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جامعة أبوظبي
Abu Dhabi University



IEEE
United Arab Emirates Section



INNOVATION
&
ENTREPRENEURSHIP

Day 1: 18 April 2026 – Program Overview				
Time	ROOM A (VIRTUAL)			
09:30-10:00	National Anthem			
	Welcome/Opening Speeches			
	Welcome Speech by Patron-in-Chief Prof. Ghassan Aouad (Chancellor, Abu Dhabi University)			
	Welcome Speech by Honorary General Chair Dr. Hamdi Mustafa Sheibani (Dean, College of Engineering, ADU)			
	Opening Speech by General Chair Prof. Montasir Qasymeh (Associate Provost for Research, ADU)			
10:00-10:30	Opening Speech by Conference Chair Prof. Shehzad Ashraf Chaudhry (ADU)			
Plenary Session 1: Keynote Speaker (Dr. Dwarikanath Mahapatra)				
VIRTUAL SESSIONS				
	ROOM A (Virtual)	ROOM B (Virtual)	ROOM C (Virtual)	ROOM D (Virtual)
10:30-12:00	Parallel Session 1A: Workshop on Operational AI Systems: MLOps, Applied Intelligence, and Governance (4)	Parallel Session 1B: Human-in-the-Loop & Collaborative AI Systems (6)	Parallel Session 1C: Cloud-Edge AI & Software-Defined Networking/Brain-Computer Interfaces & Cognitive Robotics (6)	Parallel Session 1D: AI in Autonomous Systems & Intelligent Transportation (7)
12:00-12:15	TEA BREAK			
12:15-13:45	Parallel Session 2A: Smart Grids, Renewable Energy & Power Systems (5)	Parallel Session 2B: Human-in-the-Loop & Collaborative AI Systems (6)	Parallel Session 2C: Cybersecurity, Metaverse & Generative AI Applications (6)	Parallel Session 2D: AI in Autonomous Systems & Intelligent Transportation (7)
13:45-14:00	LUNCH/TEA BREAK			
14:00-15:30	Parallel Session 3A: Smart Grids, Renewable Energy & Power Systems (5)	Parallel Session 3B: Intelligent Systems in Healthcare & Medicine (6)	Parallel Session 3C: Cybersecurity, Metaverse & Generative AI Applications (6)	Parallel Session 3D: AI in Autonomous Systems & Intelligent Transportation (6)
15:30-15:45	TEA BREAK			
15:45-17:45	Parallel Session 4A: Mixed Topics (8)	Parallel Session 4B: Intelligent Systems in Healthcare & Medicine (7)	Parallel Session 4C: Mixed Topics (8)	Parallel Session 4D: Cyber-Physical Security, Blockchain & Human Factors (8)

Day 2: 19 April 2026 – Program Overview				
VIRTUAL SESSIONS				
	ROOM A (Virtual)	ROOM B (Virtual)	ROOM C (Virtual)	ROOM D (Virtual)
09:00-09:30	Plenary Session 2: Keynote Speaker (Dr. Khalid Yahaya)			
09:30-11:15	Parallel Session 5A: Intelligent Systems in Healthcare & Medicine (7)	Parallel Session 5B: Human-Computer Interaction, UX & Immersive Technologies (AR/VR/MR) (7)	Parallel Session 5C: Explainable & Trustworthy AI with Digital Ethics (8)	Parallel Session 5D: Advanced Signal Processing & 6G Intelligent Communications (8)
11:15-11:30	TEA BREAK			
11:30-13:15	Parallel Session 6A: Intelligent Systems in Healthcare & Medicine (8)	Parallel Session 6B: Mixed Topics (7)	Parallel Session 6C: Explainable & Trustworthy AI with Digital Ethics (8)	Parallel Session 6D: Mixed Topics (8)
13:15-13:30	LUNCH/TEA BREAK			
13:30-15:15	Parallel Session 7A: Industry 4.0, Smart Manufacturing & Digital Twins (7)	Parallel Session 7B: Intelligent Control, Multi-Agent & Swarm Systems (7)	Parallel Session 7C: Explainable & Trustworthy AI with Digital Ethics (8)	Parallel Session 7D: Mixed Topics (8)
15:15-15:30	TEA BREAK			
15:30-17:00	Parallel Session 8A: Industry 4.0, Smart Manufacturing & Digital Twins (6)	Parallel Session 8B: Intelligent Control, Multi-Agent & Swarm Systems (7)	Parallel Session 8C: Human-Computer Interaction, UX & Immersive Technologies (AR/VR/MR) (6)	Parallel Session 8D: Distributed & Federated Learning (5)
17:00-17:15	TEA BREAK			
17:15-18:30	Parallel Session 9A: Mixed Topics (4)	Parallel Session 9B: Industry 4.0, Smart Manufacturing & Digital Twins (3)	Parallel Session 9C: Intelligent Systems in Healthcare & Medicine/ Intelligent Control, Multi-Agent & Swarm Systems (3)	Parallel Session 9D: Mixed Topics (5)
CLOSING SESSION - ROOM A (VIRTUAL)				
17:15-17:30	Best Paper Announcement, Closing Remarks by Conference Chairs, Participants' Feedback and Q/A Session			


Day 1: 18 April 2026

PLENARY SESSION 0 & 1


Time	ROOM A (VIRTUAL)
09:30-10:00	National Anthem
	Welcome Speech by Patron-in-Chief Prof. Ghassan Aouad (Chancellor, Abu Dhabi University)
	Welcome Speech by Honorary General Chair Dr. Hamdi Mustafa Sheibani (Dean, College of Engineering, ADU)
	Opening Speech by General Chair Prof. Montasir Qasymeh (Associate Provost for Research, ADU)
10:00-10:30	Opening Speech by Conference Chair Prof. Shehzad Ashraf Chaudhry (ADU)
	Plenary Session 1: Keynote Speaker (Professor Ali Kashif Bashir) Topic: Interpretation of AI methods in medical image analysis

PARALLEL SESSIONS 1

Parallel Session 1A: Workshop on Operational AI Systems: MLOps, Applied Intelligence, and Governance Session Chair: Dr. Heba Ismail, Zayed University, UAE/Workshop Chair Room A


Time	Authors (Presenter)	ID	Title
10:30-12:00	Workshop Chair Talk		
	Aysha Alsulaimani, Asma Alsulaimani, Mourad Elhadef	313	Toward Trustworthy Privacy-Preserving AI: Security, Ethics, and Governance Perspectives
	Salama Alkhoori , Ashraf Khalil, Heba Ismail	352	Operationalizing Generative AI for Cybersecurity Incident Reporting: A Conceptual Operational AI and MLOps Framework for Regulated Healthcare Systems
	Adhari Aldahmani , Heba Ismail	365	A PDPL-Compliant Digital Transformation Framework for Nonprofit Public Institutions: A Case Study on Awqaf UAE
	Satwik Reddy Jambula , Ravikanth Reddy Malyala, Srihari Kumar Pendyala, Rajesh Kumar Butteddi	385	Autonomous Financial Close: Controlled Intent-Based Orchestration for Cross-ERP Accrual Automation
12:00-12:15	TEA BREAK 		

Parallel Session 1B: Human-in-the-Loop & Collaborative AI Systems Session Chair: Dr. Modafar Ati, College of Engineering, Abu Dhabi University, UAE Room B

Time	Authors (Presenter)	ID	Title
10:30-12:00	Daria A. Gashnikova , Ivan D. Sidelnikov, Alla E. Brom	82	Predictive Lifecycle Management of High-Tech Products Using Machine Learning
	Zixin Li , Yasuharu Koike	120	Engaged but Neurally Unprepared: Predictive Quiescence in HiL Automated Driving
	Leonid Ilyinov, Nikolay Gorkunov, Danila Gromozdov, Sargsian Ovannes , Ilya Karpasov, Yuriy Gapanyuk	155	Coupling of input and output signals of electrical equipment using an LLM agent
	Constantine Andoniou	198	The Cheating Crisis That Wasn't: AI, Academic Integrity, and the Evidence Gap
	Jatin Joshi	328	Human-in-the-Loop AI Frameworks for Digital Bill Payment Adoption: Reducing Paper Dependency Through Trustworthy Cognitive Automation
	Chandra Shekhar Pareek	338	Guardrails and Safety Testing Framework for Large Language Models in Insurance Systems: Ensuring Compliance and Risk Mitigation
12:00-12:15	TEA BREAK 		


Parallel Session 1C: Cloud-Edge AI & Software-Defined Networking/Brain-Computer Interfaces & Cognitive Robotics

Session Chair: Dr. Khiati Abdel Ilah Zakaria, College of Engineering, Abu Dhabi University, UAE
Room C

Time	Authors (Presenter)	ID	Title
10:30-12:00	Eduardo Lopez , Cristina Bernad, Pedro Juan Roig, Salvador Alcaraz, Katja Gilly	283	Scientific Workflow Management Systems and Scheduling Strategies in the Edge-Cloud Continuum: A Brief Systematic Review
	Arun Ganapathi, Mahima Gupta	321	Autonomous AI Agents for Self-Healing Cloud Infrastructure: A Survey with Critical Evaluation
	Abraham George	399	Leveraging the NVIDIA Robotics Ecosystem for Phased Physical AI Development
	Ramani Bai V, Ashutosh V M, Abhinav R S, Abiram R , Amrita Sibi	403	A Modular Retrieval-Augmented Architecture for Multilingual Voice-Based Intelligent Assistant
	Mousa Herzallah , Amro Jalad, Hanan Aljaber, Hussain Ujjainwala, Joud Herzallah	408	AI-Powered Neuroadaptive Interfaces: Using Wearable EEG-Based Brain-Computer Interfaces for Structural UI Adaptation
	Ramani Bai V, Nafeesa A S, Paul M Martin, Sona Deyo, Sona Mary Bijoy	478	TinyML-Based Adaptive Cache Optimization for Low-Power Embedded Systems
12:00-12:15	TEA BREAK 		


Parallel Session 1D: AI in Autonomous Systems & Intelligent Transportation

Session Chair: Dr. Prosper Yeng, College of Engineering, Abu Dhabi University, UAE
Room D

Time	Authors (Presenter)	ID	Title
10:30-12:00	Dou Linghan	35	A Lightweight Real-Time RGB-LiDAR Fusion Network for Long-Range 3D Object Detection in Autonomous Driving
	Dou Linghan , Zijian Liu, Oleg Varlamov	36	An Explainable Autonomous Driving Decision-Making Method Based on the Mivar Expert System
	Zizhang Liu, Shengshuo Gong, Олег Олегович Varlamov	47	NRLDRPM-A: Noise-Robust Lightweight Diagnosis Network for Railway Point Machines via Audio Signals
	Lilia Illarionova, Alexey Loktev, Daniil Loktev	76	Modeling the Propagation of Acoustic Disturbances from Motor Vehicles
	Alexandra Volosova, Tongtong Xia	90	Multi-task Scene Object Detection and Trajectory Joint Prediction Model Based on BEVFormer-v2
	Maria Selezneva , Konstantin Neusypin, Anastasiia Surkova	109	Study of the Inertial Navigation System Error Estimation Accuracy for a Spacecraft Re-Entering the Atmosphere
	Azmat Hussain , Muhammad Khurram	397	Benchmarking Navigation Paradigms in GPS-Denied Environments: Insights from Simulated Multi-Modal Sensor Data
12:00-12:15	TEA BREAK 		

PARALLEL SESSIONS 2

Parallel Session 2A: Smart Grids, Renewable Energy & Power Systems Session Chair: Dr. Jawad Yousaf, College of Engineering, Abu Dhabi University, UAE Room A

Time	Authors (Presenter)	ID	Title
12:15-13:45	Anatoly Klochkov, Aleksandra Kichikova , Rustam Khayrullin, Denis Ershov	70	Study of deep-level recharge processes in semiconductors using deep-level optical relaxation spectroscopy and transient deep-level spectroscopy
	Du Linxian , Qiujie Shen, Enkaer Wuerken, Varlamov O.O.	78	Algorithm for Safety Monitoring and Early Warning of Power Production Personnel Based on Mivar Expert System
	Muhammad Arbab Khan, Arash Asrari	91	Coordination-Aware Digital Twin Intelligence for Detecting Retailer-Level False Data Injection Attacks in Electricity Markets
	Sergey Oleynikov , Ivan Petrov, Alexey Molchanov, Ovannes Sargsian, Marina Ponomareva, Yuriy Gapanyuk	157	Visual representation of the power plant network using a metagraph model
	Danila Gromozdov , Ovannes Sargsian, Leonid Ilyinov, Nikita Klimov, Anatoly Nardid, Yuriy Gapanyuk	159	Structured knowledge extraction from power engineering texts using LLM
13:45-14:00	LUNCH/TEA BREAK 		

Parallel Session 2B: Human-in-the-Loop & Collaborative AI Systems Session Chair: Dr. Taimur Hassan, College of Engineering, Abu Dhabi University, UAE Room B

Time	Authors (Presenter)	ID	Title
12:15-13:45	Maria Semenova	356	Industrial implementation of computer vision system for PCBA quality control
	Rani Pasia , Lysa Comia	400	Legal Knowledge Grounding with Retrieval-Augmented Generation: Evaluating LLMs on the Philippine Intellectual Property Code
	Adil Joldić , Nina Bijedić, Dražena Gašpar	418	Behavioral Evidence from Staged Multi-Criteria Disclosure: A Companion Human-Study Analysis of ML Model-Selection Deliberation in Educational QA
	Marlon Hernandis , Isaac Dioses	473	An Efficient Channel Attention-Enhanced Transfer Learning Framework with Progressive Fine-Tuning for Defective Soy Classification
	Isaac Dioses	474	A Hybrid NLP and Explainable Machine Learning Framework for Social-Linguistic Behavior Analysis in Digital Environments
	Exequiel Macapas	479	A Machine Learning and NLP-Based Analysis of AI Tool Usage, Behavioral Patterns, and Sports Psychology Factors Among Criminology Students
13:45-14:00	LUNCH/TEA BREAK 		

Parallel Session 2C: Cybersecurity, Metaverse & Generative AI Applications

Session Chair: Dr. Khalid Mahmood, Graduate School of Intelligent Data Science, National Yunlin University of Science and Technology, Douliu, Taiwan R.O.C

Room C

Time	Authors (Presenter)	ID	Title
12:15-13:45	Marwa Zamzam	124	CyberKahoot: A Gamified Cybersecurity Awareness Platform For Students
	Nelli Makhanenko , Nikita Trufanov, Oleg Kravchenko	139	Machine Learning Methods for Synthetic Speech Detection in the Russian Language
	Khuloud Alketbi , Abid Mehmood	222	An Explainable AI Framework for Malicious Insider Threat Detection Using Random Forest and XGBoost Models on CERT r6.2
	Vipindas Aravindakshan	227	Proactive Defense of Cloud Architectures Against AI-Enabled Advanced Persistent Threats Threat Modeling and Architecture-Level Hardening
	Fatima Mohamed, Hamda Fasila , Rabiah Al-Qudah	255	A Hybrid Data and Model Centric Approach for Network Security Using Deep Learning
	Jonak Bhowmik , Tahsin Ishraque, Ahmed Faizul Haque Dhrubo, Mohammad Abdul Qayum	272	AGENT-CORE: A Self-Correcting Multi-Domain Framework for Agentic Reasoning in 7B-8B Quantized Models
	Mohamad Izani Zainal Abidin	320	Intelligence Without Borders: Empirical Evidence of US–China LLM Convergence and the Ecosystem-Dependent Licensing Gap
13:45-14:00	LUNCH/TEA BREAK 		

Parallel Session 2D: AI in Autonomous Systems & Intelligent Transportation


Session Chair: Dr. Halit Yahya, Istanbul Gelisim University, Turkey

Room D


Time	Authors (Presenter)	ID	Title
12:15-13:45	Shiqi Wang , Hui Lu, Shi Cheng	112	Robustness Assessment for Image Classification Systems to Combined Common Corruptions Based on Decision Boundary Scenarios
	Aarush Naveen , Fakruddin Mohammed, Roohi Banu	161	Sim-to-Real Linear Reinforcement Learning with Hybrid PID Control for Straight-Line Motion on a Low-Cost Robot
	Praveen Pal	184	Agentic AI-Driven Cyber-Physical Defense Framework for Proactive Threat Anticipation in Mission-Critical Networks
	Zain Shahid , Sahibzada Muhammad Ali, Muhammad Zeeshan, Bilal Khan, Zahid Ullah, Giambattista Grusso	192	Machine Learning Enhanced Hybrid Power Flow Modelling for Bidirectional EVs Integration in Smart Grids
	Lingyu Zhang, Linna Li, Seyed Parsa Parvasi, Jasmine Lam	245	A framework of ship-shore communication with the adoption of autonomous shipping
	Sara Ayyoub , Zayna Wasma, Taimur Hassan, Mohammed Ghazal, Jawad Yousaf	285	Multi-Class Object Recognition in Autonomous Driving Using Radar Heatmaps and Lightweight Machine Learning
	Erasmó García, Daniel Cevallos, Franklin Fienco, Miguel Torres, Holger Cevallos, Wilton Agila	388	A Low-Cost Retrofittable Intelligent Battery Sensor for Legacy 12-V Lead-Acid Vehicles with Real-Time SOC/SOH Estimation.
13:45-14:00	LUNCH/TEA BREAK 		

PARALLEL SESSIONS 3


Parallel Session 3A: Smart Grids, Renewable Energy & Power Systems
Session Chair: Dr. Jabar Mahmood, Zhejiang University, Hangzhou, China
Room A

Time	Authors (Presenter)	ID	Title
14:00-15:30	Zhang Tao, Chi Hao Tian, Han Lei, Mehdi Hassan Bhatti, Daud Sibtain , Turab Rafiq	160	Improved Regulation of Nonlinear Gas Turbine in Hybrid Power System using TP-FOPI Strategy
	Abdul Hannan, Yasir Hussain, Kaleem Ullah , Muhammad Sarfraz Khan, Haider Saleem, Babar Azeem	223	Short-term Load Forecasting in Renewable Power Grids using a Hybrid Deep Learning Approach with Attention Mechanism
	Sahibzada Muhammad Ali, Muhammad Hadi, Fnu Usama, Muhammad Sarfraz Khan, Mansoor Iqbal , Shehzad Ahmad	259	From Artificial to Quantum Intelligence: The Next Frontier of Low-Carbon Energy Systems
	Sahibzada Muhammad Ali, Abdul Jabbar Ehsan, Abdur Rahman, Muhammad Sarfraz Khan, Abdullah Khan , Syed Shahzaib Ali	271	Quantum Computing-Enhanced Intelligence for Sustainable Power Systems: Toward Next-Generation Smart Grid Architectures
	Shehzad Ahmad, Marco Faifer, Epoupa Mengou Joseph	277	Techno-Economic Assessment of Hybrid Energy Storage System for Grid Resilience: A Case Study
15:30-15:45	TEA BREAK 		


Parallel Session 3B: Intelligent Systems in Healthcare & Medicine
Session Chair: Dr. Anwar Ghani, Department of Computer Science, School of Engineering and Digital Sciences, Nazarbayev University, Astana, Kazakhstan
Room B

Time	Authors (Presenter)	ID	Title
14:00-15:30	Oleg K. Malkov, Artem V. Arkhipov, Vyacheslav K. Zalygin , Maria Skvortsova	278	Hybrid Forecasting of Occlusal Changes in Deep Bite Correction Based on Digital Setup, 3D Models, and Design Factors
	Gunjan Ramteke	314	HCVTransFuse: A Dual-Task Transformer Architecture for Simultaneous Hepatitis C Stage Classification and Cirrhosis Risk Forecasting from Blood Biomarkers
	Gunjan Ramteke	315	HybridFibroNet: Dual-Branch CNN-Transformer Architecture for Joint Liver Fibrosis Staging and Etiology Classification from B-Mode Ultrasound Images
	Brian Chama	329	Intelligent Systems, Linguistic Bias, and Health Communication in Dubai: A Critical Study of AI Reliability Across Arabic and Gulf Dialects
	Dhanvin Patel	344	PSCAN-AI Object Detection Based Deep Learning Framework for Early Skin Disease Detection and Classification
	Ralph Cristian Corpuz , Lysa Comia	401	A Handbook-Grounded Retrieval-Augmented Generation Chatbot for Family Planning: Comparative Evaluation of Qwen3-4B and Llama-3.1-8B
15:30-15:45	TEA BREAK 		

Parallel Session 3C: Cybersecurity, Metaverse & Generative AI Applications
Room C

Time	Authors (Presenter)	ID	Title
14:00-15:30	Fatima Mohamed , Muhammad Nasir Bhutta	290	AI-Integrated Honeypots for Cloud Security: A Survey and Conceptual Framework
	Prosper Yeng, Abdulhadi Mohammed Haidar, Livinus Nweke, Mattias Gebrie, Mourad Elhadef	362	Evaluating Classical and Deep Learning Approaches for improving Honeypot-Informed Network Intrusion Detection
	Hawraa Mahdi	394	Protecting the privacy of medical images based on hybrid chaotic encryption
	Abdulrahman Ghazwan Aljebori, Mohammad Ahmad Abu Saifan, Said Samir Najib, Ola Marwan Mhanna, Mohamed Elhadad	396	Deep Learning-Powered Intrusion Detection and Prevention System for Web-Based Attacks
	Shany Jophin , Dr Raja Subramanian R	434	An Explainable Hybrid Self-Attention-Enhanced Deep Neural Network for Malware Detection
	Rachelle Mae Ortiz , Fredilyn Calanda	475	ThreatShield: Web-Based Diagnostic Tool for Detecting and Mitigating SQL Vulnerabilities on PHP Login Forms
15:30-15:45	TEA BREAK 		

Parallel Session 3D: AI in Autonomous Systems & Intelligent Transportation
Room D

Time	Authors (Presenter)	ID	Title
14:00-15:30	Nada Musabbeh Alkaabi, Sara Hussam Ayyoub, Syed Omer Gilani, Jawad Yousaf	299	Weighted Ensemble of Deep Architectures for SAR-Based Target Classification
	Wei Yim Yap , Hongxiang Feng	304	A data-driven framework for analysing maritime disruptions
	Yohannis Adamu, Biniam Negash, Shehzad Chaudhry	305	Domain Adaptation of Geospatial Vision Transformers (ViT) for Climate Resilience in the Gulf: A Self-Supervised CV Approach
	Aleema Saleem , Fatima Saud, Inzamam Ul Haq, Dr. Muhammad Khurram	416	An Integrated Vision-Based Automated Detection and Monitoring System for Out-Cabin ADAS in Intelligent Transportation Systems
	Manar Anwer , Zaher Al Aghbari, Saber Elsayed	417	Metaheuristic-Based UAV Charging Scheduling for Wireless Rechargeable Mobile IoT Networks in Disaster Response Applications
	Sahar Ebadinezhad, Aminu Stanley Kazeem	424	Performance Trends in FANET Dynamic Routing: A Systematic Literature Review on Load Balancing
15:30-15:45	TEA BREAK 		

PARALLEL SESSIONS 4

Parallel Session 4A: Mixed Topics

Room A

Time	Authors (Presenter)	ID	Title
15:45-17:45	Srinivas Chippagiri, Sowjanya Kommi, Ravi Kumar Amaresam	267	Performance Engineering Best Practices for Cloud-Native Distributed Systems
	Sahibzada Muhammad Ali, Rayed Suhail Ahmad, Abdul Hannan, Shafia ., Muhammad Sarfraz Khan, Shehzad Ahmad	289	A Deep Learning and Digital Twin Architecture for Intelligent Demand Response in Smart Grids
	Blas Trigueros , Pedro Juan Roig, Salvador Alcaraz, Katja Gilly	293	Analytical Dimensions and Performance Evaluation of the Quantum Approximate Optimization Algorithm
	Pedro Juan Roig , Salvador Alcaraz, Katja Gilly, Cristina Bernad, Blas Trigueros	294	Matrix-based perspective to quantum multiplication
	Pedro Juan Roig , Salvador Alcaraz, Katja Gilly, Cristina Bernad, Blas Trigueros	295	A study on the key aspects of the BB84 protocol
	Hamda Fasla , Abid Mehmood	309	Comparative Analysis of SVM and CNN for Web Application Attack Detection
	Manju George, Sauhard Bhatt	332	Anomaly Detection in Pipeline Metrics: Employing AI to Detect Anomalies in CI/CD Pipeline Metrics
	Isaac Dioses	470	A Texture-Aware Multi-Stage Transfer Learning Framework Integrating 2D Gram-Based Feature Representation with Progressive Fine-Tuning for Guava Disease Management Farm Decision-Making

Parallel Session 4B: Intelligent Systems in Healthcare & Medicine

Room B

Time	Authors (Presenter)	ID	Title
15:45-17:45	Neilsen Kurt Legado , Lysa Comia	406	Structure-Aware Retrieval-Augmented Generation for Regulatory Compliance: A Chatbot for the DOLE OSHS Handbook
	Amro Jalad , Mohammad Abu Zahra, Hanan Aljaber, Mousa Herzallah	411	GuardBand AI: A Wearable Edge-Computing System for Real-Time Fall Detection and Behavioral Anomaly Monitoring in Elderly Patients
	Abdulla Alshehhi , Khaiti Zakaria	415	An Intelligent Biomedical Retrieval Pipeline for Reducing Hallucination Risk in Retrieval Augmented Generation
	Gunjan Ramteke	430	Counterfactual-Guided Biomarker Targeting for Hepatitis C Risk Stratification: A Causal Inference Framework for Treatment Decision Support
	Gunjan Ramteke	431	Style-Decoupled Domain Adaptation for Liver Fibrosis Grading in Multi-Vendor Ultrasound Imaging
	Kim Shaira Casimiro , Risty Acerado	463	A Predictive Model for Dengue Hotspot Identification Using GIS and Exploratory Data Analysis for Barangay-Level Health Decision Making
	Kelvin Kris Gonzales , Isaac Dioses	472	A Channel Attention and Spatial Attention-Driven Deep Learning Framework for Enhanced Lung Disease Classification

**Parallel Session 4C: Mixed Topics
Room C**

Time	Authors (Presenter)	ID	Title
15:45-17:45	Balaji Narasimhalu Mohanam	335	Context Drift Mitigation in Long-Horizon Agentic Workflows: A Memory-Augmented Retrieval Architecture for Enterprise Process Continuity
	Anmol Aggarwal	391	From Prediction to Generation: Decision Criteria for Selecting Traditional ML or Generative AI in Organizations
	Anmol Aggarwal	392	Operationalizing Generative AI in Product Management: A Lifecycle Framework
	Rabia Waheed, Sahibzada Muhammad Ali, Abdul Jabbar Ehsan, Rayed Suhail Ahmad, Abdul Hannan, Abdullah Khan	404	Artificial Intelligence in Renewable Energy Systems: Tackling Intermittency and Storage Challenges
	Sahibzada Muhammad Ali, Abdul Jabbar Ehsan, Aadil Suhail Ahmad, Muhammad Hadi, Muhammad Sarfraz Khan, Kaleem Ullah	407	The Role of Artificial Intelligence in Achieving the United Nations Sustainable Energy Goals
	Sean Henry Gonzaga	410	Classification of Banana Leaf Diseases Through Instance Segmentation using YOLOv8
	Ramani Bai V, Henry Martin, Juliya Poly , Malavika S, Mariya Abraham	413	Intelligent Food Quality Monitoring and Predictive Shelf-Life Estimation Using IoT and Machine Learning
Seetaram Rayarao , Saraswati Mishra, Subhashchandra Madineni, Sahil Yadav, Amit Kumar Meshram	420	A Scalable Knowledge Integration Framework for Large Language Models in Heterogeneous Enterprises	

**Parallel Session 4D: Cyber-Physical Security, Blockchain & Human Factors
Room D**

Time	Authors (Presenter)	ID	Title
15:45-17:45	Krassimira Stoyanova	101	Dynamic Coins Change in UTXO-Based Digital Assets using DEPSO
	Jenan Alshredah	104	Performance and Security Trade-offs Between Symmetric and Asymmetric Cryptography in Cloud Environments
	Elham Alamri, Arwa Alhajri, Azza Alaghbari, Mian Muhammad Waseem Iqbal, Waqas Aman	173	Facilitating Experimental Privacy Research with APT: The Android Privacy Tracker
	S. K. Sajid Anam, Md. Mehenuf Hossain Bhuiyan, Souvik Pramanik, Ahmed Faizul Haque Dhrubo, Khushnur Binte Jahangir, Mohammad Abdul Qayum/ Author	240	Blockchain Meets AI-Powered Oracles and decentralized storage: A Secure and Scalable Framework for Decentralized Credit Scoring
	Naaja Fouzy , Mourad Elhadeif, Hajer Zarouk, Anas Jawish, Kennedy Modugu	275	Cryptocurrency Money Laundering Techniques and AI-Driven Detection Approaches
	Maitha Alsuwaidi, Pallavi Vashisht, Mourad Elhadeif	318	Security Challenges in IoT and Edge Computing: A Layered Analysis of Threat Vectors
	Goncharenko Daria , Oleg Kravchenko, Pavel Mizinov, Dobroslav Egorov, Natalia Konnova	140	Artifact Synthesis in Biometric Robustness Assessment
Mahmood Alsadoun, Abdulaziz Aljalkhaf, Mohammed Aldakheel, Abdulrahman Al Ali, Jawad Ahmad, Ghassen Ben Brahim, Muhammad Shahbaz Khan	233	Evaluating Lightweight Intrusion Detection Models for Resource-Constrained Edge Devices	

Day 2: 19 April 2026

PLENARY SESSION 2


Plenary Session 2: Keynote Speaker Room A

09:00-09:30


Plenary Session 2: Keynote Speaker (Dr. Khalid Yahaya)
Topic: Digital Intelligence and Cybersecurity in Times of Instability

PARALLEL SESSIONS 5

Parallel Session 5A: AI, Neural Networks, Deep Learning and Intelligent Systems Room A


Time	Authors (Presenter)	ID	Title
09:30-11:15	Natalia Korobova, Vladimir Chekmenev , Vasily Stepanov, Alexey Shakurov, Aleksandr Pushkarev	52	Control System Architecture for a Cold Air Therapy Experimental Unit
	Kirill Dmitrievich	60	Development of the ResNet18 model for biometric identification based on palm vein pattern
	Vladislava Kapravchuk, Ilya Bykanov, Albert Ishkildin , Pavel Chibizov, Andrey Briko, Sergey Shchukin	80	Investigation of the dependence of muscle contraction force on morphofunctional changes in forearm tissues
	Pavel Chibizov, Vladislava Kapravchuk, Veronika Mazeina, Andrey Briko	83	Experimental system for transverse ultrasound mapping of anatomical structures of the forearm
	Ekaterina Li , Anna Borde, Eduard Sarmin, Anton Parunin, Oleg Rura, Belikov Nikita	107	Temperature measurement in ultrasonic field using thermistors and thermocouples
	Jawad yousaf , Milia Habib, Moulham Al Boudone, Zaher Merhi	122	AI-Powered Medical Assistant System for Disease Prediction and Clinical Note Structuring
	Paolo Maresca, Iris Panaro	129	A Hierarchical Multi-Agent System for Dynamic Orchestration of Clinical Workflows
11:15-11:30	TEA BREAK 		

Parallel Session 5B: Human-Computer Interaction, UX & Immersive Technologies (AR/VR/MR) Room B

Time	Authors (Presenter)	ID	Title
09:30-11:15	Artem Milevich , Danila Ovchinnikov, Valery Terekhov	40	Acceleration of visualization of point clouds in the PyQt6 application using VBO technology
	Daniil Zelinskii	57	Symmetry Restoration of LiDAR Tree Point Clouds
	Jack Leser , Md Baharul Islam	93	SignGPT: Real-Time ASL Keyword Recognition with LLM-Guided Sentence Completion
	Anna Baeva	96	Dependence of labour productivity of ERP-system users on the cost of implementation of AI-agents into the support service
	Fatimah Al-Shafaey, Najla Al-Khamis, Sarah Alotaibi, Sheikha Al-Zaaqi, Hadeel Al-Dawsari	156	Towards an Intelligent Quran Memorization Framework Using Interactive and Personalization Technologies
	Md Baharul Islam	185	Feasibility Benchmarking of Saliency Detection for Assistive Stereo Video Retargeting in Wearable AR
	Ilham Kachbal, Mohammed Yassine El Abdellaoui, Khadija Arhid, Imrane Errafi, Mousaab El Harmali, Abdelkhalq Samili, Said El Abdellaoui	201	A Five-Stage Pose-Guided Virtual Try-On Framework for Traditional Gulf Abayas with SAM-Refined Segmentation
11:15-11:30	TEA BREAK 		


Parallel Session 5C: Explainable & Trustworthy AI with Digital Ethics

Room C

Time	Authors (Presenter)	ID	Title
09:30-11:15	Qiujiie Shen	26	A Multi-Dimensional Feature Analysis and LLM-Enhanced Similarity Assessment Method For Mivar Decision Models
	Md. Aurongojeb Lishad , Md. Adnan Arafat, Ahmed Faizul Haque Dhrubo, Mohammad Abdul Qayum	55	Explainable Stacking for Bangladesh CPI: Ridge-Meta Ensembles with SHAP/LIME
	Egor Khoroshev	64	Kolmogorov-Arnold Networks: Atomic Basis Implementation
	Effat Amin Khan, Mosammat Shahana Islam, Sanjana Alam, Ahmed Faizul Haque Dhrubo, Mohammad Abdul Qayum	132	Measuring the Impact of Social Media on Human Productivity Using Sentiment, Emotion, and Explainability
	Sergey Barshin, Aleksandr Solopov, Timur Kiribaev , Mikhail Borisochkin, Nikita Efimov, Svetlana Panyukova	137	AI-based Assistant for Studying an Electrical Engineering Course
	Kazi Abdullah Al Hasnaine, Md. Asaduzzaman Sunny, Al Amin, Md. Jalal Abedin, Ahmed Faizul Haque Dhrubo , Mohammad Abdul Qayum	142	Real-Synthetic Artwork Classification with Deep Transfer Learning: Benchmarking and Web Deployment
	Meherin Chowdhury, Akib Sadman Nafi, Fahima Shameem, Sabbir Ahmed Sakil, Ahmed Faizul Haque Dhrubo , Souvik Pramanik, Mohammad Abdul Qayum	165	Comparative Analysis of Transformer Models for Multi-Class Emotion Detection: A Cross-Dataset Study
Anil Midathada, Benson Raj, Chanyalew Belachew	288	AI-Integrated Engineered Soils from Organic and Industrial Waste for Sustainable Land Reclamation in Arid Regions	
11:15-11:30	TEA BREAK 		

Parallel Session 5D: Advanced Signal Processing & 6G Intelligent Communications

Room D

Time	Authors (Presenter)	ID	Title
09:30-11:15	Nikita Zelnitskiy , Victor Suchkov	38	Development of a Moving Target Detection Algorithm for an Automotive Millimeter-Wave Radar Based on a Multi-scatterer Radar Scene Model
	Nikita Zelnitskiy , Victor Suchkov, Ilya Dodenko	39	Algorithm for calculating synthetic aperture radar images of ship targets based on polygonal and multipoint models
	Yury Karakulin	72	Investigation of ultra wideband spiral antenna receiving pattern from a radio source
	Taulan Uzdenov	103	Modeling an online machine learning service based on a queueing system
	Alexander Finoshin, Andrei Glushkov	105	Noise Signal Processing Based on the Generative Model Method
	Vladislav Andrest	179	Automatic Detection of Micro-Relief Archaeological Features in Forested Areas from LiDAR Point Clouds
	Julia Evdokimova, Mohammad Abdallah, Mohammad Nassr, Mohammad Anbar, Hala Hammoud	221	A Hybrid SMI-MWF Approach for Enhanced Sidelobe Cancellation in Radar Systems
Ivan Fedorov , Yaroslav Konovalov	86	Computing Modified Meyer Wavelet Filters Using Newton's Method	
11:15-11:30	TEA BREAK 		

PARALLEL SESSIONS 6

Parallel Session 6A: Intelligent Systems in Healthcare & Medicine

Room A

Time	Authors (Presenter)	ID	Title
11:30-13:15	Milia Habib, Azzam El Haffar , Abdel Rahman Hamzeh, Zaher Merhi	158	High-Performance Brain Tumor Detection in MRI Using YOLOv12s: A Comparative Study
	Laiali Almazaydeh , Laiali Almazaydeh	197	Machine Learning-Based Classification of Fetal Health Using Cardiotocography Data: An H2O and Power BI Approach
	Mohammed Abdul Gaffar, Moatsum Alawida	229	A Diffusion-Hyperchaotic Zero-Watermarking Framework for Secure Medical Image Protection
	Mutaz Abdel Wahed , Nader Mohammad Aljawarneh, Osama Almarashdi, Feras Almarashdi	244	Agentic Automation in Healthcare Finance: A Next-Generation Model for Invoice Processing
	Boran Sekeroglu, Lara Ozturk, Serife Kaba , Ahmet Ilhan, Omid Mirzaei	253	A Comprehensive Comparative Evaluation of Deep Learning Models for Breast Cancer Classification Using Ultrasound Imaging
	Saif Simanta , Md Baharul Islam	256	Technology-Enabled ASD Detection: Modalities, Performance, and Clinical Readiness
	Saif Alhebsi , Rabiah Al-Qudah	268	End-to-End Automated Data-Centric Pipeline with Adaptive Augmentation for Medical Image Classification
	Daniel Cevallos, Ricardo Raúl Carranza Delgado, Michael Anthony Castro Empuño, Holger Ignacio Cevallos Ulloa, Miguel Alberto Torres Rodríguez, Erasmo Israel García Ochoa	428	Design and Experimental Validation of an IIoT-Enabled Predictive Monitoring System for Electric Motors Using Vibration Velocity and Electrical Parameters
13:15-13:30	TEA BREAK /LUNCH BREAK/PRAAYER BREAK		

Parallel Session 6B: Mixed Topics

Room B

Time	Authors (Presenter)	ID	Title
11:30-13:15	Nikita Antsifrov , Konstantin Myshenkov	25	Evaluation of Software Lifecycle Models Based on Project Parameter Metrics
	Sergei Kurakov, Vladimir Samoylov, Dilhan Yilmaz, Grigoriy Tikhomirov , Pavel Kotelnikov	27	On the Application of the Method of Cold Gas-Dynamic Spraying in the Restoration of Monumental Metal Sculpture
	Victor Suchkov, Alexei Perov, Stepan Tseytlin	45	Analysis of Target Classification Algorithms in a Polarimetric Inverse Synthetic Aperture Radar
	Svetlana Sidorova, Sergey Kiryanov , Ekaterina Shcherbak, Anastasia Naumova, Alexey Kouptsov, Ivan Artemyev	46	Unified Neural-Network Model of the Geometry of Multicomponent Nanoscale Coatings and Structures
	Valeria Ivaannikova , Aleksandr Pushkarev, Ivan Burkov, Dmitry Tsiganov, Dmitry Zhidkov	53	Conceptual Design Improvements for a Prototype Decellularization and Freezing System
	Ibrahim Shati , Rashed Marimi, Mohamed Gernaz, Riad Jernz	56	Integrated Green Energy Solutions Within 5G Networks: A Unified Approach to IoT Cybersecurity
	Alexander Finoshin, Timofey Provotorov	106	Filtering of Sine-cosine Signals in the Steering Wheel Angle Processing
13:15-13:30	TEA BREAK /LUNCH BREAK/PRAAYER BREAK		

Parallel Session 6C: Explainable & Trustworthy AI with Digital Ethics

Room C

Time	Authors (Presenter)	ID	Title
11:30-13:15	Eesha Yasser, Shehzad Chaudhry	176	A Schema-Enforced Evaluation Pipeline for LLM-Based Windows Security Log Classification
	Constantine Andoniou	203	404 Meaning Not Found: The Pedagogy of Error in AI-Enhanced Learning
	Asifur Rahman, Rashed Ahammod Bin Azam, Israt Jahan Chowdhury, Nabil Mohammed Nasim Uddin, Souvik Pramanik, Ahmed Faizul Haque Dhrubo , Mohammad Abdul Qayum	219	Comparative Evaluation of Deep Learning Architectures for Underwater Semantic Segmentation Using the SUIM Dataset
	Walid Hossain, Anabil Wahid, Shifa Haque, Ahmed Faizul Haque Dhrubo , Mohammad Abdul Qayum	243	Real-Time Legal Auditing of LLM Interactions Using Retrieval Augmented Small Language Models
	Sahar Ebadinezhad, Olusegun Emmanuel Adeshina	300	The Frontier of Multi-Modal Fusion: A Systematic Review of Knowledge Graph-Guided Generative Augmentation
	Sai Venkata Ganesh Penumarthi	306	AgileAgent-Orch: Governance-Aware Agentic Repository Migration within Scaled Agile AWS Pipelines
	Mohammad Hossain, N. M. Muntasirul Haque, Md Shakhawat Islam Sajib, Ahmed Faizul Haque Dhrubo , Mohammad Abdul Qayum	367	Detection and Classification of Peripheral Blood Cells in Microscopic Images using Deep Learning
	Nithesh gudipuri	453	Enterprise Search Portals: Hybrid RAG at Scale for Compliance-Sensitive Knowledge Work
13:15-13:30	TEA BREAK /LUNCH BREAK/PRAYER BREAK		

Parallel Session 6D: Mixed Topics


Room D

Time	Authors (Presenter)	ID	Title
11:30-13:15	Najah Ghani	58	Building an AI-Driven HR Strategy: A Framework for Organizational Transformation
	Alexey Kovalenko , Konstantin Myshenkov	59	Web Service for University Navigation
	Fernando Tomás Gámez-Cartagena , Pedro Juan Roig, Salvador Alcaraz, Katja Gilly, Cristina Bernad	67	Time Series Forecasting via Machine Learning: A Comparative Perspective on Financial Markets and IP Network Traffic
	Rustam Khayrullin, Mansur Nizhametdinov, Vyacheslav Styazhkin, Mikhail Chernenkiy	68	Probabilistic Analysis Application in Early Design of Multi-Component Technical Systems with Metrological Support
	Alexander Zakutin, Evgenia Yurova , Michael Kosolapov, Lyudmila Shkuratova	73	Evaluation of Measurement Uncertainty for the Complex Effective Reflection Coefficient of Six-port Devices with Millimeter-Wave Instrumentation
	Adil Zaben , Md Baharul Islam	85	Seasonally Robust Thermal Object Detection: A Modality-Aligned Approach
	Anna Syrchina , Alexander Kuleshov	121	On the effect of the discreteness in the automatic control system of a small-sized indicator gyrostabilizer of an optical device on the image stabilization quality
	Amna Naeem, Jawad Ahmad, Muazzam A. Khan, Aizaz Ahmad Khattak, Muhammad Shahbaz Khan	235	Efficient IoT Intrusion Detection with an Improved Attention-Based CNN-BiLSTM Architecture
Nithesh gudipuri	454	ReconGraph: AI-Powered Trade Reconciliation Across Systems with Break Discovery and Auditable Triage	
13:15-13:30	TEA BREAK /LUNCH BREAK/PRAYER BREAK		

PARALLEL SESSIONS 7

Parallel Session 7A: Industry 4.0, Smart Manufacturing & Digital Twins

Room A

Time	Authors (Presenter)	ID	Title
13:30-15:15	Liana Amirkhanyan	43	Comparing machine learning and fuzzy-logic hybrid approaches for defect detection
	Rami Mahmoud , Sergey Gavriushin	44	Fuzzy Logic-Based Predictive Maintenance for Industrial Chillers: System Development and Economic Analysis
	Alexandra Volosova, Maria O. Derevyankina , Victoria A. Korchagina	88	Realization of the danger detector within the framework of the digital twin of the vehicle
	Pavel Aronov , Mikhail Galanin, Aleksandr Rodin	100	Modeling of fuel pellets fracture using discrete crack method
	Vera Meshcheryakova	108	Machining accuracy automated assessment method for the CNC machines
	Daria Parfenova , Alla Brom	119	Forecasting the technological level of industrial production based on machine learning
	Maxim Kopachevsky	130	A reproducible engineering and economic framework for evaluating digital twin projects at the asset level
15:15-15:30	TEA BREAK /LUNCH BREAK/PRAYER BREAK 		


Parallel Session 7B: Intelligent Control, Multi-Agent & Swarm Systems

Room B

Time	Authors (Presenter)	ID	Title
13:30-15:15	Shengshuo Gong	24	A Distributed Mivar Cooperative Decision-Making Model for Multi-Robot Task Allocation in Warehouses
	Daniil Markevich , Dmitry Vidmanov	31	Reinforcement Learning for a Playground on the Aurora Mobile OS: An Example Using the MuJoCo Ant Framework
	Ivan Lobachev , Ivan Nagornyy, Andrey Maslennikov	48	LiDAR measurements simulation for a grid-based map
	Victor Arutin , Alexander Alfimtsev	63	Independent cooperative multi-agent reinforcement learning
	Che Zhang , Valery Terekhov, Yiming Zhai	71	Aligning Global and Local Belief through Communication in Multi-Agent Reinforcement Learning
	Nikolaos Nikolakis, Paolo Catti , Kosmas Alexopoulos	75	Agentic AI for the proactive identification of unforeseen disruptions in manufacturing supply chains
	Alexandra Volosova, Maxim. Sh Musaev, Viktoriya I. Tyugova , Daniil O. Guryanov	89	Using the Physarum polycephalum model to build and optimize transport networks in the Arctic
15:15-15:30	TEA BREAK /LUNCH BREAK/PRAYER BREAK 		


Parallel Session 7C: Explainable & Trustworthy AI with Digital Ethics

Room C

Time	Authors (Presenter)	ID	Title
13:30-15:15	Isaac Dioses	469	Behavioral Analysis and Machine Learning Prediction of AI Adoption Among Students and Faculty in Higher Education
	Tianyu Wu , Weizhi Zhang, Xinxin Zhang	370	Explainable Wafer Defect Detection Using Spatial Graph Neural Networks with GNNExplainer Attribution
	Sutharsan Chiranjeevi Partha Saarathy, Sadia Riaz	382	TRUSTED: A Unified Reference Architecture for Trustworthy AI Deployment in Education
	Ramani Bai V, Jerin Varghese, Rakshit Nair, Sachin Eldho, Sreeraj Rajeev	414	Neethi AI: An AI-Powered Multi-Agent System for Indian Legal Advisory
	Abdulrahman Tamim	451	Head Compensatability Is Architecture-Determined
	John Lloyd Agustin , Gerald Cayabyab, Fredilyn Calanda	461	An NLP-Based Framework for Analyzing Online Reviews to Assess Service Quality in Local Small and Medium Food and Service Businesses
	Ace John Mark Ponce Liwanag , Isaac Dioses	462	A Multi-Modal Explainable AI Framework Integrating NLP Sentiment, Behavioral Feature Engineering, and Supply Chain Dynamics for Agri-Product Switching Analysis Among Filipino Gen Z Students
15:15-15:30	TEA BREAK /LUNCH BREAK/PRAYER BREAK		
			

Parallel Session 7D: Mixed Topics


Room D

Time	Authors (Presenter)	ID	Title
13:30-15:15	Malika Suyunova, Botir Elov	177	Creating and Preparing an Uzbek-language Dataset for Aspect-Based Sentiment Analysis (ABSA)
	Manvirsinh Gohil, Jenil Patel, Rajan Datt, Rajesh Gupta, Sudeep Tanwar	213	Multilingual Agricultural Advisory System Using Fine-Tuned LLM-Driven Recommendation Models
	Yara Jad Allah, Moatsum Alawida, Raned Shalash, Batool Alassem, Dina Alhiyari	230	VocalGuard: A Machine Learning-Based Framework for Real-Time Deepfake Voice Detection in Voice Authentication Systems
	Sawera Sana, Sajid Khawaja, Asad Khan, Muhammad Usman Akram, Arslan Shaukat	247	EdgeEvoFilter: Energy-Quality-Aware Reconfigurable Approximate Gaussian Filtering for Edge AI
	Malyka Awais, Sajid Khawaja, Asad Khan, Haroon Waris, Shahbaz Ahmad	248	Mind the Gaps: A Survey of Reusability and Interconnect Challenges in UVM-Based SoC Verification
	Shkëmb Abdullahu , Arbana Kadriu, Marco Piangerelli	261	A Comparative Evaluation of Multi-Face Recognition Pipelines on a Custom Dataset for IoT-Oriented Applications
	Srihari Kumar Pendyala , Ravikanth Reddy Malyala, Satwik Jambula, Rajesh Kumar Butteddi	266	A Real-Time, High-Throughput Journal Integration Framework for Heterogeneous ERP Systems
	Karizza Felix , Risty Acerado	471	A Predictive Model for Residential Property Valuation Using GIS and Machine Learning
15:15-15:30	TEA BREAK /LUNCH BREAK/PRAYER BREAK		
			

PARALLEL SESSIONS 8


Parallel Session 8A: Industry 4.0, Smart Manufacturing & Digital Twins

Room A

Time	Authors (Presenter)	ID	Title
15:30-17:00	Andrew Kovalev , Anton Kanev	131	Modified voxelization algorithm for obtaining tree crown approximation from single tree LiDAR dense cloud
	Moaaz Al Shehadat, Mahdi Jemmali, Lotfi Hidri	254	Initialization Sensitivity of Simulated Annealing for Identical Parallel-Machine Scheduling with DeJong's Learning Effect
	Prosper Yeng, Abdullah Abouezz, John-Bosco Diekuu, Meriem Bettayeb, Abdulrahman Zakaria Abdulmote, Yumna Salaas	284	Comparative Machine Learning Models for Steel and Direct Reduced Iron Quality Prediction: A Systematic Review
	Balaji Narasimhalu Mohanam	334	BridgeAgent: A Graph-Aware Mediation Framework for Connecting Agentic AI to Legacy Enterprise Systems via Adaptive API Translation
	Sihem Baccari , Mohamed Elhadad	390	Digital Twin Applications for Connected and Autonomous Driving: A Survey
	Valeria Ivlicheva , Kira Kalvinskayte, Ksenia R. Kuzina , Maria Skvortsova	409	DETERMINING THE CONDITION OF CITY GREEN SPACES FROM PHOTOGRAPHS
17:00-17:15	TEA BREAK /LUNCH BREAK/PRAYER BREAK		
			


Parallel Session 8B: Intelligent Control, Multi-Agent & Swarm Systems

Room B

Time	Authors (Presenter)	ID	Title
15:30-17:00	Yuriy Vasilevich , Gennady Ivanovich	114	Method for aggregating task batches based on the principle of trainable weighted optimism
	Dmitrii Peshkov , Vladimir Gurenko	138	A Fuzzy Model for Adaptive Server Load Forecasting
	Bushra Ahmad	175	Radio Beacons Intensity-Based Algorithm for UAV Angular Vibration Estimation and Precision Landing on a Moving Platform
	Tamara Abduljabbar	232	Secure Multi-Agent AI Systems for Smart Cities Using Blockchain-Based Trust and Edge Intelligence
	Taniya Maheshwari , Saksham Jain	280	Fitness-Guided Adaptive Dandelion Optimizer
	Nura Tahir , Jie Zhang, Matthew Armstrong	291	Deep Learning Soft Sensors for Real-Time Estimation of Product Compositions in a Heat-Integrated Distillation Column
	Alexey Zakharevsky	146	Energy-Efficient Adaptive Model Predictive Control for Data Center Cooling
17:00-17:15	TEA BREAK /LUNCH BREAK/PRAYER BREAK		
			


Parallel Session 8C: Human-Computer Interaction, UX & Immersive Technologies (AR/VR/MR)

Room C

Time	Authors (Presenter)	ID	Title
15:30-17:00	Dennis Ray Filho , Md Baharul Islam	218	Jerk-Triggered Bone-Conducted Vibration for VR Cybersickness Mitigation
	Mohammed-Yassine El Abdellaoui , Ilham Kachbal, Ilham Mounir, Said El Abdellaoui	279	Inclusive Virtual Try-On Systems: Geometric and Generative Approaches for Diverse Garments
	Said El Abdellaoui , Ilham Kachbal, Mohammed Yassine El Abdellaoui, Maryem Labrassi, Khadija Arhid	325	Virtual Try-On for Gulf Traditional Garments: A Culturally Aware Deep Learning Framework with Adaptive Mask Refinement
	Arif Mushtaq	363	Human – AI Interaction and User Experience: Integrating HCI Principles into AI System Design Education
	Ganesan Subramanian , Anju Anna Jacob	372	Design and Experimental Evaluation of a Immersive Computer Vision-Based Gesture-Controlled LED Display System
	Anuvinda Balan , Lee Bernard, Md Baharul Islam	393	Augmented Reality for Corporate Sustainability Reporting: An Interactive Carbon Footprint System
17:00-17:15	TEA BREAK /LUNCH BREAK/PRAYER BREAK		
			

Parallel Session 8D: Distributed & Federated Learning

Room D

Time	Authors (Presenter)	ID	Title
15:30-17:00	Marwa Zamzam, Nadeem Elgendi	123	GAIA-FL-AGC: A Differential Privacy and Generative AI Approach to Robust Intrusion Detection in Federated Learning
	Naga Sujitha Vummaneni , Sundeep Bobba	180	Breaking Down Silos: A Federated Approach to Collaborative Threat Detection Using Privacy-Preserving Machine Learning
	Qais El-Dalahmeh , Muhamad Naser Magableh, Jie Li	209	Prompt Driven Legal Compliance Automation Using Large Language Models
	Hitesh Chugani	340	FedRAG-FT: Drift-Aware Federated Fine-Tuning of Foundation Models for Reliable Retrieval-Augmented Generation
	Prosper Yeng, Abdullah Abouezz, John-Bosco Diekuu, Mohamed Elhadad	341	Federated Soft-Voting Intrusion Detection with Random Forest under IID and Non-IID Data
17:00-17:15	TEA BREAK /LUNCH BREAK/PRAYER BREAK		
			

PARALLEL SESSIONS 9

Parallel Session 9A: Mixed Topics

Room A

Time	Authors (Presenter)	ID	Title
17:15-18:30	Ekaterina Gorinchoy, Darya Skvortsova, Anna Kabanova	28	Development of a multi-agent model of an assembly manufacturing system
	Sofia Gerasimova, Yuri Belov	54	Construction of a geoinformation system for classifying terrain cover and assessing the condition of agricultural land
	Esraa Hamawi	118	Analyzing the Effectiveness of Encryption in Protecting Personal Data on Mobile Devices
	Boris Kriuk	11	MorphBoost: Self-Organizing Universal Gradient Boosting with Adaptive Tree Morphing

Parallel Session 9B: Industry 4.0, Smart Manufacturing & Digital Twins

Room B

Time	Authors (Presenter)	ID	Title
17:15-18:30	Ivan Girin, Daria Skvortsova	49	Development of Database Architecture for Assessing the Digital Maturity Index of Industrial Enterprises
	Diana Oganessian, Pavel A. Orlov	113	Review of methods for choosing rational shapes and structures of printed composite power elements of space technology
	Bogdan Barabanov, Denis Frolov, George Kolovato, Mikhail Merkelov, Anastasia Kadyrbaeva	164	Research into Convolution Algorithms

Parallel Session 9C: Intelligent Systems in Healthcare & Medicine/Intelligent Control, Multi-Agent & Swarm Systems

Room C

Time	Authors (Presenter)	ID	Title
17:15-18:30	Darya Skvortsova, Anna Kabanova, Ekaterina Gorinchoy	30	Determination of the optimal location of a small business facility using the agent-based modeling method
	Mikhail Merkelov, Daniil Loktev	74	Analysis of the influence of different arrangements of software receptors in the retinal simulation module layer on the ability of a neural network to recognize images
	Anastasia Rumyantseva	134	Electrical system for intracellular microelectrophoresis of buccal epithelial cells

**Parallel Session 9D: Mixed Topics
Room D**

Time	Authors (Presenter)	ID	Title
17:15-18:30	Sergey Dosk, Ryad Ajamieh	62	Evaluation of Polar Orbit Analysis for Detecting and Classifying Shaft Misalignment
	Vladislav Tarasenko	87	Assessing the Attractiveness of R&D Fields through Analysis of the Multi-ServiceArchitecture of Scientific Knowledge
	Alexander Malakhov, Nikita Minagureev, Victoria Udalova , Valentin Vitrinskiy, Svetlana Loseva	92	Ergonomic, Technical and Organizational Solutions at Workstations for Radioelectronics' Testing and Measuring Equipment Verification Engineer
	Dmitriy Smyslov , Sergey Oleynikov, Kseniya Petrisheva, Maria Koltakova, Yuriy Kaganov, Aleksei Sibirtsev	144	Using Graph Neural Networks for Failure Prediction in Power Grids
	Alexey Kornev, Denis Senkov , Aleksandr Prygunov, Svetlana Loseva, Sergei Lazarenko	29	Holographic Device for Acoustic (Noise) Diagnostics of Construction Machinery

CLOSING SESSION

**Closing Session – Closing Remarks by Conference Chairs
Room A**

17:15-17:30	Best Paper Announcement
	Closing Remarks by Conference Chairs
	Participant Feedback We value your insights and would love to hear about your experience. Please share your feedback on the sessions, speakers, organization, and overall event. Your input is essential in helping us improve future conferences!
	Q/A Session

Thank you very much for your contributions.