IEEE International Conference on Machine Learning and Applied Network Technologies (ICMLANT 2025)

EL SALVADOR, 11 - 12 DECEMBER, 2025 (GMT-6, El Salvador Time)

Schedule	Thursday, December 11	Friday, December 12
7:50 am – 8:05 am	**Opening Ceremony**	
8:10 am – 8:30 am	**Keynote 1** **Dr. Kazim Raza Talpur** *Faculty of Artificial Intelligence, Universiti Teknologi Malaysia (UTM)* *Kuala Lumpur, Malaysia*	**Privacy-Preserving Federated Network Intrusion Detection on Encrypted Traffic: A Multi-Site Cross-Domain Approach with XGBoost Optimization** *Adepoju, Peter; Al-Hubaishi, Mohammed*
8:35 am – 8:55 am		**Deep Learning-Based HD Risk Prediction Using Sequential Neural Networks** *Krishna, Sujatha*
9:00 am – 9:25 am	**Smarter Healthcare: Assessing Nurse Workload using Wearable Sensors and Machine Learning** *Bui, Viet-Hoan; Tran, Duc-Nghia; Trong Minh, Hoang; Dinh, Ngoc-Anh; La Tuan, Minh; Hieu, Dao*	**Transcript-Free Alzheimer's Detection Using Lightweight Hybrid CNN–LSTM Architectures** *Nguyen, Bao-Long; Tran-Bui, Nguyen-Duong; Hoang, Nhat-Minh; Vu, Hoang-Dieu*
9:30 am - 9:50 am	**Analysis of Driving Patterns on the Manzanillo–Colima Route Using Telematic Monitoring and Unsupervised Learning** *Ayala, Cristian; Zárate, Francisco; Vasconcelos, Alan; Collazos, Julian; Nicolas, Daniel; Vargas, Angie*	**Transfer Learning with XceptionNet for Cancer Detection in Medical Imaging** *Pham, Tuan-Anh; Hoang, Nhat-Minh; Nguyen, Thanh-Phuc; Vu, Hoang-Dieu*
9:55 am – 10:15 am	**Forecasting renewable energy curtailment using ARX models: A case study of Honduras during COVID-19** *Serrano, Fernando; Raudales, Kevin; Sosa, Diego; Flores, Marco; Serrano, Miguel ; Cardona, Manuel*	**A Systematic Review of Artificial Intelligence Applications in Alzheimer's Disease: Advances and Research Gaps in Latin America** *Sánchez, Carlos; Vásquez-Pineda, Bryan; Velasco-Molina, Nicole; Pinto, Rodrigo*
10:20 am – 10:40 am	**Advanced AI Regression Models for Non-Destructive Prediction of Maize Chemical Composition via Mid-Infrared Spectra Data** *Rammal, Abbass; Haidar, Shaza; Youness, Sara; Sharafeddin, Mageda*	**Deep Learning for Early Detection of Diabetic Retinopathy Using Retinal Fundus Images** *G R, Shreeya; Nayak, Shwetha*
10:45 am – 11:05 pm	**Reconstructing CT Scan Images with SADNN: A Promising Approach for Medical Imaging** *Dayanika, Jarugumalla; Balakrishna, Sivadi*	**ExBERT-CM: Explainable Cyberbullying Detection in Code-Mixed Social Media with Multilingual Transformer Models** *R, Varshini ; Mary J, Priyanga; R, Shoba*
11:05 am – 11:15 am	**Break**	**Break**
11:15 am – 11:35 pm	**Pest and Disease Identification in Pomelo Leaves Using YOLOv9 Convolutional Neural Network (CNN) Model** *Perez, Edrick Benjamin; Gundran, Juan Miguel; Latina, Mary Ann*	**Personalized Education Path Recommendation System and AI Assistance** *priya, Dhathri*
11:40 am – 12:00 pm	**Low-cost Edge Gateway Architecture for IIoT Interoperability in Industry** Miranda, Diego; Cardona, Manuel; Vásquez, Bryan; Solanki, Vijender Kumar	**Multi-model Approach for Investigating the Gut Microbiota Signatures in Hepatic Steatosis Progression** *P, Deepika ; L, Anand*
12:05 am – 12:25 pm	**A Quantum-Resistant Blockchain Framework for Securing IoT Devices** *Puri, Vikram; Kumar, Pradeep; Solanki, Vijender Kumar*	**Towards Ethical Artificial Intelligence: A Review of XAI Methods in Healthcare** *Martinez Rivas, Andrea; Cardona, Manuel; Vásquez-Pineda, Bryan*
12:25 pm – 6:00 pm	**Break**	**Break**
6:00 pm – 6:20 pm	**Dragon Fruit Plant Disease Classification Using Transfer Learning** *Magboo, Vincent Peter; Magboo, Ma Sheila*	**ZenIA: An Artificial Intelligence-Based Robotic System for Elderly Healthcare Assistance** *Guevara, Armando; López, Irene; Chávez, Fernando; Vásquez-Pineda, Bryan; Cardona, Manuel*
6:25 pm – 6:45 pm	**Synthetic Data Generation and Cost-Sensitive Distillation for Cardiovascular Risk Models** *Serrano-Fabela, Handry; Rivera-Lopez, Rafael; de la Cruz-Hernández, Erick; Hernández-Barrios, Daniela; Carrasco-Barradas, Abraham; Cruz-Ramírez, Marisol; Barradas-Cortés, Abraham; Ortega-Juárez, Daniela*	**Leveraging Deep Progressive Reinforcement Learning and Feature Learning Techniques for Vietnamese Sign Language Recognition** *Nguyen, VanToi*
6:50 pm – 7:10 pm	**Q-Learning-Based Path Planning Approach for UAVs in a Dynamic Environment** *Jarray, Raja; Bouallègue , soufiene*	**Towards Smart Charging Strategies: Using Machine Learning to Predict EV Charging Pattern via Smart Grid** *Irhaam, Adli; Mohd Nawi, Illani*
7:15 pm – 7:35 pm	**Application of Long Short-Term Memory Networks to Predict Electrical Frequency in El Salvador** *Flores-Cortez, Omar; Pocasangre, Carlos; Arevalo, Fernando; Lue, Josue; Arce, Carlos; Arrieta, Mario; Ramos, Jose ; Melendez, Werner; Ramos, Jose*	**Low-Overhead Hybrid Beamforming and SINR-Based User Clustering for Mixed-Field Non-Orthogonal Multiple Access Systems** *Le, Thuan; Dinh, Nam; Nguyen, Ngoc Thanh; Nguyen, Luong*
7:35 pm – 7:50 pm	**Break**	**Break**
7:50 pm – 8:10 pm	**NH SwiftPass** *Jayee, Georgy; Mariya, Hima ; Mariya, Ginu*	**Design of Miniaturized 3.8-GHz Shorted Patch Antenna for Sub-6 GHz 5G Applications** *Hoàng, Trang; Tran-Huy, Dat; Nguyen-Huy, Hoang; Tran-Huy, Hung*
8:15 pm – 8:35 pm	**Comprehensive Academic Integrity Verification: Plagiarism, AI-Content, and Citation Analysis** *K, Hariharan; B, Harish*	**Game-Theoretic Distributed Beamforming and User Association for mmWave Networks** *Le, Thuan; Dinh, Nam; Nguyen, Ngoc-Thanh*
8:40 pm – 9:00 pm	**Robust and Transparent IoT Anomaly Detection via Feature Selection and Explainable Machine Learning** *Rupai, Sanzida Sultana; Saykat, Tamim; Kabir , Seendid Saleh; Ruman, Md Abu Rafe; Chowdhury, Apurbo Roy*	**Simulation-Based Analysis of MITM Attack Success and Prevention Using VPN and Network Segmentation** *Tadepalli , Monikanjali ; Solanki, Vijender Kumar*
9:05 pm - 9:25 pm	**AI-Powered System for Missing Person Identification Using Age-Invariant Face Recognition** *Muthulingam, Gurusigaamani Ayyanar; Yalamanchi, Kushvanth; Vara, Jayavardhan Reddy; Garlapati, Velugondaiah; Tungala, Bose Babu*	**Development of a cost-effective and user-friendly skin potential acquisition module for emotion detection** *Tran, Anh Quang; Tran, Duc-Tan; Dang, Tran Huy; Nguyen, Minh Giang*
9:30 pm - 9:50 pm	**BlockWave: Democratizing Social Media Through User Control** *Vittapu, Mani*	**Keynote 2** **Dr. Manuel Cardona** *Vice-President for Science & Technology, Don Bosco University* *El Salvador*
9:55 pm - 10:15 pm	**A Hybrid CNN with Boosting - Soft Voting Ensemble Technique for Diabetic Retinopathy Diagnosis** *Patlolla, Vishnesh Reddy ; Hameed, Mohd Abdul*	**Closing Ceremony**