9th IFIP International Internet of Things Conference (IFIP IoT 2026)

11 to 12 November 2026

Organized by: College of Computing and Artificial Intelligence (CCAI), UAEU, Al Ain, UAE

Venue: **UAEU Library Theater** and **Male Auditorium – CCAI**
UAEU, Al Ain, UAE

Conference Program

Day 1 [Wednesday] (11 Nov 2026)

Venue	Time				
UAEU Library Theater (CRESCENT - B2001)	8:30 – 10:30 AM	**Registration**			
	10:30 - 10:40 AM	**Welcome Address**			
	10:40 - 10:50 AM	**Address by His Excellency Zaki Anwar Nusseibeh,** Conference Patron and Chancellor of the United Arab Emirates University.			
	10:50 - 11:00 AM	**Address by Prof. David Camacho Fernandez** Dean of the College of Computing and Artificial Intelligence			
	11 AM - 12 PM	**Keynote 1: Prof. Keith Ross** New York University Abu Dhabi, UAE			
	12 PM - 01 PM	**Keynote 2: Dr. Manzoor Khan** Professor of Applied AI at MBZUAI and CTO of Bell Labs Venture Studio, New Jersey, USA			
Male Auditorium -CCAI	01 PM - 02 PM	**Lunch Break**			
	02 PM - 3:30 PM	**Technical Session 1 (TS1)** IoT Systems, Architectures, and Emerging Communications • **Presenters**: Mayher Tyagi/Anang Hudaya Muhamad/Avent Prakasa Rao/Milena Kraeva/Robert Wrembel	**Technical Session 2 (TS2)** Artificial Intelligence and Machine Learning for IoT • **Presenters**: Hessa Hassan Shamal/Gagan P/Jayakrishna Amathi/Rajiv Senapati/Mustaqeem Khan	**Tutorial 1** (AL HUSON-2018) **Dr. Aamna AlShehhi Khalifa University**	**Panel Session** Shabab AI: Empowering Youth to Shape the Future of AI and IoT (CCAI Male Auditorium) **Fatima Al Suwaidi Sara Al Wehaibi Shaimaa Al Kaabi**
	3:30 PM - 4 PM	Coffee Break/Networking			
	4 PM - 5:30 PM	**Technical Session 3 (TS3)** IoT Security and Privacy **Presenters**: Saswat Kumar Ram/Omar Mahmoud Sherif/Arup Sarkar/Sai Sri Harsha Chakravarthula/Khaled Ammar Maarouf	**Technical Session 4 (TS4)** Intelligent Sensing and Data Analytics for Smart IoT **Presenters**: Kiran Kumar Kethineni/Wasim Yasin/Bharath Prasoon N/Deepasikha Mishra/Reem Alhamimi		
	7 PM - 10 PM	**Social Gathering/Networking**			

Day 2 [Thursday] (12 Nov 2026) – Venue: Male Auditorium -CCAI

8:30 - 10 AM	**Registration**		
9.30 AM - 11 AM	**Poster / Demo Session**		
11.00 - 11.30 AM	**Coffee Break/Networking**		
11:30 AM - 1 PM	**Technical Session 5 (TS5)** Intelligent Cloud–Edge–IoT Continuum • **Presenters**: Ritoban Dutta/Pamula Udayaraju/Pamula Udayaraju/Sambit Kumar Mishra/Sambit Kumar Mishra	**Technical Session 6 (TS6)** Sustainable and Trustworthy Edge Intelligence for IoT Ecosystems • **Presenters**: Ruhul Amin/Abir Raza/Belal Al Singlawi/Norziana Jamil/Indira Devi Siripurapu	**Tutorial 2** (CCAI Male Auditorium) **Dr. Norbert Tihanyi TII, Abu Dhabi, UAE**
01 PM - 02 PM	**Lunch Break**		
2 PM - 3:30 PM	**Technical Session 7 (TS7)** Distributed Edge Computing and Adaptive Multi-Tier Frameworks • **Presenters**: Qifan Deng/Amanjot Kaur/Abdulmalik Alwarafy/Mohammed Baziyad	**Technical Session 8 (TS8)** Resilient and Sustainable Edge-AI Architectures for IoT • **Presenters**: Tarek Elsaka/Maida Alamgir/Sambit Kumar Mishra/Sohini Banerje	**Industry Demo** Technical Presentation from MATLAB (CCAI Male Auditorium) **Mohammad Abuzayyad**
3.30 PM - 4 PM	**Coffee Break/Networking**		
4 PM - 5:30 PM	**Technical Session 9 (TS9)** AI-Driven Communication and Networking for 6G and beyond • **Presenters**: Aya Ahmed/Niranjan Kumar Ray/Pradip Kumar Sharma/Maryam Tariq	**Technical Session 10 (TS10)** Intelligent Condition Monitoring and Fault Diagnosis in IoT • **Presenters**: S. Anusha Seles/Mohammed M. Alani/Muneeswari S/Muneeswari S/Sreelatha Chandran	
7 PM to 10 PM	**Gala Dinner & Award Announcement**		

Technical Session Details

Technical Session 1 (TS1): IoT Systems, Architectures, and Emerging Communications

Time: 2:00 PM – 3:30 PM Venue: AL HUSON-2025 Session Chair: Arup Sarkar and Mobeen Ur Rehman

Paper ID	Paper Title	Presenter
56	Low Cost and Efficient IoT based Solution for Smart Bin Management	Mayher Tyagi
166	A Comparative Analysis of Multi-Objective Path Planning and Energy Optimization Strategies for Autonomous Healthcare Delivery Robots	Anang Hudaya Muhamad Amin
141	Smart Hydro-Aquaponic Garden Tower: IoT-Based Automated System	Avent Prakasa Rao
145	A KPI-Driven Evaluation Framework for Lifecycle Governance and Interoperability in Utility Internet of Things (UIoT) Systems	Milena Kraeva
153	On Integrating Robotic Devices at the Edge Layer: NebulaStream-based Architecture	Robert Wrembel

Technical Session 2 (TS2): Artificial Intelligence and Machine Learning for IoT

Time: 2:00 PM – 3:30 PM Venue: AL HUSON-2029 Session Chair: Deepasikha Mishra and Hossien Eldeeb

Paper ID	Paper Title	Presenter
42	A Hybrid Approach to Phishing Email Detection: Leveraging Machine Learning and LLM-Generated Synthetic Data	Hessa Hassan Shamal
81	Genomic Inspired K-Mer Tokenization of Multi-View Forensic Representations for Explainable Deepfake Image Detection	Gagan P
84	Two-Valued Symmetric Circulant Matrices: Applications in Deep Learning	Jayakrishna Amathi
95	A Soft Voting Ensemble Framework with Grid Search Optimization for Diabetes Prediction	Rajiv Senapati
150	Benchmarking Temporal Multi-Channel CNN-LSTM Models for 24-Hour M-Class Solar Flare Forecasting Using SDOBenchmark	Mustaqeem Khan

Technical Session 3 (TS3): IoT Security and Privacy

Time: 4:00 PM – 5:30 PM Venue: AL HUSON-2025 Session Chair: Norziana Jamil

Paper ID	Paper Title	Presenter
46	A Dual-Mode Subthreshold Metastability PUF with Authentication-Controlled Power Gating for Secure Energy-Harvesting IoT Nodes	Saswat Kumar Ram
61	ECA-Guard: Explainable Hybrid Security Verification for IoT–Cloud Applications Using Event–Condition–Action Behavioral Modeling	Omar Mahmoud Sherif
87	SecureGovChain: A Policy-Aware Blockchain Framework for Revocation-Consistent Government Document Verification	Arup Sarkar
89	LLMTrustChain: A Hardware-Rooted Blockchain Framework for Tamper-Evident Verification of LLM Outputs	Sai Sri Harsha Chakravarthula
173	SAWAS: A Self-Adjusting Web Application Security Suite with Autonomous Rule-Based Reasoning for	Khaled Ammar Maarouf

Technical Session 4 (TS4): Intelligent Sensing and Data Analytics for Smart IoT

Time: 4:00 PM – 5:30 PM Venue: AL HUSON-2029 Session Chair: Thangavel Murugan

Paper ID	Paper Title	Presenter
52	Beyond the Training Horizon: A Systematic Architecture Characterization for Intelligent Plant Disease Detection	Kiran Kumar Kethineni
71	Anomaly detection of IoT devices using Isolation Forest algorithm	Wasim Yasin
88	Artificial Intelligence based Data Analysis for the Effectiveness Study of Different Ayurvedic Medication Methods to Prevent Pandemic-Associated Fever Spreading	Bharath Prasoon N
96	AI Surveillance System for Public Safety and Emergency Response	Deepasikha Mishra
158	Immersive Digital Twins for Academic Credential Equivalency and AI-based Hiring with Cybersecurity Considerations: A Systematic Literature Review	Reem Alhamimi

Technical Session 5 (TS5): Intelligent Cloud–Edge–IoT Continuum

Time: 11:30 AM – 1:00 PM Venue: AL HUSON-2018 Session Chair: Rajiv Senapati and Hossien Eldeeb

Paper ID	Paper Title	Presenter
72	APS: Adaptive Priority Scheduler for Pipeline-Aware MLOps Workloads on Kubernetes	Ritoban Dutta
109	ReliSphere: Forecasting Operational Risk and Resilience Dynamics in Financial Data Pipeline Ecosystems	Pamula Udayaraju
110	A Predictive AI-Driven Middleware Performance Optimization and Capacity Planning Framework for High-Availability Healthcare Enterprise Systems	Pamula Udayaraju
112	SAC-PTO: Soft Actor-Critic Predictive Task Offloading for the Internet of Vehicles	Sambit Kumar Mishra
116	AIOps-Enabled Real-Time Resource Management Across the Cloud–Edge–IoT Continuum: An Open-Source VRLI Extension for Apache Cassandra	Sambit Kumar Mishra

Technical Session 6 (TS6): Sustainable and Trustworthy Edge Intelligence for IoT Ecosystems

Time: 11:30 AM – 1:00 PM ***Venue: AL HUSON-2029*** ***Session Chair: Mohamed Amine Ferrag***

Paper ID	**Paper** Title	Presenter
27	Design and Feasibility Evaluation of a TinyML-Driven Intrusion Detection Framework for In-Vehicle Electric Systems	Ruhul Amin
37	FairVFL: Monotonic Fairness Correction for Incentive-Driven Vehicular Federated Learning	Abir Raza
54	Federated Learning-based Intrusion Detection for IoT Systems: A Practical Evaluation	Belal Al Singlawi
78	Enhancing Threat Detection in IoT Systems through Explainable AI: A Comparative Study of Machine Learning and XAI-integrated Models	Norziana Jamil
82	MacroGLU: Explainable and Privacy-Aware Edge Intelligence for Meal-Level Postprandial Glucose Response Modeling	Indira Devi Siripurapu

Technical Session 7 (TS7): Distributed Edge Computing and Adaptive Multi-Tier Frameworks

Time: 2:00 PM – 3:30 PM ***Venue: AL HUSON-2018*** ***Session Chair: Farman Ullah***

Paper ID	**Paper** Title	Presenter
98	Gossamer: Distributed QoS-Aware Request Routing for Stateful LLM Inference at the Edge	Qifan Deng
146	Multi-Agent based Management of Kubernetes Edge Networks	Amanjot Kaur
60	Mirqab: An AI-Enabled IoT Platform for Intelligent Parking Monitoring and Management	Abdulmalik Alwarafy
172	Sparse Visibility Potential Fields: Fast, Trap-Free Planning for Resource-Constrained IoT Robots	Mohammed Baziyad

Technical Session 8 (TS8): Resilient and Sustainable Edge-AI Architectures for IoT

Time: 2:00 PM – 3:30 PM ***Venue: AL HUSON-2029*** ***Session Chair: Sambit Kumar Mishra and Bassem Mokhtar***

Paper ID	**Paper** Title	Presenter
57	Harvest Guard: A Deployable Edge Intelligence Architecture for Smart Agricultural Monitoring and Plant Disease Detection	Tarek Elsaka
59	Vision-Based Fatigue Detection Using Edge Artificial Intelligence, and Internet of Things Technologies	Maida Alamgir
79	Hardware-Aware One-Shot NAS for Lightweight CNNs: A Latency-Constrained Evolutionary Search on Tiny-ImageNet	Sambit Kumar Mishra
127	REFLEX: Stateless Statistical Gating for Zero-Shot Resilience Against Adversarial Feature Corruption in NIDS	Sohini Banerje

Technical Session 9 (TS9): AI-Driven Communication and Networking for 6G and beyond

Time: 4:00 PM – 5:30 PM ***Venue: AL HUSON-2018*** ***Session Chair: Bassem Mokhtar***

Paper ID	**Paper** Title	Presenter
58	A Centralized Network Semantics Ontology for Improved Communication Quality and Reliability in IoT/IoV Environments	Aya Ahmed
100	s ~ t-MPS: Source-to-Target Minimal Path Set Based Reliability Estimation in IIoT Sensor Networks	Niranjan Kumar Ray
117	Exploiting CKKS-based Homomorphic Encryption in Federated Learning: A Hybrid Attack under Adverse Deployment Conditions	Pradip Kumar Sharma
154	A Dynamic BLE PHY Switching Model for Data Collection Optimization in UAV-Assisted WSNs	
160	Multi-Band Rydberg Atomic Receivers for Heterogeneous IoT: A Communication-System Perspective	Maryam Tariq

Technical Session 10 (TS10): Intelligent Condition Monitoring and Fault Diagnosis in IoT

Time: 4:00 PM – 5:30 PM ***Venue: AL HUSON-2029*** ***Session Chair: Mohammed M. Alani***

Paper ID	**Paper** Title	Presenter
122	Unsupervised Anomaly Detection in IoT-Driven Hydroponics Systems Using Isolation Forest: A Multivariate Sensor Monitoring Framework	S. Anusha Seles
148	It's All in the Data: A Review of Internet-of-Things Intrusion Detection Datasets	Mohammed M. Alani
151	A Cognitive Digital Twin Framework for Predictive Academic Risk Intervention Using Temporal Learning Drift	Muneeswari S
152	Drift-Aware Learner Prioritization Under Capacity Constraints: A Data-Driven Framework for Academic Early Intervention	Muneeswari S
155	Lightweight Vision-Based Anomaly Detection for UAV-Enabled Smart Infrastructure Monitoring: A Survey	Sreelatha Chandran