



The 1st International Conference on Emerging
Technologies and Engineering Systems
(ICETES2026)

Al-Ahliyya Amman University
Amman, Jordan

Hybrid Conference | 7-9 April 2026 | Amman, Jordan



List of Accepted Papers

#	Authors	Title
2	Fatima A. Hikmat, Ali N. Al-Shuwaili and Mouayad A. Sahib	Adaptive Beamforming for 5G/6G Systems Using Convex Optimization Techniques
4	Mohammed Ahmed Eljack, Ahmed Ammar Kubba, Qassim Nasir, Mohammed Kamil and Manar Abu Talib	Stormwater Drainage Optimization Using Graph-Based Piping Networks
7	Subuhi Kashif Ansari, Nusrat Hamid Shah, Mohammad Ashfaq Hussain, Roma Fayaz, Ahmad Unnisa Begum and Durdana Taranum Khan	IoT-Enabled Text-to-Image Generation: A Review of Artificial Intelligence and Machine Learning Approaches
8	Iyas Qaddara, Insaf Kraidia, Mohammad Hiari and Nida Al-Shafi	A Unified Blockchain-VR Trust Architecture for Real-Time, Secure, and Fully Auditable Metaverse Environments
14	Maham Akhtar and Muhammad Suleman	QR Code Based Steganography: A novel approach for encrypted QR codes
20	Qamar Burhan Abdullah and alah Abdulghani Alabady	PEGASIS Protocol Development for Prolonging Network Lifetime Using Multi-Chain and Dual Leaders

#	Authors	Title
22	Tatiana Alshaweesh, Aya Jamjoum, Aseel Mohammad, Nour Al-Qaisi, Elvira Dwairi and Majed Dwairi	Design and Evaluation of 5G Microstrip Patch Antennas at 28 GHz
31	Hadjir Zemmouri, Said Labeled, Insaf Kraidia and Akram Kout	Cross-Modal Feature Fusion for Multimodal Amazon Review Data Using TensorFlow and Spark
32	Ayoub Alsarhan, Adnan Qazan, Suhaila Abuowaida, Nawaf Alshdaifat, Mohammad Alshinwan and Ahmad Aburomman	Explainable Deep Learning for Early Mental Health Detection in Arabic Social Media Texts
33	Mohammad Qatawnah, Khaled Hamad, Suhaila Abuowaida, Nawaf Alshdaifat, Mo'Men Malkawi and Mohammad Alshinwan	High-Accuracy Recognition of Yemeni Sign Language Using ConvNeXt Architecture with Focal Loss and Advanced Data Augmentation
34	Abdallah El Ghaly, Hassan N. Noura and Khaled Chahine	DC Link Fault Diagnosis in Shunt Active Power Filter Using Machine Learning
37	Ghassan Al Jayyousi, Ghaith Al-Refai, Mutaz Ryalat and Hisham Elmoaqet	Field-of-View–Based Spherical Video Stitching and Object Detection for Multi-Camera Drones
40	Esra Bağcı, Esengül Altınok, Yiğit Kalaycıoğlu, Ertuğrul Furkan Savaştaer, Berrin Çelik and Mahmut Emin Çelik	Automatic Caries Segmentation Using Deep Learning: A Comparative Analysis
41	Omar Almomani, Mohammed Madi and Tariq Alwada'N	A Comparative Study of Deep Learning Models for Brute-Force Attack Detection in Network Traffic
42	Malik Al-Essa, Abualghanam Orieb, Muhammad Imran, Almobaideen Wesam and Alazzam Hadeel	Adversarially Trained Deep Models for Robust Malware and Cyber-Threat Detection

#	Authors	Title
43	Suhail Odeh, Sherin Hazboun, and Mohammad Abu Ayyash	Congestion-Aware Genetic Algorithm for Urban Mobility Optimization in Intelligent Transportation Systems
44	Mehmet Özkaya, Aybala Kılıç, Yiğit Kalaycıoğlu, Ertuğrul Furkan Savaştaer, Berrin Çelik and Mahmut Emin Çelik	Teeth Segmentation using Deep Learning Models
48	Amal Dweik, Enas Jounaidi, Raghad Qafesheh and Rahaf Qafesheh	Arachno TrackBot: An Autonomous Spider Robot with Embedded AI for Search and Rescue
51	Ahmed Alzughaibi	Feasibility of Using Commercial Security Cameras for Vision-Based Drift Monitoring: A Preliminary Experimental Study
53	Saeed Hamouda, Ayman Mohammed, Ayman Elshenawy, Abdelaziz M.Abdelbr, Yasser Abdel Satar and Amr A. Hassanain	An APSO optimized ensemble learning framework for Ransomware Threat Detection
54	Kholoud Alkayid, Haitham M. Alzoubi, Yordanka S. Angelova, Mounir El Khatib and Khadija Slimani	How AI transform Time-Series Foundation Models to Logistics Business Value in MENA
58	Ahmad Sulaiman Alkhatib, Mohammad Alhawarat and Qasem Nijem	Integrated Explainability-Oriented Software Engineering: Bridging XAI and Development Practice
59	Hany Elsalamony, Ayman Mohamed, Saeed Hamouda, Nevien Moawad, Ayman Elshenawy and Amr Hassanain	Identification and tutoring of Buildings Approaching the River Canals: An Integrated Geospatial Method for Conservation of Waterway Preservation
60	Ayman Mohamed, Nevien Moawad, Reda Omara and Rasha Elnemr	Decision Support System for Wheat Diseases Resistance Breeding Based on FAIR Principles

#	Authors	Title
64	Naghham A.A Kharmoosh and Ali A.A. Habib Alrammahi	Temporal Behavioral Signatures for Modeling Explainable Credit Risk Using Dynamics Smartphone Session
66	Sneha Panda and Sandeep Rathor	Mental Health Prediction from Digital Conversations via Transformer-Based NLP models
68	Hamsa Hameed and Ayad Hameed Mousa	A Systematic Literature Review of Machine Learning Methods for YouTube Popularity Prediction
71	Aghna Pranada, Feren Lisady, Vanessa Tjong and Anderies Anderies	KasUMKM: Mobile Application Development Emphasizing Sustainable and Cost-Effective Software Approach for Food and Beverage MSMEs
75	Yazeed Al-Sarhan, Ayoub Alsarhan, Farah Abo Asba and Suhila Suhila	Advanced Multi-Layer Framework for Distinguishing Human-Written and AI-Generated Arabic Text: A Transformer-Based Approach with Linguistic Feature Engineering
76	Hasan Alhasan, Chien-Chung Ho, Yuan-Hao Chang and Tei-Wei Kuo	EPCO: ECC and Processor-aided Computational Offloading for Efficient In-Storage Video Querying
77	Mohammad Salman Sulaiman, Salihatun Md Salleh, Lilywati Bakar, Moch.Agus Choiron and Zurina Abdul Wahab	Development of an IoT-Based Automated Electric Fence System Powered by Hybrid Solar-Wind Energy
78	Ayman Elshenawy and Nora Abdelgawad	A Lightweight EfficientNet-B2 Framework for Dental Radiograph Classification
80	Muzamel Hussain, Ayman Elshenawy and Nora Nora Abdelgawad	From Images to Clinical Insight: A Conceptual Multimodal Framework for Dental Radiology Analysis

#	Authors	Title
93	Mohammad Alhawarat	Detecting Hallucinations in Arabic Large Language Models Using Automatic Fact-Verification Signals
94	Mohammad O. Hiari, Iyas Qaddara, Insaf Kraidia, Nida Al-Shafi and Rania Alzubaidi	Enhancing Cybersecurity Awareness Through Immersive Virtual Reality and Machine Learning-Based Behavioral Analysis
96	Nidal Turab, Shahad Abu Hedeab, Batool Al Zubaidi, Ahmad Aburomman and Suhila Abuowaida	AI-Powered Hypertension Prediction: Leveraging Machine Learning for Early Detection
97	Neaam R. Abdulgabbar and Salah Alabady	Design and Implementation of an Integrated AES–Blockchain Framework for Secure IoT Networks
98	Mahmoud Abdelhamied, Ahmed Madbouly, Shaimaa Mostafa and Naglaa Reda	A Deep Learning-Based Model for the Detection and Classification of Brain Tumors
100	Mosleh Abualhaj, Abdallah Hyassat and Ahmad Shalalkeh	Comparative Evaluation of DenseNet, ResNet, and GoogLeNet Architectures
101	Ahmad Shalalkeh, Shahbaz Pervez, Seyed Ebrahim Hosseini and Ayman Alnsour	Optimizing Usability and Security: A Study of Multi-Factor Authentication in Academic Environments
104	Siska Lewandi, Lidia Tanaya and Anderies Anderies	Improving User Experience in Culinary Exploration Website through Contextual User Interface Approach
105	Dheeb Albashish, Nedaa Almansour, Shahnorbanun Sahran, Azizi Abdullah, Abdulla Amin Aburomman and Sofian Kassaymeh	TE-ViT: Gabor-Enhanced Vision Transformer for Breast Cancer Classification in Mammograms
108	Jumana Matouq, Yara Joudeh, Zaina Hamzeh, Raneem Hamdona, Sadeen Al-Bawaneh and Mira Jbarah	Gamified Real-time Biofeedback for Pulmonary Rehabilitation

#	Authors	Title
114	Aya Alsharif, Mohammad Kouali, Jenan Abu Dayyah, Ahmed Abdou, Mohanad Rezeq and Mohammad Sabri	Design and Implementation of a KNX-Based Smart Home Training and Educational System
118	Shahad Abdeljabbar, Noor Saadallah and Bilal Jebur	Integrating KNN Clustering, Fuzzy-Genetic Optimization, and ACO Multi-Hop Routing for Protocol WSN Lifetime
120	Motasem Elshourbagy, Mayy Al-Tahrawi, Al-Laith Dababseh and Mosleh Abualhaj	An Efficiently Modified DenseNet Architecture for Image Classification Applications
123	Abdelrahman Elsayd, Saeed Hamouda, Ayman Mohamed, Mohamed Reda Ali and Salameh A. Mjlae	From Client-Side to Server-Side: Rethinking Web Security in the Age of Multimodal AI
124	Oraib Abualganam, Hadeel Alazzam, Malik Al-Essa, Wesam Almobaideen and Mohammad Qatawneh	Intelligent Correlation of Indicators of Compromise Using AI for Proactive Threat Detection
126	Nida Al-Shafi, Iyas Qaddara, Insaf Kraidia and Mohammad O. Hiari	Performance Optimization of Blockchain Design for 5G-AKA Authentication under Sudden Traffic Surges
128	Zahra Sami Abdulameer, Aymen J Salman	Latency-Aware Priority Weighted Round-Robin Scheduling for Mobile Edge Computing
130	Muhammad Hamza Tariq and Ayesha Anees Zaveri	Digital Optimization of UK Chemical Supply Chains Considering Operational Efficiency, Safety Risk and Carbon Emissions: A comprehensive analysis of digital innovation
149	Insaf Kraidia, Iyas Qaddara, Nida Al-Shafi, Mohammad O. Hiari, Rania Alzubaidi and Amira Benlecheb	RAG-Induced Failures in Multi-Agent Large Language Model Debate
160	Israa Lulu, Fatima Alhammadi and Ashraf Elnagar	AraToxi-Agent: A Multi-LLM Consensus System for Arabic Toxicity Detection and Neutral Rewriting

#	Authors	Title
162	Amal Al Ali, Alanood Almansoori and Ashraf Elnagar	Arabic Handwritten Text Recognition Using TrOCR with LLM-Based Post-Processing
163	Wai Chong Chia, Richard Teck Ken Wong, Riady Siswoyo Jo and Nor Akmar Mohd Yahya	A Portable Gamified Platform for Programming Education via a Dual-Role Puzzle Solving Framework: Conceptual Design and Architecture
168	Taha Amjad, Muhammad Hashir Bin Khalid, Mubbshir Saleem, Hashim Raza Khan, Kamran Arshad and Khaled Assaleh	Design and Development of a Configurable High Voltage Power Supply for Atmospheric Plasma Generation
174	Nabeel Ahmed Awan and Adeel Ahmed Awan	Multi-Label Eye Disease Diagnosis from Paired Fundus Images Using EfficientNet-ML-Decoder and SAM with Grad-CAM Explanations
175	Mohammad Rizwan and Irfan Ahmed	Perceived Influence of AI on Organisational Decision-Making in the UK Manufacturing Sector
177	Ahmad Habboush, Bassam Elzaghmouri, Hussein Al-Ofeishat and Takialddin Al Smadi	Enhancing Different Hybrid Energy Systems Management and their Optimization using AI Technology
180	Melik Başar Baysal and Mahmut Emin Çelik	A Unity-Based Digital Twin for Preliminary System Design of Multi-Lane License Plate Recognition
181	Shimaa Ibrahim, Ahmed Madbouly and Mahmoud Abdelhamied	A Multi-Stage Feature Selection Framework for Low-Cost CKD Screening
183	Aya Jamal and Eman Salih Al-Shamery	Deep Reinforcement Learning for Cybersecurity Problems: A Review
186	Aya Jamal and Eman Salih Al-Shamery	Adaptive Intrusion Detection and Mitigation System Using Proximal Policy Optimization (PPO)

#	Authors	Title
188	Amjad Hijazi	Anomaly Detection in Encrypted Network Traffic based on a Hybrid Machine learning Model: ANN-SVM
192	Walid Dalal, Dounia Rabhi and Marouane Ikira	Artificial Intelligence in Startup Incubation and Acceleration: A Global Bibliometric Analysis
197	Musharraf Hassan Butt, Waseem Akram and Irfan Ahmed	CNN-Based Facial Emotion Recognition for Depression Screening Using Emotion Aggregation
202	Md. Hasib Hasan, A.F.M Mahmudullah Shuhartha, Mohammed Anwer, Md. Ismail Jabiullah and Md. Tarek Habib	Cross-Cultural Visual Classification Using Deep Learning: A CNN-Based Study on Foreign, Chinese Oil, and Bangladeshi Graffiti Art
206	Ahmed M. Salameh and Zaid A. Al Muala	Peer-to-Peer Energy Trading Mechanism to Reduce Reliance on the Main Power Grid
207	Rania Alzubaidi, Iyas Qadaara and Insaf Kraidia	AI-Augmented Co-Learning: A Framework for Integrating Large Language Models into Programming Curricula
211	Samah Shawa, Esraa Albarahmieh, Abdo Mahli, Ahmad Barghash and Tala Abdelhadi	Bioinformatics and Data Analytics Approaches for Identifying Disease Biomarkers and Protein Signaling Pathways in Crohn's Disease
212	Maria Yousef, Hussein Hodroj and Thabit Bustanji	DeepCXR: A Deep Learning Framework for Automated Chest X-Ray Analysis Using ResNet Architectures
214	Zhang Jiahao, Yu Hang and Septavera Sharvia	A Hybrid-Attention Transformer for Efficient Automated Essay Scoring
215	Ahmad Adel Abu-Shareha, Rawan D. Alabdallat and Moslehm. Abualhaj	Android Malware Detection by employing a Modified Dwarf Mongoose Optimization Algorithm
216	Abdallah S. Hyassat, Qusai Omar, Alayham Shehadeh, Hebatallah Alhadidi and Abdullah Alhejoj	Comparative Analysis of Deep Convolutional Neural Networks under Different Transfer Learning Strategies for Retinal Disease Classification

#	Authors	Title
217	Reem Ahmad Mahmmod and Amera Istiqlal Badran	Real-Time Mental Fatigue Detection in Real-World Webcam Environments Using a Hybrid Deep Learning Framework
218	Hamda Al-Maadeed, Nadeen Abunada, Rula Ammuri, Mohammed Taghi Dabiri, Meysam Ghanbari and Khalid A. Qaraqe	Optical IRS Assisted Relay Architecture for Enhancing LOS Quantum Key Distribution Links