



# The International Conference on Smart Multidomain Integrated Learning Environments (SMILEs 2026)

30-31 March 2026

## CONFERENCE PROGRAM

Conference Day 1: Monday, 30 March 2026 (IN-PERSON - JADARA UNIVERSITY)	
08:30 - 10:00	Registration & Networking (Building (A), Main Entrance)
10:00 - 11:30	Opening Ceremony (Ibn Rushd Auditorium)
11:30 - 12:00	Coffee Break (University Cafeteria)
12:00 - 14:00  Parallel Sessions	<p><b>Session A _ Smart Building (F), Room (F308)</b>  <b>Session Chair:</b> Obaida M Al-Hazaimeh  <b>Co-Chair:</b> Mohammad Al-Khasawneh</p> <p>ARA-EDU-COMMENTS: A Curated Arabic Educational YouTube Comments Dataset for Sentiment Analysis and NLP Research.  (Mohammad Taye)</p> <p>Arabic Economic Text News Summarization: An AI-driven Extractive Approach  (Iyas Qaddara, Insaf Kraidia, Mohammad Hiari, Nida Al-shafi)</p> <p>An Intelligent Educational Model Based on Artificial Intelligence Designed to Analyze Learning Patterns and Support Educational Decision-Making in Digital Environment.  (Dalya Amro)</p> <p>Intelligent Detection of Malicious Stego Images Using Statistical and Neural Models.  (Ayman Ghaben, Tariq Bishtawi, Hassan Kassem)</p> <p>Identifying AI-Generated Images in Social Media Environments Using Deep CNNs and Vision Transformers.  (Enshirah Altarawneh, Mohammad Al-Hammouri)</p> <p>Enhanced Arabic Document Understanding Using Vision-Language Models.  (Khaled Hamad, Bashar Al Harahsheh, Suhaila Abuowaida, Mo'men Malkawi, Nawaf Alshdaifat, Mowafaq Alzboon, Amer Al-Harahsheh)</p>
	<p><b>Session B _ Smart Building (F), Room (F310)</b>  <b>Session Chair:</b> Hassan Al-Sarhan  <b>Co-Chair:</b> Mutasem Al-Khasawneh</p> <p>Experimental Evaluation of MPTCP Congestion Control Algorithms in Multi-Interface Linux Environments.  (Mohmmad Hamarsheh, Abedelkareem Zidan, Jehad Khloof)</p> <p>Design and Implementation of an Integrated Pharmacy Management System with Customer Medication Reminder and Location Services.  (Sarah Al-Shammary, Shefa Tawalbeh)</p> <p>Deep Learning-Based Arabic Sign Language Digit Recognition Using ConvNeXt Architecture with Focal Loss Optimization.  (Khaled Hamad, Bashar Al Harahsheh, Suhila Abuowaida, Mo'men Malkawi, Nawaf Alshdaifat)</p> <p>Decentralized Framework for Drone-to-Vehicle Wireless Charging.  (Amjad Albashayreh, Saleh Al-sharaeh, Maria Yousef, Alhareth Abdelmuhti)</p> <p>An Immersive Virtual Reality System for Enhancing Student Engagement in Higher Education.  (Iyas Qaddara, Insaf Kraidia, Nida Al-shafi, Mohammad Hiari)</p>

<p>12:00 – 14:00</p> <p>Parallel Sessions</p>	<p><b>Session C_ Smart Building (F), Room (F311)</b></p> <p><b>Session Chair: Ashraf Abu-Ein</b></p> <p><b>Co-Chair: Maen Al-Rashdan</b></p> <p><b>Carrier Sense Multiple Access Protocols in Smart Multi-domain Integrated Learning Environments: A Comprehensive Analysis.</b> (Salsabeel Theeb, Roaa Alabdelal, Batool Mohammad Alrashdan, Obaida Al-hazaimeh, Ashraf Abu-Ein)</p> <p><b>Network Layer Security in Smart Multi-domain Integrated Learning Environments: Understanding and Mitigating Attacks.</b> (Osama Al-Gharaibeh, Alaa Al-Hazaymeh, Abdallah Alfawaz, Nezar Almoghrabi, Obaida Al-hazaimeh, Ashraf Abu-Ein)</p> <p><b>Exploratory Machine Learning and Deep Learning Classifiers for Improved AI Asthma Detection.</b> (Khaled Hamad, Yazeed Alsarhan, Anas Alomari, Karam Hassan, Areen Arabiat, Hamza Abu Owida, Mowafaq Alzboon)</p> <p><b>Machine Learning for Attendance Fraud Detection in Biometric Logs.</b> (Mashhoor AL-Awaishah, Mowafaq Alzboon, Mutaz Abdel Wahed, Mohammad Al-Batah)</p> <p><b>A Comparative Analysis of Plagiarism Detection Methodologies: A Survey on the PAN-PC-11 Dataset and Modern Trends.</b> (Ahmad Alhami, Belal Zaqaibeh)</p>
	<p><b>Session D_ Smart Building (F), Room (F312)</b></p> <p><b>Session Chair: Riyadh Al-Shalabi</b></p> <p><b>Co-Chair: Natheer Gharaibeh</b></p> <p><b>Enhancing Image Security with Chaotic S-Boxes: Performance Evaluation of a Modified Four-Round AES Algorithm.</b> (Mohammed Abutaha)</p> <p><b>PulmoNet: A Deep Learning Framework for Pneumonia Detection in Chest X-Ray Images with Feature Analysis.</b> (Amjad Albashayreh, Maria Yousef, Loai Al-Alnemer, Alhareth Abdelmuhdi)</p> <p><b>Towards Preparing a Representative Phishing Dataset</b> (Maram Bani Younes)</p> <p><b>Scenario-based Variability Specification for Context-aware Software.</b> (Mahmoud Hussein, Rawan Abulail, Wafa Bani Mustafa, Enas Abu Samra)</p> <p><b>Digital Political Coercion: Analyzing Cyber Operations as Instruments of State Power and Geopolitical Influence.</b> (Hussain Almomani)</p> <p><b>An Advanced Stacked Ensemble Framework for Genetic Disorder Classification</b> (Yazan Al-Khassawneh, Maria Yousef, Hamza Saleem, Yousef Saadi, Shath Saleem)</p>
	<p><b>Session E_ Smart Building (F), Room (F313)</b></p> <p><b>Session Chair: Mohammad Al-Batah</b></p> <p><b>Co-Chair: Mowafaq Alzboon</b></p> <p><b>From Fear to Features: Deep Learning on EEG for Early Screening of Learning Disabilities in Children.</b> (Ghadeer Suleiman, Mazen Al-Zyoud, Najah Al-Shanableh, Maymouna Shbail)</p> <p><b>A Morphological Operator Grammar and Unsupervised POS Tagging Framework for the Voynich Manuscript.</b> (Mohammad Nazzal)</p> <p><b>A Deep Learning Approach to Political Sentiment Analysis Using Natural Language Processing.</b> (Fuad hailat, Riyadh Alshalabi)</p> <p><b>Detecting AI-Generated Text Using Multilingual DistilBERT Fine-Tuning on the Kaggle AI vs Human Dataset.</b> (Ahlam Migdady, Riyadh Alshalabi)</p> <p><b>Graph-Based Detection of Anomalous IoT Traffic Using Centrality Metrics and Graph Neural Networks.</b> (Abed Elkareem Alzoubi, Mutaz Abdel Wahed, Saleem Alzoubi)</p>
<p>14:00 – 15:00</p>	<p><b>Lunch (University Cafeteria)</b></p>

Conference Day 2: Tuesday, 31 March 2026 (Virtual Sessions (Via Microsoft Teams))	
10:00 – 10:30	Opening Speech
11:00 – 14:00  Parallel Sessions	<p><b>Session A (Microsoft Teams Meeting_ Join Link: Will be sent via email to registered participants)</b></p> <p><b>Session Chair:</b> Nashat Al-Rifai</p> <p><b>Co-Chair:</b> Maen Al-Zoubi</p> <p><b>Face Recognition Using a Hybrid InceptionV3-Based Simple Neural Network and Autoencoder.</b> (Mohammed chalwi, Ali Shaban, Roaa chalwi, Muthanna Mishlish, Mohammed Ahmed Salih, <b>Mohammed AL-Ani</b>)</p> <p><b>Adversarial Deep Learning Framework for Multimodal Authentication Using ECG and Fingerprint Biometrics.</b> (<b>Abdullah Alduhailan</b>)</p> <p><b>GramLink: Smart AI-Based Multimodal Product Search System with Integrated Chatbot.</b> (<b>Shanmukha Appajosyula</b>, Sudheer Pullala, Dhinakaran D)</p> <p><b>Multimodal Cough Detection and Classification with Machine Learning: Research Gaps and Future Directions.</b> (<b>Noor Emad</b>, Ghaidaa Abdulrahman Khalid, Ali Abdulelah Nouri)</p> <p><b>AI-Driven Clinical Decision Support for Laser Tattoo Removal: A Review and Framework.</b> (<b>Sarah Kadhim</b>, Omar Salim, Ghaidaa A. Khalid, Esraa M. Hashem)</p> <p><b>An Intelligent Inventory Management System for Improving Economic Sustainability.</b> (<b>Ahmed Ibrahim</b>, Faten Karim)</p> <p><b>A Workbench to Study Movie Recommender Systems.</b> (<b>Amany Al Horani</b>, Chien Le Goh, Sharaf Horani)</p> <p><b>Optimization-Driven Hybrid Frameworks for Imaging Photoplethysmography-Based Heart Rate and Blood Pressure Monitoring: A Review.</b> (<b>Manar Jabar</b>, Aseel Al-Nakkash, Ali Al-Naji)</p> <p><b>A Recommendation-Inspired Framework for Behavioral Analysis of Arabic Handwritten Text Image Databases.</b> (<b>Jabril Ramdan</b>)</p> <p><b>Federated Learning-Based Personalized Music Recommendation System with Edge Caching in Cloud-Integrated Environments.</b> (<b>Hemanta Ghosh</b>)</p>
	<p><b>Session B (Microsoft Teams Meeting_ Join Link: Will be sent via email to registered participants)</b></p> <p><b>Session Chair:</b> Sofian Kassaymeh</p> <p><b>Co-Chair:</b> Aymen Abu-Errub</p> <p><b>Multi-Model Text Classification for Predicting Security Vulnerabilities in Python Source Code.</b> (<b>Nouh Alhindawi</b>, Mohammad Bani-Hani)</p> <p><b>Ai-powered Smart Farming System for real-time plant disease detection and treatment recommendation.</b> (S. Nagendrudu, KODAMALA KUMAR, <b>A. Praveen Kumar</b>, B Varma, K Reddy, G Vamsi)</p> <p><b>AI-Augmented Coaching: Deep Learning for Personalized Basketball Training and Strategy Optimization.</b> (Smith Newton, <b>Jefferson Jevin D</b>, Jerish Kumar J, Mitha Rachel Jose, Sam V. George)</p> <p><b>Multi-Target Cervical Cancer RiskPrediction: Ensemble Machine Learning and Deep Learning Approaches with Advanced Feature Engineering.</b> (<b>Smith Newton</b>, Achuthan K, Senthil kumar B)</p> <p><b>Human Centered Design in Comic with AI Study Case Superhero Comic with Juxtaposition.</b> (<b>Raja Syah</b>, Ferric Limano)</p> <p><b>Intelligent Safety Monitoring for Shredding System Via Computer Vision</b> (P Jacob Kumar, G Rajasekhar Reddy, <b>Narla Bhargavi</b>, P Sowmya, K. V. SurekhaDasa Mokshita)</p> <p><b>Image Centric Indoor Navigation Solution for Visually Impaired People.</b> (<b>Namala Sreenivasulu</b>, S Md Riyaz Naik, P Bhaskar, M Manoj, S Ganesh, M Nithin Simha)</p> <p><b>Performance Analysis of Cloud-Based Disaster Recovery for Workday Applications.</b> (<b>Monu Sharma</b>)</p> <p><b>Explainable Artificial Intelligence for Workforce Decision-Making in Enterprise Systems</b> (<b>Monu Sharma</b>)</p>

<p>11:00 – 14:00</p> <p>Parallel Sessions</p>	<p><b>Session C (Microsoft Teams Meeting_ Join Link: Will be sent via email to registered participants)</b></p> <p><b>Session Chair: Mohammad Al-Refai</b></p> <p><b>Co-Chair: Abdalla Marashdih</b></p> <p><b>Optimized Task Scheduling and Resource Allocation in Cloud Computing.</b> (Hemanta Ghosh)</p> <p><b>Trash Free Terrain.</b> (Krishnaraj M, Serrena J, Shreen Thasbeeha O M R)</p> <p><b>Transformer-Based Diffusion Models for Early Alzheimer’s Disease Detection using Brain MRI.</b> (T. Saravanan, M Chandraprabha)</p> <p><b>Deep Learning Approaches for Accelerated MRI Reconstruction: A Review.</b> (Ranjana K, Sandhya Dass)</p> <p><b>AI-Based Simulated Auto-Trading Bot for Stock and Cryptocurrency Markets using Technical Indicators.</b> (Noel Kenny Chadipiralla, P Ameerulla Khan, Saran Raj Sowrirajan)</p> <p><b>Enhancing ECG Signal Compression Robustness Using Noise-Aware Deep Convolutional Autoencoders in IoT-Assisted Remote Healthcare.</b> (Alyaa Ali Neamah, Mustafa Ismael)</p> <p><b>Uncertainty Quantification in Retinal Disease Diagnosis for Enhanced Clinical Decision Support.</b> (Sura Muslim jabbair, Mohammed Aboud Kadhim, Jinan Fadhil Mahdi, Mohammed Suhail Naim Al-Salam)</p> <p><b>Emotion-Aware Federated Reinforcement Learning Framework for Privacy-Preserving Smart Home Energy Management.</b> (Waled Taha Sanad, Mohammed Aboud Kadhim, Ali J. Al-Askery)</p> <p><b>Self-Supervised Contrastive Learning for Intelligent Fault Detection in 400kV Super-High Voltage Transmission Systems: A Data-Efficient Deep Learning Approach.</b> (Raghda AbduLateef Mezaal, Mohammed Aboud Kadhim, Mohammed Abdulla Abdulsada)</p> <p><b>SmartSort Bin: AI-Based Solar-Powered System for Automated Waste Segregation Using IoT.</b> (Md Yasin Zihad, Khawja Imran Masud, Arobindo Paul, Md Sajedul Islam, Md Obaidur Rahman, Sahara Ali)</p>
<p>11:00 – 14:00</p> <p>Parallel Sessions</p>	<p><b>Session D (Microsoft Teams Meeting_ Join Link: Will be sent via email to registered participants)</b></p> <p><b>Session Chair: Mohmmmed Bawaneh</b></p> <p><b>Co-Chair: Mustafa Ababneh</b></p> <p><b>A Dataset-Based Comparative Analysis of Student Academic Performance.</b> (Gulnar Naghiyeva)</p> <p><b>Deep Learning-Based Intrusion Detection System for Cyber-Physical Systems.</b> (Khattab Alheeti, Saleem Majeed, Ahmad Awaad, Abdul Kream Najem, Rasha Sakr)</p> <p><b>Hybrid Metaheuristic Optimization for SVM Feature and Parameter Selection.</b> (Mohammad Al-Refai, Maen Alzubi, Murad Bashabsheh, Shakir Mrayyen)</p> <p><b>Graph Neural Reinforcement Learning for Adaptive Resource Management in Vehicular Cloud Networks.</b> (Maen Alzubi, Murad Bashabsheh, Mohammad Al-Refai, Osama H. Al-Rifai)</p> <p><b>PID-Based Position Control of a Robotic Arm with Adaptive Gain Tuning.</b> (Murad Bashabsheh, Maen Alzubi, Mohammad Al-Refai, Alaa AlZoubi)</p> <p><b>An Automated System for Pharmaceutical Inventory: Real-Time Medicine Detection Using Android Studio.</b> (Saja Sadiq, Saleem Lateef, ALI Al-Naji)</p> <p><b>Multi-Modal Emotion and Personality Analysis for AI-Enabled Recruitment Systems.</b> (Hemanta Ghosh)</p> <p><b>A Multi-Modal Deep Learning Framework for Smart Nutrition Monitoring and Dietary Management.</b> (Kotha Harshvardhan, Mangali Chandra, Gedipudi Abijith, E.Ravi Kumar, Mohammad Irshadulla)</p>

<p>11:00 – 14:00</p> <p>Parallel Sessions</p>	<p><b>Session E (Microsoft Teams Meeting_ Join Link: Will be sent via email to registered participants)</b></p> <p><b>Session Chair: Omar Obeidat</b></p> <p><b>Co-Chair: Moath Najeeb</b></p> <p><b>Multimodal Driver Drowsiness Detection Using Adaptive Subject-Specific Thresholding.</b> (Hemanta Ghosh)</p> <p><b>Algorithmic Bias in AI-Mediated Communication Systems: Transparency, Power Asymmetries, and the Role of Explainable Artificial Intelligence.</b> (Mrunal Gangrade, Shalini Sivasamy)</p> <p><b>Multi Agent Cognitive Automation Model Using Reinforcement Learning for Distributed Knowledge Management and Autonomous Collaborative Decision Making in Complex Environments.</b> (Algirmaa Baljinnayam, Myagmarsuren Orosoo, T.Dhivya Bharathi, V. Vedavathi, Syed Gardezi, R Saravanakumar)</p> <p><b>AI-Based Wildlife Intrusion Detection Using Daytime, Thermal, and Predictive Analysis.</b> (Lily Candace, Malaram Naidu, Deepika R. K, Jayashree K)</p> <p><b>A Validated 4D Clinical–Computational Taxonomy and Translation Framework for GAN-Based MRI Super-Resolution.</b> (Satvik Khara, Monali Suthar, Prayas Chavda, Nisarg Chauhan, Anurag Soliya, Vraj Thakkar)</p> <p><b>Source Code Vulnerability Detection and Personalized Password Recovery Tool.</b> (Shyam Ganesh T, Vignesh T, Vasanthi R)</p> <p><b>Predictive Failure Detection in Distributed Healthcare Integration Systems</b> (Manjeera Chanda)</p> <p><b>Reinforcement Learning-Based Optimization of Energy and Security in Wireless Sensor Networks</b> (Saif Alsabti, Shaimaa Ahmed, Aymen Al-Dulaimi, Mariam Saleh, Mustafa Hamid, Shashi Kant Gupta)</p> <p><b>Adaptive Reinforcement Learning for Advanced Interference Mitigation in Future 5G Wireless Networks.</b> (Saif Alsabti, Ghassan Hamed, Aymen Mohammed Al-Dulaimi, Ali Obied, Mustafa Abdulirees jebur, Shashi Kant Gupta)</p> <p><b>Hybrid Quantum-Inspired Optimization and Convolutional Neural Networks for Scalable DDoS Detection in IoT Networks.</b> (Saif Alsabti, Marwa Ismaeel, Aymen Al-Dulaimi, Raid Gaib, Mustafa Hamid, Shashi Kant Gupta)</p>
<p>11:00 – 14:00</p> <p>Parallel Sessions</p>	<p><b>Session F (Microsoft Teams Meeting_ Join Link: Will be sent via email to registered participants)</b></p> <p><b>Session Chair: Firas Zawaideh</b></p> <p><b>Co-Chair: Hassan Al Sukhni</b></p> <p><b>Smart Hospitality: The Role of Artificial Intelligence in Shaping Employee–Robot Collaboration and Job Crafting Behaviors.</b> (Pritpal Singh, Shashikant Gupta, Anushka Srivastava, NEHA Kohli, kriti Bedi, ANUP SHARMA)</p> <p><b>AI, IoT, and Cybersecurity in Last-Mile Delivery Systems: A Systematic Review and Conceptual Framework.</b> (Pritpal Singh, NEHA KOHLI, SHASHIKANT GUPTA, KRITI BEDI, ANUP SHARMA, PRIKSHAT KUMAR ANGRA)</p> <p><b>Edge-Enabled Smart Last-Mile Delivery: Technologies, Design Challenges, and Future Directions.</b> (Pritpal Singh, NEHA KOHLI, Prikshat Kumar Angra, KRITI BEDI, ANUP SHARMA, SHASHIKANT GUPTA)</p> <p><b>A Context-Aware Fuzzy Logic Framework for Adaptive Multi-Factor Authentication.</b> (Riad Makhoul, Abdallah Moubayed, Nouh Alhindawi)</p> <p><b>Attention-Based CNN-BiLSTM Framework for Intrusion Detection in RPL-Based IoT Networks.</b> (Daniah Abdul Qahar Shakir, Ahmed Adil Nafea, Sameeh Abdulghafour Jassim, Aythem Khairi Kareem)</p> <p><b>Using Google Authenticator and HashiCorp Vault to Build a Security System to Boost Digital Wallet Security and Recovery Secrets.</b> (Samah Mahmood Ahmed, Raad A. Muhajjar, Mishall Al-Zubaidie)</p> <p><b>Context-Aware Sustainable AI Kitchen Assistant Using Multimodal Input and Constraint Optimization.</b> (S.Aurthy Felicita, Shankari R, SowmiyaSri N R, Srimathi B, Vaibavalakshmi M)</p> <p><b>A Stacked Deep Feature Learning Framework for Multi-Class ECG Image-Based Cardiac Disease Classification.</b> (Mustafa Muslih Shwaysh, Ahmed Waleed Khalil Al-Nasir)</p> <p><b>SolveX A Plug and Play AI Tutor for Multi Variable Math Word Problems</b> (V. Phani Sirisha, P. Harshitha, P. Naveen Kumar, V. Revanth, Dr. M. V. Ramakrishna, Dr. J. Ramadevi)</p>

**Program subject to change. Last updated: 27 March 2026**