



MICAI 2010 Detailed PROGRAM

Registration for Workshops and Tutorials: Monday 8 and Tuesday 9 all day

Registration for MICAI opens: Monday 8, 4:00-6:00 P.M.

Tuesday 9, 4:00-6:00 P.M. and Wednesday 10, from 8:00 A.M.

All Keynote talks and the Opening Ceremony will be carry out at Ing. Baltasar Muñoz Lumbier room

The Ing. Baltasar Muñoz Lumbier, Teatro la Garza, Sala de Consejo Académico and Dr. J. Pilar Licona Olvera rooms, are located in the UAEH main building: Abasolo # 600, colonia centro, Pachuca, Hidalgo, CP. 42000

All tutorials will be celebrated in the ICBI-CITIS Building: Carretera Pachuca – Tulancingo Km. 4.5, Ciudad Universitaria, Colonia Carboneras, C.P. 42084, Mineral de la Reforma, Hidalgo, México.

November 8, Monday		<b>8:00 - 13:00</b>	<b>Doctoral Consortium: Sala de Consejo Académico</b>		
	Morning		Workshops, CONACyT Thematic Networks Meeting, and Tutorials		
Afternoon					
November 9, Tuesday	Morning		Workshops, CONACyT Thematic Networks Meeting, and Tutorials		
	Afternoon				
		9:00- 9:20	Opening Ceremony		
		9:20 - 10:50	Keynote talk: De Shuang Huang		
		10:50 - 11:00	Coffe Break		
			<b>Teatro la Garza</b>	<b>Dr. J. Pilar Licona Olvera</b>	<b>Ing. Baltasar Muñoz Lumbier</b>
			Parallel Session 1	Parallel Session 2	Parallel Session 3
			<b>Robotics, Planning and Scheduling (4 papers)</b>	<b>Machine Learning and Pattern Recognition (5 papers)</b>	<b>Logic and Distributed Systems (5 papers)</b>
	Morning, November 10, Wednesday	11:00 - 11:30	1. Heung Seok Jeon, Jung Hwan Park, Ryumduck Oh and Hyun Kyu Kang. A Practical Robot Coverage Algorithm for Unknown Environments	1. Brijnesh Jain and Klaus Obermayer. Elkan's k-Means Algorithm for Graphs	1. Omar Montano Rivas, Roy McCasland, Lucas Dixon and Alan Bundy. Scheme-based Synthesis of Inductive Theories
		11:30 - 12:00	2. Juan Carlos Arenas Mena, Jean-Bernard Hayet and Claudia Esteves. An algorithm for the automatic generation of human-like motions based on examples	2. Everton Alvares Cherman, Jean Metz and Maria Carolina Monard. A Simple Approach to Incorporate Label Dependency in Multi-label Classification	2. Oscar Estrada, Jose Arrazola and Mauricio Osorio An Intuitionistic Possibilistic Logic
		12:00 - 12:30	3. Leonardo Romero and Carlos Lara. Line Maps in Cluttered Environments	3. Vadim Vagin and Marina Fomina. Methods and algorithms of information generalization in noisy databases.	3. Alejandro Guerra-Hernández, Carlos Alberto Gonzalez-Alarcon and Amal El Fallah Seghrouchni. Jason Induction of Logical Decision Trees: A learning library and its application to commitment.
		12:30 - 13:00	4. Maikel León, Ciro Rodriguez, María M. García, Rafael Bello, and Koen Vanhoof. Fuzzy Cognitive Maps for modeling Complex Systems	4. Leonardo Chang Fernández, Miriam Monica Duarte Villaseñor, Eduardo Morales and Luis Enrique Sucar. Object Class Recognition using SIFT and Bayesian Networks	4. Stefano Bistarelli, Fabio Gadducci, Javier Larrosa, Emma Rollon and Francesco Santini. Extending Soft Arc Consistency to Non-Invertible Semirings
		13:00 - 13:30		5. Songfeng zheng. Boosting based Conditional Quantile Estimation for Regression and Binary Classification	5. Oscar A. Esquivel Flores and Héctor Benitez Perez. Frequency Transition based upon dynamic Consensus for a Distributed System

November 10, Wednesday	13:30 - 14:30	lunch		
	14:30 - 16:00	Keynote talk: Boris Stilman "Discovering Role of Linguistic Geometry"		
		Teatro la Garza	Dr. J. Pilar Licona Olvera	Ing. Baltasar Muñoz Lumbier
		Parallel Session 1	Parallel Session 2	Parallel Session 3
		<b>Robotics, Planning and Scheduling (4 papers)</b>	<b>Machine Learning and Pattern Recognition (4 papers)</b>	<b>AI-based Medical Application (5 papers)</b>
	16:00 - 16:30	1. Alejandro Peña-Ayala and Humberto Sossa. A lecture sequencing approach to enhance learning based on a semantic representation and exploitation of knowledge	1. Heron Molina-Lozano. A Fast Fuzzy Cocke-Younger-Kasami Algorithm for DNA and RNA Strings Analysis	1. Irvin Hussein Lopez and Angélica Muñoz. Towards Ubiquitous Acquisition and Processing of Gait Parameters.
	16:30 - 17:00	2. Daniella Castro Araujo and Marcelo Seido Nagano An effective constructive heuristic for the no-wait flowshop with sequence-dependent setup times problem	2. Guillermo Sanchez-Diaz, Ivan Piza-Davila, Manuel Lazo-Cortes, Miguel Mora-Gonzalez and Javier Salinas-Luna. A fast implementation of the CT_EXT algorithm for the testor property identification	2. Ramón Aranda, Mariano Rivera, Alonso Ramirez-Manzanares, Manzar Ashtari and James C. Gee. Massive Particles for Brain Tractography
	17:00 - 17:30	3. Roman Barták. Optimizing Alternatives in Precedence Networks	3. Rogelio Salinas-Gutiérrez, Arturo Hernández-Aguirre, Mariano J.J. Rivera-Meraz and Enrique R. Villa-Diharce. Supervised Probabilistic Classification based on Gaussian Copulas	3. María Lucila Morales Rodríguez, Rogelio Florencia Juárez, Juan Javier González Barbosa Hector J. Fraire Huacuja, and José A. Martínez Flores. Emotional Conversational Agents in Clinical Psychology and Psychiatry
	17:30 - 18:00	4. Dmitry Tsadikovich, Eugene Levner and Hanan Tell. AI-based integrated scheduling of production and transportation operations within military supply chains.	4. Ali Zulfiqar, Aslam Muhammad, A.M. Martínez-Enriquez, and G. Escalada-Imaz. Text-independent Speaker Identification using VQ-HMM Model Based Multiple Classifier System	4. Miguel Murguía-Romero, René Méndez-Cruz, Rafael Villalobos-Molina, Norma Yolanda Rodríguez-Soriano, Estrella González-Dalhaus and Rafael Jiménez-Flores. Knowledge-Based System for Diagnosis of Metabolic Alterations in Undergraduate Students
	18:00 - 18:30			5. Pedro Ponce, Arturo Molina, Rafael Mendoza, Marco Antonio Ruiz, David Gregory Monnard, and Luis David Fernández del Camp. Intelligent Wheelchair and Virtual Training by LabVIEW
Evening, November 10, Wednesday	18:30 - 20:30	Poster session		
	9:00 - 10:20	Keynote talk: Claudia Manfredi		
	10:20 - 10:30	Coffe Break		
		Teatro la Garza	Dr. J. Pilar Licona Olvera	Ing. Baltasar Muñoz Lumbier
		Parallel Session 1	Parallel Session 2	Parallel Session 3
		<b>Robotics, Planning and Scheduling (4 papers) + Fuzzy logic (2 papers)</b>	<b>Machine Learning and Pattern Recognition (4 papers)</b>	<b>Hybrid Intelligent Systems and Neural Networks (5 papers)</b>

November 11,  
Thursday

Morning, November 11, Thursday	10:30 - 11:00	1. Pablo Manrique, Rafael Antonio Márquez Ramírez, Oleksiy Pogrebnyak and Luis Pastor Sanchez Fernandez. Turbo Codification Techniques for Error Control in a Communication Channel	1. LM Manevitz, Omer Boehm and David Haroon. Towards One-Class Pattern Recognition in Brain Activity via Neural Networks	1. Kevin Grant and Keilan Scholten. On the Structure of Elimination Trees for Bayesian Network Inference
	11:00 - 11:30	2. Mahdi Naser-Moghadasi. A New Graphical Recursive Pruning Method for the IP Algorithm	2. Antonio Camarena-Ibarrola and Edgar Chavez. Real Time Tracking of Musical Performances	2. Sohail Sarwar, Zia-UI Qayyum and Owais Malik. CBR and Neural Networks Based Technique for Predictive Prefetching
	11:30 - 12:00	3. mahdi naser-moghadasi. A New Pruning Method for Incremental Pruning algorithm using a Sweeping Scan-line Through the Belief Space	3. Laura Jeanine Razo-Gil, Salvador Godoy-Calderon and Ricardo Barrón-Fernández. Recognizing dactylogical symbols with image segmentation and a new differentiated weighting scheme	3. Mahdi Tabassian, Reza Ghaderi and Reza Ebrahimpour. Combining neural networks based on Dempster-Shafer theory for classifying data with imperfect labels
	12:00 - 12:30	4. Eddy Borera, Larry Pyeatt and Mahdi Naser-Moghadasi. Pruning POMDP value Functions with the Kaczmarz Iterative Method	4. José Juan Carbajal Hernández and Luis Pastor Sánchez Fernández. Environmental pattern recognition for assessment of air quality data with the Gamma classifier	4. LM Manevitz and Hananel Hazan. Stability and Topology in Reservoir Computing
	12:30 - 13:00	5. Prometeo Cortés Antonio, Ildar Batyrshin, Imre Rudas, Heron Molina Lozano and Luis Villa Vargas. FPGA implementation of fuzzy system with parametric membership functions and parametric conjunctions		5. Rolando J. Praga-Alejo, Luis M. Torres-Treviño, David S. González, Jorge Acevedo-Dávila, and Francisco Cepeda. A Radial Basis Function Redesigned For Predicting A Welding Process
	13:00 - 13:30	6. Juan-Manuel Ramos-Arreguin, Emmanuel Guillen-Garcia, Sandra Canchola-Magdaleno, Jesus-Carlos Pedraza Ortega, Efrén Gorrostieta-Hurtado, Marco-Antonio Aceves-Fernández And Carlos-Alberto Ramos-Arreguin. Fuzzy Logic Hardware Implementation For Pneumatic Control Of One Dof Pneumatic Robot		
Afternoon, November 11, Thursday	13:30 - 14:30	Lunch		
	14:30 - 16:00	Keynote talk: Raúl Monroy "Some Encounters on the Productive Use of a Failed Proof Attempt or a Counterexample"		
		<b>Teatro la Garza</b>	<b>Dr. J. Pilar Licona Olvera</b>	<b>Ing. Baltasar Muñoz Lumbier</b>
		Parallel Session 1	Parallel Session 2	Parallel Session 3
		<b>Fuzzy logic (5 papers)</b>	<b>Automatic Learning for Natural Language Processing (4 papers)</b>	<b>Hybrid Intelligent Systems and Neural Networks (5 papers)</b>
	16:00 - 16:30	1. Do-Thanh Sang, Dong-Min Woo, Dong-Chul Park and Thi Nguyen. Financial Time Series Prediction in Cooperating with Event Knowledge : A Fuzzy Approach	1. Fabiano F. Santos, Veronica O. Carvalho and Solange O. Rezende. Selecting Candidate Labels For Hierarchical Document Clusters Using Association Rules	1. Eugene C. Ezin, Orion Fausto Reyes-Galaviz and Carlos Alberto Reyes García. Recognition of Huffman Codewords with a Genetic-Neural Hybrid System
	16:30 - 17:00	2. Bora Kumova and Hüseyin Çakır. The Fuzzy Syllogistic System	2. Miguel Angel Ríos Gaona, Alexander Gelbukh and Sivaji Bandyopadhyay. Recognizing Textual Entailment Using a Machine Learning Approach	2. Wilfredy Santamaria Ruiz and Elizabeth Leon. Fraud detection model based on the discovery symbolic classification rules extracted from a neural network

		17:00 - 17:30	3. Luis G. Martínez, Antonio Rodríguez, Guillermo Licea and Juan R. Castro. Big Five Patterns for Software Engineering Roles Using an ANFIS Learning Approach with RAMSET	3. Antonio Neme, Blanca Lugo and Alejandra Cervera. Detection of texts authorship through mutual information function and self-organizing maps.	3. Carlos Felix Campa, Marco Antonio Acevedo and Maria Elena Acevedo. New proposal for eliminating interferences in a radar system	
		17:30 - 18:00	4. Denisse Hidalgo and Patricia Melin. Type-2 Fuzzy Inference System Optimization Based on the Uncertainty of Membership Functions applied to Benchmark Problems	4. Olga Kolesnikova and Alexander Gelubkh. Supervised Machine Learning for Predicting the Meaning of Verb-Noun Combinations in Spanish	4. Maciej Nikodem. Hardware Implementation of Artificial Neural Networks for Arbitrary Boolean Functions with Generalised Threshold Gate Circuits	
		18:00 - 18:30	5. Fevrier Valdez, Patricia Melin and Oscar Castillo. Fuzzy Logic for Parameter Tuning in Evolutionary Computation and Bio-Inspired Methods		5. Laura Elena Gomez Sanchez, Humberto Sossa Azuela, Ricardo Barrón and Julio F. Jimenez Vielma. Dynamic Neural Networks Applied to Melody Retrieval	
		18:30 - 19:30	<b>Asamblea general de la Sociedad Mexicana de Inteligencia Artificial: Sala de Consejo Académico</b>			
	Evening, November 11, Thursday	21:00	Conference dinner			
November 12, Friday	Morning, November 12, Friday					
		9:00 - 10:20	<b>Keynote talk: Witold Pedrycz "Fuzzy modeling: fundamentals, design and challenges"</b>			
		10:20 - 10:30	Coffe Break			
			<b>Teatro la Garza</b>	<b>Dr. J. Pilar Licona Olvera</b>	<b>Ing. Baltasar Muñoz Lumbier</b>	
			Parallel Session 1	Parallel Session 2	Parallel Session 3	
			<b>Natural Language Processing (5 papers)</b>	<b>Computer Vision and Image Processing (4 papers)</b>	<b>Evolutionary Algorithms and other Naturally-inspired Algorithms (5 papers)</b>	
		10:30 - 11:00	1. Iria da Cunha, Eric SaJuan, Juan-Manuel Torres-Moreno, Marina Lloberas and Irene Castellón. DiSeg: A Discourse Segmenter for Spanish	1. Anna Romero and Miguel Cazorla. Testing Image Segmentation for Topological SLAM with Omnidirectional Images	1. Tianmin Zheng and Mitsuo Yamashiro. Solving no-wait flow shop scheduling problems by a hybrid quantum-inspired evolutionary algorithm.	
		11:00 - 11:30	2. Fernando Sánchez-Vega, Luis Villaseñor-Pineda, Manuel Montes-y-Gómez and Paolo Rosso. Towards Document Plagiarism Detection based on the Relevance and Fragmentation of the Reused Text	2. Alonso Ramirez-Manzanares, Abel Palafox-Gonzalez and Mariano Rivera. Robust spatial regularization and velocity layer separation for optical flow computation on transparent sequences.	2. Juan J. Flores, Hector Rodriguez Rangel and Mario Graff. Reducing the Search Space in Evolutive Design of ARIMA Models for Time Series Prediction.	
		11:30 - 12:00	3. Afraz Z. Syed, Muhammad Aslam, and Ana Maria Martinez-Enriquez. Lexicon based Sentiment Analysis of Urdu Text Using SentiUnits	3. Gerardo Arellano Cervantes, Luis E. Sucar Succar and Eduardo F. Morales Manzanares. Automatic Image Annotation using Multiple Grid Segmentation	3. Christian Domínguez Medina and Nareli Cruz Cortés. Routing algorithms for Wireless Sensor Networks using Ant Colony Optimization	
		12:00 - 12:30	4. Julio Castillo. Using semantic measures based on Wordnet in Recognizing Textual Entailment	4. Felix Calderon and Mariano Rivera. One Trilateral Filter based on Surface Normal	4. Juan Carlos Gomez and Hugo Terashima-Marin. Approximating Multi-objective Hyper-heuristics for Solving 2D Irregular Cutting Stock Problems	
12:30 - 13:00	5. Débora Hisgen and Daniela López De Luise. Dialog Structure Automatic Modeling		5. Julio Barrera, Juan J. Flores and Rodrigo Lopez Farias. Gravitational Interactions for Multimodal Optimization			
	13:00 - 14:30	Lunch				

Afternoon, November 12, Friday		14:30 - 16:00	Keynote talk: Héctor García Molina "CourseRank: A Social Site for Academic Course Planning and Evaluation"		
			Teatro la Garza	Dr. J. Pilar Licona Olvera	Ing. Baltasar Muñoz Lumbier
			Parallel Session 1	Parallel Session 2	Parallel Session 3
			Natural Language Processing (4 papers)	Computer Vision and Image Processing (3 papers)	Evolutionary Algorithms and other Naturally-inspired Algorithms (4 papers)
		16:00 - 16:30	1. Darnes Vilariño Ayala, David Pinto, Mireya Tovar Vidal, Carlos Balderas and Beatriz Beltran A Probabilistic Model based on n-grams for Bilingual Word Sense Disambiguation	1. Andrés F. Serna-Morales, Flavio Prieto and Eduardo Bayro-Corrochano. Spatio-Temporal Image Tracking Based on Optical Flow and Clustering: An Endoneurosonographic Application	1. Yenny Noa Vargas and Stephen Chen. Particle Swarm Optimization with Resets – Improving the Balance between Exploration and Exploitation
		16:30 - 17:00	2. Sonia Ordoñez and Alexander Gelbukh. Information Retrieval with a Simplified Conceptual Graph-like Representation	2. Oscar Dalmau and Mariano Rivera. Beta Measure for probabilistic segmentation.	2. Loreto Gonzalez-Hernandez and Jose Torres-Jimenez. MITS: A New Approach of Tabu Search for Constructing Mixed Covering Arrays
		17:00 - 17:30	3. Ana C. Tenorio-Gonzalez, Eduardo F. Morales-Manzanares and Luis Villaseñor-Pineda Teaching a robot to perform tasks with voice commands	3. Jose M. Mejia-Muñoz, Humberto de Jesus Ochoa-Dominguez, Leticia Ortega-Maynez, Osylan O. Vergara-Villegas, Vianey G. Cruz-Sanchez, Nelly Gordillo-Castillo and Efren D. Gutierrez-Casas. SAR multiplicative noise reduction algorithm using NSCT and morphological operators	3. Oscar Herrera. On the best evolutionary wavelet based filter to compress a specific signal
17:30 - 18:00	4. Alberto García, Alexander Gelbukh, and Hirma Calvo. Music composition based on linguistic approach		4. Ricardo Martinez, Oscar Castillo and Luis T. Aguilar. Fuzzy Logic Controllers Optimization Using Genetic Algorithms and Particle swarm Optimization		
November 13, Saturday		Morning	Academic activities and excursions		
		Afternoon			