



2026 International Conference On Cyber Management And Engineering (CyMaEn) Program

Sunday, October 11

Sunday, October 11 8:30 - 9:30

REG: Registration

Room: Main Hall

Sunday, October 11 9:30 - 10:15

Opening: Opening Ceremony

Plenary Room

Sunday, October 11 10:15 - 11:15

PN1: Plenary Session 1 : The title is the future of AI and its impact on geopolitics

Fouad Ben Abdelaziz

Plenary Room

Chair: Abdelghani Bekrar

Sunday, October 11 11:15 - 11:30

CB1: Coffee break 1

Room: Main Hall

Sunday, October 11 11:30 - 13:10

PS1-1: Human-Centered AI: Learning, Cordination and Forecasting Parallel Session 1-1

Plenary Room

Chairs: Kouzou Abdellah, Mohamed Tarek Khadir

11:30 A Comparative Study of Matrix Factorization and the Multi-Layer Perceptron for Collaborative Filtering

Benabbou Amin, Djamila Hamdadou and Kaouther Labeled

11:50 An Empirical Evaluation of Architectural Hybridization on the EduRABSA Dataset

Manal Djelouah, Nassima Bouadem and Zoubeyr Farah

12:10 Mamba-Based Deep Learning for Sentiment Analysis and Spam Review Detection in E-Commerce

Nassima Bouadem, Manal Djelouah and Zoubeyr Farah

12:30 Multi-Agent Reinforcement Learning for Adaptive Task Allocation and Fault Tolerance in Cooperative Robotic Welding

Mohamed Yasser Korichi and Amira Chekir

12:50 Conventional vs. Attention-Based Deep Learning for Urban Water Demand Forecasting: A Systematic Comparison

Siredj eddine Benaichouche and Abdelkader Dairi

PS1-2: Deep Learning for Medical Analysis and Diagnosis Parallel Session 1-2

Room 1

Chairs: Sanja Petrovic, Omar Behadada

11:30 FL-RDDetect: A Federated Hybrid Model for Diabetic Retinopathy Detection

Oussama Bellouze, Ikram Azzouz, Samira Ait Kaci Azzou and Djamil Boukredera

11:50 Heart Disease Detection with Machine Learning and Data Fusion Technique

Karima Hadfi and Kahina Amara

12:10 Najda: A Hybrid Retrieval-Augmented Classifier for Medical Triage in Algerian Darija

Amel Boustil, Akram Mahboub and Nasreddine Bramki

12:30 FALCON: Fusion of Absolute Logic and Calibrated Probabilistic Inference for Minority-Class Detection in Radiology Reports

Hiba Ouchene, Melyara Mezzi and Nadja Benblidia

12:50 Too Accurate to Be True: A Pandemic Case Study of Performance Inflation in Healthcare Machine Learning Models

Manel Hadjer Benyarou, Fatima Zohra Benkaddour and Karim Bouamrane

PS1-3: Wireless Network Security Parallel Session 1-3

Room 2

Chairs: Fouad Ben Abdelaziz, Mohamed Lehsaini

11:30 Assessing the Post-Quantum Readiness of Widely Deployed Internet Security Protocols

Sid Ahmed Khobzaoui, Djohra Meguedmi and Hamza Moufek

11:50 Blockchain Based Defense Against Poisoning Attacks in Federated Learning: A Comparative Survey

Chaima Chemam and Ala Djeddaï

12:10 A Comparative Deep Metric Learning Study for Secure Wrist Vein Authentication Under Limited Data Conditions

Alachaher Ahmed Salim and Benziane Sarah

12:30 A Synthetic PCAP Benchmark for Evaluating Temporal Learning in Sequence-Based Intrusion Detection

Mohamed Bekouassa, Mounir Mounir Tahar abbes and Kadri Walid

12:50 Modelling of Mechanical Responses in AISI 430 Stainless Steel Welds Through Artificial Neural Networks

Mohamed Farid Benlamnour, Nabil Bensaid, Mohamed Amine Soualili, Haoues Ghouss, M'hamed Ouadah and Omar Fethi Benaouda

PS1-4: Engineering applications Parallel Session 1-4

Room 3

Chairs: Brahim Cherki, Tillal Eldabi

11:30 Diagnosing and Repairing Confidence Calibration in Unsupervised Ontology Matchers

Youcef Toumi and Khaled Benali

11:50 An Inventory Routing Problem for Perishable Products with Returnable Transport Items and Simultaneous Pickup and Delivery

Wassila Ghennam, Mohammed Haoues and Ahmed Senoussi

12:10 An Efficient Variant of ECDSA

Nissa Mehibel, Braknia Ounassa Amat Ellah, Hala Boulfrad, Abdelhak Mesbah, Ibtihel Baddari and M Hamed Hamadouche

12:30 An Integrated Production and Packing Planning Model for Perishable Products

Wassila Ghennam, Mohammed Haoues and Ahmed Senoussi

12:50 A New Genetic Algorithm Approach for the Job Shop Scheduling Problem

Ouissal Benchehida, Karima Wiam Ouahab and Habib Zahmani Mohamed

PS1-5: Knowledge Graphs, Semantic Retrieval and Generative AI 1 Parallel Session 1-5

Room 4

Chairs: Anis Allal, Ghazi Sabri, Sr.

11:30 Temporal Knowledge Graph Quality: Machine Learning Methods for Completion and Repair

Ali Belgacem, Yahia Atig, Ahmed Zahaf and Djelloul Bouchiha

11:50 A Bilingual GraphRAG System for HSE Document Retrieval in the Oil and Gas Industry

Ghazi Sabri, Sr., Nadine Sara Toumani and Mendjel Mohamed Said Mehdi

12:10 Graph-Aware Metadata Selection for Kubernetes YAML Generation Using Hybrid Weak Supervision

Amina Yagoub, Allal Tiberkak and Miloud Bagaa

12:30 Benchmarking Loss Functions for LLM-Based Log Anomaly Detection: A Comparative Study Across Architectures and Datasets

Bougherara Imene, Nabiha Azizi and Chamseddine Talhi

12:50 FedGATSage++: A Federated Graph Neural Framework for Privacy-Preserving DDoS Detection in IoT Networks

Fellahi Achref Ghanem, Hamdan Bensenane, Zakariya Ghalmane and Mohamed El Amine Brahmia

PS1-6: Sustainable Logistics and Vehicle Routing Optimization Parallel Session 1-6

Room 5

Chairs: Oussama Djedidi, Hichem Haddou Benderbal

11:30 Towards Sustainable E-Commerce Logistics: A Forecast-to-Route Framework for AI-Driven Net Carbon Assessment

Dinh An Nguyen, Nguyen Thi Thuy Hanh, Thuy Huyen Pham and Quang Hung Nguyen

11:50 A Hybrid Electric Vehicle Routing Model Integrating Fixed Charging Stations and Mobile Charging Vehicles

Imane Benchelih, Fouad Maliki and Abdelghani Bekrar

12:10 Assessing Return Quality Effects in Hybrid Manufacturing-Remanufacturing Systems Using Multi-Agent Simulation

Meryem Belmahi, Mohammed Dahane and Mehdi Souier

12:30 Towards Intelligent and Sustainable Manufacturing: A Digital Twin Framework for Predictive Maintenance in FMS

Aïcha Belkebiri, Mehdi Souier and Hichem Haddou Benderbal

12:50 A Genetic Algorithm-Based Metaheuristic for a Last-Mile Delivery Problem

Hind Sari, Mehdi Souier and Mohammed Dahane

Sunday, October 11 13:15 - 14:00

Lunch1: Lunch1

Room: Main Hall

Sunday, October 11 14:00 - 15:00

PN2: Plenary Session 2: Applications of Artificial Intelligence, Data Science, and Operational Research in Healthcare Delivery Improvement

Sanja Petrovic

Plenary Room

Chair: Mohamed Tarek Khadir

Sunday, October 11 15:00 - 16:40

PS2-1: AI for Wireless Signal Processing and Resource Management Parallel Session 2-1

Plenary Room

Chairs: Ridha Ilyas Bendjillali, Bendelhoum Mohamed Sofiane

15:00 RF-CVIP: Contrastive RF-Vision Pretraining for Label-Efficient 6G Beam Management

Mohamed Ammara, Mohammed Anis Oukebdane and A. F. M. Shahan Shah

15:20 An Explainable Federated Edge AI Framework for 5G Failure Prediction and Resource Optimization

Kamline Miloud, Ridha Ilyas Bendjillali, Fezzioui Batoul Ines and Chaoufi Fatima Zohra Maria

15:40 DeepWave: An Edge Intelligence Framework for Adaptive Beamforming in Dynamic Wireless Networks

Hamel Salima, Ridha Ilyas Bendjillali and Houam Imane

16:00 A Brief Survey of Generative AI Approaches for Autonomous Vehicle Test Scenario Generation

Kenza Sihem Taleb and Mohamed Lehsaini

16:20 Identity-Aware Deep Recurrent Q-Networks for Cooperative Spectrum Access in Cognitive Radio Networks

Katia Abdoune, Djamilia Boukredera and Karima Adel-Aissanou

PS2-2: Privacy and Security in Distributed Healthcare AI Parallel Session 2-2

Room 1

Chairs: Asma Amraoui, Ahmed Nait Chabane

15:00 Parallel and Federated Autoencoder Architectures for Medical Image Feature Extraction: A Comprehensive Survey

Asma Ghilassi, Makhlof Derdour, Djamilia Zamouche and Moustafa Sadek Kahil

15:20 Privacy-Aware Lightweight Federated Learning for Chest Disease Classification: MIA Analysis

Haroune Kadri, Baha Eddine Chellali, Amina Khacha and Zibouda Aliouat

15:40 Evaluating the Privacy-Utility Tradeoff of K-Anonymity for Healthcare Metadata: A Sensitivity-Driven Approach

Benzellat Djamel Eddine and Asma Amraoui

16:00 Blockchain and NFT-Based Access Control in Healthcare: A Systematic Mapping Study

Narimane Bair, Lamia Hamza and Hassina Nacer

16:20 Confidence-Gated Ensemble with Platt Calibration for Healthcare MQTT Intrusion Detection

Soheib Cherih and Lyazid Sabri

PS2-3: Sustainable Manufacturing Parallel Session 2-3

Room 2

Chairs: Bilal Attallah, Abdelghani Bekrar

15:00 *Carbon Taxation and the Stability of Environmental R&D Cooperation in a Heterogeneous Oligopoly*
Sait Razika

15:20 *Minimizing the Single Cycle Time in a Mobile Rack Automated Storage and Retrieval System Using Simulated Annealing*
Wahiba Fandi

15:40 *Analytical Travel Time Models for Retrieval in Cube-Based AS/RS*
Baba Hamed Sid Ahmed and Sihem Kouloughli

16:00 *A Scenario-Based Multi-Objective Optimization Model for Wildfire Resource Allocation Incorporating Water-Use Effectiveness*
Rym Bouali, Fouad Maliki, Benatia Mohamed Amin and M'hammed Sahnoun

16:20 *Capability Planning for Multiple Value-Retention Processes in Existing Manufacturing Plants: A Numerical Study of Industrial Printers*
Mouna Elouchdi, Fayçal Belkaid and Brahimi Nadjib

PS2-4: Industrial Process Modeling and Quality Improvement Parallel Session 2-4

Room 3

Chairs: Abdelhamid Iratni, M'hammed Sahnoun

15:00 *Three-Stage Decomposition-Based Iterative Identification Algorithm for CARAR Systems*
Nasar Aldian Ambark Shashoa

15:20 *From Lean Diagnosis to Decision Support: A MATLAB-Based DSS for Industrial Performance Improvement*
Hasna Meddour, Hichem Aouag and Boultif Bahia

15:40 *A Lean Six Sigma DMAIC-Based Diagnostic of Brix Variability in Carbonated Beverage Production: A Case Study in an Algerian SME*
Hamlili Imed and Housseyn Kahouadji

16:00 *MATRO: A Multi-Time Adaptive Traffic Routing Optimizer for Time-Dependent Vehicle Routing*
Meroune Mazar

16:20 *A Reproducible Simulated Annealing Baseline for Static Flexible Job Shop Scheduling*
Abderrahim Khobizi, Hakim Nadhir Bessenouci and Ahmed Hassam

PS2-5: AI for Arabic Language Understanding and Document Processing Parallel Session 2-5

Room 4

Chairs: Seifedine Kadry, Benatia Mohamed Amin

15:00 *Development and Implementation of an Intelligent Virtual Keyboard Letter Detection System Using Eye-Tracking Technology*
Hadil Elotreuch, Esma Ouahiani and Triqui Sari Lamia

15:20 *Score-Aware Vs Binary Supervision for Arabic Context-Gloss Word Sense Disambiguation*
Tarek Youcef Khelfaoui, Nouredine Doumi, Djelloul Bouchiha, Benamar Bouougada and Abdelghani Bouziane

15:40 *Toward Fractional-Order Memory in Neural Machine Translation: A ψ -Caputo Encoder for Arabic-English NMT*
Dhaya Eddine Messaoudi

16:00 Synthetic Data Composition for Arabic WSD: A Controlled Experimental Study

Tarek Youcef Khelfaoui, Djelloul Bouchiha, Nouredine Doumi, Abdelghani Bouziane and Benamar Bouougada

16:20 A Comprehensive Benchmark for Fake News Detection on the VERA-ARAB Dataset

Nour El Islam Attia, Meriem Laifa and Djamilia Mohdeb

PS2-6: Blockchain and Intelligent Platforms for Supply Chain Management Parallel Session 2-6

Room 5

Chairs: Nassima Aissani, Sadeque Hamdan

15:00 Blockchain as a Strategic Governance Mechanism for Internal Trade in Algeria

Abdallah Tayebi, Lila Ayad and Benkaddour Achouak

15:20 Bi-Objective Optimization of a Blockchain-Based Pharmaceutical Supply Chain

Wissal Mimouna Sekouane, Mustapha Anwar Brahmi and Latefa Ghomri

15:40 Blockchain-Based Approaches for Secure and Privacy Preserving Hydrocarbons Supply Chain: A Comprehensive Survey

Merini Wahida and Ala Djeddaï

16:00 IoROA-ERP: An Ontology-Driven Semantic Microservices Framework for Autonomous ERP and Robotic Logistics Orchestration

Nassim Boukezoula, Abdelhamid Malki, Mimoun Malki and Alti Adel

16:20 Improving Annotation Efficiency for Sentinel-1 SAR Land Cover Classification Using Active Learning

Narimane Benouakta, Zohra Slimane and Benadda Belkacem

Sunday, October 11 17:00 - 18:20

PS3-1: AI for Disease Risk Prediction Parallel Session 3-1

Plenary Room

Chairs: M'hammed Sahnoun, Samira Ait Kaki

17:00 A Unified Transfer Learning Framework for High-Performance Multiclass Diabetic Retinopathy Classification Using DenseNet121 and MobileNetV2

Imane Mahfouf, Abdelkader Horch and Boualem Merabet

17:20 Optimizing Federated Deep Learning and Case Retrieval Using the Lee Oscillator for Skin Lesion Classification

Mohamed Amine Aid, Djebbar Akila, Boulemden Ahmed and Bahi Rami

17:40 Efficient Diagnosis of Breast Cancer Using an Improved C4.5 Algorithm

Ilhem Tarchoune, Djebbar Akila, Asma Chebli and Hayet Merouani

18:00 Kolmogorov-Arnold Networks with Symbolic Knowledge Extraction for Data-Driven Diabetes Risk Prediction

Tamer-Abderrahmane Lafia, Chamseddine Talhi, Samia Beldjoudi and Omar Tahmi

PS3-2: AI for Neurodevelopmental Screening and Assistive Technologies Parallel Session 3-2

Room 1

Chairs: Djilali Moussaoui, Abdelhafid Zeroual

17:00 Mamba-Driven Latent Diffusion with Adaptive Attention for High-Resolution Restoration of Degraded Arabic Historical Manuscripts

Ridha Ilyas Bendjillali, Kamline Miloud, Mehdi Souier, Ouardas Asma, Bendelhoum Mohamed Sofiane and Lachache Salih

17:20 CTU-KG: A Causal Temporal Uncertainty Knowledge Graph for Early Diagnosis of Autism Spectrum Disorder

Dhekra Hadjoub and Hassina Seridi

17:40 Trustworthy Speech-Based Autism Screening Under Class Imbalance with Uncertainty-Aware HuBERT Ensembles

Nihel Loubna Ghennani, Mourtada Benazzouz and Julie Mauclair

18:00 Large Language Model Agent and Fractional-Order Control for a Novel Rehabilitation Robot Design in Personalized Upper-Limb Therapy

Kouzou Zakaria, Omar Seif Eddine Bencheikh, Samir Ladaci, Stefano Rodinò and Giuseppe Carbone

PS3-3: Cloud and Fog Computing Parallel Session 3-3

Room 2

Chairs: Gharib Toufik, Sadeque Hamdan

17:00 Energy-Efficient Task Scheduling in Fog Computing for Real-Time Applications

Bekkouche Khawla, Selma Azizi, Fatima Zohra Touati, Chahrazad Hambli and Khodja Khalida

17:20 Efficient Service Function Chain Placement in Fog Computing

Bekkouche Khawla, Selma Azizi, Fatima Zohra Touati, Chahrazad Hambli and Khodja Khalida

17:40 Power-Saving Queueing Model with Setup Times and Server Breakdowns for Cloud Computing

Sabrina Mousli and Karima Adel-Aissanou

18:00 Benchmarking a Legacy University HPC Cluster Against Cloud and Commodity Platforms: An Eight-Workload MPI Study

Aicha Guemir, Mahmoud Fahsi, Lala Septem Riza, Yasmine Grele and Fatima Zohra Zinai

PS3-4: Digital Twins and IIoT for Smart Manufacturing Parallel Session 3-4

Room 3

Chairs: Benatia Mohamed Amin, Ahmed Senoussi

17:00 A Review of Digital Twin Technology for Predictive Maintenance in Industry 4.0

Hayet Bourkab, Ali Chabane, Hamza Boudhar and Khaled Benfriha

17:20 An ARM Processor-Telemetry Pipeline with Multi-Layer Perceptron for Attack Monitoring in IoT Systems

Gabriel Davi Reis Almeida, Jonatan Davi Reis de Almeida, Junia Maisa de Oliveira Pereira and Alex Vidigal Bastos

17:40 Mapping the Evolution of Digital Twin-Enabled 5G/6G Networks: A Bibliometric Study (2019-2025)

Baraa Bouafia, Bilal Benarabi and Belkacem Khaldi

18:00 Development and Validation of a Digital Twin of the FESTO MPS 500 Distribution Station: Coupling Siemens NX MCD and TIA Portal for Virtual Commissioning

Benaddi Sidi Mohammed Mehdi, Al shaikh Qasem Jasser, Ahmed Hassam and Mohammed El Amine Mkedder

PS3-5: Integrated Production, Inventory and Warehouse Planning Parallel Session 3-5

Room 4

Chairs: Bougloula Aimade Eddine, Mohammed Haoues

17:00 Simulation of a Modular Cold Storage System with Gravity Conveyors for Improved Energy Efficiency

Bouchra Lahlou, Pierre Castagna and Latefa Ghomri

17:20 Two-Speed Identifiability in Manufacturing Input Modeling: A Multi-Criteria Distribution Fitting Framework

Abd El Madjid Benmalek, Houcine Gourmala, Fouad Maliki and Zaki Sari

17:40 A Generalized Multi-Period MILP Framework for End-of-Life Product Disassembly and Remanufacturing Planning

Mohammed Abdelkader El Ahmar, Taha Arbaoui and Fouad Maliki

18:00 Solving the Scheduling Problem on Parallel Machines with Agreement Constraints

Issaadi Hayat, Abida Kerdali and Mourad Boudhar

PS3-6: Production and services Monitoring Parallel Session 3-6

Room 5

Chairs: Mirna Abou Mjahed, Sarah Nouri

17:00 Optimizing Flow Shop Scheduling in Pharmaceutical Manufacturing

Djedjiga Ouiddir and Mourad Boudhar

17:20 Design and Implementation of an Industrial Digital Twin for Real-Time Monitoring of a Pottery Production Plant

Mohammed Yacine Bemrah, Mohammed Youcef Bemrah, Mohammed M'hamedi and Imane Nedjar

17:40 Class-Imbalance Corrections Trade Regression Accuracy for Minority-Class Sensitivity When Predicting the Bispectral Index from Raw EEG

Salima Bentounes, Messaoud Chakir and Mohamed Tadjine

18:00 An Approach for Solving a Two-Stage Hybrid Flow Shop Scheduling Problem with Sequence-Dependent Setup Times

Sarah Nouri, Warda Merabet-Messaoud, Amine-Seddik Houache, Nazim Sami and Mourad Boudhar

Monday, October 12

Monday, October 12 8:30 - 9:30

PN3: Plenary Session 3: From Physical Stock to Digital Inventory: Additive Manufacturing as a Cyber-Physical Supply Chain Enabler

Mirco PERON

Plenary Room

Chair: Tillal Eldabi

Monday, October 12 9:30 - 11:10

PS4-1: AI for Treatment Support Parallel Session 4-1

Plenary Room

Chairs: Hamza Boudhar, Mohamed Tarek Khadir

9:30 *Extracting Capecitabine Side Effects from Arabic Patient Speech: A Self-Supervised ASR and Topic Modeling Pipeline*

Amel Ziani, Abdelmalek Naanaa, Nada Ahmed Malek, [Hamza Boudjema](#), Houdna Khilouf, Sarra Zouiti, Aicha Nabet and Mohamed Amine Yakoubi

9:50 *A CNN-Enhanced Lifelong Learning Framework for Recognizing Feeding and Rumination Behaviors in Cattle*

[Hamza Boudjema](#), Amel Ziani, Nada Ahmed Malek, Houdna Khilouf, Amine Adouane, Mohamed Amine Yakoubi and Aicha Nabet

10:10 *The Multimodal Evolution of Thoracic Decision Support: A Structured Review from Imaging to Vision-Language Models*

[Mohammed El Hadi Baghli](#), Chams Eddine Choucha and Khadidja Belbachir

10:30 *BIOGUARD: An IoMT-Based Connected Emergency Box for Health Monitoring*

Azzedine Bekkar, Tarek Lamri, Fouad Benamara, Mohamed Imad Eddine Fatah and Ghalem Belalem

10:50 *A Systematic Literature Review of Artificial Intelligence Methods for Diabetic Retinopathy Detection and Severity Grading*

[Selsabile Soundous Ouahab](#), Talib Hichem Betaouaf and Mustapha Anwar Brahami

PS4-2: Robotic Perception, Adaptive Control Parallel Session 4-2

Room 1

Chairs: Nassima Aissani, Ridha Ilyas Bendjillali

9:30 *Stabilization of Underactuated Loads with Planar Cable-Driven Parallel Robots Under Constraints*

Omar Aissani, Fouad Inel and Nesserine Laribi

9:50 *AI-Based Mobile Robot for Autonomous Navigation and Traffic Sign Recognition: Design and Implementation*

Lotfi Fazil Boukli Hacene, [Meryem Bourouba](#), Wassen Ikhlasse Bouziani and Imane Nedjar

10:10 *Cost-Sharing Mechanisms for Collaborative Production-Distribution Planning*

[Rachida Benfedel](#), Brahimi Nadjib and Fayçal Belkaid

10:30 *Comparative Study of Lightweight YOLO Models for Railway Object Detection*

Bidjad Souier, Choukri Bensalah, Rida Mokhtari, Amal Choukchou Braham and Mohamed Abderrahim

10:50 *Design and Sizing of an Autonomous Photovoltaic Water Pumping System for Agricultural Irrigation: A Case Study in Tlemcen, Algeria*

[Zohra Mesli](#), Imane Nedjar, Chakib Seladji, Khaled Aliane and Leila Bekrit

PS4-3: AI for Decision Analytics Parallel Session 4-3

Room 2

Chairs: Tillal Eldabi, Mirco Peron

9:30 *Health Infrastructure Project Selection Using the Analytic Hierarchy Process (AHP)*

Mohamed Akhrouf

9:50 *Volatility Forecasting of Bitcoin During Structural Breaks: A Comparison of ANFIS, LSTM, and MLP*

Ahmed Benlaria, Ayyoub Yassine Benlaria and Mediani Mohamed

10:10 *A Comparative Study of LSTM, SVR, and KNN Models for Wind Speed Forecasting in Adrar, Algeria*

Oualid Slimani, Mohamed Mebrouki and Hafida Sebbagh

10:30 *Design and Experimental Validation of an ESP32-Based IoMT Smart Patient Monitoring System for Real-Time Remote Healthcare*

Doc Salima Ben Mansour, Sari Aouatef, Kourdi Zakarya and Mendli Ahmed

10:50 *C-TGN+: A Continuous-Time Dynamic Graph Neural Network with Temporal Centrality Enrichment for Intrusion Detection in IoT Networks*

Bouchelarem Lydia, Hamdan Bensenane, Zakariya Ghalmane and Mohamed El Amine Brahmia

PS4-4: Wireless Protocols: Signal Detection, Routing and Localization 1 Parallel Session 4-4

Room 3

Chairs: Bougloula Aimade Eddine, Bendelhoum Mohamed Sofiane

9:30 *Blockchain-Based 5G Multi-Vendor Environment: A Zero Trust Model for Token Integrity and Access Control*

Meriem Boukessessa

9:50 *Performance Evaluation of Geographic Routing in Wireless Multimedia Sensor Networks*

Benmansour Fassila Lemya and Nabila Labraoui

10:10 *Robust Aggregation Against Poisoning in Federated 5G Slice Load Prediction: An Empirical Evaluation and Its Structural Limits*

Lachgueur Mohammed Abdessalem, Nabila Labraoui, Abdelhak Mourad Gueroui, Sahraoui Dhelim, Chafiq Titouna and Radjaa Bensaid

10:30 *Comparative Performance Analysis of XGBoost for Real-Time Throughput Prediction in O-RAN Managed 5G mmWave Networks*

Djazia Berrahma, Hicham Megnafi and Sidi Mohammed Chouiti

10:50 *A Lightweight Multi-Class Intrusion Detection System for VANET's Using LightGBM: An Empirical Study on the Balanced VeReMi DataSet*

Fatima Zohra Ould Hadri, Ahmed Louazani and Yassine Douga

PS4-5: Knowledge Graphs, Semantic Retrieval and Generative AI 2 Parallel Session 4-5

Room 4

Chairs: Hichem Haddou Benderbal, Imen Mejri

9:30 *Cognitive Redistribution in the Age of Generative AI: Rethinking Student Development Beyond the Myth of Mental Arrest*

Megha Jaiwani and Aditi Rajput

9:50 *Beyond Behavioral IDs: RAM-IL-Rec Distills Multi-Expert LLM Knowledge into Retrieval-Augmented Sequential Recommenders via Adversarial Reinforcement Learning*

Hadjer Djafri, Samira Lagrini, Farouq Zitouni, Walid Hariri and Larbi Boubchir

10:10 A Retrieval-Augmented Generation Framework for Personalized Medicinal Plant Recommendation in Chronic Disease Management Using Large Language Models (RAG-LLM)

Boudebza Roukaia, Nadjet Dendani and Nabiha Azizi

10:30 Developing a Hybrid Retrieval-Augmented Generation Assistant for Tramway Maintenance Documentation: A Case StudyBouhafs Imane, Ganoun Dihia, Kherbachi Hamid and Amine Mammasse**10:50 Enhancing Transparency in Deep Learning-Based Cyberattack Detection for Distributed Networks: An Integrated XAI, Federated Learning, and Human-in-the-Loop Framework**

Fatima Bazerkan and Mohamad-Bassam Kurdy

PS4-6: Business Analytics and Intelligent Decision Support Parallel Session 4-6**Room 5**

Chairs: Abdelghani Bekrar, Seifedine Kadry

9:30 A Fuzzy Inference System for Price Quotation Decision Support in LogisticsMelisa Şimşek, Selcuk Cebi, Fatma Kutlu Gündoğdu, Timuçin Çınar and Hamide Uslu**9:50 From Administrative Silos to Citizen-Centric Processes: A BPM-Based Architecture for National Housing Management in Algeria**

Moufida Aouachria, Mouna Kenoui, Boussad Belakebi, Kaouthar Moussaoui, Abdessamad Réda Ghomari, Abderrahmane Leshob and Malika Radi

10:10 Coupling Multi-Criteria Analysis and Data Mining in Group Decision Support SystemsSouad Madouri, Djamila Hamdadou, Kawther Makhoul and Mohammed Amine Smahi**10:30 How Does Artificial Intelligence Help Decision-Science Management?**Ryan Manuel D Guido and Jason B. Kalaw**10:50 Enrichment of OLAP Analysis with Graph Data Science Techniques**Doulikifli Boukraa, Oumama Cheurfi and Chaima Laissaoui**Monday, October 12 11:00 - 11:30****CB3: Coffee break 3****Room: Main Hall****Monday, October 12 11:30 - 13:10****PS5-1: Metaheuristics Parallel Session 5-1****Plenary Room**

Chairs: Mirco Peron, Sanja Petrovic

11:30 Enhanced RIME Algorithm with Variable Neighborhood Search for IoT Service CompositionAmal Halfaoui and Fethallah Hadjila Hadjila**11:50 ML-Guided Adaptive Genetic Algorithm for Resilient Hospital Bed Allocation Under Demand Uncertainty**

Ikram Mahieddine and Khalid Hachemi

12:10 A Memetic GA-ILP Hybrid for Optimal Irrigation Emitter Activation in Smart AgricultureMoumni Mohammed Salem, Loukil Lakhdar, Benyamina Abou El hassen and Bakhadda Assia Marwa**12:30 A Genetic Algorithm-Based Optimization in AS/RS: A Review**Omar Bahmid, Sihem Kouloughli and Amaria Ouis Khedim**12:50 Robust Noise-Aware Multi-Row Facility Layout Under Dynamic Production Scheduling and Operator Mobility**

Sara fatima zohra Megaiz, Fouad Maliki and Mehdi Souier

PS5-2: IOT and industry 4.0 Parallel Session 5-2

Room 1

Chairs: Hamza Boudhar, Bendelhoum Mohamed Sofiane

11:30 *Low-Cost Open-Source IoT Architecture for Real-Time Water Reservoir Level Monitoring and Multi-Channel Alerting*

Mourad Elgorma, Rachid Merzougui, Amina Aicha Bettoui and Ikram Bouhafs

11:50 *Design and Experimental Validation of an IoT-Based Smart Public Lighting Monitoring System*

Mourad Elgorma, Amina Otmani, Yassine Ouldali and Yassamina Bouchenak Khelladi

12:10 *Industrial IoT-Based Intelligent Predictive Maintenance for Industry 4.0 with Machine Learning*

Zoheir Karaouzene, Mohammed Nehila, Ahmed Ghezal, Hicham Megnafi, Salah Zidi and Lisa Alliche

12:30 *An MQTT-Based Edge Gateway for Migrating Legacy Industrial PLCs to Industry 4.0 Architectures*

Zoheir Karaouzene, Mohammed Nehila, Ahmed Ghezal, Salah Zidi, Hicham Megnafi, Lisa Alliche and Arezki Abderrahim Chellal

12:50 *UAV-IoT Air Quality Monitoring with on-Edge Fuzzy AQI Estimation*

Nesserine Laribi, Hicham Megnafi and Abdenmour Bouri

PS5-3: Surveillance and Autonomous Monitoring Parallel Session 5-3

Room 2

Chairs: Abdelghani Bekrar, Ali Chabane

11:30 *Incremental Multi-UAV Deployment for Priority-Aware Persistent Target Patrolling*

Meryem Bouchra Benmahdi and Mohamed Lehsaini

11:50 *An Adaptive Continuous-Time Temporal Graph Network for Insider Threat Detection with Calibrated Zero Trust Enforcement*

Meriem Hadjia Mokhtari, Mohammed Salih Bendella and Hamdan Bensenane

12:10 *Smart Poultry Farming: An IoT-Based Water Delivery and Monitoring System*

Abdessamad Saidi, Sebbah Abderrezzak and Mohamed Lehsaini

12:30 *Combining Lean Six Sigma DMAIC and Graph Neural Networks for Predictive Maintenance of a Propane Steam Turbine: A Case Study at the Sonatrach GNL1 Complex*

Habiba Houari, Ammar Khouloud Djamilia, Rezigui Nessrine and Nouredine Zerhouni

12:50 *Frustration in Human-Humanoid Collaboration: A State of the Art Review*

Leila Belghoul, Ahmed Nait Chabane, Mustapha Anwar Brahmi and M'hammed Sahnoun

PS5-4: Forecasting, Monitoring and Resource Management Parallel Session 5-4

Room 3

Chairs: Hichem Haddou Benderbal, Samatthachai Yamsa-ard

11:30 *Cross-Year Robustness of Machine Learning-Based Water-Level Forecasting for Flood Early Warning: Evidence from the Kok River*

Krit Sittivangkul, Sunida Tiwong, Tosporn Arreeras and Samatthachai Yamsa-ard

11:50 *A Business Decision Framework for Analyzing Economic Activity Using Space-Based Data*

Ryan Manuel D Guido, Jason B. Kalaw and Kathryn D. Tria

12:10 *Improving Resource Management in Call Centers by Developing a Model Using Machine-Learning Technology*

Zein Al-Helal Sharif and Mohamad-Bassam Kurdy

12:30 *Explainable Data-Driven Framework for BaSO₄ Scaling Prediction in Formation Waters*

Boukhamla Moussa, Ali Med Arbaoui, Abdeljaber Touahri and Mohamed Abdelbasset Mahboub

12:50 Blockchain-Based Decentralized Information Management for Secure and Transparent Shipment Traceability in Supply Chains

Aouar Mounir, Triqui Sari Lamia and Mohammed Dahane

PS5-5: Optimization, Representation Learning and Efficient AI Parallel Session 5-5

Room 4

Chairs: Ali Karasan, Bendelhoum Mohamed Sofiane

11:30 A Challenge-Driven Taxonomy and Decision Framework for Optimizer Selection in Modern Machine Learning

Mourad Messaadia, Salah Eddine Bellal and Mohammed Mispah Omar

11:50 Classifier-Specific Genetic-Algorithm Resampling for Imbalanced Classification

Aroussi Sana, Karima Khiati, Ikram Ben Salah, Boumahdi Fatima and Narhimene Boustia

12:10 MH-FPP: Metropolis-Hastings-Type Feasible-Population Polling for Constrained Multiobjective Optimization

Ramdani Zoubir, Addoune Smail, Brahmi Boualem and Leila Younsi Abbaci

12:30 What Determines Robustness to Dimensionality Reduction in Dense Retrieval?

Tarik Ziad Sahraoui and Mohammed Alaeddine Abderrahim

12:50 Exploring Fine-Tuning Strategies for CLIP-Based Image-Text Retrieval via Residual Gated Projection

Boughera Norhane, Walid Hariri, Aladine Chetouani and Samira Lagrini

PS5-6: Wireless Protocols 1 Parallel Session 5-6

Room 5

Chairs: Mohammed Merzoug, Mohamed Tadlaoui Status

11:30 Adaptive First-Path Detection in DW1000-Based UWB Ranging via PSO-Driven Iterative Thresholding

Ibrahim Yassine Nouali, Zohra Slimane and Abdelhafid Abdelmalek

11:50 An Opportunistic-Hop Congestion-Aware Single-Link Selection Policy for Multi-Link Operation in IEEE 802.11be Networks

Kichou Kenza, Mohand Yazid, Mordjane Chalal and Mounir Benmeziane

12:10 Whale Optimization Algorithm for Efficient Parameter Tuning in SOR-Based Massive MIMO Signal Detection

Naceur Aounallah and Labad Smail

12:30 EMAS-QoS: Energy and Mobility Aware Stable and Safe Clustering Protocol with QoS for FANETs

Assia Kassa and Samra Boulfekhar

12:50 A Trust-Aware Machine Learning Intrusion Detection System for Sybil Attack Detection in VANETs

Hayet Zerrouki, Halimi Abdessalem and Rezig Yahia Nassim

Monday, October 12 13:15 - 14:00

Lunch2: Lunch2

Room: Main Hall

Monday, October 12 14:00 - 15:00

PN4: Plenary Session 4: AI-Enhanced Simulation: A New Paradigm for Modelling

Tillal Eldabi

Plenary Room

Chair: Fouad Ben Abdelaziz

Monday, October 12 15:00 - 16:00

PS6-1: Constraint Programming and Combinatorial Optimization 1 Parallel Session 6-1

Plenary Room

Chairs: Imen Mejri, Ahmed Senoussi

15:00 *Hypercube Cuts: A Geometric Framework for Efficient Generalized Arc Consistency on Table Constraints*

Ouali Lillia, Madani Bezoui and Kamal Amroun

15:20 *HYB: Hybrid Constraint Propagation via Vectorization and Adaptive Scheduling*

Ouali Lillia, Madani Bezoui and Kamal Amroun

15:40 *MOHBA/ED: An Improved Honey Badger Algorithm Epsilon Dominance and Crowding Distance for Multi-Objective Knapsack Problem*

Meriem Hemici and Djaafar Zouache

PS6-2: Constraint Programming and Combinatorial Optimization 2 Parallel Session 6-2

Room 1

Chairs: Ridha Ilyas Bendjillali, Sadeque Hamdan

15:00 *A Survey on Solving the Linear Ordering Problem: Heuristic, Exact, and Hybrid Approaches*

Aziza Merdaci, Abdelkamel Ben Ali and Mohamed Kamel M Benbraika

15:20 *An Improved Greedy Heuristic for the Weighted Positive Influence Dominating Set Problem in Social Networks*

Salim Bouamama, [Farida Habia](#) and Ugur Odabasi

15:40 *Carbon-Accountable AI Scheduling via Multi-Seed Proximal Policy Optimization in Cloud Environments*

[Kahina Ferhi](#), Assia Outamazirt, Djamil Aïssani, Karima Adel-Aïssanou and Kamel Barkaoui

PS6-3: Secure Authentication: Biometrics and Post-Quantum Cryptography Parallel Session 6-3

Room 2

Chairs: Hamza Boudhar, Hassina Seridi

15:00 *Comparative Analysis of Digital Signature Algorithms (ECDSA, EdDSA, ML-DSA) for IoT Authentication: An Experimental Evaluation on ESP32-Class Hardware*

[Heffaf Islam Larbi](#), Nissa Mehibel, Abdelhak Mesbah and Ibtihel Baddari

15:20 *Towards Secure Biometric Authentication: A CNN Ensemble Framework for Robust Face anti-Spoofing with Confidence-Based Rejection*

[Abderraouf Amarouayache](#), Rabah Rahal and Rahim Haiahem

15:40 Post-Quantum Secure Edge-Based Facial Pain Detection for Smart Healthcare Applications

Wardia Ould Amara and Souad Khellat-Kihel

PS6-4: Optimization of Fog and Edge Service Placement Parallel Session 6-4**Room 3**

Chairs: Ali Chabane, Krit Sittivangkul

15:00 Rainbow Deep Reinforcement Learning for Microservice Placement in Cloud-Fog-IoT Healthcare Systems

Baghdadi Absari and Hayat Bendoukha

15:20 SepDist: A Separable, Rank-Reversal-Immune Architecture for Mobility-Aware Service Migration in Fog and Edge Computing

Soussi Hakim

15:40 Skeleton-Based Human Activity Recognition: Comparative Analysis of BiLSTM, Transformer, and CNN Architectures

Lina Bensikhelifa, Hanane Zahra Benziani, Imane Nedjar, Mokhtaria Bekkaoui and Mohammed M'hamed

PS6-5: Robotic Perception, Adaptive Control and Multi-Agent Coordination Parallel Session 6-5**Room 4**

Chairs: Salah Eddine Bellal, Benatia Mohamed Amin

15:00 Vision-Based UAV Detection Using Yolov11 and DUT-ANTI-UAV Benchmark Dataset

Benalia Kouider, Ahmed Maache and Tabet Youcef

15:20 An Adaptive Robust Filtering Framework for Image Quality Enhancement and Restoration

Boucif Beddad, Ahmed Hadji, Mohammed Amine Tehami, Samiha Mezrar, Jack-Gerard Postaire and Frantisek Jabloncik

15:40 Luenberger Observer-Based Fractional-Order MRAC Control with PSO Optimization for the Vertical Dynamics of a Quadrotor UAV

Farah Zoulikha Elbachir, Meriem Yasmine Haddadou and Samir Ladaci

PS6-6: Smart Infrastructure: Monitoring, Mobility and Resource Allocation Parallel Session 6-6**Room 5**

Chairs: Mohammed Alaeddine Abderrahim, Bendelhoum Mohamed Sofiane

15:00 An IoT-Based Smart Attendance System Using Headless Architecture and Real-Time Server-Sent Events

Miloud Ikhlas Nor Elhouda, Sebbah Abderrezak and Tarik Ziad Sahraoui

15:20 AD-SOTL: A Demand-Adaptive and Downstream-Aware Self-Organizing Traffic Signal Controller for Saturated Grid Networks

Yasmina Younsioui, Fazia Rahmoune and Nadir Farhi

15:40 A Self-Supervised Graph Neural Network Framework for Adaptive Detection in MC-CDMA Systems

Bendelhoum Mohamed Sofiane, Ridha Ilyas Bendjillali, Fouad Maliki, Ouardas Asma, Kamline Miloud and Tadjeddine Ali Abderrazak

Monday, October 12 16:00 - 16:20

CB4: Coffee break 4

Room: Main Hall

Monday, October 12 16:20 - 17:40

PS7-1: AI and IoT for Healthcare and Precision Agriculture 1 Parallel Session 7-1

Plenary Room

Chairs: Larbi Boubchir, Habiba Louzim

16:20 *Early Warning System for Potato Early and Late Blight Prediction: A Multi-Model Approach for Weather Data*

Fatima Zohra Touati, Lakhdar Loukil and Bekkouche Khawla

16:40 *Deep Learning-Based Detection and Classification of Plant Diseases in Agricultural Crops*

Kawther Chouachi, Aya Kerroumi, Mokhtaria Bekkaoui and Mohammed M'hamedi

17:00 *Towards Smart Farming: A UAV-Based Intelligent System for Real-Time Crop Stress Detection and Precision Agriculture*

Doucene Hafsa, Kamel Boudjit, Boulerbah Souissi and Mounira Ouarzeddine

17:20 *The Twenty-Point Gap: Confidence Calibration Erodes Before Discrimination Under JPEG Compression in Medical Diagnostic Imaging*

Nour El Houda, Djebbar Akila and Hayet Farida Merouani

PS7-2: AI and IoT for Healthcare and Precision Agriculture 2 Parallel Session 7-2

Room 1

Chairs: Sama Aleshaiker, Imen Mejri

16:20 *Z-Farm: An Intelligent Zigbee-Based IoT Platform with Embedded AI for Precision Agriculture*

Mouleylakhdar Zakaria, Hamdan Bensenane and Abdessalaem Omari

16:40 *An IoT and Deep-Learning Framework for Automated Fertilization for Field-Deployed Plant-Disease Classification*

Abderrahmane Haouaia, Billel Ali Merakchi, Lisa Alliche, Arezki Abderrahim Chellal, Zoheir Karaouzene, Hicham Megnafi and Abdeldjalil Benhanifia

17:00 *Optimized XGBoost Model for Blood Glucose Prediction in Diabetes*

Yacine Hachi, Soraya Tighidet, Kamal Amroun and Meriem Djouadi

17:20 *Deep Learning-Based MGMT Promoter Methylation Prediction: A Comparative Interpretability-Oriented Review*

Mohammed Anes Hadjadj, Meziane Tani Souad and Asma Amraoui

PS7-3: AI for Treatment Support and Drug Safety Parallel Session 7-3

Room 2

Chairs: Lamia Hamza, Ahmed Nait Chabane

16:20 *DeepEns-DDI: Ensemble Deep Learning to Predict Severity Classification of Drug-Drug Interactions*

Kadaria Saim, Djamila Hamdadou and Kaouther Labeled

16:40 *HeteroDDI: Heterogeneous Graph Learning for Iatrogenic Drug-Drug Interaction Severity Prediction*

Kawther Makhoulouf, Souad Madouri, Djamila Hamdadou and Karim Bouamrane

17:00 *Attention-Guided Correction of Shortcut Learning in Explainable Chest X-Ray Classification*

Ines Mansour, Fella Berrimi, Chafia Kara Mohamed and Aboubekour Hamdi-Cherif

17:20 Adaptive Insulin Delivery Using LSTM-Based Glucose Prediction with Reinforcement Learning

Manar Hachemi, Wisem Kasmi, Saliha Hamdi-Cherif and Chafia Kara Mohamed

PS7-4: Surveillance and Autonomous Monitoring and navigation Parallel Session 7-4**Room 3**

Chairs: Mohammed Haoues, Abdelhafid Zeroual

16:20 QDT-DisasterNet: A Hybrid Quantum-Classical Federated Framework for UAV Swarms Under Extreme Client Attrition

Rayane Aggoune and Abdelhak Merizig

16:40 A Comprehensive Review on UAV Sensors: Taxonomy, Applications, and Challenges

Bouzid Tarek

17:00 Socially Aware Robot Navigation: From Social Conventions to Planner Implementation

Iyed Derar, Bouraine Sara and Karima Rebai

17:20 TD3-Jaya: Adaptive Deep RL-Metaheuristic Approach for Dynamic MEC Offloading

Abdelhamid Zabi and Abdelkamel Ben Ali

PS7-5: AI for Predictive Maintenance and Adversarial Robustness Parallel Session 7-5**Room 4**

Chairs: Mirna Abou Mjahed, Nadia Bahria

16:20 Explainable Machine Learning for Predictive Vehicle Maintenance Using Large-Scale UK Government Inspection Data

Abdelmalek Beladam, Hakim Nadhir Bessenouci and Ahmed Hassam

16:40 Transitioning from Traditional to AI-Driven Predictive Maintenance in Renewable Energy Systems

Soulef Lasgaa and Elyasmine Kadaoui-Elaïdi

17:00 Network-Level Detectability of Telegram- and Discord-Based Command-and-Control Channels

Saad Azil, Nassima Bouadem and Moahammed Amine Benhaddad

17:20 The Impact of Constraint Violations on Adversarial Attack Success Rates in Network Intrusion Detection Systems

Younes Belouche, Beghoura Mohamed Amine and Islam Debicha

PS7-6: AI for Business Forecasting and Decision support Parallel Session 7-6**Room 5**

Chairs: Salah Eddine Bellal, Abderrahmane Leshob

16:20 Predicting Digital Consumer Behavior Using Machine Learning: A Comparative Study on Purchase Intention in E-Commerce

Zoubeyda Hellabi, Amel Khedim and Amina Ouhoud

16:40 Comparison of Classical and Quantum Neural Networks for Financial Distress Prediction

Manel Kadri, Nourhene Kadri, Abir Selma Horchi and Mohamed Tarek Khadir

17:00 CNN-Based Visual Recognition for Pharmaceutical Stock Management

Atika Borsali, Mokhtaria Bekkaoui and Wahiba Fandi

17:20 Intra-Sentence Spatial Variability for Offline Dysgraphia Screening in Children

Sabrina Benredjem and Mekhaznia Tahar

Tuesday, October 13

Tuesday, October 13 8:30 - 9:30

PN5: Plenary Session 5: From Deep Learning to Quantum Neural Networks: Forecasting and Classification Examples

Mohamed Tarek Khadir

Plenary Room

Chair: Mirco Peron

Tuesday, October 13 9:30 - 10:30

PN6: Plenary Session 6: Recent Advances in Multi-Objective and Set-Valued Optimization with Applications

Davide LA TORRE

Plenary Room

Chair: Sanja Petrovic

Tuesday, October 13 10:30 - 10:50

CB5: Coffee break 5

Room: Main Hall

Tuesday, October 13 10:50 - 12:50

PS8-1: Deep learning for healthcare Parallel Session 8-1

Room 1

Chairs: Asma Amraoui, Larbi Boubchir

10:50 *EMobileNetV4: An Enhanced Lightweight Network with Efficient Channel Attention for Skin Lesion Classification*

Kholkhal Mourad, Bellal Linda, Ridha Ilyas Bendjillali, Bendelhoum Mohamed Sofiane, Mohamed Rida Lahcene and Kamline Miloud

11:10 *Automated Parasitic Egg Classification Using an Iterative Semi-Self-Supervised Learning Approach*

Benamar Kadri, [Alaa Khadidja Fridjat](#), Asmae Dib and Mohammed Mebarek Bia

11:30 *Entropy-Guided Selective Prediction for Reliable Pre-Operative Surgical Decision Support Using XGBoost and LightGBM*

[Bachiri Hadjer](#) and Asma Amraoui

11:50 *Improving Latency and Workload Distribution in Healthcare Fog Computing: A Comparative Analysis of Multi-Criteria and Bio-Inspired Strategies*

[Bochra Arichi](#) and Asma Amraoui

12:10 *DWTEM-UNet: A Frequency-Aware Wavelet-Mamba Framework for Low-Dose CT Denoising*

[Abdelkarim Cherhabil](#), Lahcène Mitiche and Amel Baha Houda Adamou-Mitiche

12:30 *Artificial Intelligence for Early Detection of Muscle Atrophy and Personalized Nutritional Support in Head and Neck Radiotherapy*

[Houdallah Douzi](#), Khemis Kamila and Douzi Meriem El Betoul

PS8-2: AI-Enabled Optimization of Future Mobile Networks Parallel Session 8-2**Room 2**

Chairs: Samir Kameche, Meriah Sidi Mohammed

10:50 An IoT-Based Monitoring and Energy Management System for Hybrid DC Power Supply of off-Grid Telecommunication Base StationsLisa Alliche, Mourad Aït-Ahmed, Azeddine Houari, Hicham Megnafi and Zoheir Karaouzene**11:10 AI-Driven UAV-Assisted Network Slicing: Existing Works, Challenges, and Future Trends**Bouzid Tarek and Hicham Madjidi**11:30 Optimizing Transmitter Azimuths in 4G and 5G Networks: A Hybrid Approach Combining Artificial Intelligence and Wave Propagation Simulation**Zoheir Karaouzene, Hicham Megnafi, Larab Fethallah and Mohammed Oussama Benosman**11:50 Adaptive Bayesian-Optimized Variational Sparse Learning for RIS-Assisted mmWave Massive MIMO Channel Estimation**Labed Smail and Naceur Aounallah**12:10 Quantum and Post-Quantum Security for 5G/6G Networks: A Deployment-Maturity Taxonomy**Benmenzer Faiza**12:30 Text2GraphPolicy: Trustworthy Access Control Policy Generation for Graph Data**Adil Achraf Bereksi Reguig and Houari Mahfoud**Tuesday, October 13 10:50 - 12:30****PS8-3: Scheduling of Production and services Parallel Session 8-3****Room 3**

Chairs: Brahimi Nadjib, Susana Relvas

10:50 A Bi-Objective MILP Model for the Permutation Flow Shop Scheduling Problem with AGV Transportation: Makespan and Fleet Size Optimization

Khadidja Bakdi, Fouad Maliki and Latefa Ghomri

11:10 Task Scheduling Optimization in RCS/RS Using Simulated Annealing with Taguchi-Tuned ParametersOmar Bahmid, Sihem Kouloughli and Amaria Ouis Khedim**11:30 An on-Policy Learning Framework for Sequential Retrieval Decisions in Automated Warehousing Systems**

Imane Kouloughli, Manel Dali Youcef and Zoulikha Koudad

11:50 Analyzing the Impact of the Number of Hops on Carbon Emissions in Hub-and-Spoke Transportation NetworksAsma Azzoug, Mustapha Anwar Brahami, Belgacem Bettayeb, M'hammed Sahnoun and Latefa Ghomri**12:10 Equitable Allocation of Computer Laboratories to Academic Departments Using Binary Convex Quadratic Programming: A Case Study at the University of Tlemcen**

Bensmain Yassir

PS8-4: AI-Based Intrusion Detection for Edge and IoT Systems Parallel Session 8-4**Room 4**

Chairs: Fatma Kutlu Gündoğdu, Djilali Moussaoui

10:50 Lightweight Intelligent Intrusion Detection System on Edge Devices Using Machine Learning

Sihem Souiki, Djilali Moussaoui, Mourad Hadjila, Aissani Djamel Eddine and Benmansour Mohammed Omar

11:10 Explainable Feature Reduction for Efficient Intrusion Detection on the Farm-Flow Smart Agriculture IoT Dataset

Abdelmalek Bakiri, Samir Fenanir and Lakhdar Goudjil

11:30 Machine Learning and Deep Learning for IoT Intrusion Detection Systems: A Comprehensive Survey of Models, Datasets, and Challenges

Lakhdar Djaafar, Boumahdi Fatima, Fouaz Berrhail and Mohamed Abdelkarim Remmide

11:50 Explainable AutoML Driven CNN Framework for Binary Intrusion Detection

Racha Ikram Hakiki, Abdenmour Azerine, Redouane T Tlemsani, Mahmoud Golabi and Lhassane Idoumghar

12:10 Towards Robust Face anti-Spoofing with SE-Enhanced Residual Learning and Hybrid Pooling

Oussama Maameri, Bensafia Younes and Bahia Yahya-Zoubir

Tuesday, October 13 12:30 - 13:15

Closing: : Closing Ceremony

Plenary Room

Tuesday, October 13 13:15 - 14:00

Lunch3: Lunch3

Room: Main Hall

Tuesday, October 13 14:00 - 17:00

City Excursion