



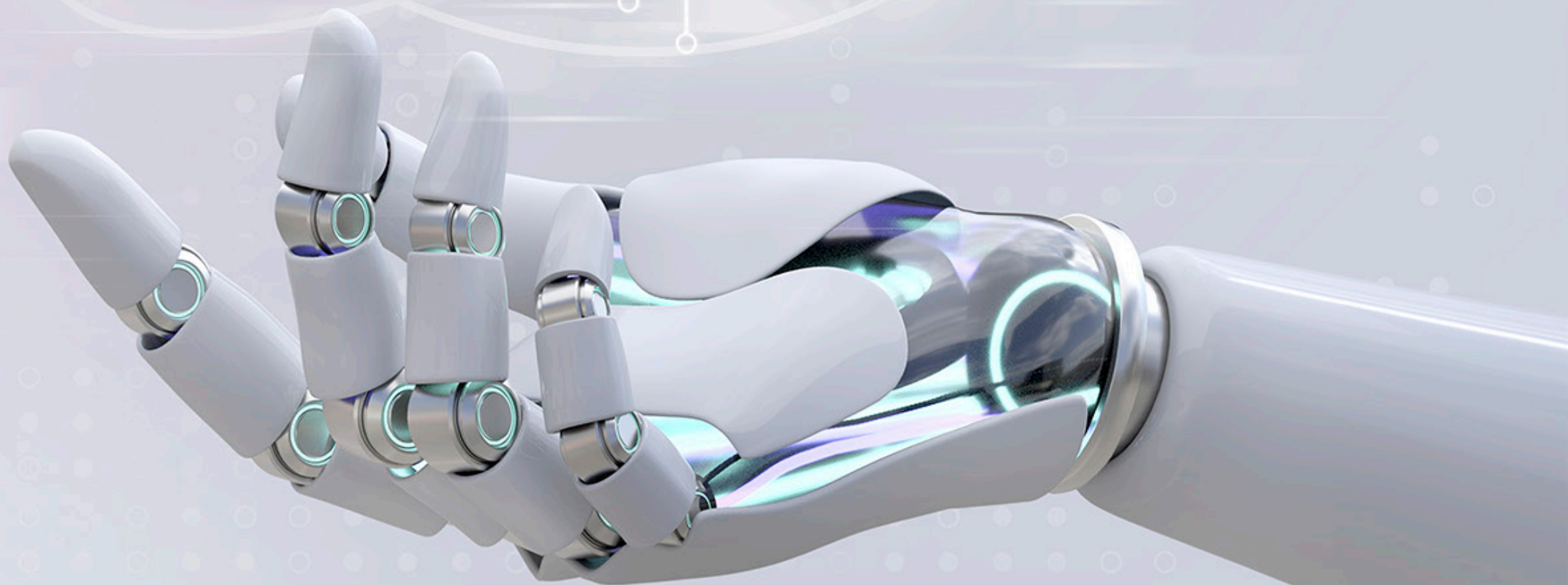
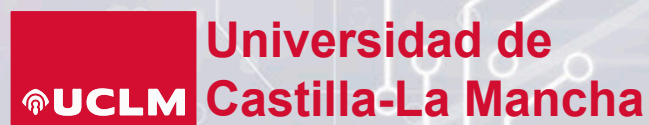
ICTIAIR
2025

UNEMI
UNIVERSIDAD ESTATAL DE MILAGRO

ICTIAIR 2025 PROGRAM

International Virtual Conference – March 19–21, 2025.

All times are in UTC-5 (Ecuador Time)



DAY 1: WEDNESDAY, MARCH 19, 2025 – ENERGY AND ARTIFICIAL INTELLIGENCE

 Virtual Meeting Room: meet.google.com/izv-svdz-ttz

TIME	ACTIVITY	PRESENTER
08:00 – 08:05	Opening Ceremony	Organizing Committee
08:05 – 08:50	Keynote Lecture 1: "Industry 5.0: Accelerating the SDGs through Technological Innovation and Collaboration"	Ana María Osorio Flores
08:50 – 08:55	Brief Technical Break	
SESSION 1		
Electrical Energy Systems	CHAIR Roger Clotet	
08:55 – 09:15	ID 1: Dynamic VBR model of single-phase induction machines using ATPDRAW	Jose Aller
09:15 – 09:35	ID 17: Transformer framework for the fault detection of a reciprocating compressor	Diego Cabrera
09:35 – 09:55	ID 18: Analysis of harmonic mitigation in a photovoltaic energy microgrid for supply to an electronic load	Edgar Salazar
09:55 – 10:15	ID 23: Design of a backup system powered by renewable energy sources for the operation of a textile industry in Quito	Andres Rubio Proaño
10:15 – 10:20	Brief Technical Break	
SESSION 2		
Artificial Intelligence and Advanced Systems	CHAIR Fausto Garcia	
10:20 – 10:40	ID 20: Neural networks in disinformation detection in Spanish: A comparative analysis between BERT and BETO	Marco Castelo
10:40 – 11:00	ID 29: Detection and adaptation to concept evolution in data streams: An integral framework	Mario Pena
11:00 – 11:20	ID 44: A review on relevant failure modes in electric machines	Mariela Cerrada
11:20 – 11:40	ID 4: Evaluating information security in academic management systems under the ISO/IEC 27001 standard	Eliana Ibarra Alcivar
11:40 – 11:45	Brief Technical Break	
SESSION 3		
Advanced Learning and Computing Techniques	CHAIR Mariela Cerrada	
11:45 – 12:05	ID 7: Designing a High School computational thinking test using evidence-centered design	Amadeo Gómez
12:05 – 12:25	ID 8: On the use of AI algorithms applied to strong motion records for the prediction of earthquake fault mechanisms	Diego Benítez
12:25 – 12:45	ID 9: Towards the early detection of speech disorders in children applying manifold learning techniques: Preliminary results	Malena Loza
12:45 – 12:50	Closing Remarks - Day 1	

DAY 2: THURSDAY, MARCH 20, 2025 – NETWORKS AND INFORMATION SYSTEMS

 Virtual Meeting Room: meet.google.com/wma-jxtz-pyi

TIME	ACTIVITY	PRESENTER
08:00 – 08:05	Welcome and Daily Announcements	Organizing Committee
08:05 – 08:50	Keynote Lecture 2: "Map Reduce and Spark: Examples of Big Data Applications"	Yudith Cardinale
08:50 – 08:55	Brief Technical Break	
SESSION 4 Network Systems and Management		
CHAIR Roger Clotet		
08:55 – 09:15	ID 33: SMART-MANAGER: Multi-user, multi-tenant informatic platform for remote management of internet network terminal devices base on TR-069 protocol	Erwin Sacoto
09:15 – 09:35	ID 34: GIGABIT AMERICAN ADVANCED NETWORKS: Emulation of the 2024 backbone topology under IPv6	Jose Ignacio Castillo
09:35 – 09:55	ID 31: Backlog management: Analyzing user-reported and technically identified incidences in medical equipment maintenance – A case study	Sebastián Bastidas
09:55 – 10:15	ID 32: Level control simulation and fault prediction system using machine learning	Thamara Villegas
10:15 – 10:20	Brief Technical Break	
SESSION 5 Education Technology and System Design		
CHAIR Mónica Huerta		
10:20 – 10:40	ID 11: Model-Free fuzzy controller for time delay systems	Oscar Camacho
10:40 – 11:00	ID 13: K9-Buddy: Platform for robotics education and competencies	Francisco Yumbra
11:00 – 11:20	ID 15: Performance of digital skills from student to school teacher in Ecuador and Peru according to the adaptation of the Charlotte Danielson model	Rously Atencio
11:20 – 11:25	Brief Technical Break	
SESSION 6 Computer Vision and Advanced Networking		
CHAIR Mariela Cerrada		
11:25 – 11:45	ID 22: Automated segmentation and classification of meningiomas using AI techniques	Erick Lamilla Rubio
11:45 – 12:05	ID 30: Proposed architecture for a patient management and classification system in the triage process	David Rivas
12:05 – 12:25	ID 37: Reverse engineering analysis applied to the upgrade of a WAN in a medical supplies company	José Ignacio Castillo
12:25 – 12:45	ID 35: Building management system control for home automation with HDL Buspro	David Rivas
12:45 – 12:50	Closing Remarks – Day 2	Organizing Committee

DAY 3: FRIDAY, MARCH 21 2025 – SUSTAINABILITY AND SPECIALIZED APPLICATIONS

 Virtual Meeting Room: meet.google.com/aoy-ifzp-vao

TIME	ACTIVITY	PRESENTER
08:00 – 08:05	Welcome and Daily Announcements	Organizing Committee
08:05 – 08:50	Keynote Lecture 3: “Bridging the Gap in Riverine GHG Emissions: Standardizing Cost-Effective Monitoring for Developing Countries.”	Rubén Jerves Cobo
08:50 – 08:55	Brief Technical Break	
SESSION 7 Applications and Innovation		
CHAIR José Ignacio Castillo Velazquez		
08:55 – 09:15	ID 26: Achachay App: A community-driven innovation for flood data collection in urban and rural areas.	Ariana Jiménez
09:15 – 09:35	ID 25: Systematic review of a voice-to-Ecuadorian sign language translator	Fernando Viñanzaca
09:35 – 09:55	ID 24: Gear fault severity classification using acoustic emission peaks and Poincaré plots	Rubén Medina
09:55 – 10:15	ID 28: AI-based predictive and detection models for avian pox caused by avipoxvirus SPP in the Galápagos Islands	Thamara Villegas
10:15 – 10:20	Brief Technical Break	
SESSION 8 STEM Education and Sustainable Solutions		
CHAIR René Sánchez		
10:20 – 10:40	ID 5: Advancing STEM pedagogy through gamified 3D-printed educational prototypes: A PODS-driven framework for bridging theory and practice	Erick Lamilla Rubio
10:40 – 11:00	ID 19: Storytelling and STEM: A scoping review	Ronny Cabrera
11:00 – 11:20	ID 36: White balance adjustment in hyperspectral images through statistical analysis	David Rivas
11:20 – 12:05	Keynote Lecture 4: “Application of machine learning models to time series for predicting building energy consumption”	Julio Barzola Montesés
12:05 – 12:15	Awards and Recognition Closing Ceremony	Scientific Committee