Technical Session Schedule in Detail

Detail Technical Program

All times are in BST (GMT +6:00)

Technical Sessions: Day 1, Sunday, 8 November 2026

TS-1A: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 1		
Venue: C201, CSE		**Time:** 08:45 – 09:45
Session Topic: *Explainable, Fair, Federated, and Ethical AI*		
Session Chairs: **Prof. Muhammad Anwarul Azim**, CU **Dr. Kazi Ashrafuzzaman, CU**		
Moderators: Mr. Abdul Aziz, Lecturer, CSE Md. Badiuzzaman Biplob, Lecturer, CSE		
Invited Talk 08:45 – 09:15		**AI for ALL: Mapping out the Journey from Diversity Errors to Inclusion Excellence** **Dr. Rifat Ara Shams** Postdoctoral Fellow, CSIRO's Data61 / Monash University, Australia *Mode: In-person*
Paper ID	**Time**	**Title of the Paper**
520	09:15 – 09:30	Deep Feature Fusion and Machine Learning for Facial Emotion Recognition: A VGG-Based PCA Approach
579	09:30 – 09:45	Comparative Evaluation of Lightweight YOLO Models for Real-Time Fire and Smoke Detection

TS-1B: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 2		
Venue: C301, CSE		**Time:** 08:45 – 10:00
Session Topic: *Object Detection, Segmentation, and Human-Centric Computer Vision*		
Session Chairs: **Prof. Dr. Mohammed Jahirul Islam**, SUST **Dr. Muhammad Kamal Hossen**, CUET		
Moderators: Mujibur Rahman Maruf, Lecturer, CSE Mr. Md Sadman Hafiz, Lecturer, CSE		
Paper ID	**Time**	**Title of the Paper**
401	08:45 – 09:00	Degradation-Aware Augmentation for Robust Multi-Person 2D Human Pose Estimation Using YOLOv8s-Pose
505	09:00 – 09:15	BAGFD-Net: Multimodal Boundary-Aware Fusion for Crack Segmentation and Geometric Quantification.

550	09:15 – 09:30	Edge-Optimized Small Object Detection for Motorcycle Safety: Simultaneous Identification of Helmet and Number Plate
738	09:30 – 09:45	BattleNet: A Resource-Conscious Multi-Label Vision Pipeline for Military Object Recognition in Miniature-Art Imagery
905	09:45 – 10:00	Quantifying Augmentation-Induced Data Leakage in Pre-Augmented Object Detection Datasets: A Controlled Study on FabricSpotDefect

TS-1C: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 3

Venue: C401, CSE **Time:** 08:45 – 10:00

Session Topic: *Biomedical Image and Signal Analysis for Clinical Diagnosis*

Session Chairs:
Prof. Dr. Md. Shahnur Azad Chowdhury, IIUC
Dr. Mohammad Azam Khan, DIU

Moderators:
Fathema Tuj Johora, Lecturer, CSE
Miskatul Jannat, Lecturer, CSE

Paper ID	Time	Title of the Paper
140	08:45 – 09:00	Deep Learning Based Ranked Ensemble Framework for Multiclass Alzheimer's Disease Classification
396	09:00 – 09:15	Few-Shot Based Lung Cancer Classification from CT Images via Entropy-Guided Multi-Stream Embeddings and Siamese Networks
571	09:15 – 09:30	Multimodal Deep Learning Approach for Multi-Class Oral Disease Detection and Classification
573	09:30 – 09:45	LCP-Net: Enhancing Prototypical Networks with Lesion Consistency Learning for Few-Shot Retinal Disease Classification
889	09:45 – 10:00	EzOpNet: A Lightweight Convolutional Neural Network Architecture for Automated Pneumonia Classification in Chest X-ray Images

TS-1D: Data Science, NLP, and Software Systems – 1

Venue: C402, CSE **Time:** 08:45 – 10:00

Session Topic: *Natural Language Processing; Large Language Models, Retrieval-Augmented Generation, and Conversational AI*

Session Chairs:
Dr. Hadaate Ullah, VC (Acting), Dean, FSET, USTC
Prof. Dr. Mahfuzul Hoq Chowdhury, CUET

Moderators:
Ms. Mysha Sarin Kabisha, Lecturer, CSE
Mrs. Ayesha Julekha, Lecturer, CSE

Paper ID	Time	Title of the Paper
121	08:45 – 09:00	KothonBERT: A Focal-Loss Ensemble Based Framework for Chittagonian, Sylheti, and Standard Bangla Dialect Classification
250	09:00 – 09:15	An Empirical Study of Chunk Size and Overlap in Cybersecurity Retrieval-Augmented Generation Systems
268	09:15 – 09:30	Zero-Shot and Few-Shot Learning for Rare Disease Text Classification: A Comparative Study Against Supervised Fine-Tuning

310	09:30 – 09:45	Layer Optimization Leveraging CrossCoT-QLoRA-Qwen3 Framework with LIME Explainability for Multilingual Disentangling Content and Formal Reasoning in LLMs
864	09:45 – 10:00	A Machine Learning Pipeline for ESG Pillar Attribution: From Prediction to Causal Validation

TS-1E: Data Science, NLP, and Software Systems – 2

Venue: C501, CSE **Time:** 08:45 – 10:00

Session Topic: *Natural Language Processing and Data Analytics*

Session Chairs:
Dr. M. Jamshed Alam Patwary, CU
Dr. Tanjim Mahmud, RMSTU

Moderators:
Farzana Tasnim, CSE
Subrina Akter, CSE

Paper ID	Time	Title of the Paper
70	08:45 – 09:00	A Lightweight and Explainable Multimodal Deep Learning Framework for Bangla Disaster Classification
125	09:00 – 09:15	BongoBarta: A GRU-Attention Model with FastText Embeddings for Bengali News Headline Classification
157	09:15 – 09:30	Probabilistic Forecasting of Safety Car Deployment in Formula 1 using Event-Stratified Machine Learning
390	09:30 – 09:45	Bangladesh's Uneven Urban Warming: A National-Scale Land Surface Temperature Study Using Explainable Machine Learning
693	09:45 – 10:00	Rethinking Architectural Complexity in Multimodal Learning Analytics: A Lightweight Sequence Model Matches Deeper Fusion Networks for Student Performance Prediction

TS-1F: Communication and Computer Networks – 1

Venue: R422, ETE **Time:** 08:45 – 10:05

Session Topic: *Computer, Wireless and Fiber Optic Networks*

Session Chairs:
Dr. Touhidul Alam, RMSTU
Dr. Md. Ismail Hoque, IIUC

Moderators:
Mr. Mohammad Woli Ullah, Assistant Prof, ETE
Mr. Ahmad, Lecturer, ETE

Invited Talk 08:45 – 09:05		**Experimental Investigation on Miniaturized MIMO Antennas for Sub-6 GHz 5G Systems** **Dr. Khaleda Ali** Associate Professor, Department of EEE, University of Dhaka; WIE Coordinator, IEEE APS-MTTS Bangladesh Joint Chapter *Mode: In-Person*
Paper ID	**Time**	**Title of the Paper**
225	09:05 – 09:20	Design of an L-Slotted Circular Patch Antenna for Multiband Application

601	09:20 – 09:35	HARP-TS: Confidence-Driven Two-Timescale Parameter Adaptation for ACO Routing in Hierarchical Vehicular Delivery Networks
647	09:35 – 09:50	AI-Assisted Fair Resource Allocation and Interference Management in Energy-Efficient Angle-Domain SWIPT MIMO Systems
787	09:50 – 10:05	Polarization Insensitive Fourfold Symmetric Hybrid Circular-Square Split-Ring Shaped Metamaterial Absorber for Sensing Application

Plenary Session 1: Day 1, Sunday, 8 November 2026

Venue: IIUC Auditorium **Time:** 14:15 – 16:15

Session Chairs:
Prof. Dr. Mohammed Jahirul Islam, SUST
Prof. Dr. Md. Azad Hossain, CUET

Moderators:
Dr. Saifur Rahman, Assistant Professor, CSE
Md. Mostafa Amir Faisal, Assistant Professor, ETE

Time	Name of Keynote Speaker	Topic of Speech
K1 14:15 – 14:55	**Prof. Dr. Sudan Jha, SMIEEE** Professor, Department of Computer Science & Engineering, Kathmandu University, Nepal	**AI-Augmented Research: Foundations of Efficient Architecture & Real-World Systems** *Mode: In-Person*
K2 14:55 – 15:35	**Prof. Mohamed-Slim Alouini, FIEEE** Distinguished Professor, Electrical and Computer Engineering, King Abdullah University of Science and Technology (KAUST), Saudi Arabia	**Tapping into the full potential of the Stratosphere** *Mode: Online*
K3 15:35 – 16:15	**Dr. Azni Haslizan Binti Ab Halim** Associate Professor; Deputy Dean (Research and Innovation), Faculty of Science and Technology, Universiti Sains Islam Malaysia (USIM)	**Securing the Post-Quantum Internet: An Adaptive Hybrid Certificate-Based Protocol for TLS and PKI** *Mode: In-person*

TS-2A: Power and Green Energy System – 1

Venue: Online (Zoom Room 1) **Time:** 18:30 – 19:45

Session Topic: *Advanced Control, Smart Grid and Renewable Energy; Robotics and Automation*

Session Chairs:
Dr. Mohammad Tawhidul Alam, Professor, EEE, AIUB
Dr Asim Ullah Nabil, Associate Prof and Chairman, EEE, DIU
Dr Md. Yasir Arafat, Associate Professor, Dept of EEE, IIUC

Moderators:
Md. Rasheduzzaman, Associate Professor, EEE
Engr. Riazul Islam, Lecturer, EEE

Paper ID	Time	Title of the Paper
305	18:30 – 18:45	A Solar-Powered Robot for Evaluating Body Temperature and Spraying Disinfectant: A First Line of Defense against Airborne Pathogens
496	18:45 – 19:00	Optimal Battery Sizing for a Grid-Connected Residential Rooftop PV System: A HOMER-Based Techno-Economic Study in Savar, Dhaka
671	19:00 – 19:15	Advanced IoT-Driven Distribution Transformer Monitoring System Using Multi-Sensor Fault Analysis and Automatic Protection

673	19:15 – 19:30	Group-Disjoint and Conformal Evaluation of Surrogates for Synthetic High-Level Radioactive Waste Disposal Indices
880	19:30 – 19:45	Techno-Economic and Ecological Feasibility of a Grid-Coupled Rooftop Solar PV System for HSIA Third Terminal, Bangladesh: A Tilt Angle Optimization Approach

TS-2B: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 4

Venue: Online (Zoom Room 2) **Time:** 18:30 – 19:45

Session Topic: *Computer Vision for Agriculture and Food Security*

Session Chairs:
Prof. Dr. Md. Ashraful Islam, MIST
Prof. Dr. Md. Shakowat Zaman Sarker, UU

Moderators:
Mr. Md Sadman Hafiz, Lecturer, CSE
Md. Badiuzzaman Biplob, Lecturer, CSE

Paper ID	Time	Title of the Paper
26	18:30 – 18:45	SpectralWhispers: Unmasking AI-Generated Imagery Through Frequency-Domain Fingerprints
104	18:45 – 19:00	Explainable Ensemble Learning for Potato and Mango Leaf Disease Classification Using Lightweight and Transfer Learning Models
587	19:00 – 19:15	BanglaShakNet: Fine-Grained Classification of Bangladeshi Leafy Vegetables Using Transfer Learning
626	19:15 – 19:30	MangoLens: An XAI-Powered Real-Time Edge Application Using EfficientNet-B0 for Offline Mango Variety Identification
806	19:30 – 19:45	Explainable Multi-Head Deep Learning Framework with Soft-Voting Ensemble for Multi-Crop Nitrogen Deficiency Detection

TS-2C: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 5

Venue: Online (Zoom Room 3) **Time:** 18:30 – 20:00

Session Topic: *Deep Learning for Cancer and Tumor Image Analysis*

Session Chairs:
Prof. Dr. Golam Rabiul Alam, BRAC
Dr. Md. Khaliluzzaman, IIUC

Moderators:
Miskatul Jannat, Lecturer, CSE
Asmaul Hosna Sadika, Lecturer, CSE

Invited Talk 18:30 – 19:00		**Artificial Intelligence in Critical Infrastructure: Insights from a Norwegian Wastewater Treatment Case** **Dr. Zia Uddin, SMIEEE** Senior Research Scientist, Human Computer Interaction Group, Sustainable Communication Technologies Department, SINTEF Digital, Oslo, Norway *Mode: Online*
Paper ID	**Time**	**Title of the Paper**
214	19:00 – 19:15	An Explainable ConvNeXt-CBAM Framework for Multi-Class Skin Lesion Classification and Monkeypox Detection

260	19:15 – 19:30	DeepFuseALL: Adaptive Multi-scale Feature Fusion with Coordinate and Self-Attention Mechanisms for the Classification of Acute Lymphoblastic Leukemia
372	19:30 – 19:45	Normalization-Based Architectural Harmonization for Robust Federated Brain Tumor Segmentation under Preprocessing Heterogeneity
530	19:45 – 20:00	Effect of Prompt Length on AI Response Quality: An Evidential Reasoning Approach

TS-2D: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 6		
Venue: Online (Zoom Room 4)		**Time:** 18:30 – 19:30
Session Topic: *Quantum Computing, Quantum Algorithms, and Quantum Machine Learning*		
Session Chairs: **Prof. Dr. Taskeed Jabid**, EWU **Prof. Dr. Muhammad Abul Hasan**, GUB		
Moderators: Mohammmad Sakif Ibn Yousuf, Lecturer, CSE Mohammod Sazid Zaman Khan, Assistant Professor, CSE		
Invited Talk 18:30 – 19:00		**Beyond Generative AI: The Rise of Agentic AI and Context-Aware Intelligent Systems** **Prof. Dr. Hafiz Mahfooz Ul Haque** Department of Software Engineering, Faculty of Information Technology & Computer Science, University of Central Punjab, Lahore, Pakistan *Mode: Online*
Paper ID	**Time**	**Title of the Paper**
120	19:00 – 19:15	QRSafeXAi: Quantum Machine Learning for Malicious QR Code Detection with Explainable Classical Benchmarking
912	19:15 – 19:30	A Hybrid Quantum Graph Neural Network with Adjacency Masked Quantum Self Attention

TS-2E: Data Science, NLP, and Software Systems – 3		
Venue: Online (Zoom Room 5)		**Time:** 18:30 – 19:45
Session Topic: *Explainable Machine Learning for Clinical Decision Support and Cybersecurity*		
Session Chairs: **Prof. Dr. Mahfuzul Hoq Chowdhury**, CUET **Dr. Mohammad Kamal Hossain Foraji**, DIU		
Moderators: Tanvir Ahammed Shawon, Lecturer, CSE Mohammad Nazmul Islam, Assistant Professor, PHAR		
Invited Talk 18:30 – 19:00		**Predicting the Unpredictable: Computational Approaches to Tuberculosis Drug Safety** **Dr. Yuslina Zakaria** Associate Professor, Department of Clinical Pharmacy, Faculty of Pharmacy, Universiti Teknologi MARA (UiTM), Selangor, Malaysia *Mode: Online*
Paper ID	**Time**	**Title of the Paper**

205	19:00 – 19:15	Confidence-Aware Self-Training for Coronary Heart Disease Risk Prediction Under Label Scarcity and Class Imbalance
269	19:15 – 19:30	Two-Stage Hybrid Feature Selection for Multiclass Intrusion Detection Using Optimized mRMR and Alpha-Guided Binary GWO
663	19:30 – 19:45	A Privacy-preserving Personalized Federated Learning Model for In-Hospital Mortality Prediction in Hypotensive ICU Patients Using Clinical Time-Series Data

TS-2F: Internet of Things (IoT), Smart Connectivity, and Security – 1

Venue: Online (Zoom Room 6) **Time:** 18:30 – 19:45

Session Topic: *IoT Architecture, Sensor Networks and Embedded Systems; AI-Driven IoT, Blockchain and Data Analytics*

Session Chairs:
Dr. Shahid Md. Asif Iqbal, Dean, FE, Premier University
Dr. Md. Sajjatul Islam, Associate Professor & Head, Department of CSE, CIU
Prof Razu Ahmed, Dean, FSE, IIUC

Moderators:
Md. Abdullah Al Masud, Lecturer, CCE
Md. Hasan Mia, CCE

Paper ID	Time	Title of the Paper
198	18:30 – 18:45	An Explainable Ensemble Learning Framework for Static Malware Detection Using PE Features
230	18:45 – 19:00	A Crop and Fertilizer Recommendation System Using IoT and Machine Learning
538	19:00 – 19:15	An Adaptive Congestion-Aware Routing Framework Integrating EWMA-Based Queue Estimation and Dynamic Load Balancing
575	19:15 – 19:30	Packet Perturbation-Based Evasion Attacks from Network to CAN Bus in Connected Vehicles
576	19:30 – 19:45	EA-FedProtoIDS: Energy-Aware Federated Prototype Learning for Heterogeneous and Zero-Day IoMT Intrusion Detection

Technical Sessions: Day 2, Monday, 9 November 2026

Plenary Session 2: Day 2, Monday, 9 November 2026		
Venue: IIUC Auditorium		**Time:** 08:45 – 10:45
Session Chairs: **Prof. Dr. Mohammad Osiur Rahman, CU** **Prof. Mohammed Shamsul Alam, IIUC**		
Moderators: Dr. Saifuddin, CCE Engr. Sk Md. Golam Mostafa, Associate Professor, EEE		
Time	**Name of Keynote Speaker**	**Topic of Speech**
K4 08:45 – 09:25	**Prof. Dr. A.K.M. Azharul Islam, FInstP, CPhys, FBAS, ISESCO Laureate** Professor Emeritus; Former Vice-Chancellor, International Islamic University Chittagong; Senior Grade Professor of Physics (Retd.), Rajshahi University	**MXenes as Transformative Nanostructures for Healthcare & Sustainable Processes** *Mode: In-person*
K5 09:25 – 10:05	**Professor Tek Tjing Lie, SMIEEE** Department of Electrical and Computer Engineering, Auckland University of Technology, New Zealand	**Artificial Intelligence Applications in Power Systems** *Mode: Online*
K6 10:05 – 10:45	**Prof. Dr. Shaowei Wang** Distinguished Professor, State Key Laboratory of Precision Spectroscopy Science and Technology, East China Normal University, Shanghai, China	**Research on thin-film-based micro-nano photonic devices** *Mode: Online*

TS-3A: Electronics, Materials Science, VLSI and Real Time Systems – 1		
Venue: R323, EEE		**Time:** 11:00 – 12:15
Session Topic: *Perovskite and Thin-Film Solar Cells (SCAPS-1D Simulation)*		
Session Chairs: **Prof Dr. Muhibul Haque Bhuyan**, Dept of EEE, AIUB **Prof. Dr. Mohammad Osiur Rahman, CU**		
Moderators: Engr. Riazul Islam, Lecturer, EEE Engr. Mahi Rashid Chowdhury, Lecturer, EEE		
Invited Talk 11:00 – 11:30		**Micro and Nano Refractive Index Photonic Sensing Technologies: Current Progress, Challenges, and Future Perspective** **Prof. Dr. Dulal Haque** Department of Electronics and Communication Engineering, Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh *Mode: In-person*
Paper ID	**Time**	**Title of the Paper**
271	11:30 – 11:45	Impact of Nb_2O_5 Electron Transport Layer with Organic and Inorganic Buffer Layers in CNT-Based Solar Cells.
654	11:45 – 12:00	Numerical investigation of non-toxic buffer layers for high performance CZTS thin-film solar cells using SCAPS1D
687	12:00 – 12:15	Simulation-Based Performance Evaluation of High Efficiency CIGS-Based Tandem Solar Cell Utilizing Tin Perovskite(MASnI3)

TS-3B: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 7		
Venue: C201, CSE		**Time:** 11:00 – 12:15
Session Topic: *Deep Learning for Cancer and Tumor Image Analysis*		
Session Chairs: **Prof. Dr. Atiqur Rahman**, CU **Dr. Md. Khaliluzzaman**, IIUC		
Moderators: Mohammad Sakif Ibn Yousuf, Lecturer, CSE Tanvir Ahammed Shawon, Lecturer, CSE		
Paper ID	**Time**	**Title of the Paper**
204	11:00 – 11:15	FedHisto: An Explainable Federated Learning Framework For Breast Cancer Detection Using EfficientNet-B0 With Contrastive Loss And Confidence Aware Prediction
540	11:15 – 11:30	Dual-Stream Attention Fusion: A Unified Deep Learning Architecture for Robust Lung Cancer Detection
804	11:30 – 11:45	A Simulation-Based Evaluation of Cross-Modal Attention Fusion for Multimodal Colorectal Polyp Recurrence Risk Modeling
860	11:45 – 12:00	Attention-Enhanced Semi-Supervised Learning for Annotation-Efficient Ovarian Cancer Histopathology Classification
871	12:00 – 12:15	Adaptive Multi-Attention Deep Learning for Lung and Colon Histopathology Classification with Improved Calibration and Visual Interpretability

TS-3C: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 8		
Venue: C301, CSE		**Time:** 11:00 – 12:15
Session Topic: *Generative AI, Large Language Models, and Applied Machine Learning*		
Session Chairs: **Prof. Dr. Rashed Mustafa**, CU **Prof. Muhammad Anwarul Azim**, CU		
Moderators: Muhammad Mizanur Rahman Mizan, Lecturer, CSE Md. Sohanur Rahman, Lecturer, PHAR		
Paper ID	**Time**	**Title of the Paper**
46	11:00 – 11:15	EduBloom-RAG++: Multi-agent Alignment of Bloom's Taxonomy for Educational Question Classification
380	11:15 – 11:30	A Recall-Prioritized Stacking Ensemble for Suicide-Risk Detection in Mental-Health Analytics
570	11:30 – 11:45	Human-Centered Digital Wellbeing through a Multi-Agent Actor–Critic Framework for Social Media Addiction Mitigation
581	11:45 – 12:00	Physics-Informed Fourier Neural Operators for Gravitational Potential Reconstruction: A Study of Zero-Shot Resolution Generalization
680	12:00 – 12:15	PromptShield-LSTM: An Explainable Deep Learning Framework for Detecting Prompt Injection Attacks in Large Language Models

TS-3D: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 9

Venue: C401, CSE **Time:** 11:00 – 12:15

Session Topic: *Deep Learning for Cancer and Tumor Image Analysis*

Session Chairs:
Prof. Dr. Mohammed Jahirul Islam, SUST
Prof. Nihad Karim Chowdhury, CU

Moderators:
Mahadi Hasan, Lecturer, CE
Mr. Sahariar Reza, Lecturer, CSE

Paper ID	Time	Title of the Paper
108	11:00 – 11:15	A Lightweight Multi-Scale MobileNet Attention Network for Lung and Colon Cancer Diagnosis from Histopathological Images
245	11:15 – 11:30	Explainable Brain Tumor Classification from MRI Using a Hybrid VGG16–EfficientNetB0–SE Attention Network
284	11:30 – 11:45	An Explainable Brain Tumor Diagnosis Framework Using Unified Grad-CAM, LIME, and Enhanced VGG19 with Attention Mechanism
317	11:45 – 12:00	Comparative Analysis of State-of-the-Art Methods for Brain Tumor Segmentation on the BraTS 2020 Dataset
553	12:00 – 12:15	NeuroStack: A Hybrid Concept Bottleneck Stacking Ensemble for Interpretable Brain Tumor Triage on BraTS 2024

TS-3E: Data Science, NLP, and Software Systems – 4

Venue: C402, CSE **Time:** 11:00 – 12:15

Session Topic: *Cybersecurity, Intrusion Detection, and Software Vulnerability Analytics; Financial and Fraud Analytics*

Session Chairs:
Prof. Dr. Mohammad Shamsul Arefin, CUET
Professor Dr. Farah Jahan, CU

Moderators:
Farzana Tasnim, CSE
Ms. Raisa Nuzhat, Lecturer, CSE

Paper ID	Time	Title of the Paper
102	11:00 – 11:15	Drift-Aware Hierarchical Federated Learning for Intrusion Detection Under Non-IID Environments
603	11:15 – 11:30	A Machine Learning-Based Framework for Software Vulnerability Detection and Risk Prioritization Using Static Analysis Alert Fusion
604	11:30 – 11:45	Does Reported Intrusion Detection Performance Survive Honest Evaluation Label Correction and Leakage-Free Splits on CICIDS2017
646	11:45 – 12:00	Predicting Self-Financing Among Graduate Applicants: A Leakage-Aware Machine Learning Framework on Bangladeshi Admissions Data
908	12:00 – 12:15	BDMFSSim: A Synthetic Benchmark Calibrated to Public Statistics for Fraud Detection in Bangladesh Mobile Financial Services

TS-3F: Data Science, NLP, and Software Systems – 5

Venue: C501, CSE **Time:** 11:00 – 12:15

Session Topic: *Bioinformatics, Genomics, and Computational Biology*

Session Chairs: **Prof. Dr. Abdul Kadar Muhammad Masum**, SEU **Dr. Abu Nowshed Chy**, CU		
Moderators: Mrs. Ayesha Julekha, Lecturer, CSE Ms. Mysha Sarin Kabisha, Lecturer, CSE		
Invited Talk 11:00 – 11:30		**A Comparative Analysis of Enhanced and Baseline Cycle GAN Models for Robust Audio Steganography** **PM Dr. Farida Hazwani Mohd Ridzuan** Associate Professor, Information Security & Assurance Program, Faculty of Science and Technology, Universiti Sains Islam Malaysia (USIM) *Mode: In-person*
Paper ID	**Time**	**Title of the Paper**
409	11:30 – 11:45	Cox-Guided Entropy-Weighted TOPSIS for Interpretable Breast Cancer Survival Risk Stratification Using Clinicogenomic Data
450	11:45 – 12:00	An Evaluation of Machine Learning, Deep Learning, and Transformer Approaches for Protein Sequence Classification
835	12:00 – 12:15	xMELD: An Explainable Multimodal Learning Framework for Early Cancer Detection Using cfDNA Molecular Signatures

TS-3G: Pharmacy and Biological Science		
Venue: R403, AB4, PHAR (Physical) + Zoom (Online)		**Time:** 11:00 – 12:30
Session Topic: *Phytochemical and In-vivo Neuropharmacological Studies; Computational Pharmacology and Disease Modelling*		
Session Chairs: **Prof. Dr. Md. Sohel Rana**, Dept of Phar, JU **Prof. Dr. Md. Aktar Sayeed**, Prof, Phar, IIUC		
Moderators: Mohammad Nazmul Islam, Assistant Professor, CSE Md. Sohanur Rahman, Lecturer, CSE		
Paper ID	**Time**	**Title of the Paper**
Online Presentations (via Zoom)		
33	11:00 – 11:15	Computational Docking and Pharmacokinetic Profiling of Bioactive Phytochemicals from Nymphaea nouchali Against Key Therapeutic Targets
726	11:15 – 11:30	A Hybrid Ensemble Framework for Climate-Based Dengue Forecasting in Bangladesh
In-person Presentations (R403, AB4, PHAR)		
717	11:30 – 11:45	Comprehensive Study on Phytochemical Screening & Evaluation of In vitro Antioxidant, Thrombolytic & In vivo Neuropharmacological (Antidepressants, and Anxiolytic) activity of Methanolic extract of stem of Justicia burmanica
727	11:45 – 12:00	Pharmacological and system biological evaluation of Kuguacin J, a bioactive component of Momordica charantia for the treatment of colorectal cancer through EGFR and TP53 mediated pathways
820	12:00 – 12:15	Exploration of Anti-Oxidant, Thrombolytic, Anthelmintic, Antidepressant & Anxiolytic Activities of Methanol Extract of Mangifera sylvatica Stem

822	12:15 – 12:30	Experimental Study of Antioxidant, Anthelmintic, Thrombolytic, Antidepressant and Antidiarrheal Activities and Qualitative Phytochemical Analysis of Methanol Extract of the Whole Plant of Cayratia japonica

TS-3H: Civil and Environmental Engineering		
Venue: R207, AB-5, Civil (Physical) + Zoom (Online)		Time: 11:00 – 12:45
Session Topic: *Water Resource, Environmental and Structural Engineering; Transportation Engineering and Construction Materials*		
Session Chairs: **Prof. Dr. Swapan Kumar Palit,** IIUC **Prof. Dr. Reaz Akter Mullick,** CUET		
Moderators: Ashrar Al Washi, Lecturer, CE Md Abdullah Al Mamun, Lecturer, CE		
Paper ID	**Time**	**Title of the Paper**
Online Presentations (via Zoom)		
212	11:00 – 11:15	Performance of Rice Husk Ash Blended Concrete in Normal, Acidic, and Saline Environments
In-person Presentations (R207, AB-5, Civil)		
326	11:15 – 11:30	Coastal Water Quality and Risk Screening in Sitakunda, Bangladesh
330	11:30 – 11:45	Heavy Metal Contamination and Ecological Risk Assessment of Shipbreaking Coastal Sediments in Bangladesh (2014–2024) -A Review.
359	11:45 – 12:00	Physicochemical Water Quality Assessment of the Karnaphuli River Near the Karnaphuli Paper Mill Discharge Outlet.
602	12:00 – 12:15	Multi-Hazard Response of Plan-Irregular Reinforced Concrete Buildings in Coastal Bangladesh
662	12:15 – 12:30	Interannual Variability of NO_2, CO, SO_2, CH_4, and O_3 over Bangladesh Using Sentinel-5P/TROPOMI Observations: A January 2022–2026 Assessment
713	12:30 – 12:45	Improving Pedestrian Safety In High-Density Cities: A Review Of Risk Factors, Strategies, And Safe System Approaches

TS-4A: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 10		
Venue: C201, CSE		**Time:** 13:45 – 15:00
Session Topic: *Computer Vision for Agriculture and Applied Machine Learning*		
Session Chairs: **Prof. Dr. Rashed Mustafa**, CU **Dr. Touhidul Alam**, RMSTU		
Moderators: Mahadi Hasan, Lecturer, CE Mohammad Sakif Ibn Yousuf, Lecturer, CSE		
Paper ID	**Time**	**Title of the Paper**
163	13:45 – 14:00	A Lightweight MobileNetV2 Model for Real-Time Rice Leaf Disease Recognition in Field Environments
239	14:00 – 14:15	LightWeedNetV2 for Ultra Lightweight Full Resolution UAV Crop and Weed Segmentation

867	14:15 – 14:30	An Explainable Hybrid Deep Learning Framework with Attention-Based Feature Fusion for Tomato Leaf Disease Classification
872	14:30 – 14:45	A Fusion-Based Deep Learning Framework Combining ConvNeXt and Swin Transformer for Leaf Disease Classification in Solanaceae Crops
910	14:45 – 15:00	Toward a Data-Driven Digital Twin Framework for Industrial Energy Monitoring Using Explainable Machine Learning and Scenario-Based Impact Analysis

TS-4B: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 11

Venue: C301, CSE **Time:** 13:45 – 14:45

Session Topic: *Biomedical Image Analysis and Quantum Machine Learning*

Session Chairs:
Prof. Muhammad Anwarul Azim, CU
Dr. Md. Khaliluzzaman, IIUC

Moderators:
Mohammad Nazmul Islam, Assistant Professor, PHAR
Muhammad Mizanur Rahman Mizan, Lecturer, CSE

Paper ID	Time	Title of the Paper
123	13:45 – 14:00	VCAF-Net: Voltage-Conditioned Cross-Architecture Fusion Network for AAV Capsid Classification
314	14:00 – 14:15	Automated End-to-End Signal Processing and Interpretable Machine Learning for Superconducting Qubits
504	14:15 – 14:30	A Fast Hybrid Feature-Fusion Framework Combining EfficientNetB4 Features and Metadata for Multiclass Skin Lesion Classification.
865	14:30 – 14:45	NeuroQ-Net: Parameter-Efficient Lightweight Quantum CNN for Multi-Class Brain Tumor Classification

TS-4C: Data Science, NLP, and Software Systems – 6

Venue: C401, CSE **Time:** 13:45 – 15:15

Session Topic: *Health Analytics and Risk Prediction*

Session Chairs:
Prof. Dr. Abdul Kadar Muhammad Masum, SEU
Prof. Dr. Engr. Mohammad Aman Ullah, IIUC

Moderators:
Subrina Akter, CSE
Ms. Mysha Sarin Kabisha, Lecturer, CSE

Paper ID	Time	Title of the Paper
240	13:45 – 14:00	BanglaBERT-Based Recurrent-Attention Hybrid Framework for Bengali Depression Detection in Social Media Text
281	14:00 – 14:15	An Explainable Multi-Tier Fusion Stacking Framework for Multi-Class Psychological Distress Prediction
385	14:15 – 14:30	Early Postpartum Depression Detection with Soft Voting Ensemble and Explainable AI
551	14:30 – 14:45	MentalBERT-MOON: An Explainable Contrastive Federated Learning Framework for Non-IID Mental Health Text Classification

744	14:45 – 15:00	SACRE-HD: Stability-Aware Calibration and Risk-Explicit Heart Disease Screening on Clinical Data
878	15:00 – 15:15	An Explainable Stacking Ensemble for Postpartum Depression Risk Prediction

TS-4D: Data Science, NLP, and Software Systems – 7		
Venue: C402, CSE		**Time:** 13:45 – 15:00
Session Topic: *Explainable Machine Learning, Software Systems, Databases, and Data Engineering*		
Session Chairs: **Professor Dr. Farah Jahan**, CU **Dr. Abu Nowshed Chy**, CU		
Moderators: Miskatul Jannat, Lecturer, CSE Ms. Raisa Nuzhat, Lecturer, CSE		
Paper ID	**Time**	**Title of the Paper**
274	13:45 – 14:00	Learning to Route: Machine Learning Based Query Routing in a Hybrid PostgreSQL MongoDB Environment
479	14:00 – 14:15	ClinTraj: Ontology-Grounded Clinical Trajectory Scoring for Proactive Detection of Adversarial Multi-Turn Attacks on Medical Language Models
508	14:15 – 14:30	ParityKD: A Novel Parity-Constrained Student Selection for Deployable Knowledge Distillation in Chronic Kidney Disease Screening
643	14:30 – 14:45	An Interpretable Fairness-Aware Multi-Task Adversarial Neural Network for Age-Stratified Anemia Prediction
694	14:45 – 15:00	A Benchmark for Cross-Project Early Contributor Disengagement Prediction in the NumFocus Open-Source Community

TS-4E: Internet of Things (IoT), Smart Connectivity, and Security – 2		
Venue: R701, AB5		**Time:** 13:45 – 15:15
Session Topic: *Information and Network Security, Privacy and Control; Industrial IoT, Automation, Cloud and Edge*		
Session Chairs: **Dr. Hadaate Ullah**, Asso Professor & Dean, FoS, USTC **Dr. Md. Saiful Islam**, Dept of ETE, CUET		
Moderators: Hassan Jaki, Lecturer, CCE Md Nurnobi Chowdhury Saddam, Lecturer, CCE		
Paper ID	**Time**	**Title of the Paper**
28	13:45 – 14:00	LeXNet:A Lightweight and Explainable AI Framework for Real-Time Cyber Threat Detection in Distributed Networks
328	14:00 – 14:15	A Machine Learning Approach for Phishing Website Detection with Comprehensive Multi-Method Feature Selection
483	14:15 – 14:30	PhishRAG: A Multi-Stage Retrieval-Augmented Phishing Detection Framework with XGBoost Stacking and LLM Explainability
489	14:30 – 14:45	HeteroXIDS: Heterogeneous Explainable Graph Neural Network for Intrusion Detection in Encrypted Network Traffic

541	14:45 – 15:00	ContrastiveTrust: Physics-Guided Contrastive Learning for Zero-Shot Industrial Control System Anomaly Detection
852	15:00 – 15:15	A Passive UHF RFID for Battery Power Monitoring in Long-Life NB-IoT Sensor Nodes

TS-4F: Communication and Computer Networks – 2		
Venue: R422, ETE		**Time:** 13:45 – 15:00
Session Topic: *Microwave, Antenna, RF Engineering and Beamforming*		
Session Chairs: **Dr. Md. Azad Hossain**, Prof, CUET **Dr. Sikder Sunbeam Islam**, Prof, EEE		
Moderators: Dr. Ismail Hoque, Associate Professor, EEE Md. Mostafa Amir Faisal, Assistant Professor, ETE		
Invited Talk 13:45 – 14:15		**Advances in Near-Field Meta-Steering Meta surfaces: Techniques, Materials, and High-Performance Antenna Applications** **Dr. Foez Ahmed, SMIEEE** Associate Professor, Department of Information and Communications Engineering, University of Rajshahi; Secretary, IEEE APS-MTTS Bangladesh Joint Chapter *Mode: In-person*
Paper ID	**Time**	**Title of the Paper**
374	14:15 – 14:30	Design of a Convoluted FSS Reflector-Based Dual-Band Microstrip Patch Antenna with Enhanced Gain for Ku-Band Applications
758	14:30 – 14:45	Robust angle-domain analog beamforming for SWIPT with nonlinear energy harvesting and bounded CSI uncertainty
763	14:45 – 15:00	Velocity-Aware Robust Analog Beamforming for Angle-Domain SWIPT-NOMA under Channel Aging and Bounded CSI Uncertainty

Plenary Session 3: Day 2, Monday, 9 November 2026		
Venue: IIUC Auditorium		**Time:** 15:00 – 16:20
Session Chairs: **Prof Dr. Muhibul Haque Bhuyan,** AIUB **Professor Razu Ahmad,** IIUC		
Moderators: Engr. Md Abdul Kader, Associate Professor, EEE Dr. Saifur Rahman, Assistant Professor, CSE		
Time	**Name of Keynote Speaker**	**Topic of Speech**
K7 15:00 – 15:40	**Dr. Bo Liu, FIET, SMIEEE** Professor of Electronic Design Automation, James Watt School of Engineering, University of Glasgow, UK	**Automated Design of Microwave Antennas: An AI-empowered Approach** *Mode: Online*
K8 15:40 – 16:20	**Prof. Dr. Jianqing Wang, FIEEE** Department of Electrical and Mechanical Engineering, Nagoya Institute of Technology, Japan	**In-Body Communications: From RF to Ultrasound** *Mode: Online*

TS-5A: Power and Green Energy System – 3		
Venue: Online (Zoom Room 1)		**Time:** 18:30 – 19:45
Session Topic: *Renewable Energy, Solar PV and Wind*		
Session Chairs: **Dr. Mohammad Tawhidul Alam**, Prof, EEE, AIUB **Prof Dr. Md. Shamimul Haque Choudhury**, Dept of EEE, IIUC **Dr Asim Ullah Nabil**, Associate Prof and Chairman, EEE, DIU		
Moderators: Engr. Md. Lokman Hossain, Lecturer, EEE Riazul Islam, Lecturer, EEE		
Paper ID	**Time**	**Title of the Paper**
160	18:30 – 18:45	Techno-Economic Appraisal of Rooftop Solar PV Systems with Financial Feasibility Analysis
174	18:45 – 19:00	Feasibility Study of a Grid-Tied Rooftop Solar PV System at KUET Campus
175	19:00 – 19:15	SWOT Analysis of Rooftop Solar Photovoltaic Energy in Bangladesh
605	19:15 – 19:30	Comprehensive Transient Signature Characterization and Mitigation of Protective Relay Blinding in Weak Distribution Networks with High Inverter-Based Resource Penetration
668	19:30 – 19:45	Wind Field Variability and Offshore Wind Energy Potential in the Bay of Bengal Using Multi-Dataset Assessment

TS-5B: Power and Green Energy System – 4		
Venue: Online (Zoom Room 2)		**Time:** 18:30 – 19:45
Session Topic: *EV, Transportation and Charging Systems; Robotics and Automation*		
Session Chairs: **Dr. Nur Mohammad**, Prof, CUET **Dr. Yasir Arafat**, Asso Prof, EEE, IIUC **Dr. Md. Zahid Hasan**, Associate Professor, EEE		
Moderators: Engr. Md Abdul Kader, Associate Professor, EEE Engr. Khandakar Abdullah Al Mamun, Assistant Professor, EEE		
Paper ID	**Time**	**Title of the Paper**
362	18:30 – 18:45	A Distributed Compressed Sensing for LoRa Sensors in Smart Grid Communication System
557	18:45 – 19:00	A Tariff- and Voltage-Responsive Energy Management System for Grid-Connected DC Fast Charging Stations in Bangladesh
698	19:00 – 19:15	Multi-Location Electric Vehicle Charging Demand Forecasting for Urban Transport Hubs
778	19:15 – 19:30	Design and Development of a Smart Robotic Arm for Industrial Product Sorting using QR Code and Color Recognition
848	19:30 – 19:45	Towards Sustainable Public Transportation: A Multi-Criteria Evaluation of Diesel, CNG, Electric, and PV-Integrated Electric Buses

TS-5C: Electronics, Materials Science, VLSI and Real Time Systems – 2	
Venue: Online (Zoom Room 3)	**Time:** 18:30 – 20:00

Session Topic: *Semiconductor and Functional Materials; Sensors, Photonics and Electromagnetic Devices*		
Session Chairs: **Prof. Dr. Dulal Haque,** ECE, HSTU **Dr M. Kabiruzzaman**, Associate Professor, Dept of EEE, AIUB		
Moderators: Md. Rasheduzzaman, Associate Professor, EEE Engr. Md. Nazmus Sakib, Assistant Professor		
Paper ID	**Time**	**Title of the Paper**
49	18:30 – 18:45	Geometry-Optimized Integrated MEMS Calorimetric Flow Sensor for Simultaneous Water Flow Rate and Temperature Measurement Using COMSOL Multiphysics
371	18:45 – 19:00	Pressure-Induced Structural, Electronic, Optical, and Mechanical Evolution of KAlH3 Perovskite Hydride for Hydrogen Storage Applications: A First-Principles Study
645	19:00 – 19:15	Hole Transport Layer Optimization of Perovskite Absorber CsSnI3-Based Solar Cell via SCAPS-1D
779	19:15 – 19:30	Design of a Compact Dual-Band Implantable Antenna for In-Body Capsule Communication
792	19:30 – 19:45	Fabrication of $ZnMnO_3$:PANI Electrodes for High-Performance Supercapacitor Technology
814	19:45 – 20:00	TCAD-Based Design and Performance Analysis of Depletion Mode β-Ga2O3 MOSFET

TS-5D: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 12		
Venue: Online (Zoom Room 4)		**Time:** 18:30 – 19:45
Session Topic: *Algorithms, Scheduling, and Machine Learning*		
Session Chairs: **Prof. Dr. Md. Shakowat Zaman Sarker**, UU **Prof. Dr. Muhammad Abul Hasan**, GUB		
Moderators: Md. Badiuzzaman Biplob, Lecturer, CSE Mr. Md Sadman Hafiz, Lecturer, CSE		
Invited Talk 18:30 – 19:00		**Predictive Validity of Safety Evaluations for LLM-Driven Robots Under Complex Operational Requirements** **Gokhan Erdemir, Ph.D.** Associate Professor, Mechatronics; Director, Robotics, Intelligent Systems and Control Laboratory (RISC-Lab), University of Tennessee at Chattanooga, USA *Mode: Online*
Paper ID	**Time**	**Title of the Paper**
202	19:00 – 19:15	Adaptive Priority Evolution: A Hybrid CPU Scheduling Algorithm for Responsive and Starvation-Resilient Systems
203	19:15 – 19:30	ScoreSched: A Score-Based Scheduling Framework for Responsive and Starvation-Free CPU Management
610	19:30 – 19:45	What If Domain Shift Breaks Transfer Learning? Can Instance Weighted Training Recover Building Cooling Load Prediction?

TS-5E: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 13		
Venue: Online (Zoom Room 5)		**Time:** 18:30 – 19:45
Session Topic: *Deep Learning, Neural Networks, and Fuzzy Systems in Computer Vision*		
Session Chairs: **Prof. Dr. Kaushik Deb, CUET** **Prof. Dr. Taskeed Jabid**, EWU		
Moderators: Mujibur Rahman Maruf, Lecturer, CSE Mr. Sahariar Reza, Lecturer, CSE		
Invited Talk 18:30 – 19:00		**Reimagining Engineering and Technology Education in the Generative AI Era** **Dr. Faisal Tariq, SMIEEE, FHEA** Senior Lecturer, James Watt School of Engineering, University of Glasgow, UK *Mode: Online*
Paper ID	**Time**	**Title of the Paper**
624	19:00 – 19:15	A Deep Learning Approach for Custom Image-Based Automated Waste Segmentation and Classification Using YOLO26
805	19:15 – 19:30	fMRI-Based Schizophrenia Classification via Hybrid Convolutional and Transformer Feature Fusion
808	19:30 – 19:45	A Multimodal Deep Learning Framework for Multi-Horizon Solar PV Power Forecasting and Sky Condition Classification

TS-5F: Data Science, NLP, and Software Systems – 8		
Venue: Online (Zoom Room 6)		**Time:** 18:30 – 20:00
Session Topic: *Natural Language Processing and Cybersecurity*		
Session Chairs: **Prof. Dr. Syed Md. Galib**, JUST **Prof. Dr. Md Abdul Based**, DIU		
Moderators: Mr. Abdul Aziz, Lecturer, CSE Khandaker Tayef Shahriar, Lecturer, CSE		
Paper ID	**Time**	**Title of the Paper**
17	18:30 – 18:45	Deep Contextual Integration of Textual-Visual Modalities for Enhanced News Categorization Using Machine Learning Ensembles
47	18:45 – 19:00	An Explainable Transformer Based Framework for Bangla Public Service Grievance Classification
82	19:00 – 19:15	A Comparative Study of Transformer Models for Extremist Content Classification in Bangla
661	19:15 – 19:30	A Regression Model-Based Approach with Uncertainty-Aware Ensemble Learning to Identify Economic Determinants of Infant Mortality: A Cross-Country Panel Study for Bangladesh
849	19:30 – 19:45	Stylometric & Credibility-Aware Four-Way Human and AI-Generated Misinformation Classification
882	19:45 – 20:00	Beyond Point Accuracy: Regime-Conditional SHAP and Walk-Forward Validation for Australian GDP Growth Forecasting

TS-5G: Data Science, NLP, and Software Systems – 9		
Venue: Online (Zoom Room 7)		**Time:** 18:30 – 20:00
Session Topic: *Natural Language Processing and Large Language Models, Retrieval-Augmented Generation*		
Session Chairs: Prof. Dr. Engr. Mohammad Aman Ullah, IIUC **Dr. Tanjim Mahmud**, RMSTU		
Moderators: Miskatul Jannat, Lecturer, CSE Asmaul Hosna Sadika, Lecturer, CSE		
Paper ID	**Time**	**Title of the Paper**
159	18:30 – 18:45	Parameter Efficient Adaptation of Vision-Language Models for Bengali Medical Visual Question Answering with Patch Level Explainability.
256	18:45 – 19:00	Voices of the July Revolution: Benchmarking Sentiment Analysis Models to Decode Student-Led Digital Discourse in Bangla
318	19:00 – 19:15	Ensembling Chain-of-Thought Stacked and DocumentLSTM Embeddings with Explainable AI for Evaluating Educational Pedagogy System in LLMs
535	19:15 – 19:30	A Belief Rule-Base Decision-Support System for Match Hydration-Break Recommendation Under Uncertainty: Application to the 2026 FIFA World Cup
588	19:30 – 19:45	Automated Hate Speech Detection for Romanized Bengali Social Media Text
706	19:45 – 20:00	BanglaMobileABSA-AT: A Fine-Grained Re-annotated Dataset for Aspect-Term-Based Sentiment Analysis with Transformer Baselines

TS-5H: Internet of Things (IoT), Smart Connectivity, and Security – 3		
Venue: Online (Zoom Room 8)		**Time:** 18:30 – 19:45
Session Topic: *Industrial IoT, Automation, Cloud, Edge and Autonomous Systems*		
Session Chairs: **Dr. Md. Sajjatul Islam**, Associate Professor & Head, Department of CSE, CIU **Prof Razu Ahmed**, Dean, FSE		
Moderators: Md. Abdullah Al Masud, Lecturer, CCE Engr. Mahi Rashid Chowdhury, Lecturer, EEE		
Paper ID	**Time**	**Title of the Paper**
116	18:30 – 18:45	Agentic AI-Driven Self-Healing LoRaWAN Mesh Network for Autonomous Disaster Response in Coastal Bangladesh
676	18:45 – 19:00	An Explainable Machine Learning Approach for Air Quality Prediction with PM2.5 Using SHAP and Environmental Big Data
769	19:00 – 19:15	Diverse Weather effects on 8 × 10 Gbps MDM-FSO Systems Using Laguerre-Gaussian Beams
786	19:15 – 19:30	AedesGuard: Multi-Sensor IoT Framework for Early Detection of Aedes Mosquito Breeding Conditions
886	19:30 – 19:45	Simulation-Based Latency Trade-Off Analysis Between Edge and Cloud Computing for Time-Sensitive Applications

Technical Sessions: Day 3, Tuesday, 10 November 2026

Plenary Session 4: Day 3, Tuesday, 10 November 2026		
Venue: IIUC Auditorium		**Time:** 08:45 – 10:45
Session Chairs: **Prof. Dr. M. Moshiul Hoque,** CUET Prof. Dr. Dulal Haque, HSTU		
Moderators: Dr. Saifuddin, CCE Md. Mostafa Amir Faisal, Assistant Professor, ETE, IIUC		
Time	**Name of Keynote Speaker**	**Topic of Speech**
K9 08:45 – 09:25	**Prof. Dr. Xi-Zhao Wang, FIEEE, FCAAI** Vice Director, Big Data Institute; College of Computer Science and Software Engineering, Shenzhen University, China	**Uncertainty modeling for calibrating confidence of LLM outputs** *Mode: Online*
K10 09:25 – 10:05	**Dr. Faisal Hossain** Professor, Department of Civil and Environmental Engineering, University of Washing, Seattle, USA	**Electrifying Our Rain** *Mode: Online*
K11 10:05 – 10:45	**Professor Sisi Zlatanova** GRID, School of Built Environment, UNSW Sydney, Australia	**Voxel modelling for environmental studies** *Mode: Online*

TS-6A: Power and Green Energy System – 2		
Venue: R422, ETE		**Time:** 11:00 – 12:15
Session Topic: *EV, Transportation and Charging; Power System Analysis, Protection and Fault Diagnosis*		
Session Chairs: **Dr. Nur Mohammad**, Prof, CUET **Dr Asim Ullah Nabil**, Associate Prof and Chairman, EEE, DIU		
Moderators: Md Sazidul Hoque, Lecturer, EEE Mujibur Rahman Maruf**,** Lecturer		
Paper ID	**Time**	**Title of the Paper**
511	11:00 – 11:15	AC Load-Flow-Based Contingency Analysis and Ranking for Vulnerability Assessment of the South-East Power Grid of Bangladesh
755	11:15 – 11:30	Comparative Analysis of Archive-Based MOTLBO and MOEO for Multi-Objective Optimal Power Flow in the IEEE 57-Bus System
836	11:30 – 11:45	ML-Enhanced MPPT and Techno-Economic Assessment of a Solar-PV/Battery Series-Hybrid DC Propulsion System for Inland Ferries on Kaptai Lake, Bangladesh.
870	11:45 – 12:00	Operational Design and Performance Analysis of PV-to-EV-with-Battery, and PV-to-EV-with-Grid-Export Modes in a Solar–Grid Hybrid EV Charging Station.
902	12:00 – 12:15	Rooftop Solar PV Across New and Old Airport Facilities: A Techno-Economic Assessment of Hazrat Shahjalal International Airport

TS-6B: Electronics, Materials Science, VLSI and Real Time Systems – 3		
Venue: R323, EEE		**Time:** 11:00 – 12:15
Session Topic: *Perovskite and Thin-Film Solar Cells (SCAPS-1D Simulation)*		
Session Chairs: **Dr. Muhibul Haque Bhuyan**, AIUB **Dr. Md. Shamimul Haque Choudhury, IIUC**		
Moderators: Mr. Ahmad, Lecturer, ETE Riazul Islam, Lecturer		
Paper ID	**Time**	**Title of the Paper**
481	11:00 – 11:15	Performance Optimization And Numerical Investigation Of Cs2sibr6-Based Lead-Free Perovskite Solar Cells Using SCAPS-1D
585	11:15 – 11:30	ETL Engineering and Parameter Optimization of All-Inorganic CsPbI3 Perovskite Solar Cells Using SCAPS-1D
650	11:30 – 11:45	DFT-Guided SCAPS-1D Design of a Lead-Free Na2AgAlBr6 Double-Perovskite Solar Cell
840	11:45 – 12:00	Numerical Investigation of Transport Layer Optimization in FrCdCl3 Perovskite Solar Cells Using SCAPS-1D
913	12:00 – 12:15	Performance Optimization of Lead-Free Mg3PBr3-Based n-i-p Perovskite Solar Cells: A SCAPS-1D Study

TS-6C: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 14		
Venue: C201, CSE		**Time:** 11:00 – 12:15
Session Topic: *Vision Transformers, Efficient Deep Learning, and Model Robustness*		
Session Chairs: **Prof. Dr. Mohammed Jahirul Islam**, SUST **Prof. Dr. Abdul Kadar Muhammad Masum, SEU**		
Moderators: Mr. Md Sadman Hafiz, Lecturer, CSE Mohammad Sakif Ibn Yousuf, Lecturer, CSE		
Paper ID	**Time**	**Title of the Paper**
294	11:00 – 11:15	Benchmarking Vision Transformers against CNNs for Galaxy Morphology Classification on GalaxiesML
495	11:15 – 11:30	Are Quantization and Token Merging Orthogonal? A Mechanistic Study on Plain Vision Transformers
526	11:30 – 11:45	Does Quantization Break the Graph? Structure--Accuracy Dissociation in Vision GNNs under INT8 Post-Training Quantization
733	11:45 – 12:00	AdaptRepair-Vision: Empirically Bounded-Risk Adaptive Repair for Corruption-Shifted Image Classification
862	12:00 – 12:15	Does Graph Structure Earn Its Keep? Grid, Sequence, and Graph Vision Models for Galaxy Morphology under Quantization and Latency Constraints

TS-6D: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 15		
Venue: C301, CSE		**Time:** 11:00 – 12:15
Session Topic: *Multimedia Forensics, Deepfake Detection, and Visual Security*		

Session Chairs:
Prof. Dr. Mohammad Sanaullah Chowdhury, CU
Dr. Foez Ahmed, Associate Professor, ICE, RU

Moderators:
Md. Badiuzzaman Biplob, Lecturer, CSE
Muhammad Mizanur Rahman Mizan, Lecturer, CSE

Paper ID	Time	Title of the Paper
218	11:00 – 11:15	An Interpretable Siamese Network with Triplet Loss for Writer Independent Offline Signature Verification
342	11:15 – 11:30	Cross-Corpus Generalization in Bangla Deepfake Audio Detection: A Multi-Tier Evaluation with Pooled Training and Domain-Adversarial Mitigation
453	11:30 – 11:45	BioMotion-TRNG: A Computer Vision-Based Biological True Random Number Generator Using Fish Motion for Cryptographic Applications
490	11:45 – 12:00	DeepVoiceGuard: A Cross-Lingual Attention-Enhanced BiLSTM Framework for Explainable Deepfake Voice Detection in English and Bangla
741	12:00 – 12:15	An Intelligent Machine Learning-Based Intrusion Detection and Real-Time Attack Mitigation System

TS-6E: Artificial Intelligence, Algorithms, Vision, and Signal Processing – 16

Venue: C401, CSE **Time:** 11:00 – 12:15

Session Topic: *Object Detection, Segmentation, and Human-Centric Computer Vision*

Session Chairs:
Prof. Dr. Md. Shahnur Azad Chowdhury, IIUC
Dr. Shahid Md. Asif Iqbal, Dean, FE, Premier University

Moderators:
Ashrar Al Washi, Lecturer, CE
Mr. Sahariar Reza, Lecturer, CSE

Paper ID	Time	Title of the Paper
297	11:00 – 11:15	The Ethical Landscape of Generative Artificial Intelligence: A Survey of Socio-Technical Risks, Mitigation Strategies, and Emerging Regulatory Frameworks
591	11:15 – 11:30	An Explainable Machine Learning Framework for Census Income Prediction: A Comparative Study with SHAP
592	11:30 – 11:45	Benchmarking Custom CNNs and EfficientNetB2 for 38-Class Bangladeshi Rice Variety Classification
652	11:45 – 12:00	Error-Aware Bias Mitigation under Uncertain Sensitive-Attribute Inference via Explicit Misclassification-Matrix Modeling
801	12:00 – 12:15	Rethinking GNN Interpretability for Multi-Task Toxicity Prediction: A Cross-Method Agreement Analysis on Tox21

TS-6F: Internet of Things (IoT), Smart Connectivity, and Security – 4

Venue: R701, AB5 **Time:** 11:00 – 12:30

Session Topic: *IoT Architecture, Sensor Networks and Embedded Systems; AI-Driven IoT, Blockchain and Data Analytics*

Session Chairs:
Dr. Hadaate Ullah, Asso Professor & Dean, FoS, USTC
Dr. Md. Saiful Islam, Dept of ETE, CUET

Moderators:
Md. Abdullah al Masudb, CCE
Md Hasan Mia, Lecturer, CCE

Paper ID	Time	Title of the Paper
183	11:00 – 11:15	Fed-XRL: A Federated eXplainable Reinforcement Learner for Backdoor-Resilient Aggregation in Non-IID Environments
468	11:15 – 11:30	Design and Evaluation of a GSM-Based Automatic Energy Meter Reading and Prepaid Load-Control Prototype
484	11:30 – 11:45	PromptPoison: A Backdoor Attack Model Targeting Instruction-Tuned LLMs via Trigger-Embedded System Prompts
486	11:45 – 12:00	Enhanced AutoPatch: Guided Reinforcement Learning for IoT Firmware Security
528	12:00 – 12:15	ShadowFL: A Membership Inference Attack Model Against Federated Learning Using Shadow Model Ensembles
584	12:15 – 12:30	Smart Autonomous Fire Fighting Robot Using Multi-Sensor Data Fusion and CatBoost-Based Fire Severity Classification