

## CONFERENCIAS TÉCNICAS

### SALÓN GAUSS

**Computer Vision-Based Assistance System for Visually Impaired Individuals in Vending Machine Interactions**  
(K.M. Reyes L., et.al.)  
09:00 a.m.

**A Simple Validation of ePHASORSIM's User-Defined Model of a Virtual Synchronous Machine Suitable for Real-time Simulations**  
(J.M. Valles, et.al.)  
09:45 a.m.

10:30 a.m. | Coffee Break

**A Comparative Study of CNN Trainings for the Detection of E. Coli, P. Aeruginosa and S. Aureus: A Raspberry Pi-Based Prototype,**  
(C.A. Bardales C., et.al.)  
11:00 a.m.

**Practical Considerations for Design, Operation, and Maintenance of Grounding Systems in Electrical Substations: Impact of Surface Layer Contamination in Crushed Stone**  
(G.A. Salloum S.)  
11:45 a.m.

12:30 p.m. | Almuerzo

**Application of a UPFC for Power Flow Control in the Honduran Electric Power System**  
(D.A. Rivera, et.al.)  
02:00 p.m.

**Temperature increase in medium voltage cables caused by harmonics: Analysis in residential underground networks**  
(R. Santana-Jara, et.al.)  
02:45 p.m.

03:30 p.m. | Coffee Break

**A Mobile Robot with Deep Learning for Monitoring Coffee Farms**  
(J.L. Ordoñez-Avila, et.al.)  
4:00 p.m.

**Micro-Synchrophasors for Protection Systems**  
(A. Mejia-Dubón, et.al.)  
04:45 p.m.

### SALÓN FARADAY

**Analyzing the Performance of Radial-Flux PMSGs through different Types of Windings**  
(E. Ortiz-García, et.al.)  
09:00 a.m.

**Critical Review of Machine Learning Applications for Energy Efficiency: State of the Art and Implementation Perspectives in El Salvador**  
(J.A. Cornejo B., et.al.)  
09:45 a.m.

10:30 a.m. | Coffee Break

**Reliability Analysis of the Impact of Wind Extreme Gusts on a Power Converter of Wind Turbines based on PMSGs**  
(G. Martínez-Reyes, et.al.)  
11:45 a.m.

12:30 p.m. | Almuerzo

**Impact of Inverter-Based Distributed Generation Integration on Current Seen by Overcurrent Relay: CIGRE European MV Network Case**  
(V.A. Rosero-Morillo, et.al.)  
02:00 p.m.

**Protection of single busbar substations through coordination between overcurrent IEDs and the transformer differential based on IEC61850**  
(J. YopezNicola, et. al.)  
02:45 p.m.

03:30 p.m. | Coffee Break

IEEE  
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Technologies  
Board

### SALÓN AMPERE

**QR Tech: Digital Platform for Medical Equipment Management in Public Hospitals**  
(J.A. Cerrato L, et.al.)  
09:00 a.m.

**Revisión sistemática de literatura: aprendizaje automático para la predicción de fallas en el software**  
(G.O. Navarro Cedeño, et.al.)  
09:45 a.m.

10:30 a.m. | Coffee Break

**Agile testing using user language automation with artificial intelligence in Enjisst**  
(D.Trujillo Penagos, et.al.)  
11:45 a.m.

12:30 p.m. | Almuerzo

**Chatbot for Validation of Research Topics for Engineering Students,**  
(J.R. Caballero C., et.al.)  
2:00 p.m.

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03:30 p.m. | Coffee Break

**Satellite Imagery-based Analysis of El Chaparral Hydroelectric Reservoir**  
(C.E. Martínez-Cruz)  
4:00 p.m.

**Towards A Fuzzy Logic Approach to Web Application Security - Fuzzy VADAS**  
(A. Somarriba Lucas, et.al.)  
04:45 p.m.

### SALÓN MAXWELL

**IoT Based Prototype for Monitoring the Elderly**  
(A.I. Suazo U., et.al.)  
09:00 a.m.

**A Novel Methodology Proposal for the Realization of Energy Audits in Small Office Buildings**  
(R. Jimenez V., et.al.)  
09:45 a.m.

10:30 a.m. | Coffee Break

**KEYNOTE SPEAKER**  
**Challenges and Solutions for Protection Systems in Power Systems with Inverter-based Resources**  
Francisco Gonzalez-Longatt, Ph.D., E.Eng., SMIEEE | University of South-Eastern Norway, Founder and Leader of the DlgEnSys-Lab  
11:00 a.m.

**Estimation of Shade Levels in Coffee Cultivation Using Segmentation Methods and Deep Learning**  
(J. Aldana-Aguilar, et.al.)  
11:45 a.m.

12:30 p.m. | Almuerzo

**Open Access Library of Benchmark Test systems for Offline and Real-time Simulations**  
(J.M. Valles, et.al.)  
02:00 p.m.

**KEYNOTE SPEAKER**  
**Impacto y Desafíos ante las Amenazas de la Meteorología Espacial sobre los Sistemas Electrónicos y de Comunicación**  
Yvelice Soraya Castillo, Ph.D, MSc. M.Eng., | UNAH, OWSD-Honduras  
02:45 p.m.

03:30 p.m. | Coffee Break

**Biomedical engineering and veterinary: prototype of a prosthetic forelimb for canines**  
(A.Gonzalez, et.al.)  
4:00 p.m.

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