1st Mexican Conference on Intelligent Robots (MEXCIR) 2025

June 25 - 27, 2025, Mexico City, Mexico

Time	Wednesday, June 25	Thursday, June 26	Friday, June 27
8:00	Registration	Registration	Registration
8:30			
9:00	Conference Opening and Welcome	Keynote: Jens Grossklags	Keynote: Victor Santibanez
9:30	Keynote: Hiram Ponce		
10:00		Ethical representation of cultural aspects in robots. Ivan Vladimir Meza Ruiz, Mauricio Enrique Reyes Castillo, Carlos Ricardo Cruz Mendoza and María Ximena Gutiérrez Vasques	Bayesian Localization of Service Robots. Jesús Savage, Marco Negrete and Yukihiro Minami
10:30	A holistic view on modern robotics in XXI century. Isaac Chairez	Legal Challenges of Speaking Intelligent Robots. Intellectual Property and Personal Data Protection in a World of Agentic AI. Israel Cedillo Lazcano	A Review on Binary Networks for 6D Aerial Pose Estimation. Aldrich A. Cabrera-Ponce, Manuel I. Martin-Ortiz and Jose Martinez-Carranza
11:00	Gentle review of classical walking algorithms for humanoids based on ZMP. Alejandro Aceves-López and Ana Patricia Islas-Mainou	Coffee break	An overview of Trajectory Planning and State Estimation in UAVs. Nilda Gabriela Xolo-Tlapanco and Jose Martinez-Carranza
11:30	Coffee break	Drone audition using a suspended microphone array. François Proulx, L. Oyuki Rojas-Perez, Caleb Rascon, Jose Martinez-Carranza and François Grondin	Coffee break
12:00	Perception to Action: Machine Learning Methods for Autonomous Robots. Alejandra Hernandez-Sanchez, Mariel Alfaro-Ponce and Zobeida J. Guzmán-Zavaleta	Fuzzy-PID Control of a 3-DoF Helicopter. Ponciano Jorge Escamilla-Ambrosio	A Review on Continuous Learning for Drone Deployment in Open World Environments. César Adrián Granados Bernal, Eduardo F. Morales Manzanares and José Martínez Carranza
12:30	From Pixels to Perception: The Evolution of Computer Vision in Robotics. Angélica Guadalupe Canto Torrijos and Zobeida Jezabel Guzmán Zavaleta	LA-ELaDroSy: Low-cost Autonomous Emergency Landing Drone System. Aldo Oziel Peña Gamboa and César Martínez-Torres	Autonomous drone navigation under low-light conditions: a review. Esteban Tlelo-Coyotecatl, Jose Martinez-Carranza and Alejandro Gutierrez-Giles
13:00	Chicken Swarm Optimization for Enhanced Line-segment Detection in Thermal-Monocular Depth Estimation. Carlos Manuel Perez Rodriguez, César Martínez-Torres and Jose Martínez-Carranza	Keynote: Francois Grondin	Neural Pilots for Agile Flight. L. Oyuki Rojas-Perez and Jose Martinez-Carranza
13:30	Crash Avoidance for Autonomous Cars via Probabilistic Logic Counterfactual Reasoning. Héctor Avilés, Rafael Kiesel, Alberto Reyes, Verónica Rodríguez-López, Rubén Machucho, Gabriel Ramírez, Myriam Pequeño, Ingridh Gracia, Nicolás Luévano, Karelly Rivera, José Jesús Medrano and Marco Negrete		A Review of Drone Self-localization by Reflections of Ego-noise. Caleb Rascon and Jose Martinez-Carranza
14:00	Lunch Break		
14:30			
15:00	CNN-Quantized Based RF Signal Identification for UAV Disaster Navigation. Carlos Osorio Quero and Jose Martinez-Carranza	Deep Neural Networks for Grasp Planning in Domestic Service Robots. Germán Alday-Salazar, Biddy Itzel González-Jiménez and Marco Negrete	Keynote: Peter Wallace
15:30	Trajectory Tracking Control on a Vertical Surface Based on Immersion and Invariance for an Aerial Manipulator. Aaron Lopez, Jose Martinez-Carranza and Hugo Rodríguez Cortés	Symbolic Fusion in Visual SLAM: A Hidden Markov Model Approach. Oscar Fuentes, Jesus Savage and Marco Negrete	
16:00	Multirate Integration Methods for Multicopters. Gustavo Rodriguez-Gomez, Antonio Matus-Vargas and Jose Martinez-Carranza	RobExpNet: A Model for Robotic Exploration Based on Map Entropy Minimization. Miguel Angel Rojas Andrade, Jose Adrian Rodriguez Gonzalez, Uriel H. Hernandez-Belmonte, Angel Diaz Pacheco and Juan Pablo Ramirez Paredes	Regulatory and Patent Panel
16:30	Coffee break	Coffee break	
17:00	Representative from UNINDETEC - Mexican Navy	Plenary Talk: General Policies, Planning, and Robotics | Daniel Swoboda	Conference Closing
17:30		Plenary Talk: Knowledge-Driven Reasoning in ROS with the CLIPS Executive | Tarik Viehmann	
18:00	Welcome Reception		
18:30			
19:00			

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