

**WEDNESDAY, SEPTEMBER 27TH, 2017.**

<b>EXPO HALL</b>			
Start	Speaker	Title	Session
8:00 AM	Conference Registration		
8:30 AM	<b>Michael Emmerich</b>	<b>Indicator Based Multiobjective Optimization – Geometrical, Heuristic, and Numerical Algorithms</b>	
9:30 AM	Coffe Break		
9:45 AM	A Descent Direction for Equality and Inequality Constrained Multiobjective Optimization Problems	Bennet Gebken, Sebastian Peitz and Michael Dellnitz	<b>SON1 OLIVER CHAIR</b>
10:05 AM	Lara's Descent Direction for the Treatment of Bi-objective Optimization Problems via Hybrid Evolutionary Algorithms	Lourdes Uribe and Adriana Lara and Oliver Schütze	
10:25 AM	The Hypervolume Newton Method for Equality Constrained MOPs	Victor Adrián Sosa Hernández, Oliver Schütze, Hao Wang, André Deutz, and Michael Emmerich	
10:45 AM	An Evolutionary Approach for the Non-sequential Treatment of Parameter Dependent Multi-Objective Optimization Problems	Victor Adrián Sosa Hernández, Oliver Schütze, Heike Trautmann, and Günter Rudolph	
11:05 AM	Coffe Break		
11:20 AM	Random Selection of Parameters in Asynchronous Pool-Based Evolutionary Algorithms	Mario Garcia-Valdez, Rene Marquez, Juan J. Merelo Guervos, and Leonardo Trujillo	<b>EA-1 YAZMIN CHAIR</b>
11:40 AM	Rebellion Particle Swarm Optimization: What Happens when the Particles Rebel?	Ángel Arturo Rojas-García, Arturo Hernández-Aguirre	
12:00 AM	A Memetic Algorithm to Solve the Capacitated Vehicle Routing Problem with Time-Windows, Unmatched Pickups and Deliveries, and Inventory Restrictions	Oscar M. González, Carlos Segura, S. Ivvan Valdez Peña	
12:20 AM	How am I driving? Towards a Safety Index for Driving Profiles Via Genetic Programming	J. Roberto Lopez, Luis C. Gonzalez, Leonardo Trujillo, Antonio Posada, Perla Juarez, Graciela Ramirez, Olanda Prieto, N. Leticia Mendez	
12:40 PM	Lunch		
2:40 PM	<b>Gustavo Olague</b>	<b>Evolutionary Computer Vision</b>	
3:40 PM	Coffe Break		
3:55 PM	Identification and Classification of Scenes by means of the Wiener-Granger Causality Approach	Cesar Benavides- Alvarez, Juan Villegas-Cortez, Graciela Román-Alonso, Carlos Avilés-Cruz, Arturo Zúñiga-López, Eduardo Rodríguez-Martínez, Francisco Fernandez De Vega	<b>CV-1 LEO CHAIR</b>
4:15 PM	TFPy Framework: A Development for the Massive Processing of Digital Images using Convolutional Neural Networks using TensorFlow Software	Fidel Lopez-Saca, Carlos Avilés-Cruz, Andrés Ferreyra-Ramirez, Arturo Zúñiga-López, Eduardo Rodríguez-Martínez and Juan Villegas-Cortez	
4:35 PM	Detection of Multiple Robots Using an Artificial Dorsal Stream Approach	Roberto Pérez, Eddie Clemente, Marlen Meza-Sánchez	
4:55 PM	EEG Feature Extraction using Genetic Programming for the Classification of Mental States	Emigdio Z-Flores, Leonardo Trujillo, Pierrick Legrand, Frédérique Faïta-Aïnseb	
5:15 PM	Coffe Break		
5:25 PM	Multi-Ellipse Fitting with PEARL and a Multi-Objective Genetic Algorithm	Heriberto Cruz Hernández, Luis Gerardo de la Fraga	<b>CV-2A LEO CHAIR</b>
5:45 PM	Evolution of Statistical Descriptors for the Image Recognition of Natural Sceneries by the CBIR and Genetic Programming	Juan Villegas-Cortez, Carlos Avilés-Cruz, Francisco Fernández De Vega and Francisco Chavez de la O, César Augusto Puente-Montejano	

<b>CONCURRENT SESSIONS</b>		
Speaker	Title	Session
<b>NO SESSIONS</b>		
Optimal predictive control applied to a coupled tank process	F. J. Pereyra-Pitta, G. Valencia-Palomo, N. R. Cazarez-Castro	<b>ICS-2 NOHE CHAIR</b>
Optimization of Inventory Holding Costs in Supply Chain	Pablo M. Ayllon Lorenzo, Selene L. Cardenas-Maciel, Nohe R. Cazarez-Castro	
IDA-PBC Controller Tunning Using Steepest Descent	J.A. Morales, D. García, M.A. Castro, C. Higuera, J.A. Sandoval	
Predator-Prey system modeling using fuzzy differential equations	Mauricio Odreman-Vera, Nohe R. Cazarez-Castro and Selene L. Cardenas-Maciel	
<b>Coffe Break</b>		
Fuzzy system to detect the concentration's degree on letter "A", through electroencephalographic reading (EEG), for people with motor disabilities	Jose Sergio Magdaleno-Palencia	<b>CV-3 MIGUEL DUARTE CHAIR</b>
Controlling a computer using EEG technology, by blinking or concentration	Bogart Yail Marquez Lobato, Maria Eugenia Bermudez Jimenez, Sergio Magdaleno, Arnulfo Alanis Garza	
Remove Gaussian noise in images using the manycore system	Teodoro Alvarez S, Raul Munoz Ortiz, Roberto Herrera	
SURF Detector for Computacional Vision on FPGA	Morales Rentería E, Hernández Gutiérrez C., Herrera Charles R., Zamora Gómez E.	
<b>NO SESSIONS</b>		
Evolving Neural Controllers for Locomotion and Self-assembling of MARBot Modular Robots	Jorge Padilla, Eddie Clemente, Marlen Meza-Sánchez	<b>NAES-2 RICARDO CHAIR</b>
Coefficient optimization based on the SLS algorithm and their implementation in a FPGA board	E. Allende Chávez, J.R. Cárdenas Valdez, J.C. Nuñez Pérez	
Comparison of Two Methods for I/Q Imbalance Compensation applied in RF Power Amplifiers	S.A. Juárez-Cázares, E. Allende-Chávez, Y. Sandoval-Ibarra, E. Tlelo-Cuautle, and J.C. Nuñez-Pérez	
Design of a multi-tone generator on a DSPic33 system	Teodoro Alvarez S, Tarik Virgen D, Jesus Antonio Alvarez C	
<b>NO SESSIONS</b>		

**THURSDAY SEPTEMBER 28TH**

<b>EXPO HALL</b>			
Start	Speaker	Authors	Session
8:00 AM	<b>Efrén Mezura Montes</b>	<b>Constraint-handling in Nature-Inspired Optimization Algorithms</b>	
9:00 AM	<b>Coffe Break</b>		
9:15 AM	<b>Esteban Tielo Cuautle</b>	<b>Chaos generators: Their optimization, electronic implementation and applications</b>	
10:15 AM	<b>Coffe Break</b>		
10:30 AM	Comparison of multi-objective evolutionary algorithms for high level synthesis in FPGA devices	Darian Reyes Fernández de Bulnes, Yazmin Maldonado	<b>NAES-1 RICARDO CHAIR</b>
10:50 AM	Evaluation of the succession measures of the Simultaneous Perturbation Stochastic Approximation Algorithm for the Optimization of the Process	Juan Carlos Castillo García, Jesús Everardo Olguin Tiznado, Claudia Camargo Wilson, Juan Andrés López Barreras, Everardo Inzunza González	
11:10 AM	RF Power Amplifiers behavior modeling through GSGP	E. Allende Chávez, J.R. Cárdenas Valdez, Leonardo Trujillo and J.C Nuñez Pérez	
11:30 AM	Evaluation Stage for an FPGA-based Genetic Programming System	Carlos Goribar, Yazmin Maldonado, Leonardo Trujillo	
11:50 AM	<b>Lunch</b>		
1:50 PM	<b>IBM session</b>		
2:50 PM	Machine Learning based EEG system for neuromarketing, an academia-industry collaboration	Daniel E. Hernández, L. Trujillo, O. Villanueva, C. Barajas, Mitzi Dino, O. Monroy, O. Romo.	<b>RWA-1 MIGUEL DUARTE CHAIR</b>
3:20 PM	RFID windshield tag Design for Automated Vehicle Identification	Sergio Buenrostro, Roberto Herrera-Charles, Andres Calvillo	
3:40 PM	Multi-objective optimization of a vehicle engine mount by means of design of experiments and the users preferences	Alejandro Alvarado-Iniesta, Manuel I. Rodríguez-Borbón, Roberto Romero-López, Luis A. Rodríguez-Picón	
4:00 PM	The double coverage model for the ambulance location problem using fuzzy traveling time	Noelia Araceli Torres, Yazmin Maldonado, Leonardo Trujillo	
4:15 PM	<b>Coffe Break</b>		
4:35 PM	Searching for membership functions of a fuzzy system applied to the generation of periodic motions in a simple pendulum	Lisdan Herrera Garcia, Selene L. Cardenas-MacieI, Luis T. Aguilar, Nohe R. Cazarez-Castro	<b>RWA-2 PAUL CHAIR</b>
4:55 PM	A bilevel model for sales territory design that considers customer's waiting times	Dámaris A. Dávila Soria, José-Fernando Camacho-Vallejo, Rosa G. González Ramírez, Samuel Nucamendi Guillen	
5:15 PM	Method for systematic selection of tuning parameters in efficient predictive controllers based on multi-objective evolutionary algorithm NSGA-II	R.C. Gutiérrez-Urquidez, G. Valencia-Palomo, O.M. Rodríguez-Elias and J. A. Orrante-Sakanassi	
5:35 PM	Optimal Design of Sliding Mode Control Combined with Positive Position Feedback	J. Enriquez-Zárate, L. Trujillo, C. Hernández, C. Sánchez-Gómez	
5:55 PM	A Tabu Search algorithm for the Flexible Job Shop Scheduling Problems with Lot Streaming	Miguel A. Fernández Romero, Antonin Ponsich, Eric A. Rinc on García, Roman A. Mora Gutiérrez	

<b>CONCURRENT SESSIONS</b>		
Speaker	Title	Session
<b>NO SESSIONS</b>		
<b>Coffe Break</b>		
Representing Human Decision for Agent-Based Simulation using Ethnography and Computation	Ray Brunett Parra-Galaviz, Manuel Castañón-Puga , José de Jesús Parra-Galaviz, José Sergio Magdaleno-Palencia, Bogart Yhair Lovato and José Christian Hernandez-Romero	<b>RWA-3 LUIS CORIA CHAIR</b>
Optimal synthesis of a four bar linkage for ankle rehabilitation	Carlos Alejandro Domínguez Ortega, José Antonio Rodríguez Zúñiga, Ricardo Jesús Sánchez Quintal, Jesús Alfredo López Silvano and Carlos Alberto Cruz Villar	
Teoría y experimentos de un vehículo subacuático no tripulado (AUV)	César Higuera, Jesús Sandoval, Luis Coria, Eusebio Bugarin	
Optimization and Implementation of Circular Antenna for CanSat	Cruz Ángel Figueroa Torres, José Luis Medina Monroy , Andrés Calvillo Téllez	
<b>Coffe Break</b>		
<b>Plática Plenaria (Sala Principal)</b>		
Comparing NSGA-II with Simulated Annealing for electoral redistricting problems in Mexico	Antonin Ponsich, Eric A. Rinc on García, Roman A. Mora Gutiérrez, Sergio G. de los Cobos Silva, Miguel A. Gutiérrez Andrade, Pedro Lara Velázquez	<b>NEO NOHE CHAIR</b>
Towards a stereo vision method based on a bee colony algorithm for real-time processing	G.R. Aguilar-López , M. Perez-Patricio, R.Mota-Grajales, S. Velazquez-Trujillo, Hector Daniel Vázquez Delgado	
Construction and Implementation of Decision Trees to Detect Network Attacks of the Type TCP SYN Flood, DHCP Spoofing, DHCP Starvation and Through Analyzing Audience perception of elitism operations by means of kinnect based non introusive method	F. Fernández de Vega, M. García, G. Aguilar, C. Cruz	
<b>Coffe Break</b>		
<b>NO SESSIONS</b>		

**FRIDAY SEPTEMBER 29TH**

**EXPO HALL**

Start	Speaker	Title	Session
8:00 AM	<b>Miguel Ángel Moreles</b>	<b>A DE-Constrained optimization problem for fitting OGTT data</b>	
9:00 AM	<b>Coffe Break</b>		
9:15 AM	<b>Marcial Gonzalez</b>	<b>Multi-scale modeling and simulation of microstructure formation and evolution during powder compaction</b>	
10:15 AM	<b>Coffe Break</b>		
10:30 AM	Optimal Sliding Mode Control for a Miniature Autonomous Vehicle	Luis T. Aguilar, Adonai Rosas-Vichis, and Alejandra Ferreira de Loza	<b>ICS-1 NOHE CHAIR</b>
10:50 AM	Self-tuning for a SISO-type fuzzy control based on the relay feedback approach	Pablo J. Prieto, Nohe R. Cazarez-Castro, Selene L. Cardenas-Maciel, Luis T. Aguilar	
11:10 AM	Genetic optimization of fuzzy systems for the classification of treated water quality	Itzel G. Gaytan-Reyes, Nohe R. Cazarez-Castro, David Lara-Ochoa, Selene L. Cardenas-Maciel, Armando Martinez-Graciliano	
11:30 AM	Fuzzy system based stabilization for building structures affected by external disturbances	Marco Antonio Alcaraz-Rodriguez, Selene L. Cardenas-Maciel, Luis N. Coria, Sergio Contreras-Hernandez, Nohe R. Cazarez-Castro	
11:50 AM	<b>Coffe Break</b>		
12:05 PM	A comparison of different local search methods for neat-GP and GPU	Cesar Bernal Mendez, Leonardo Trujillo, Perla S. Juarez Smith, Antonin Ponsich, Juan Tapia	<b>GP LEO CHAIR</b>
12:25 PM	Applying Genetic Improvement to a Genetic Programming library in C++	Victor López-López, Pierrick Legrand and Leonardo Trujillo	
12:45 PM	Iterated F-Racing for parameter optimization of neat-GP	Ernesto Norberto Álvarez González, Juan José Tapia Armentab, Leonardo Trujillo	
1:05 PM	<b>Lunch</b>		
2:35 PM	Computation of Lightly Robust Multi-objective Optimal Solutions by Means of Generalized Cell Mapping	Carlos Hernández, Oliver Schütze, Jian-Qiao Sun	<b>SON-2 OLIVER CHAIR</b>
2:55 PM	Pareto Explorer Framework for Many Objective Optimization Problems	Oliver Cuate, Oliver Schütze	
3:15 PM	Hypervolume Gradient Ascent for Memetic Building Spatial Design Optimisation	Koen van der Blom, Sjonnie Boonstra, Michael T.M. Emmerich, Hèrm Hofmeyer	
3:35 PM	Fault Detection, Isolation and Recovery in HVAC Systems: an Automatic, Data-driven Approach	David Laredo, Oliver Schütze, Jian-Qiao Sun	
3:55 PM	<b>Coffe Break</b>		
4:05 PM	On the Use of Asynchronous Distributed Particle Swarm Optimization for Solving a Problem of Energy Management System in a	A.-C. Pérez, J. Mina, V.-H. Olivares, J.-H. Calleja, J.-E. Araue	<b>EA-2 YAZMIN CHAIR</b>
4:25 PM	Toll Optimization Problem: A Heuristic Algorithm	Vyacheslav Kalashnikov, José G. Florez-Muñiz, Nataliya Kalashnykova, Vladik Kreinovich, Jessica I. Valdés-Montoro	
4:45 PM	Deterministic Parameter Control in Differential Evolution for Constrained Search Spaces	Efrén Mezura-Montes, Octavio Ramos-Figueroa and María-Margarita Reyes-Sierra	
5:05 PM	Bounded Velocity in Path Following Control of Unicycle Mobile Robots using Genetic Programming	Marlen Meza-Sánchez, Eddie Clemente	
5:25 PM	<b>Coffe Break</b>		
5:35 PM	Artificial ECG signal of five cardiopathies for automatic detection	P. Dominguez-Camacho, P. Vera-Quesada, V. Gonzalez-Abrego, K. Alvarado-Urbe, D. Martinez-Peon	<b>CV-2B LEO CHAIR</b>
5:55 PM	Evaluation of Fetal Heart Rate Variability for the Diagnostic and Prediction of Intrauterine Growth Restriction	Oliver G. Campos Trujillo, Verónica Medina Bañuelos, Oscar Yáñez Suarez	