Friday, 27 November. LT2 Auditorium

09:00 - 09:15	**A Flatness-Based Control Strategy for Energy and Bipolar Voltage Regulation in the "DC/DC Boost Converter–Full-Bridge Buck Inverter" System** Eduardo Hernández-Márquez, Adrián Jared Omaña-Butrón, Jonathan Miguel Martínez-Santos, J. Martín Alba-Martínez, Benjamin Natanael Santiago-Nogales, Ramón Silva-Ortigoza, Magdalena Marciano-Melchor, Rosalba Galván-Guerra and José Rafael García-Sánchez.
09:15 - 09: 30	**Sim-to-Real Reactive Navigation and Edge Avoidance for a Miniature Mobile Robot via Deep Reinforcement Learning on Microcontroller Hardware** Daniel Antonio Castro.
09:30 - 09:45	**Robust Hierarchical Speed Regulation of a Photovoltaic-Fed DC/DC Buck-Boost Converter–DC Motor–Centrifugal Pump System** Rogelio Ernesto García-Chávez, David Hebert del Valle-Paniagua, Ramón Silva-Ortigoza, Adrián Jared Omaña-Butrón, Magdalena Marciano-Melchor and José Rafael García-Sánchez.
09:45 - 10:00	**Detection of DoS and DDoS Attacks Using a Temporal Transformer Model: An Evaluation of Class Balancing Strategies** Angélica Espinoza Godínez, José Luis Garza Rivera and David Tinoco Varela.
10:00 - 10:15	**Artificial vision-based discrimination algorithm for thermographic flame detection** Ismael Monroy Luna, Rubén Alejandro Garrido Moctezuma and Cesar Ulises Solís Cervantes.
10:15 - 10:30	**Multiobjective Genetic Algorithm for Wafer-Lot Sequencing Using a Neural-Network Surrogate Mode**l Oscar Báez, Carlos Martínez, María Gurruchaga and Miguel Heredia.
10:30 - 10:45	**EEGNet-Based Classification of Motor Imagery Tasks: Construction and Validation of a Virtual Reality Electroencephalography Database** Luis Alberto Pineda-Gómez, Tamara Osuna-Uribe, Mario Castelán and D Gutiérrez.
10:45 - 11:00	**A Practical Tutorial on Moving Horizon Estimation for LTI Systems** Lizeth Torres and Roberto-Giovanni Ramírez-Chavarría.
11:00 - 11:15	**Real-time Vehicle License Plate Identification Using YOLOv8 and Geometric Segmentation.** Adrián Núñez-Vieyra, Juan Carlos Olivares-Rojas, Eduardo Alcaraz-Chávez, Edgar B. Carrillo-Vaca, Arturo Méndez-Patiño and Laura N. Alvarado-Zamora.
11:15 - 11.30	**Neuroevolution for Effort Estimation in the Construction Phase With Low-code Project**s Angel Sanchez García.
11:30 - 11:45	**User Interface for Histopathological Analysis of Breast Tumors Using Deep Learning** Alejandro Barranco, Adán Ramírez, Jesús Villegas, Jorge Muños, Juan Prado and Saúl Tovar.
11:45 - 12:00	**A Systematic Literature Review on Bio-Inspired Optimization for Monolith-to-Microservice Decomposition** Luis Angel López-García, Saul Dominguez-Isidro, Jorge Octavio Ocharán-Hernández, Angel J. Sánchez-García and Juan Luis López-Herrera.
12:00 - 12:15	**AI-Empowered Climate Change Prediction and Control: A Review of Methodologies and Applications** Harshal Pal.

Friday, 27 November. LT2 Auditorium

12:15 - 12:30	**RunTimer: An IoT and Cloud-Based System for Robotics Competition Management and Automated Timing** Nicolás Andrés Castro Rodríguez, Brayyan Enrique Bonilla Carmona, Luis Anderson Coronel Rojas, Jorge Antonio Sequeda Serrano, Mauricio Zafra Aycardi and Dewar Rico-Bautista.
12:30 - 12:45	**Experimental Analysis of Latent Space Manipulation in StyleGAN3 for High-Resolution Facial Image Synthesis** Sergio Álvarez Silva.
12:45 - 13:00	**A Gamification Strategy for Teaching the FET Transistor as an Amplifier** Oriana Alexandra López Bustamante, Byron Medina, Paula Stephany Estupiñan, Sebastian Calderón, Yesenia Areniz Arevalo, Dixon Alirio Garcia Carrillo, Dinael Guevara Ibarra and Darwin Orlando Cardozo Sarmiento.
13:00 - 13:15	**Comparative Evaluation of Automatic Speech Recognition Systems for Spanish Medical Transcription** Eduardo Rafael Mendiola Rosas, Alejandro Reyes and Daniel Ulises Campos Delgado.
13:15 - 13:30	**Decision-Making in Multi-Agent Autonomous Systems Using TOPSIS and Potential Fields** Andres Antonio Arenas Muñiz, Dante Mújica-Vargas, Noé Castro-Sánchez, Gabriel Gonzalez-Serna, Nimrod González and Hugo Estrada Esquivel. Dynamic
13:30 - 13:45	**mHealth-eMotion: A Linux Software Platform for RGB-D Movement Capture and Landmark Processing** Andrés Navarro Cadavid, Luisa Fernanda Castaño Pino, Santiago José Barraza Sinning, Juan Eduardo Yustes Nieto, Samuel Rivera Navarro and Jorge Luis Orozco.
13:45 - 14:00	**Evaluation of Deep Learning Models for Classification of Hand Gesture Recognition in High-Dimensional sEMG Datasets** José Luis Garza Rivera, Angélica Espinoza Godínez and David Tinoco Varela.