

PROGRAMME

The 2026 International Conference on Information Technology & Systems (ICITS'26)
Universidad Tecnológica de Honduras
Campus Isla de Roatán
Honduras
16-18 February 2026
(Time Zone: UTC/GMT-6:00, Tegucigalpa)

February 16	
8:00 – 9:00	Check-In: @ Secretariat
9:00 – 10:30	S1 - Opening Session Location: Pristine Bay – Auditorium Chair: Luis Loo, Universidad Tecnológica de Honduras
	<p>Rector Javier Enrique Mejía, Universidade Tecnológica de Honduras, Honduras Álvaro Rocha, President of ITMA, Portugal José Braga de Vasconcelos, Keynote Speaker, Lusófona University, Portugal. Talk: <i>“Artificial Intelligence and Data Science Contributions to Enterprise Digital Transformation”</i> Rajeev Kumar Kanth, Keynote Speaker, Savonia University of Applied Sciences, Finland. Talk: <i>“PQC and Quantum Safe Solutions for Critical Infrastructures: Savonia Water Lab as a Use-Case”</i></p> <p>Group Photo</p>
10:30 – 11:00	Coffee Break
11:00 – 12:30	S2 – BDAA, CNMPS, ECS Room: 101 Chair: José Braga de Vasconcelos
	<p>143 - Innovation in the Entrepreneurial RIMPE. Electronic invoicing as an engine of transformation 173 - Enhancing Legal Transparency: Interpretable Legal Document Classification with Hybrid BERT-RF Models 237 - Invisible Comparisons: Big Data Screening, AI Surveillance, and Exponential Risks of False Alert 284 - Per capita water trending in countries with higher and lower withdrawals 158 - Accurate and Rapid Time-synchronization using Single Camera Image 266 - Taxonomy of Hierarchical Federated Learning for Intrusion Detection Systems in IoT 277 - Three-tier Distributed Energy and Sensing Framework</p>

	<p>S3 – HCI, HIS Room: 102 Chair: Sam Espinoza</p> <p>127 - Digital Literacy as a Resilient Pillar A Structured Methodology Against Social Engineering 247 - The level of English language learning according to the Common European Framework of Reference for Languages in students of health-related programs at a private university 250 - BookWidgets as an Educational Innovation: Impact on English Vocabulary Learning in Elementary School Students 228 - Inclusive Mobile App Design for Preventing Sexual Violence in Girls with Mild Intellectual Disabilities: A User-Centered Approach 215 - NeuroFocusVR: A Virtual Reality Application to Support ADHD Diagnosis in Children Aged 7–10 324 - Evaluación de la Aceptación Tecnológica de un Asistente Conversacional con IA Generativa para Inclusión Educativa de Estudiantes con Discapacidad Motriz 216 - Extended Reality for Education in Construction Waste Recycling: Design and Evaluation of a User-Centered Interactive Ecosystem</p>
	<p>S4 – Online: BDAA, CNMPS, ECS Room: 104 (https://shorturl.at/WVsqS) Chair: Eslam AbdAllah</p> <p>232 - Enhanced RC4 Stream Encryption Algorithm using SHAKE256 226 - TICs y Score MAMÁ: Innovación en el control prenatal rural 208 - Implementation Process Evaluation of the electronic Community Health Information System (eCHIS) in Kenya using the Normalisation Process Theory 230 - Explainable Machine Learning Framework for Cardiovascular Disease Risk Prediction Using NHANES Temporal Data 200 - TRUSTWORTHINESS IN IOT: DISCUSSION FROM WATERLAB AND SMART FACTORY PERSPECTIVES 263 - Implementation of AI Tool Accessibility in Nursing Procedures</p> <p>S5 – Online: BDAA, CNMPS, ECS Room: 105 (https://shorturl.at/Lqgfo) Chair: Raquel Patrício</p> <p>149 - Applications of Big Data in the analysis of local economic indicators: a case study of the canton of Ambato, Ecuador. 310 - Star Classification Using Data Analysis tools From a Spatial Dataset 258 - Sistemas Embarcados e Visão Computacional para Segurança Residencial: Uma Revisão da Literatura 157 - Measuring Information Security Awareness. A Brazilian Legislative Case Study 123 - Evaluating success and failure in English language learning using decision trees: A case study of university students. 229 - Evaluation of optimizers in pre-trained neural networks: Case study on the classification of pathologies in thyroid scans using a reduced and unbalanced dataset 204 - Software test automation through AI: A case study of IT industry in Sri Lanka</p>

12:30 – 14:00	Lunch
14:00 – 15:30	S6 – HIS, IDSS Room: 101 Chair: Sam Michael Espinoza Vidaurre
	<p>236 - Optimization of the data processing performance of the “ZENGSR1.0” prototype to capture electrodermal signals (EDA) during ancestral cultural practices focused on the recovery of energy balance (limpias)</p> <p>300 - Intelligent Agents for Mental Health: Depression Detection through ML and LLM Model Fusion in Audio Data</p> <p>316 - Efeitos da Electroestimulação Neuromuscular na Força e Reabilitação Muscular: Uma Revisão Integrativa</p> <p>182 - Integration of Blockchain and Artificial Intelligence in Accounting Audit: Transparency, Challenges, and Op-portunities in Ecuador</p> <p>245 - Enhancing Sales Forecast Accuracy for New Fashion Items: Leveraging Online Trend Signals and Historical Data</p> <p>255 - Big data analytics and unsupervised learning for digital payments adoption in Ecuador.</p> <p>279 - Hierarchical LLM-Assisted Clinical Coding in ICD-10-CM: A Hybrid Prompting and Embedding Approach</p>
	S7 – IDSS, IKM Room: 102 Chair: Rajeev Kanth
	<p>260 - AI-Based Vision System for Emotional Recognition and Management in Education</p> <p>331 - Word Embedding to Analyze Innovation Projects in Higher Education Institutions</p> <p>159 - Unraveling the Macroeconomic Determinants of Economic Growth</p> <p>161 - Consumer preferences on natural food products: Perspectives on NTFP Demand</p> <p>246 - A Context-Aware Dual-Model Architecture for E-commerce Recommendation</p> <p>146 - STEAM Education: Analysis of Instrumentation, Learning Environments and Tools</p>

	<p>S8 – Online: HCI, HIS Room: 104 (https://shorturl.at/WVsqS) Chair: Raquel Patrício</p>
	<p>188 - Teaching Digital Competencies: Influence of Demographic Factors in the Current Educational Context. 194 - Honey-Alonso Questionnaire on Learning Styles: An Instrumental Analysis and Learning Profiles in Law Students at UNITEC, Honduras 319 - Corporate Social Responsibility and Sustainability: A Study on Best Operational Practices for Improved Performance 166 - Contribution of the PLS methodology in the field of information and knowledge management 244 - Identification of Risks and Controls of the Technological Components of a Virtual Learning Platform 254 - Teachers' perceptions of the possibilities, potential, and limitations of using GenAI in higher education in the social sciences in Ibero-America 223 - Effectiveness of mindfulness in the regulation of stress in middle school students: a PRISMA review</p>
	<p>S9 – Online: HCI, HIS Room: 105 (https://shorturl.at/Lqgfo) Chair: Francis Jiménez</p>
	<p>189 - Minds Under Pressure: Digital Application for Monitoring the Mental Health of the Military Population 214 - O Futuro da Saúde Preditiva: Uma Análise do Estado da Arte em IoT e Sistemas Embarcados para Identificar Oportunidades de Inovação 290 - Prototype of smart wristbands with QR code for pre-hospital care of people with intellectual disabilities 296 - High-fidelity simulation for learning to manage tachyarrhythmias in medical emergency students 308 - Bridging Communication Gaps: A Web Tool for Ecuadorian Sign Language Learning 175 - Artificial Intelligence in Higher Education: Quasi-Experimental Evidence and SEM Models in Peru and Chile 134 - Socio-Technical Modeling of Software Development Team Productivity: A Systematic Literature Review of System Dynamics Applications</p>
<p>15:30 – 16:00</p>	<p>Coffee Break</p>
<p>16:30 – 18:00</p>	<p>S10 - IKM Room: 101 Chair: Gloria Palacio Valdivieso</p>
	<p>332 - Artificial Intelligence as Digital Innovation for Social Responsibility: A Bibliometric Exploration with a Focus on SMEs 333 - Artificial intelligence and the human dimension in predicting payment character in savings and Credit Cooperatives 181 - Impact of negligent parenting on the academic performance of school-aged children at the Yaguachi elementary school in the Ibarra city 160 - Key competitive advantage factors in the commercialization of non-timber forest products 317 - Artificial Intelligence in Management: Transforming Decision-Making, Operations, and Organizational Efficiency 318 - The Impact of Transformational Leadership on Organizational Performance</p>

16:30 – 18:00	S11 – IKM, ITE Room: 102 Chair: Peter A. Khaiter
	<p>131 - Usability evaluation of cross-platform mobile development frameworks</p> <p>126 - Agentic AI for Homicide Prediction: A Modular Framework for Geospatial Risk Analysis and Tactical Decision Support</p> <p>203 - Towards a Framework for Understanding Animal Behaviour and Climate Change: A Case Study of Little Penguins</p> <p>174 - Juris Syntax: Automação da Análise Jurídica Brasileira com IA Generativa e PLN</p> <p>125 - Bibliometric review on the Contributions of Artificial Intelligence to Energy and Climate Sustainability: A Thematic Study of Scientific Literature</p> <p>184 - Exploring Digital Metaliteracy Through a Bibliometric Lens: Intergenerational Perspectives in Education</p> <p>211 - Optimizing the Balance between Knowledge Acquisition and Cognitive Load in Virtual Reality-Based Education for Children with Special Needs</p>
	S12 – Online: BDAA, CNMPS, ECS Room: 104 (https://shorturl.at/WVsqS) Chair: Promise Mvelase <p>169 - Information Security Awareness in Public Organizations: A Case Study of Brazilian Audit Courts</p> <p>234 - Detecção de Phishing multicanal (e-mail, sms, sites) Uma abordagem com Deep Learning utilizando DistilBERT, CNN, RNN e MLP</p> <p>240 - A Alta Administração na Linha de Frente da Segurança da Informação: Utopia ou Necessidade?</p> <p>249 - Copyright Challenges and a Multi-Layered Conceptual Model for AR Filters in TikTok</p> <p>199 - Tools for detecting and humanizing AI in academic work: an exploratory study</p> <p>289 - Lightweight Semantic Segmentation for Real-Time Obstacle Avoidance in Unmanned Surface Vehicles Using Embedded AI</p> <p>172 - Cross-Market Evaluation of Complementary and Alternative Product Recommendations Using GATs and Textual Similarity</p>
	S13 – Online: HCI, HIS Room: 105 (https://shorturl.at/Lggfo) Chair: Mikel Ugando Peñate <p>144 - Basketball 3-point shot detection using GCN-pose estimated keypoints for the downstream AQA task</p> <p>218 - Smart Irrigation in Miniature Roses: A Case Study with IoT and Agriculture 4.0</p> <p>205 - Automated Generation of Personalized 360° Environments for Reminiscence Therapy Using Generative AI</p> <p>275 - Personalization of Educational Assessments: An Artificial Intelligence Perspective</p> <p>212 - Emotional intelligence in students aged 11-12: a study from the perspective of early intervention</p> <p>213 - Teaching knowledge about early intervention strategies in the socio-emotional development of students.</p>
20:00 – 22:00	Welcome Cocktail - free access Location: Pristine Bay – Pool

February 17

9:00 – 10:30

S14 - ITE

Room: 101

Chair: Diego Chacón

- 273** - Interactive NFC System: Multisensory Platform for Early Learning Based on VEX 123
- 274** - Hybrid STEAM Strategy with an Accessible Web Application and Everyday Materials for Initial Education
- 291** - Use of social media in Education: Perceptions of students and teachers in their integration
- 292** - Information Technology Competencies and the Use of Data Processing Software in Master's Students in Honduras
- 297** - Breaking Barriers: Technology as a Tool for the Educational Inclusion of Students with Visual Impairments.

S15 – MATC, OMIS

Room: 102

Chair: Daniela Borissova

- 176** - Media representations in emergency contexts: a bibliometric analysis of humanitarian crises
- 202** - Audiovisual narratives and the audience: the case of The Ministry of Time.
- 206** - Influence of Material on Thermal Dissipation Efficiency Using a Rectangular Finned Heat Sink
- 314** - Identification with the Avatar and Flow as factors influencing the intention to purchase virtual items in video games
- 315** - Towards Mhealth-Specific Framework for Delivering Personal Healthcare in South Africa: A Case of Privacy and Security Regulations

S16 – Online: IKM

Room: 104 (<https://shorturl.at/WVsqS>)

Chair: Francis Jiménez

- 221** - Accounting education and entrepreneurship: keys to transforming education in the 21st century
- 241** - The discourse on political polarization in the Peruvian context through Lima's digital media
- 242** - Disinformation in Peruvian political discourse in digital media
- 248** - De economías ilícitas a modelos productivos sociales: la gestión del conocimiento académico en el emprendimiento posconflicto en Colombia
- 154** - Digital Marketing Challenges and Opportunities: A Bibliometric Review
- 286** - Mobile banking as a tool for financial inclusion in adults in the city of Loja, year 2025
- 171** - Decision-Intelligent Educational Management and Sustainable Brand Performance: Insights from Ecuador
- 186** - STEM studies, SDGs and the role of women in Ecuadorian universities
- 321** - Using Portable SDR Systems to Teach Spectrum Monitoring and RF Reconnaissance Concepts.

9:00 – 10:30	S17 – Online: ITE Room: 103 (https://shorturl.at/Lqgfo) Chair: Guillermina Avila Garcia
	<p>257 - Decision tree-based artificial intelligence for academic performance in an educational institution: a case study.</p> <p>259 - Augmented reality as an educational resource in learning in an educational center: study of case</p> <p>264 - Predictors of perceived ease of use with ChatGPT. An experience with university multimedia students</p> <p>267 - Between traditional and emerging technologies: Integrating digital technologies in a professional learning of prospective mathematics teachers</p> <p>304 - Key variables for teacher performance and the development of autonomous learning management in adolescents</p> <p>305 - Academic satisfaction in the use of the Blackboard LMS. The mediating role of the integration of key elements in learning management</p> <p>323 - Gamification and scientific reasoning with MiniPix EDU: learning based on experimental evidence</p> <p>231 - Emotional advertising in the creation of a canine lovable mark</p>
10:30 – 11:00	Coffee Break
11:00 – 12:30	S18 – OMIS, SSAAT Room: 101 Chair: Mikel Ugando Peñate
	<p>121 - A Proposed Model for Real-Time Security Linting for Novice Developers</p> <p>130 - Paper Integration of Agentic AI for intelligent hardware and software control in high school computer labs</p> <p>170 - Use of artificial intelligence in clinical image analysis to improve patient diagnosis and treatment</p> <p>281 - Design and Implementation of a Microservices Backend for an Open-Source Edutainment Platform</p> <p>313 - Low-Cost IoT–LoRa System for Reliable Temperature Monitoring in Human Milk Banks</p> <p>120 - A Proposal for a Multi-Factor Authentication-Based Model to Enhance the Subscriber Identity Module Swap Authentication Process</p>
	S19 – SSM Room: 102 Chair: Heiko Gewalt
	<p>282 - Integration of Angular Frontend, Spring Boot Backend, and Firebase in a Microservices Architecture for the Edutainment Platform</p> <p>312 - Lies or Nerves? A Signal Detection Theory-Guided Approach to Deception Detection in Natural Speech</p> <p>129 - Agentic Artificial Intelligence for the Prevention, Detection, and Response to Cyberattacks</p> <p>119 - Agentic AI for Phishing Detection and Prevention</p> <p>302 - Semantic Resizing of Neutral Emotions in Multi-Label Classification Systems with SBERT and Cascade Models</p> <p>285 - Cybersecurity Audit-Based Vulnerability Assessment and Risk Mitigation for the Edutainment Platform</p> <p>190 - Digital literacy through robotics: A Fablab-based pathway to strengthen programming skills and academic achievement in secondary education</p>

11:00 – 12:30	S20 – Online: IKM Room: 104 (https://shorturl.at/WVsqS) Chair: José Braga de Vasconcelos
	<p>191 - Model for Identifying SMEs as Innovators in Digital Ecosystem, Considering Categories of Innovation Potential, Innovation Capacity, and Eco-Friendly</p> <p>162 - Performance Evaluation of Predictive Methods for Electric Vehicle Investment in Ecuador</p> <p>180 - Reading assistant for visually impaired people implemented in Raspberry Pi with 3D casing made from recycled materials</p> <p>219 - Trust-Aware Adaptive Framework for Malware Classification with Feedback Patching</p> <p>139 - An Interactive Gamified Environment for Teaching Stacks in Java</p> <p>276 - Real-Time Social Media Analytics for Smart Tourism and Urban Management Using Zero-Shot NLP and Parallel Processing</p> <p>298 - Stock price forecasting integrating deep learning models and sentiment analysis</p>
	S21 – Online: IKM Room: 105 (https://shorturl.at/Lggfo) Chair: Luis Ulcuango <p>303 - Technological solution for the prevention of operational risks in entities of the financial sector</p> <p>140 - A Conceptual Model for Ethical and Privacy-Conscious Governance of Library Chatbots</p> <p>101 - The use of photography, through the smartphone, for the development of creative competence in the education</p> <p>102 - Photographic language and Peruvian gastronomy in the digital era</p> <p>111 - "TikTok as a Tool for Promoting Peruvian Films: The Case of Bienvenidos al Paraíso"</p> <p>147 - Teleoperated robotic de-scaling of leachate pond Basins: Architecture, design rationale, and techno-economic assessment</p>
12:30 – 14:00	Lunch
14:00 – 15:30	S22 – Online: ITE Room: 104 (https://shorturl.at/WVsqS) Chair: Alejandro Vargas
	<p>122 - Development of technical and transversal skills through educational robotics using construction models and the Lego Serious Play (LSP) methodology in university students.</p> <p>137 - University students' perceptions of the use of virtual reality to improve verbal reasoning: A case study with Delightex</p> <p>145 - Use of ICT in Education: Descriptive Analysis Based on Secondary Data from Ecuador</p> <p>163 - Flipped Classroom and Gamification for Training Engineers</p> <p>167 - Gamification and Digital Collaboration as Strategies to Enhance Literacy Skills</p> <p>179 - Sistema de apoyo al Diseño Curricular: Extensión de Meta4CBC para la evaluación por competencias</p> <p>187 - Patterns of technology utilization and academic dishonesty in secondary education</p>

14:00 – 15:30	S23 – Online ITE, MATC Room: 105 (https://shorturl.at/Lggfo) Chair: Diego Chacón
	<p>261 - Internet of Things Applying MicroIoT Methodology for Transportation Management: Case Study</p> <p>103 - Mentores Emprendedores: YouTube en la construcción de comunidades digitales</p> <p>105 - One Piece live-action: authenticity and television adaptations</p> <p>106 - Audiovisual storytelling by influencers on TikTok: a new way to inform young people</p> <p>107 - Digital Entertainment in Lima: The case of Take your money</p> <p>109 - "Audiovisual productions and Gender Stereotypes: The case of La Rosa de Guadalupe"</p> <p>110 - Romantic Podcasts, TikTok, and the COVID-19 Pandemic</p> <p>287 - Gamification and ubiquitous learning in higher education</p> <p>195 - Designing a Smart Corporate Governance Prototype for Wellness Tourism Ecosystems: An ICT-Driven Approach</p>
15:30 – 16:00	Coffee Break
16:00 – 18:00	S24 – Online: MATC, MSA, OMIS Room: 104 (https://shorturl.at/WVsqS) Chair: Victor Manuel Zamudio García
	<p>220 - Artificial Intelligence in Teacher Training: Technological, Ethical, and Pedagogical Challenges for Critical Education</p> <p>235 - Automatic Attendance Logging in University Environments Using Facial Recognition with Computer Vision</p> <p>239 - Design and Implementation of a Modular AI Agent for Library Information Systems</p> <p>207 - Artificial Intelligence in a fast-food Advertising</p> <p>233 - From hobby to profession: Work challenges of streaming in the Peruvian context</p> <p>238 - Interactivity and privacy management as determinants of purchase intention in social media advertising: Empirical evidence from an SEM model</p> <p>294 - Integrating Multimedia Co-Design in Visual Communication Systems for Cyberbullying-Related Suicide Prevention</p> <p>225 - Impact of an Artificial Intelligence Workshop on Parents' Perception and Preparedness</p> <p>288 - Virtual Reality for Obsessive-Compulsive Disorder in patients: Case Study</p> <p>224 - Barriers to Data Governance in the Brazilian Public Sector</p> <p>168 - Decision Support Model Based on Agronomic Variables in Coffee Cup Quality: a Comparative Analysis of Scientific Studies</p>

16:00 – 18:00	S25 – Online: OMIS, SSAAT, SSM Room: 105 (https://shorturl.at/Lqgfo) Chair: Khutso Lebea
	<p>217 - Implementação da Solução de Gestão de Arquitetura de TI: Estudo em uma Rede Farmacêutica Regional</p> <p>210 - From Attitude to Intention: Modeling Gen Z Mobile Banking Adoption with an Extended UTAUT2</p> <p>142 - Real-Time Assessment of Water Quality Parameters Utilizing Arduino UNO and Sensor Technology</p> <p>295 - Modelo de aprendizaje automático para la recomendación de carreras en jóvenes preuniversitarios</p> <p>251 - Desafios e Oportunidades na Implantação de Sistemas Embarcados para o Controle do Ambiente em Aviários: Uma Revisão Sistemática de Literatura</p> <p>252 - Sonification of Centrality Metrics in Layered Graphs</p> <p>198 - Redes neuronales convolucionales (YOLO) para la detección de megafauna marina y basura marina flotante a partir de imágenes aéreas</p> <p>201 - Digital Transformation and Economic Analysis as Foundations for Sustainable Institutional Marketing in the Ecuadorian Educational Sector</p> <p>132 - Starting with operations management in software startups. Motivations and initial activities</p> <p>141 - RNA-Protein Interactions Prediction using LSTM-CNN Technique</p>
20:00 – 22:30	Conference Dinner: Location: Pristine Bay – Restaurant

February 18	
9:00 – 13:00	Social Program
	Tour: Visit to Prospera, Beta District, with free Lunch included https://www.prospera.co/es/visit