EDiS'2026

CONFERENCE & WORKSHOPS PROGRAMME

November 02 – 05, 2026

■ EDiS conference (Days 1–2) ■ Smart Farming workshop (Day 3) ■ Smart e-Health workshop (Day 4)

DAY 1 · Monday, November 02, 2026

EDiS conference · 33 oral papers + 20 posters

TIME	PROGRAMME	DURATION	MODE
08h15–09h00	**Reception and registration**		
09h00–09h30	**OPENING ALLOCUTION** ▪ **Rector of the University of Oran 1 and the honorary president of EDiS'2026 conference.** ▪ **Director of the DGRSDT, honorary president of EDiS'2026.** ▪ **Dean of the Faculty of Exact and Applied Sciences of the University of Oran 1, honorary president of EDiS'2026.** ▪ **EDiS'2026 general chairs: Pr BENYAMINA Abou El Hassane (University Oran 1, Algeria), Pr RISSO Fulvio (Polytechnic University of Turin, Italy) & Pr BOULET Pierre (University of Lille, France).**	30 mn	
09h30–10h10	**KEYNOTE I (AUDITORIAUM)** **"Advanced Software Modeling with Artificial Intelligence"** Pr Houari Sahraoui, Université de Montréal, Canada **Session chair :** *Professor Pierre Boulet, Lille university, France.*	30 mn + 10 mn questions	**In person**
10h10–10h50	**KEYNOTE II (AUDITORIAUM)** **"Modular Timing Analysis of Embedded Real-Time Systems"** Professor Giuseppe Lipari, University of Lille, France **Session chair :** *Professor Smail NIAR, Université Polytechnique Hauts-de-France.*	30 mn + 10 mn questions	**In person**
10h50–11h20	***Coffee break***	30 mn	
11h20–12h20	**SESSION 1 / (AUDITORIAUM) - IoT and Applications** **Session chair :** *Professor Said Mahmoudi, Mons University, Belgium & Professor Khelifa Benahmed, Bechar university , Algeria* 1. Mohammed Abderrahmane Khelfane, Abderrezzak Sebbah, Abdessamad Saidi and Fayçal Belkaid : ***A Lightweight Certificate-Based Mutual Authentication Scheme for IoT Mesh Networks on Constrained Devices*** **(Paper N° 116).** 2. Habiba Houari and Zerhouni Noureddine : ***Improving the Performance of a Wind Turbine PID Controller Using GWO Optimization and Fuzzy Logic*** **(Paper N° 245).** 3. Abderahman Yakoub Atoui, Belkacem Messaoudi, Youssef Elmir and Abbes Amira : ***A Bidirectional GRU Network with Temporal Attention for Flood Prediction Using Time-Series Sensor Data*** **(Paper N° 81).** 4. Yousra Meguenni, Mansour Mededjel, Fethi Imad Benaribi and Samir Ouchani : ***TRAM-Light PoW: Trust RAM Adaptive Mining-Based Lightweight PoW for IoT Systems*** **(Paper N° 38).**	60 mn	**In person**
11h20–12h20	**SESSION 2 / ROOM 1 - IA and Applications 1** **Session chair : Session chair :** *Professor Sidi Mohamed Benslimane, ESI Sidi Bel Abbes.* 1. Amal Halfaoui and Fethallah Hadjila : ***QoS Neighborhood Encoding RIME Algorithm for Energy-Aware IoT Service Composition*** **(Paper N° 171).** 2. Mohammed Abdessalem Lachgueur, Nabila Labraoui, Mourad Gueroui, Sahraoui Dhelim, Chafiq Titouna and Radjaa Bensaid : ***Quantifying The Impact***	60 mn	**In person**

TIME	PROGRAMME	DURATION	MODE
	of Poisoning Attacks on Federated Learning Based 5G Network Slicing **(Paper N° 39).** 3. Mohammed Seyf Elislem Lasfer, Hamed Benahmed, Mohammed Merzoug, Mohammed M'Hamedi and Hadjila Mourad : ***A No-Reference AI-Generated Image Quality Assessment Using Gaussian-Laplacian Pyramids and Vision Transformers*** **(Paper N° 79).** 4. Farah Medjahed, Abou El Hassane Benyamina, Pierre Boulet, Philippe Devienne, Aurelie Saulquin, Thomas Firmin and Mazdak Fatahi : ***Efficient Neuromorphic Hardware for Marine Audio Classification: A Comparative Study of FPGA and SpiNNaker*** **(Paper N° 113).**		
11h20–12h20	**SESSION 3 / ROOM 2 - IA and Applications 2** **Session chair :** *Professor Mohamed Amine Chikh, Tlemcen university & Mostapha Kamel Abdi* 1. Mohammed Khalil Hadj Ahmed, Salima Saïdi-Besbes, Abou El Hassane Benyamina and Khadidja Taleb : ***Open-Path RGB Calibration for Edge-AI Adsorption Monitoring*** **(Paper N° 30).** 2. Hamed Benahmed, Lamia Benlaldj, Sihem Souiki, Mourad Hadjila and Mohammed Hicham Hachemi : ***CNNWithSNR: A Lightweight SNR-Aware Convolutional Neural Network for Automatic Modulation Classification*** **(Paper N° 36).** 3. Mohammed Achraf Larbi, Samiha Mezrar, Badia Klouche, Olivier Pons and Elena Kornyshova : ***Benchmarking Twelve Prompting Strategies for LLM-Based Rare Disease Diagnosis*** **(Paper N° 62).** 4. Ikram Ralem and Haffid Haffaf : ***A GINE-Based Framework for Structural and Causal Learning in Bond Graph Systems*** **(Paper N° 46).**	60 mn	**In person**
11h20–12h20	**SESSION 4 / ROOM 3 - Embedded, Real-Time Systems, Sequential, Parallel and Distributed Computing** **Session chair :** *Professor Giuseppe Lipari, Lille University, France & Pr Kadour Mejdi, Oran 1 University, Algeria.* 1. Nour El Houda Ouamane and Imad Eddine Lakhdari : ***Evaluating Word Embedding Methods in QCNN-Based Text Classification*** **(Paper N° 180).** 2. Davide Miola, Francesco Cheinasso and Fulvio Risso : ***Designing a Transparent Network Fabric for Cloud-Native Federated Services*** **(Paper N° 172).** 3. Alejandro Arias Jiménez, Rafael Marín-Pérez and Antonio Skarmeta Gómez : ***Decentralized Identity and Sovereign Authorization for Distributed Agricultural Ecosystems*** **(Paper N° 44). (Online)** 4. Melissa Maouche, Louiza Benbeztout, Amel Houha and Karim Akilal : ***A Sustainable and Fault-Tolerant Distributed IDS: Multi-Agent Orchestration with Autonomous Workload Rotation*** **(Paper N° 158).**	60 mn	**In person**
12h30–14h00	***Lunch***	1h30	
14h00–14h40	**KEYNOTE III (AUDITORIAUM)** **"The LPWAN technologies ecosystem for ubiquitous and massive Internet-of-Things"** Professor Congduc Pham, University of Pau, France **Session chair :** *Professor Ozcan Ozturk, Sabancı University, Turkey*	30 mn + 10 mn questions	**In person**
14h45–16h	**SESSION 5 / (AUDITORIAUM) - Optimization and Metaheuristics** **Session chair :** *Pr Zekri Lougmiri, Oran 1 university, Algeria & Saidi Salima, Oran 1 university.*	**75** mn	**In person**

TIME	PROGRAMME	DURATION	MODE
	1. Abderrahmane Khaldi and Mohamed Abdelkarim Remmide : ***Retrieval Potential Energy (RPE): A Physics-Inspired Submodular RAG Framework, Algerian CV–Job Matching Case Study*** **(Paper N° 115).** 2. Farid Boumaza, Atmane Hadji, Abou El Hassane Benyamina, Salah Maache and Abdelkader Aroui : ***A Multi-Objective Secretary Bird Optimization Algorithm with Adaptive Exploration–Exploitation Balance*** **(Paper N° 61). (Online)** 3. Sid Ahmed Boudaoud, Rabah Imache and Rachid Djerbi : ***QEC-3: Runtime-Adaptive Quantum-Energy-Delay Scheduling for Hybrid Quantum-Classical Edge Intelligence under NISQ Constraints*** **(Paper N° 140).** 4. Meriem Afaf Kenanda, Soumia Benkrama and Mohammed Fouad Mahkouka : ***Robust Behavioral Risk Detection Under Class Imbalance: A Generalizable Cross-Dataset Ensemble Framework*** **(Paper N° 117).**		
14h45–15h45	**SESSION 6 / ROOM 1 - New Trends in Information and Computing Technology** **Session chair :** *Professor Hafid Haffaf, Oran 1 university, Algeria & Professor Abdelghani Ghomari, Oran 1 university, Algeria* 1. Omar Farouk Berbouchi, Yahia Atig, Mansour Mekour and Djelloul Bouchiha : ***Deep Reinforcement Learning for Cloud Resource Optimization: A Three-Dimensional Taxonomy and Gap Analysis*** **(Paper N° 67).** 2. Mohammed Maati, Abdelghani Bouziane and Djelloul Bouchiha : ***Does Text Normalization Help Arabic Dialect Identification? A MARBERT-Based Study on Social Media Text*** **(Paper N° 56).** 3. Wahiba Si-Ahmed-Habak, Farida Dahmani-Bouarab and Samia Lazib : ***Skill Extraction in Low-Resource Contexts via Domain Adaptation and Human-in-the-Loop Learning*** **(Paper N° 59).** 4. Asmaa Aouat, El Abbassia Deba and Abou El Hassane Benyamina : ***A Model-Driven Approach to Container Management in Multi-Cloud Deployments*** **(Paper N° 66).** 5. Hanene Merouani, Sonia-Sabrina Bendib, Hamouma Moumen, Lokmane Dalouli, Youssouf Achouri and Meriem Abidi : ***Quantum-Native QUBO Optimization with Tunneling Validation for Fog-IoT Service Placement*** **(Paper N° 137) (Online).**	**60 mn**	**In person**
14h45–15h45	**SESSION 7 / ROOM 2 - Advanced Architecture and Network on Chip** **Session chair :** *Professor Abdelhalim Taieb Brahim, ENPO, Algeria & Dr Asma Benguedach, Oran 1 university, Algeria.* 1. Moaaz Abdullah, Simon Collart-Dutilleul and Otmane Ait Mohamed : Processor Soft-Error Assessment for Light Rolling Stock Automatic Train Protection: An STPA-Guided CTMC Approach (Paper N° 177). 2. Islem Teboub, Amar Aissani, Fatiha Merazka and Ayoub Takherist : ***Applying the Bienaymé–Chebyshev Inequality for Intrusion Detection: Scan Attack Case Study*** **(Paper N° 33).** 3. Stefano Galantino, Attilio Oliva, Fulvio Risso, Riccardo Tornesello and Alessandro Rontani : ***Orchestrating Network Security Borders in the Computing Continuum: A CNI-Agnostic Hybrid Enforcement Model for Liqo Multi-Cluster Federations*** **(Paper N° 58).** 4. Selma Rihane, Youcef Hammal and Khaled Zeraoulia : ***AI-Driven Adaptive Orchestration for Fog Computing Systems*** **(Paper N° 123).**	60 mn	**In person**
14h45–15h45	**SESSION 8 / ROOM 3 - Automotive Systems** **Session chair :** *Professor Abdelhamid Loukil, USTO, Algeria & Pr Karim Bouamrane, Oran 1 University, Algeria* 1. Feredj Younes and Belghachi Mohammed : ***A Lightweight Multi-Task Deep Learning Framework for Real-Time Accident Detection and Prevention in Autonomous Vehicles*** **(Paper N° 100).**	60 mn	**In person**

TIME	PROGRAMME	DURATION	MODE
	2. Abdelmalek Bakiri, Samir Fenanir and Lakhdar Goudjil : ***A Comprehensive Four-Tier Benchmark of Standard and TinyML Models for UAV Intrusion Detection on the UAV-NIDD Dataset*** **(Paper N° 112). (Online)** 3. Fatima Zohra Ould Hadri, Ahmed Louazani and Yassine Douga : ***TrustV2I: A lightweight ECC-based V2I authentication framework with dynamic trust against RSU Impersonation*** **(Paper N° 53). (Online)** 4. Mohammed Taher Amine Sahraoui, Ali Kourtiche, Mohammed Habib Diaf and Ishak Kebir : ***Formal Verification of Lightweight Cryptographic Protocols: Bridging the Implementation Gap in IoT Security*** **(Paper N° 54).**		
15h45-16h	***Coffee break***	15 mn	
16h–17h	**POSTER SESSION (Hall of the auditorium)** **Session chair :** Lamia Djebbour *(University Oran 1, Algeria) and Ahlem Kenniche (University Oran 1, Algeria)* 1. Mohammed Nabil Djilali, Elhocine Boutellaa and Oussama Azzouzi : ***CNN-Transformer for Cross-User Hand Gesture Recognition*** **(Paper N° 220).** 2. Salah Eddine Brezini, Okba Bekhelifi, Oussama Mezouar, Chams Eddine Choucha, Sarra Boukhacheba and Fethi Abdelatif Dali : ***Optimized Embedded Implementation of Hyperspectral–Multispectral Image Fusion on Raspberry Pi*** **(Paper N° 221).** 3. Said Ould Amara and Mohand Yazid : ***Two-Phase Arbitration-based RU Access Control for OFDMA-based Uplink IoT Communications*** **(Paper N° 149).(En ligne)** 4. Fayçal Belhocine and Zoubeyr Farah : ***A Lightweight Intrusion Detection Solution for IoT Using MLP with Self-Attention Mechanism*** **(Paper N° 222).** 5. Meriem L. Aarizou : ***Implementing Deep Reinforcement Learning TD3 for Social Robot Navigation in Complex Spaces: An Empirical Case Study on Sensory and Odometric Limitations*** **(Paper N° 236).** 6. Amal Kerrouche, Abdelkader Ouared and Abdelhafith Chadli : ***Responsibility-Aware Reinforcement Learning for Regulating Learner-Generative AI Reliance*** **(Paper N° 241).** 7. Farid Hammou, Majda Kermadi, Abdelhalim Taieb Brahimi and Said Moussaoui : ***Comparative Assessment of Kriging and Radial Basis Function Surrogate Models for Eddy Current Testing Inverse Problems*** **(Paper N° 183).** 8. Halima Si Moussa, Mohamed Feyçal Khelfi, Fatima Debbat, Najia Trache and Esma Insaf Djebbar : ***A Bio-Inspired Aggregation Model for Dynamic Best-of-n Collective Decision-Making*** **(Paper N° 135).** 9. Bilal Segaa and Saloua Brahmi : ***An Intelligent Multilingual Document Processing Pipeline for Administrative Archives: Hybrid OCR Routing, LLM-Based Classification, and Two-Stage Semantic Retrieval*** **(Paper N° 182).** 10. Mohamed El Kamel Bensmaine and Mohamed Sedik Chebout : ***MobileHTR-Arabic: A Synthetic Mobile-Degraded Dataset and Edge-Based Recognition Framework for Arabic Handwriting*** **(Paper N° 200).** 11. Fella Saih, Romissa Saoudi, Amani Mankouri and Rezika Zedek : ***Deep Learning-Based Satellite Image Analysis for Natural Disaster Management: A Comparative Review of CNN and Transformer Architectures*** **(Paper N° 170).** 12. Esma Insaf Djebbar, Freha Mezzoudj and Halima Si Moussa : ***Intelligent Chatbot Integration in E-commerce Systems using Advanced Deep Learning Models*** **(Paper N° 189).** 13. Fadhila Djenba and Mohamed Sedik Chebout : ***Assessing Student Judgment of AI-Generated Academic Content: An Initial Empirical Operationalization of the SGJ-AF Framework*** **(Paper N° 198).** 14. El-Ghani Iftissen, Boualem Brahmi and Madani Bezoui : ***A Novel Crowding-Distance-Triggered Immigrant Operator for Multi-Objective Evolutionary Algorithms: Application to EV Charging Station Placement*** **(Paper N° 192).**	60 mn	**In person**

TIME	PROGRAMME	DURATION	MODE
	15. Belkacem Messaoudi, Youssef Elmir and Abbes Amira : ***Multi-Modal Flood Mapping from Few Labels SAR–Optical Fusion via a Frozen Geo-Spatial Foundation Model*** **(Paper N° 203).** 16. Chaima Slimane, Laaziz Lahlou, Anes Abdennebi, Nadjia Kara and Sidi Mohammed Benslimane : ***Comparative Evaluation of Network Data Analysis Frameworks for Machine Learning-based Intrusion Detection*** **(Paper N° 178).** 17. Wahiba Menasri, Hocine Bensalah, Fatima Zohra Baouche, Reda Kara, Hani Dahmani, Haithem Abdellah Menacer, Abderrezak Gacemi and Abderrahmane Imam : ***Design and development of an intelligent robot for cleaning motorway reflectors*** **(Paper N° 18).** 18. Atmane Hadji, Farid Boumaza and Fatah Hadji : ***Explainable Machine Learning for Secure Hourly Load Forecasting in Smart Grids under Energy Transition*** **(Paper N° 102).** 19. Asmaa Hadjer Saboundji, Mokhtar Keche and Mohammed Dahmani : ***POA-Based Indoor Visible Light Positioning*** **(Paper N° 68).** 20. Hocine Bensalah, Wahiba Menasri, Abdesselam Hocini, Imam Abderrahmane, Hadda Zekraoui, Hocine Bahri, Hiba Bouandas and Nadia Menasri : ***Design of a Highly Sensitive Biosensor Based on 2D Photonic Crystals for Simultaneous Detection of Glucose and Cancer Cells*** **(Paper N° 104).**		
17h–17h30	**Debate of the first day**	30 mn	**Hybrid**

DAY 2 · Tuesday, November 03, 2026

EDiS conference · 12 oral papers

TIME	PROGRAMME	DURATION	MODE
08h30–09h30	**SESSION 9 / (AUDITORIAUM) - Automotive Systems** **Session chair :** *Professor Nabil Bougbanmi, USTO university, Algeria & Professor Safia Nait Bahloul, Oran 1 University, Algeria* 1. Zakaria Ziraoui and Mohamed Ould Khaoua : ***Performance Evaluation of MANET Routing Protocols for Inter-WBAN Communication*** **(Paper N° 121).** 2. Hamza Ghitri and Fatima Zohra Belgrana : ***Lightweight Underwater Geometric Perception for Embedded Pipeline Inspection*** **(Paper N° 63).** 3. Hichem Cheriet, Badra Khellat Kihel and Samira Chouraqui : ***Neural Motion Planning for Robotics: A Comparative Perspective on Classical, Learning-Based, and LLM-Augmented Approaches*** **(Paper N° 118).** 4. Sabrina Ismahene Bouchenafa and Ali Kies : **Blockchain-Based Secure Authentication Protocol for Drone Networks (Paper N°101).**	60 mn	**In person**
08h30–09h30	**SESSION 10 / ROOM 1 - IA and Applications 1** **Session chair :** *Pr Smail Niar – Université Polytechnique Hauts-de-France, France & Professor Fatiha Barigou, Oran 1 university, Algeria* 1. Ryad Temmar and Mohamed Ouslim : ***An Open-Source Distributed Architecture for Remote Supervision of Physiological Signals*** **(Paper N° 124).** 2. M'Hamed Amine Hatem, Amine Mammasse, Sofiane Batata and Faiçal Azouaou : ***STCALIR: Semi-Synthetic Test Collection for Algerian Legal Information Retrieval*** **(Paper N° 132).** 3. Kenza Sihem Taleb and Mohamed Lehsaini : ***An Overview of Generative AI Approaches for Autonomous Vehicle Test Scenario Generation*** **(Paper N° 127).** 4. Siredj Eddine Benaichouche and Abdelkader Dairi : ***Towards Efficient EEG Decoding: A Benchmarking Study of Graph, Transformer, and Mamba Architectures for Motor Imagery Classification*** **(Paper N° 126).**	60 mn	**In person**
08h30–09h30	**SESSION 11 / ROOM 2 - IA and Applications 2** **Session chair :** *Professor Mostefa Belarbi, Tiaret University, Algeria & Pr Mohamed Laghzaoui, Relizane University, Algeria.* 1. Fadhila Djenba and Mohamed Sedik Chebout : ***SGJ-AF: A Review-Derived Assessment Framework for Student Judgment of AI-Generated Academic Content*** **(Paper N° 197).** 2. Fatima Zohra Kharroubi, Ahmed Chaouki Lokbani and Abdelkrim Latreche : ***Towards Responsible Medical AI: A Dual Agent LLM Framework for Ethical Natural Language Queries over Healthcare Data*** **(Paper N° 230).** 3. Anes Abdelouahab Mahammedi, Abdelghani Bouziane, Yasser Yahiaoui and Djelloul Bouchiha : ***Can LLMs Replace Fine-tuned Models for Arabic NER? A Zero-shot and Few-shot Evaluation on Wojood*** **(Paper N° 144).** 4. Amina Tassenime Boulanouar, Sidi Mohammed Benslimane and Sid Ahmed Benabderrahmane : ***Cross-Platform Gender Bias and Trust Analysis in Online Advisory Platforms Using Transformer-Based NLP Models*** **(Paper N° 85).**	60 mn	**In person**
09h30–10h	***Coffee break***	30 mn	
10h–10h40	**KEYNOTE IV (AUDITORIAUM)** **"Challenges and Opportunities on Distributed and Federated Learning Security and Robustness"** Professor Sara Bouchenak, INSA Lyon, France **Session chair :** *Professor Fulvio Risso, Polytechnic University of Torino, Italy*	30 mn + 10 mn questions	

TIME	PROGRAMME	DURATION	MODE
10h45–11h20	**KEYNOTE V (AUDITORIAUM)** **"Heterogeneous Computing and Domain-Specific Hardware"** Professor Ozcan Ozturk, Sabancı University, Turkey **Session chair :** *Professor Abdelmalek Amine, Oran 1 university, Algeria & Professor Mohamed Amine Chikh, Tlemcen university*	30 mn + 10 mn questions	
11h25–12h15	**CLOSING SESSION & DEBAT (AUDITORIAUM)** Professors *Smail Niar, Boulet Pierre, Ozcan Ozturk, , Risso Fulvio, Sara Bouchnak, Houari Sahraoui, Giuseppe Lipari & Congduc Pham* • The Impact of AI on Higher Education • The Role of University Research in Algeria's Economic Development	45 mn	**Hybrid**
12h15–13h30	***Lunch***		
14h00–18h00	***Social event***		
19h30	***EDiS'2026 Social Dinner***		

WORKSHOP SMART FARMING

"New Technologies for Food Security and Sustainable Development"

DAY 3 · Wednesday, November 04, 2026

18 papers

TIME	PROGRAMME	DURATION
08h30–09h00	**Reception and registration**	30 mn
09h00–09h15	**OPENING ALLOCUTION** **Dean of the Faculty of Exact and Applied Sciences :** Professor Mohamed Hamadouch **Co-chairs :** LAPECI (Pr Abou El Hassane Benyamina), LBRAP (Pr Abdelkader Bekki) and RIIR (Pr Bouabdellah Kechar) – University Oran 1	15 mn
09h15–9h55	**KEYNOTE 1 (AUDITORIAUM)** **"Sensors, Wireless Sensor Networks and Artificial Intelligence for Greenhouse Monitoring"** Professor Jaime Lloret, Universitat Politècnica de València, Spain **Session chair :** *Professor Congduc Pham, Pau university, France*	40 mn = 30 mn presentation + 10 mn questions
10h00–10h40	**KEYNOTE 2 (AUDITORIAUM)** **"Custom bio-inoculants: deciphering genotype interactions"** Professor Alessio Mengoni, University of Firenze, Italy **Session chair :** *Professor Abelkader Bekki, LBRAP, Oran1, Algeria & Professor Salima Saidi, Oran 1 university, Algeria.*	40 mn = 30 mn presentation + 10 mn questions
10h40–11h00	***Coffee break & poster presentations*** 1. Rim Smaali, Bilal Dendani and Halima Bahi : ***Comparative Evaluation of Lightweight CNN Models for Plant Disease Classification Using Transfer Learning*** **(Paper N° 215).** 2. Farouk Benahmed, Wafa Difallah, Jaime Lloret, Tariq Benahmed and Khelifa Benahmed : ***Incident Detection System in Smart City using AIoT*** **(Paper N° 13).** 3. Imane Daha, Tariq Benahmed and Amina Bourouis : ***Smart Fertilization Monitoring System Using AIoT*** **(Paper N° 28).** 4. Abdelmadjid Saad and Abou El Hassane Benyamina : **Edge-Based Smart Irrigation: A Lightweight Univariate LSTM Architecture for Autonomous Daily Reference Evapotranspiration Forecasting (Paper N°125)**	20 mn
11h00–12h15	**SESSION 1 / (AUDITORIAUM)** **Session chair :** *Porfessor Bachir Djebar, USTO, Algeria & Pr Karim Sebaba, Mostaganem university, Algeria.* 1. Mokhtaria Ben Mekki and Abou El Hassane Benyamina : ***HydroFertil-Edge: An Edge-Cloud Hybrid Framework for Simultaneous Precision Irrigation and NPK Fertilization in Semi-Arid Algerian Wheat Fields*** **(Paper N° 93).** 2. Zineb Djihane Agli, Halima Bahi and Ridha Ejbali : ***A Multimodal RGB/TIR Edge-Cloud Framework for Lettuce Water-Stress Recognition*** **(Paper N° 201).** 3. Fatima Zohra Touati, Lakhdar Loukil and Bakhta Amrane : ***Early Detection of Rice Leaf Diseases Using Deep Transfer Learning and Image Preprocessing*** **(Paper N° 15).** 4. Miriam Zambudio Martínez, Rafael Marin-Perez and Antonio F. Skarmeta Gomez : ***Hourly Prediction of Soil Moisture at Multiple Depths Using Machine Learning Techniques: A Time Series Approach*** **(Paper N° 19). (Online)** 5. Yu Ye, Adrián Cánovas-Rodríguez, Maria Fernanda Garcia Cruz, Miguel Angel Zamora-Izquierdo, Aurora González-Vidal, José Salvador Rubio-Asensio, María Fernanda Ortuño Gallud, Pedro Nortes Tortosa and Antonio Skarmeta Gómez : ***Machine Learning-Based Estimation of Net Irrigation Requirements in a Peach Orchard Under Mediterranean Conditions*** **(Paper N° 64).**	75 mn

TIME	PROGRAMME	DURATION
11h00–12h15	**SESSION 2 / ROOM 1** **Session chair :** *Professor Fulvio Risso, Polytechnic University of Torino, Italy, ESI Belabbes, Algeria & Professor Noredine Yahia, LBRAP, Algeria.* 1. Yahia Atig, Nadri Khiati and Aissam Bendida : ***AgroLink: A Semantic Knowledge Graph for Smart Farming Decision Support in Algeria*** **(Paper N° 52).** 2. Najat Madjoub and Abdelkader Bekki : ***Mycorrhizal inoculation engineering: a biological foundation for smart farming in degraded soils*** **(Paper N° 94).** 3. Litissia Lilia Khemidja, Samir Boukhenous, Nassim Bahbou and Youcef Remram : ***Comparative Analysis of Water Consumption in Different Agricultural Substrates Using an IoT-Based Smart Irrigation System*** **(Paper N° 186).** 4. Sarah Houas and Somia Lekehali : ***Toward Agentic Nodes for Smart-City Surveillance: A Comparative Review of Edge AI, Lightweight Vision, and Multi-Agent Coordination*** **(Paper N° 216).** 5. Fouad Hellal, Hassiba Nemmour, Mohamed Rayane Lakehal, Amine Mezenner, Naouel Arab and Youcef Chibani : ***Vision Transformer with enhanced contour features for plant leaf disease severity classification*** **(Paper N° 12).**	75 mn
11h00–12h	**SESSION 3 / ROOM 2** **Session chair :** *Dr Bidai Zahia Oran1 university &* ***Asma el zerey-belaskri****, LBRAP, University Oran 1.* 1. Amina Aarizou and Mostefa Merah : ***Data-Fusion Strategies for Improving Grapevine Disease Identification in Complex Real Field Environments*** **(Paper N° 35).** 2. Yousra Beldjebel, Mohamed Nadjib Meadi and Abd El Moumene Zerari : ***Deep Learning-Based Soil Moisture Classification Using Smartphone-Captured Images*** **(Paper N° 74).** 3. Soumya Ranjan, Honey Dinesh Nikam and Saswat Kumar : ***From Cloud to Crop Row: LoRA, DINOv2, and the Real-Time Embedded Gap in Plant Disease Detection*** **(Paper N° 120).** 4. Meroua Belmir, Wafa Difallah, Abdelmadjid Mahfoudh, Bendjerad and Abdelkader Ghazli : **Precision Plant Leaf Disease Detection from UAV Imagery Using YOLO Enhanced with Attention Mechanism (Paper N°217).**	60 mn
12h20–13h	**(AUDITORIAUM)** ***Partners presentation :*** *Groupe CHIALI, El Mellouhi, Sarl AMTEC* ***Round table: recommendations and closing*** *Professors :* Abdelkader Bekki, Bouabdellah Kechar, Alessio Mengoni, Jaime Lloret, Abou El Hassane Benyamina	40 mn

WORKSHOP SMART E-HEALTH

"New Technologies for e-Health"

DAY 4 · Thursday, November 05, 2026

18 papers

TIME	PROGRAMME	DURATION
08h–09h00	**Reception and registration**	30 mn
09h00–09h15	**OPENING ALLOCUTION** **Dean of the Faculty of Exact and Applied Sciences :** Pr Mohamed Hamadouche **Co-chairs :** Pr Abou El Hassane Benyamina (LAPECI) , Pr Hafid Haffaf (RIIR) & Pr Lougmiri Zekri (LAPECI) , University Oran 1	15 mn
09h15–9h55	**KEYNOTE 1 / AUDITORIAUM** **"European Health Data Space Regulation: cybersecurity and organisation rules to share health data for research"** Professor Pierre Boulet, University of Lille, France **Session chair :** *Pr Amine Abdelmalek, Oran 1 university & Pr Sabraoui, Montreal university*	40 mn = 30 mn presentation + 10 mn questions
10h–10h30	***Coffee break & poster presentations*** 1. Yasmine Bachir Bouiadjra, Fatima Baakia, Karima Chikhi, Smail Acimi, El Abbassia Deba and Abou El Hassane Benyamina : ***Interpretable Machine Learning for Hypospadias Surgical Decision: A Comparative Study of KNN, Random Forest and CART*** **(Paper N° 224).** 2. Khaoula Drid, Asmaa Benguedach and Chaima Ayachiamar : ***Comparative Analysis of Deep Learning-Based Object Detection Models for Microcalcification Detection in Digital Mammography*** **(Paper N° 110).** 3. Kahina Amara, Mohamed Amine Guerroudji, Meriem Khedir, Oussama Kerdjidj and Nadia Zenati : ***3D Visualisation and Interactive Rendering of Brain Tumour Segmentation for Enhanced Surgical Planning and Diagnosis*** **(Paper N° 4). (Online).** 4. Mohamed Farid Benlamnouar, Nabil Bensaid, Ouadah Mhamed, Mohamed Amine Soualili, Omar Fethi Benaouda and Yazid Laib Dit Leksir : ***Comparative Analysis of OLS and Ridge Regression Models for Predicting Welding Hazard Index (WHI) under Multicollinear Process Conditions*** **(Paper N° 208).**	30 mn
10h30–11h45	**SESSION 1 / AUDITORIAUM** **Session chair :** *Pr Heroual EHU Oran & Professor Ghalem Belalem , Oran 1 University, Algeria* 1. Tahar Zioual, Laouni Djafri, Yacine Gafour, Mohamed Oussama Belalia and Kheireddine Belghitar : ***NeuroDetect Lite: A Hybrid Clinical Decision Support System for Lightweight Alzheimer's MRI Classification with a Symbolic MMSE Safety Gate*** **(Paper N° 48).** 2. Marwa Nassane, Nassima Dif and Sidi Mohammed Benslimane : ***Hybrid Quantum–Classical Architectures for Medical Image Analysis: A Review of Applications, Challenges, and Future Directions*** **(Paper N° 114).** 3. Souidi Abdelhakim, Mokeddem Fatima, Daradji Elhadja Nedjma and Sahraoui Fatima : ***Enhancing pancreas segmentation in CT images using U-Net with Attention Mechanism*** **(Paper N° 49).** 4. Moufok Souad and Belkadi Khaled : ***Drug Name Confusion in Algerian Pharmaceutical Nomenclature*** **(Paper N° 65).** 5. Mohammed Oussama Maamoun, Ammar Boucherit and Chafik Berdjouh : ***The Performance–Explainability Paradox: Auditing Synthetic Augmentation Fidelity in Scarce Clinical Data*** **(Paper N° 82). (Online)**	75 mn
10h30–11h30	**SESSION 2 / ROOM 1** **Session chair :** Ozcan Ozturk, , Sabancı University, Turkey & Dr El Abbassia Deba, University OranI	60 mn

TIME	PROGRAMME	DURATION
	1. Wissam Bouzi, Samia Bentaieb and Abdelaziz Ouamri : ***Image-Based ECG Classification for Cardiac Diagnosis: A Comparative Study of Lightweight Convolutional Neural Networks*** **(Paper N° 168).** 2. Mohammed El Amine GHERBI, Kheira MECHACH and Lougmiri ZEKRI : ***An Efficient Chest X-ray Transformation Approach for Deep Medical Image Analysis*** **(Paper N° 108).** 3. Mohamed Mansour, Fatima Zohra Belgrana and Lakhdar Saïs : ***Fractional Active Contour Loss with Parallel Attention for Polyp Segmentation*** **(Paper N° 232).** 4. Oussama Abda and Hilal Naimi : ***An Explainable Frequency-Domain and Deep Learning Framework for Automated Brain Tumor Classification from MRI*** **(Paper N° 31).**	
10h30–11h45	**SESSION 3 / ROOM 2** **Session chair :** *Pr Jaime lloret , Valence university & Pr Jamila Hamdadou, Oran 1 university, Algeria.* 1. Yamina Hamidouche, Lamya Fergani and Chafiaa Hamitouche : ***A Crowdsourced Traffic & Weather Fusion Dataset to Enhance Emergency Healthcare Travel Time Forecasting in Algiers Province*** **(Paper N° 151).** 2. Fradi Chaima, Fatima Kabli, Amal Boumedjout and Abdelhakim Benali : ***Unified Framework for Unsupervised Anomaly Detection in Water Distribution Networks: Real-World Case Study in Oran, Algeria*** **(Paper N° 107).** 3. Khawla Bekkouche, Selma Azizi, Chahrazad Hambli, Abdelhammid Bouazza and Fatima Zohra Touati : ***Smart IoT Healthcare Wearable for Remote Patient Monitoring and Prediction*** **(Paper N° 91). (Online)** 4. Nadjemat El Houda Issaad, Ismail Lotfi, Mohamed Senouci and Zekri Lougmiri : ***Auction-Driven Spectrum Allocation With AutoEncoder-Based Compression in Rural Wireless Networks: A Novel Framework for Reliable Telemedicine*** **(Paper N° 173). (Online)** 5. Amine Boulemtafes, Abdelouahab Amira and Mohamed Saddek Derki : ***Towards Trustworthy Pervasive Health Monitoring: A Capability-Driven Architectural Framework for Integrated PHM System Design*** **(Paper N° 223).**	75 mn
11h50–12h20	**KEYNOTE 2 / AUDITORIAUM** **" Multimodal Federated Learning in healthcare: Applications and security challenges**" Professor Said Mahmoudi, University of Mons, Belgium **Session chair :** *Pr Smail Acimi, Canastel Hopital, Algeria & Pr Sidi Mohamed Benslimane, ESI Sidi Bel Abbes, Algeria*	30 mn =
12h20–13h	**PARTNER PRESENTATIONS : Groupe Hasnaoui, EHU, others** ***Round table: recommendations and closing*** *Professors Houti Leila, Acimi Smail, Jamel Yousfi, Mahmoudi Said , Pierre Boulet, Hafid Haffaf, Lougmiri Zekri*	40 mn