

8th Mexican Conference on Pattern Recognition

MCPR2016

June 22–25, 2016, Guanajuato City, Mexico

University of Guanajuato

PROGRAM

Wednesday June 22 (Room number 2)

8:00-9:00	Registration
9:00-9:20	Opening
9:20-10:20	<p>Keynote Address</p> <p>MuSeMedia–The case of Vanishing Role Differences and Delays between Content Producers and Consumers</p> <p>Professor Balakhrisnan Prabhakaran Computer Science Department, University of Texas at Dallas, USA</p>
10:20-10:40	Coffee break Posters (Postgraduate Students' Meeting) & Demos
	Session 1: Computer Vision and Image Analysis
10:40-11:00	Text Detection in Digital Images Captured with Low Resolution Under Nonuniform Illumination Conditions Julia Diaz-Escobar and Vitaly Kober
11:00-11:20	Rotation Invariant Local Shape Descriptors for Classification of Archaeological 3D Models Edgar Roman-Rangel, Diego Jimenez-Badillo, and Stephane Marchand-Maillet
11:20-11:40	Feature Extraction as Ellipse of Wild-life Images Karina Figueroa, Ana Castro, Antonio Camarena-Ibarrola, and Héctor Tejeda
11:40-12:00	Comparing Threshold-Selection Methods for Image Segmentation: Application to Defect Detection in Automated Visual Inspection Systems Rafael López-Leyva, Alfonso Rojas-Domínguez, Juan Pablo Flores-Mendoza, Miguel Ángel Casillas-Araiza, and Raúl Santiago-Montero
12:00-12:20	Coffee break Posters (Postgraduate Students' Meeting) & Demos
	Session 2: Computer Vision and Image Analysis
12:20-12:40	Training a Multilayered Perceptron to Compute the Euler Number of a 2-D Binary Image Humberto Sossa, Ángel Carreón, and Raúl Santiago
12:40-13:00	Edge Detection in Time Variant Scenarios based on a Novel Perceptual Method and a Gestalt Spiking Cortical Model Juan Ramírez-Quintana, Mario Chacon-Murguía, and Alma Corral-Saenz
13:00-13:20	An Effective Image De-Noising Alternative Approach based on Third Generation Neural Networks Manuel Mejía-Lavalle, Estela Ortiz, Dante Mújica, José Ruiz, and Gerardo Reyes
13:20-13:40	Toward the Labeled Segmentation of Natural Images using Rough-set Rules Fernando J. Navarro-Avila, Jonathan Cepeda-Negrete, and Raul E. Sanchez-Yanez
13:40-14:00	Dynamic Object Detection and Representation for Mobile Robot Application Jose J. Lopez-Perez, Victor Ayala-Ramirez, and Uriel H. Hernandez-Belmonte
14:00-15:30	Lunch
	Session 3: Computer Vision and Image Analysis
15:30-15:50	Saliency Detection based on Heuristic Rules Diana E. Martinez-Rodriguez, Victor Ayala-Ramirez, and Uriel H. Hernandez-Belmonte
15.50-16:10	Order Tracking by Square-root Cubature Kalman Filter with Constraints Oscar Cardona-Morales and G. Castellanos-Dominguez
16:10-16:30	Contour Detection at Range Images using Sparse Normal Detector Alejandra Cruz-Bernal, Dora-Luz Almanza-Ojeda, and Mario-Alberto Ibarra-Manzano
16:30-16:50	An Optimization Approach to the TWPVD Method for Digital Image Steganography Ismael R. Grajeda-Marín, Héctor A. Montes-Venegas, J. Raymundo Marcial-Romero, J. A. Hernández-Servín, and Guillermo De Ita

Thursday June 23 (Room number 2)

8:30-9:00	Registration
9:00-10:00	<p>Keynote Address</p> <p>The future of Computer Vision: From the Lab to the Real World.</p> <p>Professor Theo Gevers Informatics Institute, Faculty of Science, University of Amsterdam (the Netherlands)</p>
10:00-10:20	Coffee break Posters (Postgraduate Students' Meeting) & Demos
	Session 4: Computer Vision and Image Analysis
10:20-10:40	Real Time Gesture Recognition with Heuristic-based Classification Omar Lopez-Rincon and Oleg Starostenko
10:40-11:00	Simultaneous Encryption and Compression of Digital Images based on Secure-JPEG Encoding Saqib Maqbool, Nisar Ahmad, Aslam Muhammad, and A. M. Martinez Enriquez
11:00-11:20	Automatic Tuning of the Pulse-coupled Neural Network using Differential Evolution for Image Segmentation Juanita Hernández and Wilfrido Gómez
11:20-11:40	Feature Selection using Genetic Algorithms for Hand Posture Recognition Uriel H. Hernandez-Belmonte and Victor Ayala-Ramirez
11:40-12:00	Activity Recognition in Meetings with One and Two Kinect Sensors Ramon F. Brena and Armando Nava
12:00-12:20	Coffee break Posters (Postgraduate Students' Meeting) & Demos
	Session 5: Pattern Recognition and Artificial Intelligence Techniques & Applications of Pattern Recognition
12:20-12:40	A Glance to the Goldman's Testors from the Point of View of Rough Set Theory Manuel S. Lazo-Cortés, José Fco. Martínez-Trinidad, and Jesús A. Carrasco-Ochoa
12:40-13:00	Automatic Construction of Radial-basis Function Networks through an Adaptive Partition Algorithm Ricardo Ocampo-Vega, Gildardo Sanchez-Ante, Luis E. Falcon-Morales, and Humberto Sossa
13:00-13:20	Efficient Counting of the Number of Independent Sets on Polygonal Trees Guillermo De Ita, Pedro Bello, Meliza Contreras, and Juan C. Catana-Salazar
13:20-13:40	SMOTE-D a Deterministic Version of SMOTE Fredy Rodríguez Torres, Jesús A. Carrasco-Ochoa, and José Fco. Martínez-Trinidad
13:40-14:00	Detecting Pneumatic Failures on Temporary Immersion Bioreactors Octavio Loyola-González, José Fco. Martínez-Trinidad, Jesús A. Carrasco-Ochoa, Dayton Hernández-Tamayo, and Milton García-Borroto
14:00-15:30	Lunch
	Session 7: Applications of Pattern Recognition
15:30-15:50	Classification of Motor States from Brain Rhythms using Lattice Neural Networks Berenice Gudiño-Mendoza, Humberto Sossa, Gildardo Sanchez-Ante, and Javier M. Antelis
15.50-16:10	Crime Detection via Crowdsourcing Daniel L. Pimentel-Alarcón and Claudia R. Solís-Lemus
16:10-16:30	Signature Recognition: Human Performance Analysis vs. Automatic System and Feature Extraction via Crowdsourcing Derlin Morocho, Mariela Proaño, Darwin Alulema, Aythami Morales, and Julian Fierrez
16:30-16:50	Automated Image Registration for Knee Pain Prediction in Osteoarthritis: Data from the OAI. Jorge I. Galván-Tejada, Carlos E. Galván-Tejada, José M. Celaya-Padilla, Juan R. Delgado-Contreras, Daniel Cervantes, and Manuel Ortiz.
16:50-17:10	Towards a Supervised Incremental Learning System for Automatic Recognition of the Skeletal Age Fernando Montoya Manzano, Salvador E. Ayala-Raggi, Susana Sánchez-Urrieta, Aldrin Barreto-Flores, José Francisco Portillo-Robledo, and Verónica Edith Bautista-López
20:00-22:00	Conference Dinner

Friday June 24 (Room number 2)

8:30-9:00	Registration
9:00-10:00	<p>Keynote Address</p> <p>Object Recognition In Mobile Robotics</p> <p>Professor Michel Devy Robotics, Action and Perception Group, LAAS-CNRS (France)</p>
10:00-10:20	Coffee break Posters (Postgraduate Students' Meeting) & Demos
	Session 8: Signal Processing and Analysis
10:20-10:40	<p>EEG PATTERN RECOGNITION: An Efficient Improvement Combination of ERD/ERS/laterality Features to Create a Self-paced BCI System Carlos Avilés-Cruz, Juan Villegas-Cortez, Andrés Ferreyra-Ramírez, and Arturo Zúñiga López</p>
10:40-11:00	<p>Highly Transparent Steganography Scheme of Speech Signals into Color Images using Quantization Index Modulation Diego Renza, Dora M. Ballesteros L., and Jeisson Sanchez</p>
11:00-11:20	<p>High Scrambling Degree in Audio through Imitation of an Unintelligible Signal Dora M. Ballesteros L., Diego Renza, and Steven Camacho</p>
11:20-11:40	<p>A Dynamic Indoor Location Model for Smartphones based on Magnetic Field: A Preliminary Approach Carlos E. Galván-Tejada, Jorge I. Galván-Tejada, José M. Celaya- Padilla, J. Rubén Delgado-Contreras, Vanessa Alcalá-Ramírez, and Luis Octavio Solís-Sánchez</p>
11:40-12:00	Coffee break Posters (Postgraduate Students' Meeting) & Demos
	Session 9: Signal Processing and Analysis
12:00-12:20	<p>Using N-grams of Quantized EEG Values for Happiness Detection David Pinto, Darnes Vilariño, Illiana Morales, Cristina Aguilar, and Mireya Tovar</p>
12:20-12:40	<p>LSTM Deep Neural Networks Post_Ittering for Improving the Quality of Synthetic Voices Marvin Coto-Jiménez and John Goddard-Close</p>
12:40-13:00	Final Meeting
13:00-15:00	Lunch
15:00- ...	Free Afternoon

Saturday June 25				
8:00-9:00	Registration			
9:00-10:30	Tutorial 1 (Room 2) MuSeMedia-based Collaborative Mixed/Virtual Reality Environments Professor Balakhrisnan Prabhakaran	Tutorial 2 (Room 3) Coloring Object Recognition. Professor Theo Gevers	Tutorial 3 (Room 4) Pattern Recognition in Mobile Robotics Professor Michel Devy	Tutorial 4 (Room 5) Third and Fourth Gene-ration Neural Networks (Neural networks with computations in den-drites, soma and axons) Professor Humberto Sossa
10:30-10:45	Coffee Break			
10:45-12:00	Tutorial 1 Continuation	Tutorial 2 Continuation	Tutorial 3 Continuation	Tutorial 4 Continuation
12:00-12:30	Closing Snacks			