figueroa
12:40-13:00	Problem Solving Environment based on Knowledge based System Principles A.M. Martinez-Enriquez, G. Escalada-Imaz, and Aslam Muhammad
13:00-13:20	Positive and Negative Local Trend Association Patterns in Analysis of Associations between Time Series Ildar Batyrshin and Valery Solovyev
13:20-15:00	Lunch
	Session 3: Pattern Recognition and Artificial Intelligence
15:00-15:20	An Effective Permutant Selection Heuristic for Proximity Searching in Metric Spaces Karina Figueroa and Rodrigo Paredes
15:20-15:40	Study of Overlapping Clustering Algorithms based on Kmeans through FBcubed Metric Argenis A. Aroche-Villarruel, J. A. Carrasco-Ochoa, José Fco. Martínez-Trinidad, J. Arturo Olvera-López, and Airel Pérez-Suárez
15:40-16:00	Deep Learning for Emotional Speech Recognition Máximo E. Sánchez-Gutiérrez, E. Marcelo Albornoz, Fabiola Martinez-Licona, H. Leonardo Rufiner, and John Goddard
16:00-16:20	Weighted Maximum Variance Dimensionality Reduction Turki Turki and Usman Roshan
16:20-16:40	Reduced Data based Improved MEB/L2-SVM Equivalence LACHACHI Nour-Eddine and ADLA Abdelkader

Thursday June 26 (Salón Laguna)	
8:00-9:00	Registration
9:00-10:00	<p>Keynote Address</p> <p>Pattern Discovery for Optimization in Healthcare: A Data Mining Case Study on Intensive Care</p> <p>Professor Fazel Famili School of Electrical Engineering and Computer Science University of Ottawa, Canada</p>
10:00-10:20	Coffee break
	Session 4: Computer Vision
10:20-10:40	<p>Introducing an Experimental Framework in C# for Fingerprint Recognition with Applications to Image Processing</p> <p>Miguel Angel Medina-Pérez, Octavio Loyola-González, Andres, Eduardo Gutierrez-Rodríguez, Milton García-Borroto, and Leopoldo Altamirano-Robles</p>
10:40-11:00	<p>Robust Head Gestures Recognition for Assistive Technology</p> <p>Juan R. Terven, Joaquin Salas, and Bogdan Raducanu</p>
11:00-11:20	<p>Object Recognition with Naive Bayes-NN via Prototype Generation</p> <p>Hugo Jair Escalante, Mauricio Sotomayor, Manuel Montes, and A., Pastor Lopez-Monroy</p>
11:20-11:40	<p>HOOSC128: A More Robust Local Shape Descriptor</p> <p>Edgar Roman-Rangel and Stephane Marchand-Maillet</p>
11:40-12:00	Coffee break
	Session 5: Computer Vision
12:00-12:20	<p>Noise-Removal Markers to Improve PCA-Based Face Recognition</p> <p>Santiago-Omar Caballero-Morales</p>
12:20-12:40	<p>Assembling Similar Tracking Approaches in Order to Strengthen Performance</p> <p>Edgar Reyna-Ayala, Santiago E. Conant-Pablos, and Hugo Terashima-Marín</p>
12:40-13:00	<p>Real-time Classification of Lying Bodies by HOG Descriptors</p> <p>A. Beltrán-Herrera, E. Vázquez-Santacruz, and M. Gamboa-Zuñiga</p>
13:00-13:20	<p>Contextualized Hand Gesture Recognition with Smartphones</p> <p>Enrique Garcia-Ceja, Ramon Brena, and Carlos E. Galván-Tejada</p>
13:20-15:00	Lunch
	Session 3: Animal Biometric Recognition/Computer Vision
15:00-15:20	<p>Relevance Feedback in Biometric Retrieval of Animal Photographs</p> <p>Chelsea Finn, James Duyck, Andy Hutcheon, Pablo Vera, Joaquin Salas, and Sai Ravela</p>
15.20-15:40	<p>Using Song to Identify Cassin's Vireo Individuals. A Comparative Study of Pattern Recognition Algorithms</p> <p>Julio G. Arriaga, Hector Sanchez, Richard Hedley, Edgar E. Vallejo, and Charles E. Taylor</p>
15:40-16:00	<p>A New Method for Skeleton Pruning from Binary Shapes</p> <p>Laura Alejandra Pinilla-Buitrago, José Fco. Martínez-Trinidad, and J. A. Carrasco-Ochoa</p>
16:00-16:20	<p>An Approach for Multi-Pose Face Detection Exploring Invariance by Training</p> <p>Eanes Torres Pereira, Herman Martins Gomes, and Jo~ao Marques de Carvalho</p>
16:20-16:40	<p>A Feasibility Study on the Use of Binary Keypoint Descriptors for 3D Face Recognition</p> <p>Janez Krizaj, Vitomir, Struc, and France Mihelic</p>
20:00-22:00	Conference Dinner

Friday June 27 (Salón Laguna)	
8:00-9:00	Registration
9:00-10:00	Keynote Address Visual Motion Analysis Professor Carlo Tomasi Department of Computer Science Duke University
10:00-10:20	Coffee break
	Session 6: Image Processing and Analysis
10:20-10:40	Wavelet Filter Adjusting for Image Lossless Compression Using Pattern Recognition Oleksiy Pogrebnyak, Ignacio Hernández Bautista, Oscar Camacho Nieto, and Pablo Manrique Ramírez
10:40-11:00	A New Retinal Recognition System using a Logarithmic Spiral Sampling Grid Fabiola M. Villalobos Castaldi, Edgardo M. Felipe-Riveron, and Ernesto Suaste Gómez
11:00-11:20	Thermal Image Processing for Breast Symmetry Detection Oriented to Automatic Breast Cancer Analysis Mario I. Chacon-Murguia, Adrian J. Villalobos-Montiel, and Jorge D. Calderon-Contreras
11:20-11:40	Content-Based Image Retrieval with LIRe and SURF on a Smartphone-Based Product Image Database Kai Chen and Jean Hennebert
11:40-12:00	Coffee break
	Session 7: Image Processing and Analysis/Applications of Pattern Recognition
12:00-12:20	Efficiency of DCT-Based Denoising Techniques Applied to Texture Images 262 Aleksy Rubel, Vladimir Lukin, and Oleksiy Pogrebnyak
12:20-12:40	A Semi-supervised Puzzle-Based Method for Separating the Venous and Arterial Vascular Networks in Retinal Images Edgardo M. Felipe-Riveron, Fabiola M. Villalobos Castaldi, Ernesto Suaste Gómez, Marcos A. Leiva Vasconcellos, and Cecilia Albortante Morato
12:40-13:00	Remote Identification of Housing Buildings with High-Resolution Remote Sensing José Luis Silván-Cárdenas, Juan Andrés Almazán-González, and Stephane A. Couturier
13:00-13:20	Speech based Shopping Assistance for the Blind J. Farzana, M. Aslam, A.M. Martinez Enriquez, Z.S. Afraz, and W. Talha
13:20-15:00	Lunch
	Session 8: Applications of Pattern Recognition
15:00-15:20	Odor Plume Tracking Algorithm Inspired on Evolution B. Lorena Villarreal, Gustavo Olague, and J.L. Gordillo
15:20-15:40	Use of Lexico-Syntactic Patterns for the Evaluation of Taxonomic Relations Mireya Tovar, David Pinto, Azucena Montes, Gabriel González, Darnes Vilariño, and Beatriz Beltrán
15:40-16:00	Rotor Unbalance Detection in Electrical Induction Motors using Orbital Analysis José Juan Carbajal-Hernández, Luis P. Sánchez-Fernández, Sergio Suárez-Guerra, and Ignacio Hernández-Bautista
16:20-16:40	Radiological pain predictors in knee Osteoarthritis, a four feature selection comparison: Data from the OA Jorge I. Galván-Tejada, José M. Celaya-Padilla, Carlos E. Galván-Tejada, Victor Trevio, and José G. Tamez-Peña
16:20-16:40	Applying Mathematical Morphology for the Classification of Iberian Ceramics from the Upper Valley of Guadalquivir River M. Lucena, A.L. Martínez-Carrillo, J.M. Fuertes, F. Carrascosa, and A. Ruiz

Saturday June 28			
8:00-9:00	Registration		
9:00-10:30	Tutorial 1 (Salón Laguna A) Digitization and Recognition of Various Types of Patterns Professor Ching Y. Suen	Tutorial 2 (Salón Laguna B) Knowledge Discovery and Pattern Recognition: An Applied Perspective Professor Fazel Famili	Tutorial 3 (Salón Laguna C) Tracking People Professor Carlo Tomasi
10:30-10:50	Coffee break		
10:50-12:00	Tutorial 1 (Salón Laguna A) Digitization and Recognition of Various Types of Patterns Professor Ching Y. Suen	Tutorial 2 (Salón Laguna B) Knowledge Discovery and Pattern Recognition: An Applied Perspective Professor Fazel Famili	Tutorial 3 (Salón Laguna C) Tracking People Professor Carlo Tomasi