



ICATEEE 2026

Program of:
2026 3rd International Conference of Advanced Technology in
Electronic and Electrical Engineering
(ICATEEE'2026)



October 27th, 2026 (Registration opening at 3:00pm)

Day 1, October 28th, 2026

9h00 10h30	9h00 9h45	CONFERENCE OPENING Chairs: Pr. Hafedh Trabelsi (Tunisia), Pr. Kaddour Abdelmajid (Algeria) OPENING SPEECHES Vice-President of University of Sfax: Pr. Hassen Mnif Director of National Engineering School of Sfax: Pr. Khaled Elleuch
	09h45 10h30	Keynote Speaker 1: Pr. Aref Meddeb (Canada) "Can Tiny Devices Survive the Quantum Era? Post-Quantum Security for the Internet of Things"
10h30 11h00	Coffee Break	
11h00 12h20		SESSION 1 POWER SYSTEMS & ENERGY Chairs: Pr. Kaddour Abdelmajid
	11h00 11h20	Paper 31 — Energy Production from Biomethanization: Modeling and Prediction of Electricity Generation — Kholoud Trabelsi; Siwar Khemakhem; Mouna Rekik; Lotfi Krichen — 
	11h20 11h40	Paper 39 — Battery Active Cell Balancing with Bypass Technique in Charge Mode — Ala Eddine Trabelsi — 
	11h40 12h00	Paper 93 — Severity-Group Classification of Power-Converter Faults in Wind Energy Conversion Systems — Basma Fridhi; Mansour Hajji; Belkacem Chikhaoui — 
	12h00 12h20	Paper 6 — Smart and Cost-Effective Energy-Efficient Photovoltaic Monitoring System — Kharrat Ghassen; Abdelhedi Mohamed Aymen; Derbel Faouzi; Trabelsi Hafedh — 
12h20	Lunch Break	

14h00		
14h00 15h40	SESSION 2 POWER SYSTEMS Chairs: Dr. Yassine Aoudni	
	14h00 14h20	Paper 76 — Short-Term Photovoltaic Power Forecasting: A Dual-Path Benchmark of Tree Ensembles and a CNN–LSTM Hybrid — Mohamed Aydi; Yassine Aoudni; Jalel Ktari — 
	14h20 14h40	Paper 89 — WHO 2021-Aligned Three-Class Radiogenomic Classification of Adult Diffuse Gliomas: A Transfer-Learning Baseline on UCSF-PDGM and the Precision of Its Evaluation — Fatma Ben Iffa — 
	14h40 15h00	Paper 64 — An AIoT Control System for Pitcher Irrigation in Olive Fields — Wadie Benabdallah; Wassim Ghiloufi; Nader Ben Amor — 
	15h00 15h20	Paper 38 — Robust Dispersion-Augmented Reconstruction Scoring for Anomaly Detection in Smart Meter Consumption Data — Tejal Gupta; Kalaavathi B — 
	15h20 15h40	Paper 86 — Source-Model Transfer for Low-Budget Disaster Image Classification — Aditya Kumar; Vivek Ganesh Sonar; Abhijit Pandya — 
15:40 16:00	Coffee Break	
16h00 16h30	SESSION 3 Poster session1 Chairs: Pr. Hamed Trabelsi	
	16h00 16h30	Paper 2 — Numerical Modeling and Coupled Heat and Mass Transfer Analysis of Solar Drying of Tomato and Fig under Saharan Conditions — Kaddour Abdelmadjid; Mediani Ahmed — 
	16h00 16h30	Paper 3 — Comparative Thin-Layer Drying Kinetics of Tomato and Fig for Solar-Dryer Design in Adrar, Algeria — Kaddour Abdelmadjid; Mediani Ahmed — 
	16h00 16h30	Paper 4 — IoT-Based Water Flow Monitoring System Using LoRa Point-to-Point Communication and Firebase Cloud Integration — Safa Zouaoui; Landry Dzuakou — 

	16h00 16h30	Paper 92 — IoT-Based Multimodal Authentication for Access Control Using RFID and Facial Recognition on Raspberry Pi— Bousselmi Souhir; Gannouni Moez ; Ouni Kais— 
	16h00 16h30	Paper 34 — Adaptive FPGA-Based 3D Rendering with Runtime Configuration Selection for Energy-Constrained Embedded Systems — Kais Loukil — 
	16h00 16h30	Paper 36 — Identification of Photovoltaic System Losses Using Artificial Intelligence Architectures — Djamal Fridja; Hafedh Trabelsi; Abdelmadjid Kaddour; Mohamed Herriga — 
	16h00 16h30	Paper 37 — A Reinforced 1D-CNN-with-Attention for ECG Twelve-Lead Classification under Intra- and Inter-Patient Evaluation — Souhail Baccouche — 
	16h00 16h30	Paper 48 — Device Scaling Impact on Ultra-Low-Power JLGAA FET Differential Amplifiers: A Multi-Scale Simulation Approach — Rabia Ouchen; Khalil Tamersit; Fayçal Djeflal — 
16h30 17h50	SESSION 4 ELECTRONICS & EMBEDDED SYSTEMS Chairs: Pr. Omar cheikhrouhou	
	16h30 17h00	Keynote Speaker 2: Pr. Ahmad Fakhfakh (Tunisia) "From Bio-Signals to Embedded Intelligence : Wearable Sensing and AI for Human Movement, Neurological and Health Monitoring"
	17h00 17h20	Paper 52 — Design and Numerical Investigation of a Dual-Side Open PCF-SPR Magnetic Field Sensor — Wagih Mrassi; Randa Khemiri; Sameh Kaziz — 
	17h20 17h40	Paper 21 — Nanoscale Band-to-Band Tunneling CNT Field-Effect Transistor with Enhanced On-State Current through Synergistic Doping and Dielectric Engineering — Khalil Tamersit; Fayçal Djeflal — 
	17h40 18h00	Paper 22 — A Physics-Based Investigation of Dielectric-Engineered Responsivity Enhancement in GNR–Ge Infrared Phototransistors — Rabia Ouchen; Khalil Tamersit; Fayçal Djeflal — 

Day 2, October 29th, 2026

09h00 10h30		SESSION 5 AI & ENERGY Chairs: Pr. Abdelmajid Kaddour
	09h00 09h35	Keynote Speaker 3: Pr. Faouzi Derbel (Germany) “Sensor Integrating Machine Elements”
	09h35 10h10	Keynote Speaker 4: Pr. Ahmed Samet (France) “Artificial Intelligence for Smart Battery Systems: From Data to Predictive Energy Management”
	10h10 10h30	Paper 98 — Neural Bottleneck Learning for Mitigating Training Stagnation in Deep Convolutional Networks — Slim Hamdi, Kais Loukil, Ayoub Dargoul, Hichem Snoussi, Mohamed Abid — 
10h30 11h00		Coffee Break
11h00 12h20		SESSION 6 SIGNAL, IMAGE & DATA PROCESSING Chairs : Dr. Jalel Ktari
	11h00 11h20	Paper 25 — Machine Learning-Based Feature Importance Analysis of Ultra-scaled 2D Nanotransistors — Khalil Tamersit; Tarek Berghout; Antonio Di Bartolomeo; Fayçal Djeflal — 
	11h20 11h40	Paper 61 — CardioVision IA — Haddar Yassine — 
	11h40 12h00	Paper 87 — Learning from Raw IQ: Robust WiFi/BLE/LoRa Classification for Energy-Aware Wireless Sensor Networks — Waed Abeidi; Rym Chéour; Boubaker Abdallah; Jalel Ktari; Olfa Kanoun — 
	12h00 12h20	Paper 69 — Video-Based Sperm Detection, Tracking, and Kinematic Motility Assessment — Fatma Zahra Letaief; Ferdaous Kachouri; Olfa Gaddour; Mouna Baklouti — 
12h20 14h00		Lunch

14h00 15h20		SESSION 7 ELECTRONICS, IoT & EMBEDDED SYSTEMS Chairs: Mouna Baklouti
	14h00 14h20	Paper 58 — A Semantic Framework for Automated IoT Device Selection Using the SAREF Ontology and SWRL-Based Reasoning — Ismail Ktata — 
	14h20 14h40	Paper 97 — Mask-Guided Selective Depth Registration for Real-Time RGB-D Instance Segmentation on an Embedded GPU — Hajer Ben Halima; Mohamed Njah; Ridha Hamdi; Fatma Cherif — 
	14h40 15h00	Paper 59 — Design-Space Exploration of a Scalable AI Accelerator in 7-nm Standard-Cell Technology — Gabriela Mystkowska; Alessandro Palla; Pietro Nannipieri; David Merodio Codinachs; Luca Fanucci — 
	15h00 15h20	Paper 92 — Deep Learning for Multi-Class DDoS Detection in Software-Defined Networks: A Systematic Review — Ameer Salem Zaidoun; Hajer Baccouch; Abderrahmen Guermazi; Zied Lachiri — 
15:20 15:40		Coffee Break
15h40 16h30		SESSION 8 Poster session2 Chairs: Dr. Ismail Ktata
	16h00 16h30	Paper 53 — Design and Performance Analysis of an Efficient Flexible Single-Band Rectifier Circuit for ISM Applications — Rania Guernine; Elhadi Kenane; Mohamed Sahed; Rima Seghiour; Amal Sila — 
	16h00 16h30	Paper 62 — Discharge Current on the Surface of a Solid Subjected to Electrical Discharges — Mohammed Larba; Elhadi Belhiteche; Basma Benboya; Kamel Hamitouche; Abderrahmane Redouane — 
	16h00 16h30	Paper 63 — Enhanced Bearing Fault Diagnosis and Automatic Monitoring of Induction Motors Using Statistical Factors and Type-1 Fuzzy Logic — Bilal Djamal Eddine Cherif; Sara Seninete; Hilal Rahali — 
	16h00 16h30	Paper 66 — Sentiment Analysis of Educational Feedback: A State-of-the-Art Review from Lexicons to Transformers and Hybrids — Manal Djelouah; Nassima Bouadem; Omar Cheikhrouhou; Zoubeyr Farah — 
	16h00 16h30	Paper 67 — Experimental Study of Accelerated Thermal Aging of Silicone Rubber for High-Voltage Insulation Systems Based on Dielectric and Physico-Chemical Characterizations — Belhiteche El Hadi; Chafik Birouche; Mohammed Larba; Abdallah Hedir; Sébastien Rondot — 

	16h00 16h30	Paper 74 — Palmprint Recognition Using Deep Learning Techniques: A Comparative Study — Kheira Fairouz Bedjekina; Bilal Attallah; Youcef Brik; Mohamed Djerioui; Hilmi Ismail Zool — 
	16h00 16h30	Paper 75 — RaFi: A Neural Network-Based Framework for Cross-Technology Communication from LoRa to Wi-Fi — Boubaker Abdallah; Rym Chéour; Jalel Ktari; Olfa Kanoun — 
	16h00 16h30	Paper 82 — Validation-Guided Random Forest Pruning and Quantized Inference for Resource-Constrained Microcontrollers — Walid Aydi — 
16h30 19h00	Free Time	

Day 3, October 30th, 2026

09h00 11h 20		SESSION 9 TELECOM & ELECTROMAGNETISM Chairs: Dr. Mariem Turki
	08h30 09h00	Keynote Speaker 5: Pr. Sana Ibrahim (Tunisia) "Solar PV & BESS Engineering"
	09h00 09h40	Keynote Speaker 5: Pr. Mohamed Mosbah (Tunisia) "Towards Cooperative and Intelligent Mobility Systems"
	09h40 10h00	Paper 90 — Block-ACK Simple ARQ: An Efficient Transport Protocol for Low-Power and Lossy Networks — Manel Chahed; Aref Meddeb — 🏛️
	10h00 10h20	Paper 46 — A 28-GHz Beam-Steering Antenna Array Based on a Rotman Lens — Rima Seghiour; Ali Khalfa; Elhadi Kenane; Rania Guernine; Amal Sila — 🌐
	10h20 10h40	Paper 57 — Multimodal Soft Biometrics for Age and Gender Prediction Using Facial and Eye Features — Soumia Touaibia; Bilal Attalah — 🌐
	10h40 11h00	Paper 68 — Score-Level Fusion of Deep Facial Representations: A Cross-Benchmark Study of Face Verification — Maarfi Fayek; Brick Youcef; Attallah Bilal; Bedjekina Kheira Fairouz — 🌐
	11h00 11h20	Paper 85 — Modeling Mobile Application Usage with Distribution Families — Sule Sevval Karakaya Demir, Vilda Purutçuoglu, Ahmet Bursalı — 🌐
11h20 11h30		CLOSING CEREMONY AND PRIZES Pr. Hafedh Trabelsi (Tunisia), Pr. Abdelmajid Kaddour (Algeria)