

Intelligent Systems

IA-1 (Full Papers): Sala de Conferencia, Martes 9:00-11:00

#8 -- Achieving Millimeter-Level MIMO Localization with Hybrid Vision Transformers and Synthetic Images

#16 -- Clasificación de Plantaciones de Palma de Aceite en Colombia utilizando Deep Learning y Datos Satelitales de Sentinel 1 y 2

#28 -- Calibration and Selective Prediction for Portuguese Judicial Document Classification

#3 -- Evidence on Standards, Policies, and Competencies for Adopting Artificial Intelligence in Higher Education: A Systematic Literature Review (presentación virtual)

IA-2 (Full Papers): Sala de Conferencia, Miércoles 9:00-11:00

#29 -- Geometric Analysis of Self-Supervised Vision Representations for Semantic Image Retrieval

#41 -- SmartMatch: An Application for Automated Bank Reconciliation Using a Weighted Dual-Strategy Approach

#57 -- Improving DeepLabv3+ Breast Tumor Segmentation via Backbone and Loss Function Selection

#60 -- KE tableaux para lógicas intuicionistas modales

IA-3 (Full Papers): Sala de Conferencia, Jueves 9:00-11:00

#66 -- Impact of Input Membership Function Design on Fuzzy-Adaptive Particle Swarm Optimization: An Empirical Sensitivity Analysis

#73 -- Comparative Evaluation of Heuristic Search and Monte Carlo Tree Search in the Mastergoal Board Game

#96 -- Cross-Attention Point Cloud Repair for Archaeological Object Restoration

#108 -- Optimizing Geocoding in Epidemiological Registries through a Hybrid Architecture Based on Fine-Tuning Large Language Models (LLMs)

IA-4 (Full Papers): Sala de Conferencia, Viernes 9:00-11:00

#131 -- Impact of Temporal Modelling Strategies on Spatio-Temporal Graph Neural Networks: RNNs vs Transformers

#132 -- An analysis of the generalization of deep neural networks for breast cancer classification in thermal images.

#139 -- A Data-Driven System for Automated Transfer Learning Strategy Selection

#141 -- Evaluating the Efficacy and Efficiency of Three Knowledge Distillation Paradigms in an LLM-to-LLM Scenario

IA-5 (Full Papers): Sala de Conferencia, Lunes 16:30-18:30

#153 -- Forecasting Sugar Prices with Explainable Machine Learning: Evidence from the Brazilian Sugar-Energy Market

#168 -- A Deep Learning Approach to Cheat Detection in Counter-Strike 2

#174 -- Solution of the Electric Vehicle Routing Problem with Battery Swapping Using Multi-Objective Evolutionary Algorithms

#187 -- Generative Reconstruction of Pareto Reference Sets for Multi-Objective Optimization

IA-6 (Full Papers): Sala de Conferencia, Martes 16:30-18:30

#191 -- Vehicle Data Normalization with Retrieval-Augmented LLMs

#209 -- Trustworthy Topological Immunization: An Explainable Graph Reinforcement Learning Framework for Network Containment

#210 -- Using Synthetic Data Generation to Improve Named Entity Recognition Performance on Uruguayan Dictatorship Archive

#214 -- Self-Supervised Representation Learning via Hyperspherical Density Shaping

IA-7 (Full Papers): Sala de Conferencia, Miércoles 16:30-18:30

#216 -- Identification of territorial structures and local anomalies in Paraguayan secondary education through nonlinear reduction and density-based clustering

#219 -- Evaluation of Explainable Machine Learning Models for Dengue Forecasting

#221 -- Beyond General-Purpose Models: A Multilingual and Domain-Adapted Benchmark for Safety Text Classification in the Petroleum Industry

#237 -- A SHAP-Guided Diagnostic Framework for Post-Drift Analysis in Network Intrusion Detection Systems

IA-8 (Full Papers): Sala de Conferencia, Jueves 16:30-18:30

#241 -- Early Population Dynamics Provide More Actionable Switching Signals than Static Landscape Features for Warmup-Based Operator Switching

#244 -- Fidelity of quantum circuits in NISQ Systems estimated via supervised regression

#256 -- Comparative Evaluation of Deep Learning Models for Binary Pneumonia Classification in Chest Computed Tomography Images

#280 -- Toward Sustainable and Resilient Federated Learning in the Edge-Cloud Continuum (presentación virtual)

IA-9 (Full Papers): Sala de Conferencia, Lunes 11:30-13:30

#293 -- Evaluating Cultural Reasoning and Robustness in LLMs for Spanish Political Discourse

#319 -- Intelligent Model Based on Convolutional Neural Networks for Automatic Detection of Cephalometric Landmarks in Rocabado's Analysis

#341 -- A Decomposition-based Approach for Constrained Multi-Objective Optimization using Superiority of Feasible Solutions

IA-10 (Work in Progress): Sala de Conferencia, Lunes 14:00-15:00

#20 -- A Hybrid Quantum-Classical Ensemble Approach for Breast Cancer Classification Using QSVM and SVM

#21 -- Impact of Acoustic Metrics and Spectrogram Fidelity of the Human Capacity to Detect Spanish Deepfake Audios with a Paraguayan Accent

#30 -- Machine Learning Models to determine the influence of Spatial Features in the Prediction of Wildfire events in Santa Cruz, Bolivia

IA-11 (Work in Progress): Sala de Conferencia, Martes 14:00-15:00

#34 -- Adaptive Large Neighborhood Search with Machine Learning for the Traveling Car Rental Salesman Problem

#97 -- RAUC: A Novel Geometric Measure for Point Processes Applied to Machine Learning

#101 -- Decision tree in latent space

IA-12 (Work in Progress): Sala de Conferencia, Miércoles 14:00-15:00

#130 -- DeepViews: Extracting Hidden Signals from Financial News for Extreme Stock Returns

#134 -- A Hybrid Architecture based on LLMs, Linked Data, and Knowledge Graphs for Generating Verifiable Answers

#135 -- Intersectional Bias Diagnostic Mechanism for Supervised Machine Learning Models

IA-13 (Work in Progress): Sala de Conferencia, Jueves 14:00-15:00

#136 -- Adaptive LAMDA-HAD: A Fuzzy Few-Shot Learning Algorithm for Tabular Data Classification

#137 -- LAMDA-FSTS: a Fuzzy Approach for Feature Selection in Time Series

#179 -- Generative Artificial Intelligence for Alzheimer's Clinical Reports: A Systematic Review of Multimodal LLMs Architectures and Explainability

IA-14 (Work in Progress): Sala de Maestros, Lunes 14:00-15:00

#200 -- Construction of an Ontological Knowledge Base for Clinical Inference in Epilepsy

#246 -- Invariant Human Motion Reconstruction from Temporally Sparse Observations Using Spatio-Temporal Graphs and Biomechanical Constraints

#206 -- Comparative Evaluation of Models and Experimental Factors in Predicting South American Football Results (presentación virtual)

IA-15 (Work in Progress): Sala de Maestros, Martes 14:00-15:00

#258 -- Contextualized Anomaly Analysis in Country-Risk Time Series Using Historical Precedents

#263 -- Autonomous UAV Route Planning for Coverage Maximization in Environmental Monitoring: A Systematic Literature Review

#271 -- A Hybrid Framework for Distal Ulna Fractures Classification via ShapeWorks Correspondence Modeling and XGBoost Learning

IA-16 (Work in Progress): EPIC Lab, Lunes 16:30-18:30

#288 -- Comparison of Classical and Transformer-Based Methods for Handwritten Text Recognition in Classical Nahuatl Historical Documents (16th-18th Centuries)

#295 -- A Hybrid Approach for Automatic Bibliographic Metadata Extraction from Digital PDF Books

#326 -- Orchestration of Clinical Tools Using Model Context Protocol for Burn Wound Classification

#307 -- A Comparison of Feature Selection Methods for Malware Classification Using XGBoost (presentación virtual)

IA-17 (Journal Fisrt): EPIC Lab, Jueves 14:00-15:00

#40 -- Use of Context in Data Quality Management: A Systematic Literature Review

#330 -- Wavelet-Domain Attention U-Net for Periodic Artifact Suppression in Brain MRI

#340 -- Multi-Dimensional Evaluation of Auto-Generated Chain-of-Thought Traces in Reasoning Models

Computer Education

EDU-1 (Full Papers): Sala de Conferencia, Martes 11:30-13:30

#37 -- Student Acceptance of Generative AI in UI Design Tasks: An Experimental Investigation

#47 -- Evaluation of Concurrent and Distributed Pseudocode Tools

#110 -- Uso de herramientas de inteligencia artificial en la práctica profesional supervisada: análisis en estudiantes de Ingeniería en Sistemas de Información

#157 -- Assessing the Ability of Large Language Models to Detect and Classify Errors in SQL Queries

EDU-2 (Full Papers): Sala de Conferencia, Miércoles 11:30-13:30

#169 -- A Methodological Framework for Developing Digital Competencies through Serious Games in Higher Education: The INTEGRA+506 Approach

#173 -- The Right Teacher for the Right Course: A Hybrid Transformer-Based Recommender System for Academic Planning

#175 -- Children's Privacy in Digital Game Applications: An Empirical Analysis of Risks and a Proposal for an Awareness Model in Computer Science Education

#164 -- QoCode: Automated Code Quality Assessment in Programming Assignments (presentación virtual)

EDU-3 (Full Papers): Sala de Conferencia, Jueves 11:30-13:30

#211 -- Beyond the Buzz: A Rapid Review of Generative Artificial Intelligence in Informatics Education

#235 -- AI and Machine Learning for Accessibility and Inclusion in Digital Learning Hubs

#277 -- Metacognitive Prompt Design for LLM Tutors in Introductory Programming Education: A Synthetic Learner-Based Evaluation Framework (presentación virtual)

#208 -- ProgrEval: Assisted Generation of Assessment Tasks for Programming Education

EDU-4 (Work in Progress): EPIC Lab, Lunes 14:00-15:00

#49 -- Impacto de un programa de becas en la equidad de género en ingeniería: evidencia sobre acceso, desempeño y retención en STEM

#183 -- AI-Assisted Software Engineering in University Projects: Student Practices, Perceptions, and a Proposal for Responsible Integration

#203 -- Medición del pensamiento computacional en poblaciones heterogéneas: un enfoque multinivel en México y Costa Rica

EDU-5 (Work in Progress): Bib2, Lunes 14:00-15:00

#309 -- 8-bit processor for teaching Computer Architecture

#252 -- Curricular.py: A Computationally Supported Curriculum Analysis Methodology for Updating the Computer Science Bachelor's Degree Plan at UCV

#306 -- Uncovering Student Satisfaction Drivers in Teaching Evaluations Using Aspect-Based Sentiment Analysis and Text Mining

Software System

SOFT-1 (Full Papers): EPIC Lab, Martes 9:00-11:00

#2 -- Proxy Pattern in Test Automation: A Controlled Study of Performance, Variance, and Reliability

#14 -- Evaluating RAG Systems for Continuous Quality Assurance: A Fault-Oriented Experimental Study

#80 -- Can Smaller Models Compete? Evaluating Fine-Tuned Code LLMs for Automated Smart Contract Auditing

#91 -- Capturing Epistemic States in Smart Contract Reentrancy via Bilattice-Based Model Checking

SOFT-2 (Full Papers): EPIC Lab, Martes 11:30-13:30

#114 -- Agent Contracts and Types: A Governance Layer for Verifiable and Composable Multi-Agent AI System

#120 -- Semantic Drift and Stability in Generative Pipelines for Requirements Engineering: A Controlled Experimental Study with Small Language Models

#162 -- A Scalable k-Step Look-Ahead Rollout Algorithm for the Moving Firefighter Problem on Trees

SOFT-3 (Full Papers): EPIC Lab, Martes 16:30-18:30

#171 -- Evaluación práctica de la integración de Automatización robótica de procesos (RPA) y agentes con BPMS

#254 -- Distilling Causal Policies into Executable Expression Trees for Context-Oriented Self-Adaptive Software

#294 -- The Agentic Illusion: A Conceptual Framework for Understanding the Maturity Gap in AI-Assisted Software Development

#233 -- Transfer Learning-Based Approach for Classifying Spanish and Portuguese Non-Functional Requirements (presentación virtual)

SOFT-4 (Work in Progress): EPIC Lab, Martes 14:00-15:00

#25 -- Diffusion Model for Chilean Sign Language

#33 -- A Systematic Mapping Study on the Role of Artificial Intelligence in Agile Software Development

SOFT-5 (Work in Progress): EPIC Lab, Miércoles 14:00-15:00

#155 -- Interactive Virtual Environment Supported by Aerial and Spherical Images for Data Visualization and Single-Line Diagrams of Electrical Power Substations

#222 -- LLM-Supported Identification of Implicit Security Requirements from Functional Requirements: An Empirical Study

#301 -- Ephemeral Software: Towards a New Software Paradigm

TLISC

TLISC-1 (Full Paper): Sala de Maestros, Miércoles 11:30-13:30

#6 -- Towards a Constraint-Based Approach for Quantum Circuit Modeling

#268 -- MDD-HQC: A Goal Oriented and Model Driven Approach for Hybrid Quantum-Classical Systems

#356 -- Quantum Machine Learning for Food Classification in Advertisements

TLISC-2 (Full papers + Journal First): Sala de Maestros, Jueves 11:30-13:30

#359 -- Un modelo integrado para la representación de proyectos de software cuántico

#361 -- Generación de circuitos cuánticos basada en componentes

#375 -- Modeling a Quantum Thermal Machine Framework with UML

TLISC-3 (Work in Progress): Sala de Maestros, Miércoles 14:00-15:00

#9 -- Quantum Software Engineering in Practice: FPGA and AI Integration for Quantum Certification

#149 -- Interactive Debugging of Quantum Circuits using multi-programming techniques Substations

#302 -- Exploring Security Controls in Quantum Software Using GraphCodeBERT

TLISC-4 (Work in Progress): Sala de Maestros, Jueves 14:00-15:00

#313 -- Q2SAR: overcoming classical bottlenecks in drug discovery via quantum multiple kernel learning

#364 -- Majorization Arrow and Coherence in Noisy Grover Search

#369 -- Niveles de abstracción en QSE: una librería de descomposición de operadores unitarios

TLISC-5: Bib3, Jueves 16:30-18:30

Journal First

Reunión RIPAISC

System in Practice

PRACT-1 (Full Paper): Sala de Maestros, Martes 9:00-11:00

#45 -- Performance Evaluation of Asynchronous I/O and parallel execution strategies in Relational Databases

#160 -- Assessing Self-Scheduled Factorization-Based Preconditioners on GPUs

#105 -- Energy-Performance Trade-offs in Distributed PostgreSQL: A Physical Design Study with Citus and TPC-H

#190 -- Mütüä: An Easy-Access and Adaptable Retrieval Augmented Generation LLM Scientific Platform for Resource-Efficient HPC Infrastructure

PRACT-2 (Full Paper): Sala de Maestros, Miércoles 9:00-11:00

#93 -- Optimizing Professor Time-Slot Preferences in University Course Timetabling: A Case Study

#85 -- Architecture and Usability: Model-Based Development and Multi-Actor Validation for University Clinical Scheduling

#119 -- A Cloud-based Solution for Online Sheep Monitoring Using IoT Smart Wearables

#178 -- AgroDieta: Mobile Application for Formulating Diets for Ruminants

PRACT-3 (Full Paper): Sala de Maestros, Jueves 9:00-11:00

#126 -- ParkGIS: A Prototype for Optimizing Parking Spot Search in the Federal District

#186 -- Evaluation of Big Data Technologies for Citizen Oversight Using Public Open Data in Paraguay

#194 -- A Pareto Food-Swap Recommender for Mexican Consumers, Built on an Open PROFECO ↔ Open Food Facts Crosswalk

#158 -- A Multichannel Information System for Environmental Complaint Management: Design, Implementation, and Evaluation in Municipal Governance Contexts

PRACT-4 (Full Paper): Sala de Maestros, Martes 11:30 -13:30

#215 -- Question Answering System Based on Large Language Models, Knowledge Graphs, and Linked Data

#56 -- Evaluating Rust for Memory-Safe Plasma Physics Simulations: A Performance Comparison with C and C++

#151 -- Toward Modular Pipelines for Image and Text Translation and Reconstruction

PRACT-5 (Full Paper): Bib1, Viernes 9:00 -11:00

#229 -- Recommendation Systems for Gamified Serious Games based on a Hybrid Multi-LLM Model and Dynamic Collaborative Filtering

#226 -- Distributed Reinforcement Learning for Emergent Coordination in Energy Microgrids

#228 -- A Diagnosis and Mitigation Approach for ESP Wells based on a Multi-LLM Hybrid Recommender

PRACT-6 (Full Paper): Bib1, Viernes 11:30 -13:30

#217 -- Integrating Synthetic Data, Epidemiological Modeling, and Explainability for COVID-19 Forecasting

#282 -- Software Architecture for Model-Informed Precision Dosing: A Systematic Mapping Study

#24 -- Automatic Classification of Simulated Gait Patterns Associated with Cognitive Impairment Using Pose Estimation and Machine Learning

PRACT-7 (Work in Progress): Bib2, Viernes 9:00 -11:00

#140 – Decentralized Edge Intelligence for Livestock Monitoring: A lightweight Federated YOLOv8 Approach

#199 -- Application of the StartFlow Method in Startups: An Action Research Approach

#264 -- Seeing with words: an AI-based tool for automatic image description in educational materials

#52 – Adaptive and self-adaptive User Interface in Mobile Applications: A Systematic Review (presentación virtual)

Information Technology

TEC-1 (Full papers): Sala de Maestros, Lunes 16:30 -18:30

Blockchain, Smart Contracts and Decentralized Systems

Chair: Dr. Carlos Luna

#82 -- On the Impact of Population Diversity in Hybrid Fuzzing for Ethereum Smart Contracts, Dr. Jefferson Oliveira Andrade

#102 -- Electronic Voting in Uruguay using Blockchain, Dr. Carlos Luna

#320 -- CyberGENIUS: Enhancing Cybersecurity Literacy for Non-Expert University Students through a Gender-Perspective Serious Game: Development and GEQ+ Validation, Dr. Lina Marcela Rivas Rebolledo

#224 -- HERMES: Applying Blockchain for Certificate of Origin in the Automotive Supply Chain, Dr. Gilson Sohn Junior

TEC-2 (Full papers): Sala de Maestros, Martes 16:30 -18:30

AI and Machine Learning for Intelligent Networks

Chair: Dr. Jurandir Cavalcante Lacerda Júnior

#142 -- A Machine Learning-Based Approach for Request Blocking Prediction in Space Division Multiplexed Elastic Optical Networks, Dr. Breno de Souza Guedes

#159 -- Analysis of the Impact of Power Coupling Coefficient Variations on Crosstalk in Multicore Optical Fibers, Dr. Jurandir Cavalcante Lacerda Júnior

#230 -- Predictive Trigger for Spectral Reallocation in Multi-Core Elastic Optical Networks, Dra. Ana Vitória Dias Carvalho

#78 -- Marco de Trabajo para Mitigación de Sesgos en Modelos de Lenguaje de Gran Tamaño (LLMs) mediante Ingeniería de Prompts, Dr. Marco Javier Suarez Baron

TEC-3 (Full papers): Sala de Maestros, Miércoles 16:30 -18:30

Scalable and Sustainable Computing System

Chair: Dra. Jean Everson Martina

#192 -- Simulation-Based Characterization of Fog Computing Behavior in Critical IoT Systems, Dr. Miriam Guadalupe Ramírez Sánchez

#337 -- A Results-Oriented Hybrid Exact-Heuristic Framework for the Parallel Machine Total Weighted Tardiness Scheduling Problem, Dr-Marcos Thomaz da Silva

#201 -- A Generic Approach for Data Scalability in Permissioned Blockchains Through Pruning, Dra. Jean Everson Martina

#275 -- Solar-CAP: Carbon-Aware Resilient Scheduling for Solar-Powered Edge Computing under Energy Partition Events (presentación virtual)

TEC-4 (Full papers): Sala de Maestros, Jueves 16:30 -18:30

Cybersecurity and Emerging Technologies

Chair: Dr. Gilson Sohn Junior

#127 -- Emulating Android Devices in an Academic Cyber Range for Mobile Security Training, Dr. Nicolas Vidal

#166 -- CIR-ARM: A Gap-Oriented Adoption Readiness Capability Maturity Model for Cybersecurity Incident Response in SMEs—A Pilot Study, Dr. Carlos Manzano Munizaga

#104 -- Semantic Integration Architectures for Green-Synthesized Nanomaterials in Environmental Systems, Dr. Cesar Alejandro García García

#62 -- Security in IoT Networks: Systematic Mapping of Vulnerabilities and Mitigation Strategies, Dr. Rubens De Souza Matos Junior

TEC-5 (Work in Progress + Journal First): Sala de Maestros, Lunes 11:30 -13:30

LLM-Assisted Scheduling Optimizaion

Chair: Dr. Miriam Guadalupe Ramírez Sánchez

#338 -- Enhancing Hybrid Scheduling Optimization with Large Language Models: A Work-in-Progress Approach for the PMTWTSP

LAWCC

LAWCC-1: EPIC Lab, Miércoles 9:00-11:00

#72 -- Participación Femenina en el Programa WPCredits: Evidencia desde la Facultad de Ciencias de la Computación de la Universidad Fidélitas, Costa Rica

#74 -- Latin American Women in Cybersecurity: A Systematic Literature Mapping

#90 -- Mapeamento de iniciativas para mulheres na tecnologia em Florianópolis, Santa Catarina: o papel da visibilidade e das redes colaborativas

#180 -- Design and Evaluation of an Inclusive Robotics Learning Environment for Girls in Engineering

LAWCC-2: EPIC Lab, Miércoles 11:30-13:30

279 -- Empoderando Meninas em STEM por Meio da Educação em IA: Uma Experiência Prática com Redes Neurais Convolucionais

ACM-W Latin America & Caribbean

#76 -- Project-based training in technical education – SENA as a scenario to integrate STEAM with a gender approach

#95 -- Participación femenina en áreas TIC y ciencias afines en el Perú

LAWCC-3: Bib2, Miércoles 14:00-15:00

#238 -- REDDER: Network of Women Role Models

#315 -- Redbioma: Enhancing Data Science Capacity in Mesoamerica for Biodiversity Conservation through Open Infrastructure, Training, and Empowerment of Women and Early-Career Researchers

LAWCC-4: EPIC Lab, Miércoles 16:30-18:30

#81 -- Mapeo geoespacial de iniciativas STEM con enfoque de género en Ecuador: Una herramienta abierta para el fortalecimiento del Ecosistema STEM

#352 -- Participación femenina en comunidades tecnológicas y hackatones en América Latina: motivaciones, barreras e impacto

#118 -- Promoting Female Participation in HPC through Integrated Outreach Strategies

#259 -- Programming competitions and their impact on the academic, scientific, and professional training of women in computing: a case study of success stories

#354 -- Between Algorithms and Activism: Women in Technology Communities Navigating Artificial Intelligence Through Decolonial and Intersectional Lenses

LAWCC-5: EPIC Lab, Jueves 9:00-11:00

#28 -- The invisible gap: Voices of female scientists in El Salvador facing double burden

#342 -- Brecha de género en la carrera de Computación de la Universidad Nacional de Loja: Análisis de matrícula actual y seguimiento de graduadas

#322 -- Análise das Desigualdades de Gênero na Tecnologia: Um Estudo Qualitativo-Quantitativo

#350 -- Emprendimiento femenino y desarrollo tecnológico en América Latina (presentación virtual)

LAWCC-6: EPIC Lab, Jueves 11:30-13:30

Charla Grupo de Investigación: Mujeres en la Informática (GT7)

#83 -- La Beca Ingenia como Herramienta de Transformación para la Equidad de Género en Ingeniería en Chile

#267 -- Computação CosturADA: Tecnologias Vestíveis e o Gênero Feminino

LAWCC-7: Bib2, Jueves 14:00-15:00

#336 -- Women's participation and visibility in STEM events in El Salvador: A quantitative study of recent initiative

LAWCC-8: EPIC Lab, Jueves 16:30-18:30

Panel LAWCC2026

Premiación