جامعة عجمان
AJMAN UNIVERSITY

5TH INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE SCIENCE AND APPLICATIONS IN INDUSTRY AND SOCIETY (CAISAIS 2026)

IEEE
United Arab Emirates Section

CONFERENCE PROGRAM SCHEDULE

Location: **Sheikh Zayed Center for Conferences & Exhibition**
Ajman University, Ajman

DAY 1. Wednesday, 25 November 2026

TIME	AGENDA ITEM	VENUE
09:00 - 10:00	**Welcome Desk - Registration**	Lobby Reception
10:00 - 10:05	**UAE Anthem, Quran, and Ajman University video**	Main Hall 1
10:05 - 10:10	**Welcome Address** Dr. Karim Seghir, *Chancellor* *Ajman University*	Main Hall 1
10:10- 10:15	**Conference Address,** Dr. Khaled Assaleh, *Conference Honorary Chair, Vice Chancellor for Academic Affairs* *Ajman University*	Main Hall 1
10:15- 10:20	**Dean Address** Prof. Omar Ghrayeb, *Dean of College of Engineering & IT* *Ajman University*	Main Hall 1
10:20- 10:30	**Chairs Address** Prof. Mohammed Al-Betar *Ajman University*	Main Hall 1
10:30 - 11:10	**Plenary 1: Recent Advances in Physical Embodied AI** Prof. Fakhreddine Karray Professor of Machine Learning Mohamed bin Zayed University of Artificial Intelligence, UAE and University of Waterloo, Canada **Plenary Session Chair: Prof. Mohamed Deriche, Ajman University**	Main Hall 1
11:10 - 11:30	***Coffee Break***	

11:30 - 12:15	**Keynote Session 1: The Intelligence of Everything: How IoT, AI, 6G, and Quantum Are Engineering the Intelligent Environments of Tomorrow** **Prof. Joel Rodrigues [Fellow, IEEE, IARIA & AAIA]** *Federal University of Piauí, Brazil.* Session Chair: Prof. Mohammed Al-Betar, Head, Artificial Intelligence Research Centre (AIRC), Ajman University	Main Hall 1
12:15 - 13:00	***Fireside Chat: From Research to Real-World Impact: What Industry Needs from Academia*** **Mr. Islam Azab,** *Senior Director – Emerging Technology, Etisalat Technology, UAE* Moderator: Dr. Perihan Abouzeid, Director, Ajman University Innovation Center	Main Hall 1
13:00 - 14:00	***Lunch Break***	
14:00 - 16:00	***Parallel Technical Sessions 1A - 1F (4 in person + 2 online)*** 1A (Hall 1): LLMs, NLP & Agentic AI 1B (Hall 2): Optimization, Metaheuristics & Decision Support 1C (Hall 3): Robotics, IoT, Edge & Hardware Systems 1D (Hall 4): Data Analytics for Finance, Business & Digital Transformation 1E (Hall 5 – Online): Medical Imaging & Computational Pathology 1F (Hall 6 – Online): Cybersecurity, Blockchain & Trusted Systems	Halls 1-6
16:00 - 16:15	***Coffee Break***	
16:15 - 18:30	***Parallel Technical Sessions 2A - 2F (2 in person + 4 online)*** 2A (Hall 1): Computational Pathology & Medical Image Retrieval 2B (Hall 2): Medical Imaging & Computer Vision 2C (Hall 3 – Online): AI in Education, LLMs & NLP 2D (Hall 4 – Online): AI Governance, Business & Digital Transformation 2E (Hall 5 – Online): Computer Vision, Robotics & Edge AI 2F (Hall 6 – Online): Smart Cities, Environment & Swarm Robotics	Halls 1-6

DAY 2. Thursday, 26 November 2026

TIME	AGENDA ITEM	VENUE
09:00 - 9:15	**Welcome Desk - Registration**	Lobby Reception
9:15 - 10:00	**Plenary 2: Large Perceptive Models: The next frontier in AI.** **Prof. Merouane Debbah,** *Senior Director of the Research Institute for Digital Future, Khalifa University, UAE* Plenary Session Chair: Prof. Salam Fraihat, Program Coordinator, Artificial Intelligence, Ajman University	Main Hall 1
10:00 - 10:15	***Coffee Break***	
10:15 - 11:00	**Keynote Session 2: Autonomous Recursive Software Factories: Beyond AI-Assisted Engineering.** **Prof. Phillip Kingston,** *Member of Technical Staff, AppliedAI, UAE* Keynote Session Chair: Prof. Ghazi AlNaymat, Program Coordinator, Data Analytics, Ajman University	Main Hall 1
11:00-12:00	**Panel Discussion** **Beyond Technology: The Impact of AI Across Different Fields** **Moderator:** Dr. Mahinour Ezzat, Director Teaching and Learning Center. Assit Prof College of Humanities, Ajman University, UAE **Panelists:** Dr. Nermine Mahmoud, Director of Well-being Center, Galala University (Psychology) Dr. Sharif Makhadmeh, University of Jordan (Research) Dr. Svetlana Chigaeva-Heddad, Director of Educational Programs at Voicee AI	Main Hall 1
12:00 - 13:00	***Parallel Technical Sessions 3A - 3D (In person)*** 3A (Hall 1): Cybersecurity, Blockchain & Trusted Systems 3B (Hall 2): Smart Cities, Energy & Environmental Forecasting 3C (Hall 3): Clinical AI, Explainability & Health Analytics 3D (Hall 4): AI in Education & Learning Analytics	Halls 1-4
13:00 - 14:00	***Lunch Break***	
14:00 - 15:45	***Technical Session 4A (Online)*** 4A (Hall 1 - Online): Clinical AI & Health Analytics	Hall 1
19:00-22:00	***Gala Dinner and Awards Ceremony***	

DAY 3. Friday, 27 November 2026

TIME	AGENDA ITEM	VENUE
15:00	**Trip to the Global Village**	Main Hall 1

TECHNICAL SESSIONS - PAPER PRESENTATIONS

Each paper is allotted 15 minutes (10 min presentation + 5 min Q&A). In-person sessions (blue) are scheduled first; online sessions (purple) follow. Session code: number = session, letter = hall (A = Hall 1 … F = Hall 6).

DAY 1. Wednesday, 25 November 2026 - Technical Sessions

Session 1A | Hall 1 | 14:00 - 16:00

IN-PERSON SESSION: **LLMs, NLP & Agentic AI**

Session Chair: *Dr. Vinod Pangracious (American University in Dubai)*

Co-Chair: *Dr. Irman Hermadi (Ajman University)*

TIME	PAPER ID	PAPER TITLE / AUTHORS
14:00 - 14:15	47	**Fine-Tuned Multi-Modal LLMs: Redefining Property Valuation in Dubai's Real Estate Market** *Asma Al Ali and Ghazi Al-Naymat*
14:15 - 14:30	62	**Improving Requirements Engineering with AI: A Framework for Analyzing Requirement Completeness Using NLP** *Asaad Alzayed*
14:30 - 14:45	82	**Mapping the Evolution of ChatGPT Research Using BERTopic: A Large-Scale Topic Modelling Analysis** *Muhammad Arslan and Saba Munawar*
14:45 - 15:00	113	**Machine-Generated Code Provenance via Structural-Semantic Fusion, Imbalance-Aware Attribution, and Token-Level Modeling** *Nisreen Al-Habashneh, Alia Haider, Lana Abduljabbar Wiss and Mahmoud Al-Ayyoub*
15:00 - 15:15	138	**AgenTrail: A Multi-Stage Agentic Architecture for Transparent and Personalized Itinerary Generation** *Ahmed Silat, Ayesha Khan, Abdullah Naseem and Ahmed Mostafa*
15:15 - 15:30	141	**Interpretable Social Media Sentiment Analysis: A Five-Model Benchmark for Media Monitoring** *Haythem El Messiry, Rajeev Pandey and Hussein Aboueldahab*
15:30 - 15:45	189	**Street-Level Property Market Analysis Using an Agentic LLM-RAG Framework** *Muhammad Arslan and Saba Munawar*
15:45 - 16:00	204	**Mathematical Properties of Word Embedding Space via a Pseudo-metric and Quotient-Space Framework** *Maha Sarhan and Mostafa Zahri*

Session 1B	Hall 2	14:00 - 16:00	
IN-PERSON SESSION: **Optimization, Metaheuristics & Decision Support** ***Session Chair:*** *Prof. Bilal Bataineh (Jadara University)* ***Co-Chair:*** *Dr. Halim Nour (Ajman University)*			
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**	
14:00 - 14:15	49	**Elk Herd Optimizer for the Energy Scheduling Problem Using Renewable Energy** *Sharif Naser Makhadmeh, Mohammed Azmi Al-Betar and Yousef Sanjalawe*	
14:15 - 14:30	112	**Robust Clustering Algorithm Selection Through Coverage-Aware Quality and Perturbation Stability** *Nisreen Al-Habashneh and Mohammed Al-Betar*	
14:30 - 14:45	114	**Search-State-Aware Adaptive Operator Selection in Genetic Algorithms for the Traveling Salesman Problem** *Nisreen Al-Habashneh and Mohammed Al-Betar*	
14:45 - 15:00	121	**Decision Support for Resilient IT Service Desk Staffing: An Interactive Monte Carlo Simulation Approach to Emergency Demand Bursts** *Joshuva Jeemon, Khaled Walid, Mujtaba Shaikh and Eman Abukhousa*	
15:00 - 15:15	174	**Does Random Operator Switching Help? A Budget-Controlled Study of WSO, WOA and CapSA Mixtures for Training Multilayer Perceptrons** *Sofian Kassaymeh, Bilal Bataineh and Mohammed Al-Betar*	
15:15 - 15:30	180	**Hybrid Constraint-Aware Discrete Farthest Better or Nearest Worse Optimization with Exact Neighborhood Repair for Nurse Rostering** *Nisreen Al-Habashneh and Mohammed Al-Betar*	
15:30 - 15:45	222	**Budget-Robust Hybridization: State-Driven Schedules in a Pheromone-Coupled Heterogeneous Metaheuristic** *Bilal Bataineh, Mahmood Hammad and Sofian Kassaymeh*	
15:45 - 16:00	230	**A Reproducible Framework for Ambulance Station Optimization and Road-Network Coverage Analysis: A Case Study of Dubai** *Jamil Al Alami, Mahmoud Al-Ayyoub and Mohamed Deriche*	

Session 1C	Hall 3	14:00 - 16:00	
IN-PERSON SESSION: **Robotics, IoT, Edge & Hardware Systems** ***Session Chair:*** *Dr. Peer Azmat Shah (Higher Colleges of Technology)* ***Co-Chair:*** *Dr. Ahmed Awan (Ajman University)*			
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**	
14:00 - 14:15	46	**AI-Driven IoT Platform for Realtime Detection of Children Left in Parked Vehicles** *Hassan O. Ali, Peer Azmat Shah, Amnh Saeed Hamdan Alhantoobi Alnaqbi, Ebtesam Ahmed Rashed Ali Alabdouli, Ameera Abbas Abdalla Ali Alblooshi and Mohsin Iftikhar*	
14:15 - 14:30	120	**Development and Implementation of a Low-Cost AI-Assisted Trash Bin Sorter Using an Arduino Microcontroller and Raspberry Pi Microcomputer** *Av Madrigalejos, Chris Edappady, Suraj Srinivasan and Judhi Prasetyo*	
14:30 - 14:45	149	**From Touch to Sweetness: A Non-Destructive Approach Using Vision-Based Tactile Sensing for Brix Prediction in Cucumbers** *Mashood Mohsan, Meenakshi Jayakumar and Irfan Hussain*	
14:45 - 15:00	150	**Avocado Firmness Assessment Using Vision-Based Tactile Sensing: A Non-Destructive Approach** *Meenakshi Jayakumar, Mashood Mohsan, Yusra Abdulrahman and Irfan Hussain*	
15:00 - 15:15	163	**Comparative Performance Analysis of Quadrant-Based NoC Routing Algorithms: GPU-Vectorized vs. CPU Cycle-Accurate Simulation** *Umar Adeel, Muhammad Irtiza, Mohamed Abousaada, Ali Alnoman, Mariam Hemeida and Ammar Rashid*	
15:15 - 15:30	247	**A Comparative Review of Acoustic and AI-Based Detection and Localization Methods for Compressed Air Leaks** *Yousef Melhem, Abdullah Salmo, Yousof Saleh, Ammar Al-Kubaisi, Wessam Shehieb and Ahmed Awan*	
15:30 - 15:45	127	**Memory-Centric FPGA Reservoir Computing for Binary ECG Abnormality Detection** *Anas Rababah, Baker Mohammad, Mahmoud Al-Qutayri and Eman Hassan*	
15:45 - 16:00	98	**DustAdapt: Evaluating Drift-Triggered Adaptation for Air-Quality Forecasting** *Muhammed Nehan and Mahmoud Al-Ayyoub*	

Session 1D	Hall 4	14:00 - 16:00	
IN-PERSON SESSION: **Data Analytics for Finance, Business & Digital Transformation** *Session Chair: Dr. Mohammad Shahid (UAE University)* *Co-Chair: Dr. Mohammad Al Nawayseh (Ajman University)*			
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**	
14:00 - 14:15	96	**Machine Learning for Gold-Oil Market-State Discovery and Recognition under Temporal Distribution Shift** *Yara Mohammad, Elfadil Mohamed, Mirna Nachouki and Riyadh Mehdi*	
14:15 - 14:30	97	**Leakage-Safe Feature Representation for Automobile Insurance Claim Risk Prediction** *Muhammed Nehan and Mahmoud Al-Ayyoub*	
14:30 - 14:45	183	**Leveraging Social Network and Multi-Analytics for Crisis Management: A Case Study of the TelecomX Data Breach** *Ghazi Al-Naymat, Mohammed Azmi Al-Betar and Mohammad Al Nawayseh*	
14:45 - 15:00	233	**Alias-Driven Local MLOps: A Lightweight Model Deployment and Validation Workflow for On-Premise Environments** *Aleksei Turov*	
15:00 - 15:15	240	**A Comparative Framework for Loan Prediction using Ensemble Learning and Explainable AI** *Deya' Aldeen Alawi, Abdollah Eltefati and Mohammed Al-Betar*	
15:15 - 15:30	260	**Decentralized Federated Learning with Hybrid-Quantum Learners: Evidence from Private Equity** *Filippo Dal Lago, Francesco Castellaneta and Davide La Torre*	
15:30 - 15:45	146	**From AI Strategy to Organizational Transformation: A DevOps-Driven Framework for Adopting Generative AI in Government Entities** *Khalid Khawaja*	
15:45 - 16:00	268	**Digital Drugs, Auditory Beat Stimulation, and Artificial Intelligence: A Critical Review of Psychological, Clinical, and Societal Evidence (2015–2026)** *Nermine Mahmoud and Mohammed Abd Elaziz*	

Session 1E | Hall 5 - Online | 14:00 - 16:00		
ONLINE SESSION: **Medical Imaging & Computational Pathology** ***Session Chair:*** *Dr. Ahmed BaniMustafa (Higher Colleges of Technology)* ***Co-Chair:*** *Dr. Vasaki Ponnusamy (Ajman University)*		
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**
14:00 - 14:15	84	**Detection of Mandibular Periapical Lesions on Panoramic Radiographs using Deep Learning Model** *Farah Mohamed, Youssef Maaod, Shrouk Shata, Mohamed Abd Elaziz, Hanaa Sayed Mansy, Sama Okasha and Dina Mohamed Elbshlawy*
14:15 - 14:30	130	**Enhanced YOLOv12 for Multi-Class Human Bone Fracture Detection: A Comparative Evaluation with Transformer-Based Object Detection** *Mohamed Elsayed, Mohamed Rady, Aser Mohamed, Mohamed Abd Elaziz and Shaker El-Sappagh*
14:30 - 14:45	209	**Sleep Apnea Event Detection from EEG Time-Frequency Representations Using YOLOv8n** *Atifa Aqueel, Yusuf Khan, Omar Farooq and Ahmed Imran*
14:45 - 15:00	237	**A Dual-Branch LeMeViT Framework for Autism Spectrum Disorder Classification** *Mostafa Elsaeed, Elaf Elsaeed, Jomana Soliman, Moamen Moaet, Mohamed Abd Elaziz, Rasha Abdelrahman and Nermine Mahmoud*
15:00 - 15:15	252	**Deep Learning-Based Periapical Lesion Detection and Segmentation via YOLOv8 and KAN-UNet** *Shrouk Shata, Sama Okasha, Mohamed Abd Elaziz, Dina Mohamed ElBshlawy, Hanaa Sayed Mansy and Sameh Basha*
15:15 - 15:30	257	**Multiclass Cervical-Cell Detection in Pap Smear Images: A Comparative Evaluation of YOLOv9, YOLOv10, YOLO11, and YOLO26** *Tze-Chi Hsu, Imran Ali, Syed Abbas Jan, Zohaib Mushtaq, Shahzad Ali and Atta Ur Rehman Khan*
15:30 - 15:45	104	**Reliable and Efficient Compact Medical Image Retrieval Under Leakage-Aware Evaluation Across MRI and Histopathology** *Hana Habeebu Rahiman, Mariam Alnuaimi, Mohammed Omari, Khouloud Salameh, Ali Alnoman and Mohammed Kaddi*
15:45 - 16:00	195	**Patient-Level Glioma Histopathology Classification Using Lightweight Vision Transformers and a CNN with Frozen Pathology Teachers** *Almotaz Al Khasawneh, Mohamed Deriche and Huseyin Kusetogullari*

Session 1F | Hall 6 - Online | 14:00 - 16:00		
ONLINE SESSION: **Cybersecurity, Blockchain & Trusted Systems** ***Session Chair:*** *Dr. Mustafa Abdallah (Purdue University)* ***Co-Chair:*** *Dr. Usman Butt (Ajman University)*		
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**
14:00 - 14:15	55	**The State-of-the-Art Security Vulnerabilities in School Information Systems: A Systematic Literature Review** *Vestina Nyamhanga, Jabera Matogoro and Mohamedi Mjahidi*
14:15 - 14:30	111	**TrustCert: A Decentralized Framework for Academic Certificate Management with Revocation Support** *Maruf Farhan, Rejwan Bin Sulaiman, Nasr Abosata, Madhuki Rajapakshe and Usman Butt*
14:30 - 14:45	140	**SecureTrace: Trusted Environment Attestation for Blockchain-Based Android Forensics** *Maruf Farhan, Usman Butt, Rejwan Bin Sulaiman, Muhammad Haris and Nasr Abosata*
14:45 - 15:00	178	**Feature-Based Clustering and Explainable Classification of Cyber-Physical Attack Graphs** *Phanindra Vadali, Mohammed Al Eiadeh and Mustafa Abdallah*
15:00 - 15:15	184	**How Human Misjudgment of Risk Shapes Budget-Minimizing Security Games** *Md Reya Shad Azim, Mohammed Al Eiadeh, Mohammed Al-Betar and Mustafa Abdallah*
15:15 - 15:30	227	**A Comparative Study of Automated Machine Learning Methods for Network Intrusion Detection** *Naren Velnambi, Mohammed Al Eiadeh, Mohammed Al-Betar and Mustafa Abdallah*
15:30 - 15:45	245	**A Multi-Class Fuzzy Cognitive Map Approach for DDoS Attack Classification in Resource-Constrained IoT Devices** *Muhammad Ishfaq, Muhammad Hamza, Shawal Khan, Zakria Qadir and Atta Ur Rehman Khan*
15:45 - 16:00	258	**Artificial Intelligence and NIST Post-Quantum Cryptography: A Systematic Review of Implementation Security, AI-System Protection, and Adaptive Selection** *Waad Hamdan, Addina Farrukh, Layla Al Qahtani and Deepa D. Shankar*

Session 2A	Hall 1	16:15 - 18:15	
IN-PERSON SESSION: **Computational Pathology & Medical Image Retrieval** ***Session Chair:*** *Dr. Sharif Naser Makhadmeh (University of Jordan)* ***Co-Chair:*** *Prof. Rao Naveed Bin Rais (Ajman University)*			
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**	
16:15 - 16:30	35	**Late-Fusion of Deep Semantic Hashing and Visual Words for Content-Based Image Retrieval** *Rashid Ibrahim, Mohammed Omari, Moamen Elgawish, Muhammad Irtiza, Mohammed Kaddi, Khouloud Salameh and Ali Alnoman*	
16:30 - 16:45	36	**Interactive Medical Image Retrieval Using Hybrid Features and Human Relevance Feedback** *Muhammad Irtiza, Mohammed Omari, Rashid Ibrahim, Mohammed Kaddi, Khouloud Salameh and Ali Alnoman*	
16:45 - 17:00	80	**An Integrated Binary Grey Wolf Optimizer and Vision Transformer Framework for Breast Cancer Histopathology Classification** *Omer Farooq, Huseyin Kusetogullari and Mohammed Azmi Al-Betar*	
17:00 - 17:15	110	**Annotation Efficiency of Pathology Foundation Models: A Benchmark Against Conventional Transfer Learning** *Nasima Mohammad Helal and Peter Yacoub*	
17:15 - 17:30	255	**Deep Learning Architectures for Hyperspectral Histopathology: A Model-Centric Review** *Yousef Melhem, Wessam Shehieb, Adonay Gebremedhin and Mohamad Alansari*	
17:30 - 17:45	259	**RGB-to-Hyperspectral Reconstruction for Medical Imaging: A Comparative Review of Methods, Data and Clinical Evidence** *Nadin Fayad, Joudy Kabalan and Wessam Shehieb*	
17:45 - 18:00	265	**Do Deep Learning Models Trained on Web-Scraped Microorganism Images Transfer to Laboratory Microscopy? A Leakage-Controlled Distribution-Shift Benchmark** *Ahmed Banimustafa, Lama Musallam, Olla Bulkrock, Salam Fraihat and Asdren Zajmi*	
18:00 - 18:15	144	**NeuroAssist: ML-Driven MRI Vision for Brain Tumor Analysis** *Harihar Rengan, Vinod Pangracious, Toufic Alakl, Mohannad Abourehab, Seya Makin and Lina Noman*	

Session 2B	Hall 2	16:15 - 18:30	
IN-PERSON SESSION: **Medical Imaging & Computer Vision** ***Session Chair:*** *Dr. Haythem El-Messiry (Canadian University Dubai)* ***Co-Chair:*** *Dr. Mirna Nachouki (Ajman University)*			
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**	
16:15 - 16:30	101	**PADER-DR: A Patient-Aware Deployment Evaluation and Reliability Audit Application for Diabetic Retinopathy AI** *Yara Mohammad, Mirna Nachouki, Elfadil Mohamed and Riyadh Mehdi*	
16:30 - 16:45	234	**Revised Manuscript of the paper under the title A Texture-Based Machine Learning Framework for Binary Classification of Glaucoma from Fundus Images** *Farah Thouqan and Dr.Mujeeb Rahman K K*	
16:45 - 17:00	248	**Diabetic Retinopathy Grading via Population-Aware Multi-Domain Meta-Architectures: Generalist versus Specialist Paradigms** *Haseebullah Jumakhan, Ghazi Al-Naymat and Mohammed Azmi Al-Betar*	
17:00 - 17:15	170	**Non-Contact Tire Fault Detection from Roadside Video Using Stabilization and Eulerian Motion Magnification** *Sedra Wattar, Rana Thabet, Maryam Eelwan, Halah Alshanqiti, Wessam Shehieb and Ayman Tawfik*	
17:15 - 17:30	173	**Lightweight Object Detection for Driver Monitoring: A Subject-Disjoint Benchmark** *Oumar Ibrahim, Mohamad Khairi Ishak, Khalid Ammar and Nada Masood Mirza*	
17:30 - 17:45	211	**DiDiLeaf: Uncertainty-Aware Plant Leaf Disease Prediction Using Discrete Diffusion Modeling** *Mohammad Shahid and Abdullah Aamir Hayat*	
17:45 - 18:00	254	**EmotionSense: A Reproducible Multimodal Emotion Recognition Benchmark with Reliability-Aware Gated Fusion** *Maryam Ali, Mohamed Deriche and Maitha Alghfeli*	
18:00 - 18:15	116	**Which Confidence Interval for Which Metric? A Coverage Study for Medical AI Classification** *Ameera Jaradat, Ahmad Nasayreh, Ayah Bashkami, Ahmad Alshdaifat and Hasan Gharaibeh*	
18:15 - 18:30	77	**Building Overheating Decision Support Using Hybrid Retrieval-Augmented LLMs** *Muhammad Arslan and Saba Munawar*	

Session 2C | Hall 3 - Online | 16:15 - 17:45		
ONLINE SESSION: **AI in Education, LLMs & NLP** ***Session Chair:*** *Dr. Muhammad Arslan (University of the West of England)* ***Co-Chair:*** *Dr. Raja Wasim Ahmad (Ajman University)*		
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**
16:15 - 16:30	79	**A Gamified Learning Platform for Rural Education Using Knowledge Tracing Algorithm** *Ms.Sindhuja S, Kuboja Daniel Mabuba, Nadish R, Balagugan S, Gokulanand M and Nilavan A*
16:30 - 16:45	86	**Retrieval Augmented Generation based Mixed-Reality for Education** *Ahmed M'Etwalli, Mahmoud Khaled, Mario Youssef, Mohammed Refaat, Fouad Ashraf, Mahmoud Abu-Zaid, Mostafa Eslam and Hany Said*
16:45 - 17:00	143	**Addressing Learning Design Challenges in MOOCs Through AI-Augmented Design Strategies** *Sarah Debbek, Wissam Tawileh and Mohammad Al-Smadi*
17:00 - 17:15	162	**"When You Can't Prove It": Programming Educators' Perspectives on the Detection Limits and Policy Gaps of Generative AI in Higher Education** *Marius Maharon, Mohd Fairuz Shiratuddin, Fatuma Namisango, Mostafa Hamadi and Mohammed Kaosar*
17:15 - 17:30	181	**XGenLearn: Explainable Generative AI for Personalized Learning via LLM-Driven Semantic Features** *Lotfi Ezzeddini and Oulaa Hsine*
17:30 - 17:45	151	**TwinAgent: A Digital Twin-Grounded Agentic AI Framework for Safe and Autonomous Code Execution in AI Coding Assistants** *Muhammad Zoraiz Khan, Nuhman Ul Haq, Naima Imtiaz, Zia Ur Rehman, Atta Ur Rehman Khan and Raja Wasim Ahmad*

Session 2D | Hall 4 - Online | 16:15 - 18:15		
ONLINE SESSION: **AI Governance, Business & Digital Transformation** ***Session Chair:*** *Dr. Ghousia Jabeen* ***Co-Chair:*** *Dr. Ammar Rashid (Ajman University)*		
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**
16:15 - 16:30	90	**How AI Is Reshaping Early-Career Transitions in Morocco: Expert Perspectives and a Dual-Track Framework** *Ouissal Chichi and Mohamed Mamad*
16:30 - 16:45	153	**AI-Assisted Risk Register Review: A Simple Approach with Human Control** *Feroz Khan Ismail*
16:45 - 17:00	192	**Human-AI Interaction and Digital Strategy: Exploring Employee Engagement and Disengagement in Public Organization** *Mohammed Qawasmi, Shafiz Mohd Yusof, Taufiq Hail Ghilan Al-Madhagy and Ammar Rashid*
17:00 - 17:15	202	**From Open Data to Intelligent Government: An AI-Enabled OGD+ Framework for Public-Sector Decision-Making** *Ali Albinali*
17:15 - 17:30	207	**When AI, Operators, and Command Disagree: A Dynamic Decision-Authority Framework for Security Control Rooms** *Abdulla Saeed Alhebsi*
17:30 - 17:45	220	**Artificial Intelligence and Psychology: Reviewing Bidirectional Relationships** *Mohamed Abd Elaziz, Youssef Elmeligy, Ahmed Selim and Nermine Mahmoud*
17:45 - 18:00	63	**Behavioural Finance and Investment Decisions in Women-Led Enterprises: Bias-Aware Decision Framework** *Dommati Nirosha, M. Rajyalaxmi and Ghousia Jabeen*
18:00 - 18:15	168	**Suraksha: Pilot Practitioner Agreement Evaluation of an Interpretable Four-Tier Disaster Severity Rubric for Sri Lankan DMC Situation Reports** *Deshan Silva and Yasanthika Mathotaarachchi*

Session 2E | Hall 5 - Online | 16:15 - 18:15		
ONLINE SESSION: **Computer Vision, Robotics & Edge AI** ***Session Chair:*** *Dr. Sofian Kassaymeh (Jadara University)* ***Co-Chair:*** *Prof. Ayman Tawfik (Ajman University)*		
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**
16:15 - 16:30	54	**Integrating Deep Learning in Camel Welfare: A Systematic Review of Welfare Indicators and Animal Behavior Detection Techniqu** *Hiba Moideen, Manar Abu Talib, Nabil Mansour, Shaher Bano Mirza, Ali Bou Nassif, Simon Zerisenay Ghebremeske, Fouad Lamghari and Yaman Afadar*
16:30 - 16:45	74	**A Lightweight KAN-Enhanced Early-Fusion Network for Efficient Remote Sensing Change Detection** *Ledya Safwat, Mohamed Abd Elaziz and Ibrahim Attiya*
16:45 - 17:00	119	**Deep Learning-Based Classification of Recyclable Solid Waste Using Multi-Source Visual Data for Sustainable Environmental Design** *Omar Khaled, Marco Makram, Shaker El-Sappagh and Mohamed Abdelaziz*
17:00 - 17:15	129	**YSV-Net: Hybrid CNN-Transformer with Radar Signature Enhancement for SAR military vehicle Recognition** *Mohamed Elsayed, Mohamed Rady, Aser Mohamed, Mohamed Abd Elaziz and Shaker El-Sappagh*
17:15 - 17:30	185	**HybridPose: A YOLOv11-Based Heatmap Refinement Model for Precise Single-Instance Keypoint Localization** *Hooman Esmailian, Davood Pour Yousefian Barfeh, Jeric Alcala, Mary Jasmin Ang, Rachel Edita Roxas and Val Randolf Madrid*
17:30 - 17:45	243	**Adaptive Audio-Visual Deepfake Detection Using No-Concatenation Gated Fusion and Multi-Frame Sampling** *Majd Badran, Salam Fraihat and M. Deriche*
17:45 - 18:00	155	**Fewer Channels or Better Features? Sensor Representation and Fault Geometry in Wall-Following Robots** *Nada Masood Mirza, Nura Shifa, Adnan Ali, Mohamad Khairi Ishak and Shafiz Affendi Mohd Yusof*
18:00 - 18:15	253	**Real-Time Human Stranding Detection and Alert System in Flooded Regions Using Edge AI Deployement** *Muhammad Taha, Zohaib Mushtaq, Mansoor Qadir, Ayesha Yousaf, Atta Ur Rehman Khan and Shahzad Ali*

Session 2F	Hall 6 - Online	16:15 - 18:15	
ONLINE SESSION: **Smart Cities, Environment & Swarm Robotics** ***Session Chair:*** *Dr. Ali Ben Abbes (Manouba University)* ***Co-Chair:*** *Dr. Khalid Ammar (Ajman University)*			
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**	
16:15 - 16:30	147	**Machine Learning-Based Short-Term Forecasting of Energy Vectors for Microgrid Applications** *Aqsa Tanzim and Arghya Mitra*	
16:30 - 16:45	154	**Merging Changes the Schedule: File-Count Sensitivity in Smart City Stream Scheduling** *Nada Masood Mirza, Nura Shifa, Adnan Ali, Mohamad Khairi Ishak and Khalid Ammar*	
16:45 - 17:00	156	**A Cost-Aware Comparison of Machine-Learning and Deep-Learning Models for Short-Term PM2.5 Forecasting in Smart-City IoT Systems** *Nada Masood Mirza, Adnan Ali, Nura Shifa, Mohamad Khairi Ishak, Shafiz Affendi Mohd Yusof and Khalid Ammar*	
17:00 - 17:15	193	**Zero or Unobserved? Evaluation-Protocol Sensitivity in Short-Horizon Nowcasting of Ephemeral Geosocial Activity** *Mohammed Almukaynizi*	
17:15 - 17:30	221	**Optical Engineering of Asymmetric Silicon Nanowire Solar Cells for Broadband Light Trapping** *Ramy Elbashar, Samah Mabrouk El-Broullesy, Hamdy Abdelhamid, Mohammed Ramadan, Ali Ibrahim, Saad Aboul-Enein, Salah Obayya and Mohamed Farhat*	
17:30 - 17:45	244	**Scalable Geospatial Data Analytics for Multi-Temporal Urban Growth Monitoring in Arid Smart Cities** *Ali Ben Abbes, Ghazi Al-Naymat and Mohammed Azmi Al-Betar*	
17:45 - 18:00	37	**A Swarm Robotic System with Confidence-Based Peer Verification for Crop Disease Monitoring in Precision Agriculture** *Ahmad Dardour and Omar Shalash*	
18:00 - 18:15	40	**PheroSAR: Pheromone-Guided Zone-Partitioned Swarm Coordination for Search-and-Rescue Operations** *Zaid Albadareen and Omar Shalash*	

DAY 2. Thursday, 26 November 2026 - Technical Sessions

Session 3A | Hall 1 | 12:00 - 13:00

IN-PERSON SESSION: **Cybersecurity, Blockchain & Trusted Systems**
Session Chair: Prof. Atta Ur Rehman Khan (Ajman University)
Co-Chair: Dr. Mohammad Aleiadeh (Ajman University)

TIME	PAPER ID	PAPER TITLE / AUTHORS
12:00 - 12:15	107	**Design and Implementation of a Smart Blockchain-Based System for Healthcare Asset Traceability** *Raja Ahmad, Atta Ur Rehman Khan, Ahmed Hassan, Adel Alawi Mohammed Sheikh Ali, Yaser Yasin Habib Albalushi and Rashid Abdullah Khan*
12:15 - 12:30	123	**A Blockchain-Based Framework for Enhancing Trust and Transparency in Automobile Management** *Tanjin Sikder, Raja Wasim Ahmad, Ali Almansoory, Alaa Wafae, Mohammed Bader, Atta ur Rehman Khan and Nuhman Ul Haq*
12:30 - 12:45	179	**Meta-Learning for Efficient Resource Allocation Strategy Selection in Cybersecurity Attack Graphs** *Mohammed Al Eiadeh, Mohammed Al-Betar and Mustafa Abdallah*
12:45 - 13:00	267	**Benchmarking Hash Functions and Password Key Derivation: Cost Model, Platform Effects and Equal-Latency Calibration** *Ahmed Banimustafa, Abdallah Alkhatib, Olla Bulkrock, Asem Omari, Azmi Alazzam and Salam Fraihat*

Session 3B | Hall 2 | 12:00 - 13:00

IN-PERSON SESSION: **Smart Cities, Energy & Environmental Forecasting**
Session Chair: Prof. Hamdy Abdelhamid (Ajman University)
Co-Chair: Dr. Hasan Zidan (Ajman University)

TIME	PAPER ID	PAPER TITLE / AUTHORS
12:00 - 12:15	212	**Optimal Model Mesh Topologies Over Context Graphs** *Théo Fagnoni and Phillip Kingston*
12:15 - 12:30	148	**Resilient Urban Mobility: A Multi-Modal Spatiotemporal Transformer-GNN Pipeline with Gradient-Based Explainability for Real-Time Traffic Congestion Prediction** *Peter Yacoub, Mohamed Malek Kaouach, Mohammed Deriche and Hasan Zidan*
12:30 - 12:45	238	**Machine Learning-Based Adaptive Differential Pressure Setpoint Optimization for Energy-Efficient VFD-Controlled Chilled Water Pumping Systems** *Bara Ali*
12:45 - 13:00	239	**A Pattern-Oriented Taxonomy of Digital Twin Applications in Industrial and Energy Systems** *Alyazyia Ali Almidfa and Concetta Sameraro*

Session 3C | Hall 3 | 12:00 - 12:45

IN-PERSON SESSION: **Clinical AI, Explainability & Health Analytics**
Session Chair: Dr. Mohammad Abbadi (University of Dubai)
Co-Chair: Dr. Shafiz Affendi Mohd Yusof (Ajman University)

TIME	PAPER ID	PAPER TITLE / AUTHORS
12:00 - 12:15	166	**Label Circularity in Public Autism Screening Datasets** *Mohammad Abbadi, Yassine Himeur, Abigail Copiaco, Mohammed A. Ala'anzy and Shadi Atalla*
12:15 - 12:30	262	**Early Sepsis Prediction Under Natural Class Imbalance Using an XGBoost-ANN Ensemble** *Asmaa Ismaeil Maree, Rand Sameer Abuhalimeh and Salma Ziad Alhakeem*
12:30 - 12:45	270	**Explainable Machine Learning for Diabetes Status Assessment Using Classification, Regression, and Patient Subgroup Analysis** *Maryam Ali, Mohamed Deriche and Maitha Alghfeli*

12:45 - 13:00	225	**A Three-Pillar Framework Integrating Adversarial Robustness, XAI Security, and Regulatory Compliance** *Nuha Aburamadan, Aya Al Obaidi and Mehak Khurana*

Session 3D | Hall 4 | 12:00 - 12:45		
IN-PERSON SESSION: **AI in Education & Learning Analytics** ***Session Chair:*** *Dr. Elfadil A. Mohamed (Ajman University)* ***Co-Chair:*** *Dr. Zakarea Al shara (Ajman University)*		
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**
12:00 - 12:15	214	**Closing the Inclusion Gap: Supporting Students of Determination in UAE Higher Education** *Hidaya Boudjadi, Nasma Khalid and Mahmoud Hammad*
12:15 - 12:30	266	**Influence of Feedback Timing on Student Interaction in LMS-Supported Learning: Evidence from Two Jordanian Universities** *Ahmed Banimustafa, Fadi Bani Ahmad, Lama Musallam, Salam Fraihat, Olla Bulkrock and Khalil Barhoum*
12:30 - 12:45	246	**Machine Learning for Student Dropout Prediction: A Comparison of Multiclass, Binary, and Imbalance-Aware Approaches** *Huda Mohammed Bilal, Amnah Jassem, Anood Abubaker and Mohammed Azmi Al-Betar*
12:45 - 13:00	256	**Underwater Image Quality Assessment Using Novel Domain-Specific Features and a Neural Network Regressor** *Mustafa Al Juboori, Muhammad Fahad Nasir, Zayed Esmail Al Aghbari, Farman Ullah and Mobeen Rehman*

Session 4A | Hall 1 - Online | 14:00 - 15:45		
ONLINE SESSION: **Clinical AI & Health Analytics** ***Session Chair:*** *Prof. Qasem Abu Al-Haija (The Jordan University of Science and Technology)* ***Co-Chair:*** *Prof. Muhammad Akmal Chaudary (Ajman University)*		
TIME	**PAPER ID**	**PAPER TITLE / AUTHORS**
14:00 - 14:15	73	**Reliability-Aware Explainable Machine Learning Framework for Early Heart Disease Risk Prediction and Clinical Decision Support** *Koteswara Rao Veginati, Kafila Md and Kudali Prasanthi*
14:15 - 14:30	99	**Explainable Machine Learning for Same-Year Healthcare Expenditure Estimation and High-Cost Risk Classification: Evidence from MEPS 2023** *Koteswara Rao Veginati, Kafila Md and Kudali Prasanthi*
14:30 - 14:45	128	**A Layered Interoperability Framework for Data Exchange in Human Digital Twins** *Aline Hassan and Ayman Kayssi*
14:45 - 15:00	201	**A customized 2D-CNN to access spatiotemporal patterns in EEG-based MDD detection** *Nausheen Ansari, Yusuf Khan, Omar Farooq and Ahmed Imran*
15:00 - 15:15	261	**AI Agents in Drug Design and Discovery: Evolution, Applications, and Future Directions** *Asmaa Yassen, Mohamed Abd Elaziz, Abeer Al-Ghananeem, Reda Abdelhameed and Khaled Darwish*
15:15 - 15:30	26	**Implementation and Comparative Analysis of K-Means, DBSCAN, and Fuzzy C-Means Clustering Algorithms** *Almotaz Al Muntaser, Omer Farooq and Mohammed Azmi Al-Betar*
15:30 - 15:45	271	**Physical Unclonable Functions for Hardware Security: Authentication, Key Generation, and Attack Resistance** *Qasem Abu Al-Haija and Mahmoud Hammad*