Conference Program

IEEE 3rd International Conference on Artificial Intelligence, Blockchain, and Internet of Things

September 06-07, 2025

Central Michigan University,

Michigan, USA

IEEE International Conference on Artificial Intelligence, Blockchain, and Internet of Things
Central Michigan University (CMU), USA
September 06-07, 2025

DAY-1: In-Person Sessions
Saturday, September 06, 2025
Venue: Courtyard Hotel,
Mount Pleasant, MI, 48858, Room Gamma
All timing follows Eastern Standard Time (EST), UTC-4

09:00 - 12:00	Registration
09:00 - 09:10	Conference Opening
09:10 - 10:00	Keynote: Dr. Nelly Elsayed University of Cincinnati, USA
10:00 - 12:00	In-Person Session – 1
12:00 - 13:00	Lunch Break
13:00 - 15:00	In-Person Session – 2
18:00 - 19:00	Dinner

DAY-2: Online Sessions
Sunday, September 07, 2025
All timing follows Eastern Standard Time (EST), UTC-4

	Google Meet Link-1	Google Meet Link-2	Google Meet Link-2
08:00 – 10:00	Online Session - 3	Online Session - 4	Online Session - 5
10:00 – 12:00	Online Session - 6	Online Session - 7	Online Session - 8
12:00 – 12:45	Women in Computing Empowerment: Challenges and Opportunities in AI, Blockchain, and IoT Google Meet Link		
12:45- 13:15	Keynote: Dr. Syed Attique Shah Birmingham City University, United Kingdom		
13:15 – 13:30	Break		
13:30 – 15:45	Online Session - 9	Online Session - 10	Online Session – 11
15:45 – 18:00	Online Session - 12	Online Session - 13	Online Session - 14

Welcome Message

From General Chairs

Dr. Ahmed Abdelgawad

Dr. Alaa Ali Hameed

Dr. Akhtar Jamil

It is our pleasure to welcome you to the **3rd International Conference on Artificial Intelligence, Blockchain, and Internet of Things (AIBThings 2025)**, jointly organized by **Central Michigan University (USA)** and **Istinye University (Turkey)**, and technically sponsored by the **IEEE Northeast Michigan Section (USA)**. The conference will be held on **September 06–07, 2025**.

This conference brings together researchers, academics, and industry experts to deliberate on the latest advancements and future directions in AI, Blockchain, and IoT. Serving as an interdisciplinary forum, AIBThings 2025 provides an excellent opportunity to share research findings, foster collaborations, and inspire innovative solutions to address the challenges of the modern era.

We extend our best wishes for fruitful discussions and a successful conference experience.

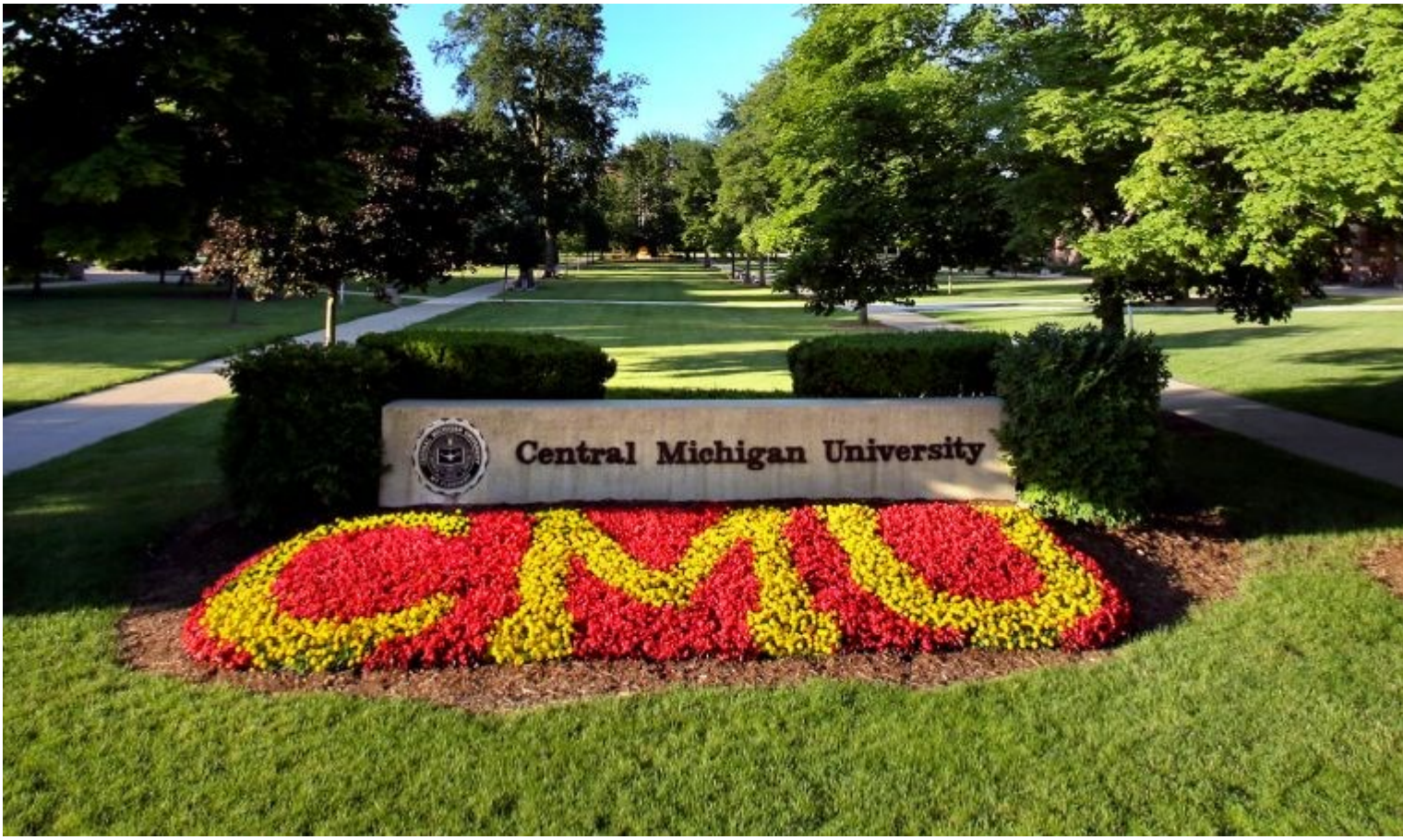
General Chairs,

Ahmed Abdelgawad, PhD

Akhtar Jamil, PhD

Alaa Ali Hameed, PhD

About CMU



Central Michigan University, Located in Mount Pleasant, Michigan, it is a leading public research institution. At CMU, we are committed to providing a comprehensive education that prepares our students for successful careers and lifelong learning. With over 24,000 students enrolled, we offer more than 200 programs across a wide range of academic fields, including business, education, health professions, humanities, social and behavioral sciences, STEM and more.

Every student deserves an inclusive and equitable learning environment, and we strive to make that a reality through our commitment to diversity, equity and inclusion. Explore all that CMU has to offer and discover why we are a top choice for higher education in the Midwest.

Official Website: https://www.cmich.edu

About Istinye University

İstinye University, founded in 2015 by the 21st Century Anatolian Foundation, draws upon the long-standing expertise of the MLP Care Group, which includes Liv Hospital, Medical Park, and VM Medical Park. Located in Istanbul, the university has two main campuses—Topkapı and Vadi İstanbul—and is strongly connected to its own network of hospitals, such as İstinye University Hospital Medical Park Gaziosmanpaşa and Liv Hospital Bahçeşehir. Since its establishment, the university has embraced a student-centered approach, aiming to be both a hub for research and education as well as a provider of accessible, high-quality healthcare services to society.

The university offers a wide spectrum of academic programs through its faculties, including Medicine, Dentistry, Pharmacy, Engineering and Natural Sciences, Fine Arts, Design and Architecture, Health Sciences, Humanities and Social Sciences, Communication, and Economics, Administrative and Social Sciences. Alongside undergraduate education, İstinye University hosts graduate institutes, vocational schools, and multiple research centers.

Official Website: https://www.istinye.edu.tr

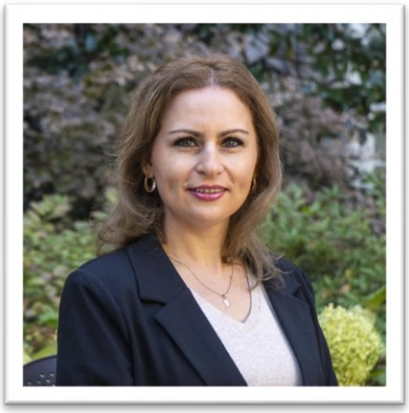
About MRD Society

The **Multidisciplinary Research and Development Society (MRD Society)** is a globally driven academic organization that promotes collaborative research, innovation, and scholarly exchange across a wide spectrum of disciplines. It provides an active forum where academics, researchers, and professionals engage in meaningful dialogue, share expertise, and work together to advance knowledge and practical solutions.

Through organizing international conferences, workshops, symposiums, and training programs, MRD Society builds partnerships with universities and research institutes worldwide. It also supports academic publishing, open access dissemination, and digital innovation to help researchers reach a broader audience and encourage impactful, cross-disciplinary contributions.

Official Website: https://www.mrdsociety.com

Keynote Speakers

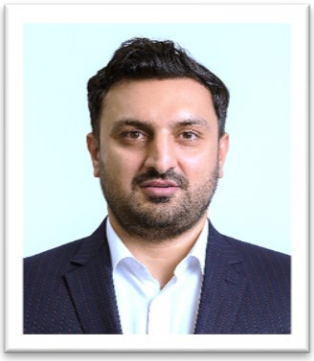


Dr. Nelly Elsayed

University of Cincinnati, USA

Dr. Nelly Elsayed is an Assistant Professor, founder and leader of the Applied Machine Learning and Intelligence (AMLI) Lab at the School of Information Technology at the University of Cincinnati. Her research focuses on Applied AI and Machine Learning for Healthcare Informatics, Cybersecurity, Smart Technologies, Computer Vision, and Business Intelligent Solutions. She received a BS. and MS. degree in Computer Science from Alexandria University and her MS. and Ph.D. from the University of Louisiana at Lafayette. She is an active member of the IEEE Computational Intelligence Society. She has served as a principal and co-principal investigator in different federal, educational, and industrial level-funded research projects. She received the Faculty Incentive Award for Research and Scholarship from the CECH, UC, recognizing her research contributions, journal and conference peer-reviewed publications, and professional presentations in 2021 and 2025. She received the Love of Learning Award from the Honor Society Phi Kappa Phi in 2019, 2021, and 2023. She received the Golden Apple Award for Excellence in Teaching (Graduate Level), CECH. She received the UCAADA Sarah Grant Barber Outstanding Advising Faculty Award for from the University of Cincinnati. She has been an Ambassador for Goodwill of Lafayette, Louisiana, since 2017. Dr. Nelly Elsayed has been nominated for the for the Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM) which is the most prestigious mentoring award in the Nation.

Talk Title: Beyond the Speech: Understanding Behaviors and Mental Health Disorders in the Era of Applied AI



Dr. Syed Attique Shah

Birmingham City University, United Kingdom

Dr. Syed Attique Shah is a Senior Lecturer in Smart Computer Systems at the Department of Computer Science, Birmingham City University (BCU), UK. He also serves as the Course Lead/Director for the MRes in Computing and MSc Advanced Computer Networks at BCU. With over 12 years of experience in teaching and research, he has established a distinguished academic career with expertise in computer science. Prior to joining BCU, he held positions as a Lecturer/Assistant Professor at the Data Systems Group, Institute of Computer Science, University of Tartu, Estonia, and as an Associate Professor and Chairperson of the Department of Computer Science at BUITEMS, Quetta, Pakistan. Dr. Shah completed his Ph.D. at Istanbul Technical University, Turkey, in 2019.

Recognized globally for his academic contributions, Dr. Shah was listed among the top 2% of scientists worldwide in 2024 by Stanford University and Elsevier. He holds the status of Chartered IT Professional (CITP) and is a Fellow of the Higher Education Academy (FHEA). Additionally, he is endorsed by the Royal Society UK as a Global Talent and is an approved Ph.D. supervisor by the Higher Education Commission (HEC) of Pakistan. He is also recognised by the Staff and Educational Development Association (SEDA), UK, for his contributions to supporting learning. His professional affiliations include IEEE Senior Member and Professional Member of the British Computer Society.

Dr. Shah's leadership as Principal Investigator (PI) on two major UK-funded projects highlights his success in securing funding (£100k total) and driving innovation. He is spearheading the Alan Turing Institute/UKRI DTNet+ project (£50,000), establishing AI-enabled digital twin frameworks to model and optimise Positive Energy Districts using real-time data and intelligent decision support. As PI on another EPSRC/UKRI/DfT project (£50,000) under the National Hub for Decarbonised, Adaptable, and Resilient Transport Infrastructures (DARe) Transport Hub, he applied multi-agent systems and federated learning to develop AI strategies enhancing climate resilience in UK transport infrastructure.

Day 1: September 06, 2025

In-Person Session -1
Session Chairs: TBA

ID	Author/Title
90	Evaluating Phi-4: A Benchmark Against Small Language Models in Education Stephane Maillard
101	Safe Robot Handover Using YOLO and Voice Commands or Visual Triggers Amna Ben Abdelkader, Jonathan M. Weaver, Ahlam Al Mohammad, Amna Mazen
109	Integrating Traditional and Diffusion-Based Augmentation for YOLOv8-OBB Wildfire Detection Yali Wang, Debjit Konar, Arghya Kusum Das
123	Machine Learning Framework for Modeling Machining Performance in Turning Operations Qutaiba Altwarah, Duha Alkurdi, Tahmina Islam, Shiva Rasouli, Stanley Okemmiri, Ahmed Abdelgawad
59	Detecting Malware in Portable Executable Files based on Reverse Engineering Ashraf Ahmad, Amal Saif, Eman Elnagi

In-Person Session - 2
Session Chairs: TBA

147	Lightweight Hybrid CNN Model with Explainable AI for Skin Lesion Classification Mahshid Benchari, Magdy Bayoumi, Michael Totaro
149	Precision Feeding Monitoring and Management System for Animal Husbandry Based on Mobile Communication Technology Cheng-Huei Yang, Tsung-Che Wu
154	Multimodal AI System for Alzheimer's Disease Patient Care Sasipriya Vejendla, Marjan Pahlevani, Sonya Hsu
183	CNN-Based Leaf Disease Detection and Real-Time Pesticide Spraying System Using Pi Camera Tahmina Islam, Md Rafiul Kabir, Qutaiba Altwarah, Ahmed Abdelgawad

Day 2: September 07, 2025

Online Session - 3
Session Chairs: TBA

12	AutoEyeFT: A Human-in-the-Loop Continuous Learning Pipeline for Robust Drowsiness Detection via Eye Region Analysis Gaurab Baral, Mithlesh Sah, Aaditya Khanal, Aalok Dhonju, Sushant Shrestha
18	Intelligent Coordination Strategies for Multi-Agent Navigation in Dynamic Networks Naga Lalitha Sree Thatavarthi

20	A Comparative Analysis of Human Activity Recognition Using Machine Learning and Deep Learning Techniques AL Arafath Zihad, Nabila Rahman,Nikoo Salimi,Arafat Alam Jion,Md Shamiul Islam,Sarup Majumder,Shaymal Chakma
27	Addressing Class Imbalance in Malware Detection with Cost-Sensitive Learning: A Framework for Enhanced Performance Isaac Kofi Nti, Owusu Nyarko-Boateng, Esther N. G. Khakata
29	CleanAir - A Scalable IoT-Enabled Real-Time Air Quality Monitoring and Alert System Using Cloud Integration and Artificial Intelligence Shamim Forhad, Toriqul Islam, Mohammad Shah Paran, Minul Khan Rahat, Md Asif Ali Sheak Arju, Md. Towfiq Uz Zaman, Md. Nisharul Hasan
31	Traffic Flow Forecasting Using Deep Learning Models with Stationarity Enhancements at Urban Junctions AL Arafath Zihad,Arafat Alam Jion,Sarup Majumder ,Nabila Rahman,Shaymal Chakma,Sabila Rahman,Md Shamiul Islam, Md Abubakkar
33	Enhancing Emotion Classification with Human-in-the-Loop Verification for Facial Expression Recognition Gaurab Baral, Mithlesh Sah, Aaditya Khanal, Aalok Dhonju, Sushant Shrestha
35	Enhancing Explainability and Performance in Brain Tumor Classification Using CNN and Scattering Networks on MRI Data Krishna Karan Ghantasala
Online Session - 4 Session Chairs: Dr. Ganesh Kumar	
37	Interpretable Machine Learning for Healthcare Risk Prediction Using Sparse Interaction Models Krishna Karan Ghantasala
38	AI-Powered Social Media Surveillance for Real-Time Disease Tracking Krishna Karan Ghantasala
39	Qunatum-based Convolutional Neural Network Model for Efficient Cardiovascular Disease Prediction Hari Suresh Babu Gummadi, Sandeep Kumar Thota, Swathi A, Manisha Guduri, Shivakrishna Deepak V, Harsha Vemuganti
40	Empowering Self-Care: Heart Attack Predictions Using Explainable AI and Machine Learning Narendra Ch, Sundeep Roy Maddineni, Chandana P,Harsha Vardhan Rao V, Sandeep Kumar Thota, Manisha Guduri, Shivakrishna Deepak,
44	Machine Learning-Based Risk Assessment for Pressure Ulcers in Critical Care Patients Kishore Arul
54	Federated Learning For Privacy-Preserving Personalization In Mobile Banking Applications Muthu Selvam
56	Implementing AI-driven Web Accessibility: WCAG 2.2 Features to Improve Usability for Users with Disabilities Muthu Selvam
57	Hybrid Ensemble Learning Framework for Real-Time DDoS Detection and Mitigation in SDN Environments Zakaria Alomari, Hemchand Sadineni, Mohammad Bany Taha, and Zhida Li
Online Session - 5 Session Chairs: TBA	
58	Combining Threat Intelligence with IoT Scanning to Predict Cyber Attacks Jubin Abhishek Soni, Amit Anand, Rajesh Kumar Pandey, Aniket Abhishek Soni
60	Real-Time Detection of Alzheimer's Relatives via Fusion of Two Parallel Deep Convolutional Networks Yasmine M. Tabra, Khansaa Dheyaa Aljafaar

62	Diverse Minds Think Alike: A SHAP-Guided RNN for Stock Price Forecasting with Smart SMA Optimization Mst Halema Begum, Faisal Md Abdur Rahman, Prof. Dr. Md. Abul Kalam Azad, Chanda Rani Debi, Khandaker Mohammad Mohi Uddin, Prof. Dr. Abdul Kadar Muhammad Masum
65	Addressing Gender Imbalance in Cirrhosis Prediction with CTGAN and Transformer-Based Generative Models Divya Saxena, Naphtali Rishe
69	Agentic AI, Automating Plane Crash Insights, Reporting and Recommendation Chevean Richards, Bo Yang
71	SmartScape: An AI-Powered IoT Framework for Sustainable City Infrastructure Optimization Abhinay Ruddarraju
72	AIBThings_72_PrajwalPisal Prajwal Pisal, Srinivas Bhogavalli, Chandrakanth Puligundla, Prateek Jalan, Solomon R Chigurupati,
73	MetaTradeNet: A Meta-Learning Framework for Adaptive Algorithmic Trading Md Tohidul Islam, Abu Sadat Mohammad Shaker, Hritika Barua, Mumtahina Ahmed, Ishtiak Al Mamoon, Kamruddin Nur
Online Session - 6 Session Chairs: TBA	
74	SPX: A Novel LLM-Based Framework for Explaining and Estimating User Story Points Anisha Jadhav, Chandrakanth Puligundla, Solomon R Chigurupati, Prateek Jalan, Srinivas Bhogavalli
75	Blockchain-Enabled Smart Lock System Using IOTA for Enhanced Smart Home Access Control Batool Allan, Yara Rahhal, Salahaldin Abukhalaf, Anastassia Gharib
76	Decentralized Blockchain-Driven Urban Parking System with IOTA for Management, Reservation, and Payment Integration in Smart Cities Hala Ben Ali, Lujain Amro, Salahaldin Abukhalaf, Anastassia Gharib
78	Computational Design of Complex Metal-Organic Frameworks Using Machine Learning Satya S Kokonda
79	Inference Time Feature Injection: A Lightweight Approach for Real-Time Recommendation Freshness Qiang Chen, Venkatesh Ganapati Hegde
80	EcoBeanAI: Predictive Modeling of Climate Effects on Coffee and Cocoa Quality and Yield Filip Dimitrievski, Sara Khan, Kalyani Vaidya, Rasha Gargees
81	Developing a Digital Twin for Lathe Machine Monitoring and Anomaly Detection Amna Mazen, Alex Barber, Jenna DeVries, Nathan Linenberg, Aerial VanAlstine, Kamyab Yazdipaz
82	A Novel Supervised Dimensionality Reduction Method: Integrating PCA with SVM Faezeh Soleimani, Saeed Bidi
Online Session - 7 Session Chairs: TBA	
85	ResolveLLM: A Large Language Model Framework for Intelligent Conflict Detection and Resolution in Collaborative Software Development Venkatesh Velugubantla, Raj Sonani, Nurmyrat Amanmadov, Anusha Chowdary Nagineni, Vamsi Alla
86	Enhancing Ophthalmic Diagnosis with Ensemble Deep Learning: Combining CNNs and Transformers for Multi-Class Eye Disease Classification

	Md Fokrul Islam Khan, Prof. Dr. Abdul Kadar Muhammad Masum, Dr. Md. Maruf Hassan, Miskatul Jannat, Prof. Dr. Dewan Md. Farid
87	Design of an IIoT Edge-Based Sensor and Control Network with Ovation DCS Integration via Modbus TCP Jeremy Perschon, Steve C. Chiu, Hesham A. Sakr, Mostafa M. Fouda, Ahmed F. Ashour
88	MoraleTrack: A Dual-Phase Transformer-Based Framework for Sentiment-Aware Team Morale Forecasting in Agile Project Environments Mohammad Shafat Ahsan, Mst. Moushumi Khatun, Md Al Amin, Sheikh Razia Sultana, Ishtiak Al Mamoon, Kamruddin Nur
89	Multi-Model Urban Road Demand Forecasting: A Graph Neural Network-Based Approach Using National Roadway Statistics Ragini Rani
92	Meta-Fused Deep Learning for Solar Forecasting in Renewable Energy Smart Grids Rasha Gargees
93	Depression Detection using FastText-BiLSTM Model on Social Media Posts Renuka Sharma, Shilpa Gupta, Pitamber Adhikari, Deepika Kumar
96	CodeProphet: A Predictive LLM Based Framework for Proactive Software Development Planning Prajwal Pisal, Neelam Gupta, Rajesh Reddy Ambavaram, Anisha Jadhav, Pravin Kumar Raja Mahendran
Online Session - 8 **Session Chairs: Dr. Marjan Asadinia**	
97	Real-Time Biomechanical Posture Analysis and Avatar-Based Visualization Using Dual-Camera Pose Estimation Nazar abbas, Woei-Nan Bair, Anwar Elhadad
98	GraphFact-Summ: Graph-Augmented Factual Summarization of Hospital Courses from Clinical Notes Masuduzzaman Niloy, MD Tanzimul Islam, Md Shafiq Ullah, Jobayar Alom, Sheikh Razia Sultana, Kamruddin Nur
99	Privacy-Preserving Virtual Mimic Boat Dock Using LoRa-Enabled Ultrasonic Sensors Pierce Alvir, Anwar Elhadad
102	LLM Deployment in Regulated Enterprise AI Systems: A Privacy-Preserving and Compliant Architectural Approach Vishnupriya S Devarajulu
103	Federated Learning-Based Cotton Crop Diseases Md Benozir Hossain, Tim Leonhardt, Ticauris Stokes, Partha Sengupta, Ahmed Sherif, Mohamed Elsersy, Rabab Abdelfattah
108	Predictive Analytics for On-Time Delivery: Designing and Evaluating a Partner Data Exchange Framework Lukesh Singla
110	Customer Churn Modeling Via Multi-Classifier Evaluation Azhaguvelan Thayumanavan
114	A Secure IoT Framework for Sleep Apnea Detection and Analysis Bathini Shravan Kumar, Md Abu Sayeed
Online Session - 9 **Session Chairs: Dr. Junaid Shuja**	
115	Automated Neural Architecture Discover via Evolutionary Optimization Sharan Sukesh
121	AI-Based Early Detection of Migraines Using a Fusion Machine Learning Model Yuliya Daroshka, Md Abu Sayeed
122	Optimized Bio-Inspired Thermal Image Analysis for Mastitis Detection Using YOLOv8 Probabilistic Spiking Networks Arun Kumar Sivaraman, Raja Waseem Anwar, Nafaa Jabeur, Ajmery Sultana, Thirumurugan Shanmugam, Kamalavelu Velayutham

125	A Heat-Wave-Aware Degree-Day Model for Predicting Flowering Time in Chickpea MD Tanzimul Islam, Jobayar Alom, Masuduzzaman Niloy, Md Shafiq Ullah, Sheikh Razia Sultana, Kamruddin Nur
128	NFT-based Secure and Decentralized Energy Marketplace Using Blockchain Gia Ky Huynh, Ajmery Sultana
129	Blockchain-Based Cross-Chain Crowdfunding Platform: A Solution for Student Project Funding Gia Ky Huynh, Rashid Hussain Khokhar, Ajmery Sultana
133	IoT-Based Aircraft Parking System with Pre-Landing Pilot Interaction via Web Interface Antora Dev, Corbin Myers, Kanan R. Chowdhury, Hesham A. Sakr, Mostafa M. Fouda, Ahmed F. Ashour
137	ML-Driven Loan Approval: Evaluating Predictive Models and Real-Time Deployment on the Cloud Abir Saha, Xiao Pu, Junaid Shuja, Ihsan Ali
115	Automated Neural Architecture Discover via Evolutionary Optimization Sharan Sukesh
177	Challenges in Cross-Dataset Generalization of Emotion Recognition Models for Intelligent Monitoring Jermine Valen Dacanay
	Online Session - 10 **Session Chairs: Dr. Deepika Kumar**
143	Brian Intensify: An Adaptive Machine Learning Framework for Auditory EEG Stimulation and Cognitive Enhancement in FXS Zag ElSayed, Grace Westerkam, Jack Yanchen Liu, Ernest Pedapati
144	A Literature Review on Deep Learning for Environmental monitoring and conservation Sharini Jayabal, Leo Ramos, Aysha Al Ketbi, Jorge Roman, Francklin Rivas
150	Low-SNR Robust Modulation Classification on the RadioML Dataset with Deep CNNs Quazi Rian Hasnaine, Isaac Wickard, Hesham A. Sakr, Mostafa M. Fouda, Ahmed F. Ashour
151	An Integrated IoT Smart Home System with Face and Object Detection Using SSD for Real-Time Security and Control on ESP32 Mohamed I. Ismail, Rhana Elsayed, Hesham A. Sakr, Mostafa M. Fouda, Ahmed F. Ashour
153	A Review of Smart Building Management Systems: CPS Applications for Energy-Efficient Monitoring and Control Rhana Elsayed, Mohamed I. Ismail, Ahmed F. Ashour, Hesham A. Sakr, Mohamed I. Ibrahem, Mostafa M. Fouda
155	Anomaly Detection in Photovoltaic Systems Using 1D Convolutional Neural Networks Under Realistic Cyberattack Scenarios Chowdhury Tasnuva Hazera, Mohamed I. Ibrahem, Mostafa M. Fouda
160	Decentralized Microservices-based Framework for Disaster Resource Allocation using Blockchain Abeer Abdel Khaleq, Sagar Gupta
161	Advanced Predictive Modelling for Chronic Kidney Disease Utilizing Multi-Layer AI Techniques and Integrated Data Analysis Priyan Malarvizhi Kumar, Abhignya Jagathpally, Jeeva Selvaraj, Balasubramanian Prabhu kavin
191	EduBot: A Low-Cost Multilingual AI Educational Robot for Inclusive and Scalable Learning Anish Giri, A S M Ahsanul Sarkar Akib,Abu Zahid Md Jalal Uddin,MD Sazibur Rahman,,Abdul Hasib,Monica Khadgi,Mohammad Farhan Ferdous
	Online Session - 11 **Session Chairs: Dr. Kasem Khalil**
163	A Conceptual Framework for Smart Disaster Response Using IoA and IoT for Smart Cities Hossam Kamel
166	Seeing Beyond Frames: Zero-Shot Pedestrian Intention Prediction with Raw Temporal Video and Multimodal Cues Pallavi Zambare,Venkata Nikhil Thanikella,Ying Liu

169	iDLG-IG: an Explainability Guided Model Inversion Attack Samin Dehbashi Sani, Tara Salman
170	Rollups: Efficient Scaling for Ethereum Layer 1 or the Dilution of its Security Stephen S Kirkman, Richard Newman, Christopher Garcia
209	Technological Interventions To Improve Novice Driver Safety: A Review of Current Technologies and Future Directions Ahmad Abutahoun, Mohammed Elhenawy, Sebastien Glaser, Andry Rakotonirainy, Taqwa Al Hadidi
211	Information-Driven Exploration Strategies for Mobile Robot Olfactory Source Tracking in Confined Environments Rishabh Satish Changwani
174	Interpretable Deep Learning Framework for Brain Tumor Classification Using MRI: A CNN and Grad-CAM Approach Alexander Phelps, Marjan Asadinia
175	Learn2Mask: A Predictive Encoding Framework for Energy-Efficient PCM Writes Sullivan Gleason, Prince Kakadiya, Marjan Asadinia
208	Predicting Student Academic Performance Using Deep Learning: A PyTorch-Based Approach Aimina Ali Eli, Abdur Rahman, Naresh Kshetri
	Online Session - 12 **Session Chairs: Dr. Ihsan Ali**
178	CryptoGuard: An AI-Based Cryptojacking Detection Dashboard Prototype Amitabh Chakravorty, Jess Kropczynski, Nelly Elsayed
180	AI-Driven Resilient Control Systems for Critical Infrastructure: Challenges, Solutions, and Future Directions Quazi Rian Hasnaine, Mohamed I. Ibrahem, Mostafa M. Fouda
181	SeizAI: A Secure AI-Based Seizure Detection via Homomorphic EEG Encryption Sunil Gupta, Md Abu Sayeed
185	Adversarial Vulnerabilities in Multi-Stage Deep Learning for Future Caption Prediction Md Ishak, Mohammed Alawad
187	NetMoniAI: An Agentic AI Framework for Network Security & Monitoring Pallavi Zambare, Venkata Nikhil Thanikella, Nikhil Padmanabh Kottur,Sree Akhil Akula,Ying Liu
188	Developing a Predictive Model for Oncology Patient Drop-off in Treatment Pathways Hemanth Dandu
190	Intelligent Multi-Dimensional Reliability Framework for Advanced 3D NAND Flash Memory Ritesh Deshmukh
224	Enhancing Data Transmission Efficiency In Computer Networks Using Hybrid SVM And Deep Neural Networks For Traffic Classification Ibrahim FADHIL, Hayri SEVER
105	Binary classification for perceived quality of headlines and links on worldwide news websites, 2018-2024 Austin McCutcheon, Thiago E. A. de Oliveira, Aleksandr Zheleznov, Chris Brogly
171	Do small language models generate realistic variable-quality fake news headlines? Austin McCutcheon, Chris Brogly
	Online Session - 13 **Session Chairs: Dr. Zag ElSayed**
192	Multi-Domain Deep Reinforcement Learning for Cyber-Physical Systems Security on the WDT Testbed Dataset Hamza Kaddour, Mohamed I. Ibrahem, Zubair Md Fadlullah, Mostafa M. Fouda
70	Towards Transparent and Compliant AI Marketing with a Dataset and Benchmark for Detecting AI Washing Raj Sonani, Venkatesh Velugubantla, Nurmyrat Amanmadov, Anusha Nagineni, Vamsi Alla
193	Hybrid Quantum-Classical Neural Network (HQCNN) for Crypto Price Forecasting Md Shujan Shak, Nabila Rahman, Fuad Mahmud, Ashim Chandra Das, Arifa Akter Eva, Anika Sayeema

194	Multi-Agent Reinforcement Learning for Cooperative Energy Optimization in Smart Buildings Md Shahab Uddin, Ahsan Ahmed, Md Aktarujjaman, Mohammad Moniruzzaman, Mumtahina Ahmed, Anika Sayeema
198	GeezNet: Comparative Study of Deep Architectures for Geez Numeral Recognition Oli Grumessa, Pakeeza Akram
199	A Dual-Module AI Platform for Japanese Language Acquisition: Integrating Conversational Practice and Prosodic Training Nathan Lopez-Yanez, Yasser M. Alginahi
201	YOLOv12-Based Real-Time Detection of Kidney Stones in CT Images: A Deep Learning Approach Tasfia Zaman Totiny, Ujan Biswas, Bayezid Ahsan, Marium Mozahid, Md. Samiul Islam, Israt Jahan
63	Improving Aquaculture Disease Diagnosis with Lightweight ResNeXt Architectures Muhammad Masum, Abdul Kadar, Md Fokrul Islam Khan, Farhad Uddin Mahmud, Maruf Hasan, Md Khaliluzzaman
84	Diabetes Prediction: Leveraging Smartphone Sensor Data in Activity Intensity and Heart Rate Monitoring Using LSTM Networks Muhammad Masum, Abdul Kadar, Md Fokrul Islam Khan, Shafiqul Islam Talukder, Chanda Rani Debi, Khandaker Mohammad Mohi Uddin, Md Maruf Hassan
52	A Lightweight Deep Learning-Based DDoS Attacks Detection for IoT Dawit Dejene Bikila, Zeru Kifle Kebede, Jan Čapek, Petr Hajek
	Online Session - 14 **Session Chairs: Dr. Rasha Gargees**
172	AEGIS: Adaptive Early Detection with Generative Intelligence for Secure Healthcare Mahek Desai, Apoorva Rumale, Marjan Asadinia
173	INSPIRE: Interpretable Sports Planning via Injury-aware Reinforcement Learning Apoorva Rumale, Mahek Desai, Marjan Asadinia
205	Real-Time YOLOv8- Driver Drowsiness Detection Using Raspberry Pi 5 Emmanuel Essel, Fred Lacy, Yasser Ismail
206	Enhanced Gastrointestinal Disease Classification Using Hybrid Deep Learning on Multi-Class Endoscopic Images Ahmed M. Salaheldin, Rahma Sayed Saad, Ahmed El-Bialy, Yasser Ismail, Neven Saleh
217	Efficient Deep Neural Approach for Early Arthritis Detection Kasem Khalil, Tamador Mohaidat, Ahmed Sherif, Magdy Bayoumi
218	LLM-Powered Synthetic Data Modeling for Self-Emulsifying Drug Delivery Systems Samiul Islam Niloy, Md Rahat Kader Khan, Nourhan Mostafa, Eman A. Ashour, Kasem Khalil
219	Secured and Decentralized Diabetes Data Management Using Blockchain and Federated Learning Jerina Eda , Kasem Khalil
220	DatasetAware Evaluation of CNN, LSTM and CNNLSTM Networks for Real-Time sEMG Gesture Recognition Ahmed Omar, Mohamed Abbas, Khalil Yousef, Kasem Khalil
221	Evaluating Lightweight Neural Models for Edge-Based Anomaly Detection: Performance and Efficiency Trade-offs Isaac Kofi Nti, Lee Jo Ning, Clark Alex, Miriyala Sai Manikanta, Murat Ozer