

International Conference on Data Science, AI and Applications (ICDSAIA 2025)

Organized by: EATL Innovation Hub & University of Salford, UK

2-DAY CONFERENCE EVENT OUTLINE

	9:30 AM – 10:30 AM	10:30 AM – 11:00 AM	11:00 AM – 11:45 AM	11:45 AM – 12:45 PM	12:45 PM – 2:30 PM	2:30 PM – 4:00 PM	4:00 PM – 4:30 PM	4:30 PM – 6:30 PM
Friday July 18, 2025	Inaugural Session	Snacks Break	Keynote Session 1	Technical Session 11 Technical Session 12 Technical Session 13 Technical Session 14	Jummah Prayer & Lunch Break	Workshop 1 Recent Trends in AI	Snacks Break	Technical Session 21 Technical Session 22 Technical Session 23 Technical Session 24
				Poster Demonstration Session				
Saturday July 19, 2025	9:30 AM – 10:30 AM	10:30 AM – 11:00 AM	11:00 AM – 12:00 PM	12:00 PM – 1:30 PM	1:30 PM – 3:00 PM	3:00 PM – 5:00 PM	5:00 PM – 6:00 PM	6:00 PM – 8:30 PM
	Technical Session 31 Technical Session 32 Technical Session 33 Technical Session 34	Snacks Break	Keynote Session 2	Workshop 2 AI in Medical Education in Bangladesh	Prayer & Lunch Break	Technical Session 41 Technical Session 42 Technical Session 43 Technical Session 44	Prayer & Snacks Break	Closing Session Followed by Dinner

SUMMARY OF TECHNICAL PAPER PRESENTATION AND POSTER DEMONSTRATION SESSION

FRIDAY, 18 JULY 2025, 11:45 AM – 12:45 PM	FRIDAY, 18 JULY 2025, 4:30 PM – 6:30 PM
Technical Session 11 (Topic & Paper ID)	Technical Session 21 (Topic & Paper ID)
Agriculture (2, 3, 22, 200)	Foreign (45, 141, 144, 159, 163, 216), Vision (87)
Technical Session 12 (Topic & Paper ID)	Technical Session 22 (Topic & Paper ID)
Computer Vision (20, 21, 27, 72)	Foreign (217, 218, 220, 231, 232, 233), Industry (120)
Technical Session 13 (Topic & Paper ID)	Technical Session 23 (Topic & Paper ID)
Agriculture (29, 59, 93, 187)	NLP (16, 91, 97, 102, 116, 151, 203)
Technical Session 14 (Topic & Paper ID)	Technical Session 24 (Topic & Paper ID)
Computer Vision (196, 207, 221, 225)	Healthcare (28, 37, 41, 43, 186, 205, 214)
POSTER DEMONSTRATION: 18 JULY 2025, 11:45 AM TO 3:45 PM (EXCEPT PRAYER AND LUNCH BREAK) Paper ID: 26, 31, 58, 82, 150, 160, 172, 173, 201, 206, 212, 213, 223, 234	
SATURDAY, 19 JULY 2025, 09:30 AM – 10:30 AM	SATURDAY, 19 JULY 2025, 3:00 PM – 5:00 PM
Technical Session 31 (Topic & Paper ID)	Technical Session 41 (Topic & Paper ID)
Cybersecurity (153,193,204,215)	Cybersecurity (15, 117, 137), Education (115,185)
Technical Session 32 (Topic & Paper ID)	Technical Session 42 (Topic & Paper ID)
Industry (69,194,199), AI (33)	NLP (152,161,184,197, 226, 227)
Technical Session 33 (Topic & Paper ID)	Technical Session 43 (Topic & Paper ID)
Healthcare (36, 44, 55, 66)	Healthcare (98, 99, 132, 133, 135, 136, 149)
Technical Session 34 (Topic & Paper ID)	Technical Session 44 (Topic & Paper ID)
Healthcare (68, 74, 77, 83)	Healthcare (162, 177, 183, 188, 190), Big Data (34,75)

TECHNICAL SESSION DETAILS
VENUE: EATL INNOVATION HUB

FRIDAY, 18 JULY 2025, 11:45 AM – 12:45 PM
TECHNICAL SESSION 11
<p>[002] Deep Learning-Based Potato Leaf Disease Classification Using Custom CNN. Md. Iftekhar Tushar; Md. Abu Raihan*; Muntasin Fayaz</p> <p>[003] Enhanced Rice Leaf Diseases Classification Using ResNet50 on a Bangladeshi Dataset. Md. Iftekhar Tushar; Md. Abu Raihan*; Muntasin Fayaz</p> <p>[022] Evaluation of CNNs for Flower Classification: A Study on Computational Efficiency and Model Performance. Jannatul Ferdeous; Mohammad Sakib Mahmood *; Umme Sumaiya Roshid Dristi; Abu Bakar Hasnath</p> <p>[200] IoT Enabled Pest Detection and Disease Management System for Agriculture 4.0. Nazrul Islam; Raisul Islam Rifat; Samia Sharmin; Muhtasin Karim; Mohammed Tahsin Islam; Zilani Khan; Khondaker Iffti Hasan Turjo; Md. Faruk Abdullah Al Sohan*</p>

FRIDAY, 18 JULY 2025, 11:45 AM – 12:45 PM
TECHNICAL SESSION 12
<p>[020] Clothes-Changing Person Re-Identification with Unique Identity-Specific Attribute Details. Raisa Begum*; Kaushik Deb</p> <p>[021] MAST-GCN: Multi-Part Attention-Guided Spatial-Temporal GCN Approach for Gait-Based Person Recognition. Md. Khaliluzzaman*; Kaushik Deb</p> <p>[027] Automated Classification of Husk Species Using DenseNet121 and Vision Transformer. Dipta Gomes; Kazi Tanvir*; Md. Sayem Kabir; Tasnim Sultana Sintheia; Sadman Samir Rafit; Mohammad Ariyan Pathan</p> <p>[072] Optimizing American Sign Language Recognition with Binarized Neural Networks: A Comparative Study with Traditional Models. Afif Alamgir*; Shakeef Ahmed Rakin; Mohammed Intishar Rahman</p>

FRIDAY, 18 JULY 2025, 11:45 AM – 12:45 PM
TECHNICAL SESSION 13
<p>[029] Interpretable IoT-Enabled Machine Learning Framework on Optimized Climate Information for Crop Yield and Resource Usage. Md. Abid Hasan Rafi*; Mst. Fatematuj Johora; Mohima Binte Rasel; Md. Emran Biswas; Md. Dulal Haque; Md. Shahzamal</p> <p>[059] A Deep Learning Approach for Detecting Pests and Diseases in Maize Crops. Faisal Imran*; Al Rafi Ahmed</p> <p>[093] Efficient Chicken Audio Classification Using Swin Transformer Features and Harmony-Optimized Random Forest. Md. Sayem Kabir; Kazi Tanvir*; Sadman Samir Rafith; Mohammad Ariyan Pathan; Md Sadi Al Huda; Touhid Bhuiyan</p> <p>[187] Smart Urban Farming: Integrating AI and IoT with Renewable Energy in Vertical Farming. Md Abdul Malek Sobuj; Md. Faruk Abdullah Al Sohan*</p>

FRIDAY, 18 JULY 2025, 11:45 AM – 12:45 PM

TECHNICAL SESSION 14

[196] Optical Character Recognition for Dari Language in Afghanistan. Sadullah karimi*; Annajiat Alim Rasel

[207] A Deep Learning-Based Framework for Bangla Vehicle License Plate Detection and Recognition. Sagar Mohajon; G.M. Sakhawat Hossain; Md Mynoddin; Rishita Chakma; Tanjim Mahmud*; Punam Kanungoe; Auntor Chakma

[221] A Lightweight Transformer-Based Encoder-Decoder Model for Video Summarization. Saadman Sakib*; Rajesh Palit; Dipankar Das; Tanjim Mahmud; Kaushik Deb

[225] Data-Efficient Image Transmission and Enhancement for UAVs: A Color Quantization and Super-Resolution Approach. Prof. Mohammad Rashedur Rahman*

FRIDAY, 18 JULY 2025, 4:30 PM – 6:30 PM

TECHNICAL SESSION 21

[045] Understanding Public Perceptions and Behaviours Towards COVID-19 Vaccination: A Multifaceted Analysis. Archanaben Prajapati*

[141] Mitigating Intersectional Bias in AI Recruitment: The HITHIRE Model for Ethical Hiring in Saudi Arabia. Elham Albaroudi*; Taha Mansouri; Ali Alameer

[144] Comparative Evaluation of Machine Learning and Signature-Based NIDS for Multi-Class and Binary Threat Detection. Somayina Wen-Udeoji*; Maybin Muyebar; Azadeh Mohammadi

[159] AIMA: An Agentic AI Approach to Vulnerability Scanning of Higher-Education Assessment. Taha Mansouri*; Mohammad Saleh Torkestani

[163] Design and implementation of a Novel, Hybrid Fall Detection model: Combining Faster R-CNN Inception V2 with YOLO Object Detection Algorithms in Surveillance Systems. Benedict Ibe*; Dagogo Godwin Orifama; Ali Dan; Ikechukwu Nwagbo Enumah; Dominic Chinedu Ogbuagu; Gbubemi Erics

[216] Ecological Overshoot: The Blindspot of Sustainable Computing. Aviad Bessler*; Kaveh Kiani; Taha Mansouri

[87] Moment Detection at Scale: Dataset-Driven Techniques for Temporal Localization. Md. Misbah Khan; Aritra Islam Saswato; Sabbir Hossain; Towfiqur Rahman Toki; Md.Towsif Abir*; Shafin Rahman

FRIDAY, 18 JULY 2025, 4:30 PM – 6:30 PM

TECHNICAL SESSION 22

[217] Plant Disease Classification by Ensemble Metaheuristic-Deep Learning Approach. Muhammad Hammad Saleem*; Zerin Jahan; Fakhia Hammad; Muhammad Taha; Joy Paul; Mohamad Saraee.

[218] Analysing and Predicting Housing Affordability Trends in the UK Using Machine Learning. Kaoma Muyebea*; Azadeh Mohammadi; Ebin Varghese

[220] An End-to-End Aspect-Based Sentiment Analysis Framework for a Real-Time Personalized Product Recommendation System. Usama Qasmi*; Kaveh Kiani; Mo Saraee

[231] Investigating the VR rollercoaster experience by applying AI models to biometric data. Giacomo Nalli*; George A. Dafoulas; Ariadni Tsiakara; Kajal Mistry; Brendan Walker; Michael Margolis; Neil Melton

[232] Assessing Electronic Customer Relationship Management Readiness in Banks. Farzad Tahmasebi Aria*

[233] A Comparative Analysis of State-of-the-Art Speech-to-Text models for court applications. Hamid Kouhpeimay Jahromi*

[120] Deep Learning-Based Effective Anomaly Detection in PWR-Type Nuclear Power Plants. Ihtesham Ibn Malek*; S. M. Hossain; Md. Farhan Shadiq

FRIDAY, 18 JULY 2025, 4:30 PM – 6:30 PM

TECHNICAL SESSION 23

[016] Enhancing Candidate Selection with NLP-Driven Resume Analysis for Industry 4.0 Recruitment Systems. Sourav Datto; Mustakim Ahmed; A K M Emran; Kazi Redwan*; Ragib Nadim; Sharfuddin Mahmood

[091] Hybrid BiLSTM-BiGRU Model for Classification of Bangladeshi Dialects. MD. Tahidul Islam*; Md. Abu Johab; Md. Roton Ahmed; Nakib Aman

[097] Restoring Rhythm: Punctuation Restoration Using Transformer Models for Bangla, a Low-Resource Language. Md Obyedullahil Mamun*; Md Adyelullahil Mamun; Arif Ahmad; Md. Imran Hossain Emu

[102] A Novel Hybrid GLDNN Architecture for Bangla Dialect Identification. Mohammad Arafath Uddin Shariff*

[116] Toward Quantum NLP: A Transfer Learning-Based BERT Transformer-QML Framework for Spam Text Semantics Modeling. Md Farhan Shahriyar*; Gazi Tanbhir; Abdullah Md Raihan Chy

[151] Assessing the Effectiveness of Supervised Learning Models in Predicting Risks of Diabetes and Cardiovascular Disease with Explainability Analysis. Ahmed Shafkat*; Kohinur Parvin; Samin Yasar; Md. Mahbubur Rahman; Bijon Mallik; Nasirul Mumenin

[203] Fake Review Detection in Low-Resource Settings with Multilingual Transformer Models: The Case of Bangla. Alina Hasan*; Tajrian Mahbub; Navid Hasan Rafi; Md. Anas Mahmud; Rushayed Ali Faiaz

FRIDAY, 18 JULY 2025, 4:30 PM – 6:30 PM

TECHNICAL SESSION 24

[028] Attention-Driven Ensemble Learning: Enhancing Diabetes Prediction in Data-Scarce Environments. Md Shahadat Kabir*; Usman Gani Joy; Tanvir Azhar

[037] Fusing ResNet50 and VGG16 for Enhanced Diagnosis of Acute Lymphoblastic Leukemia: A MultiNet Ensemble Approach. Md.Tofael Ahmed Bhuiyan; Shahriar Manzoor; Nazim Minhada; Khandaker Mohammad Mohi Uddin*

[041] Deriving Biologically Relevant Rules in Breast Cancer Subtypes using FP-Growth Algorithm. Maisha Fahmida*; Shawly Ahsan; Mohammad Shamsul Arefin

[043] EEG-Based Depression Detection Using CNNs and Heatmaps. Md. Refat Sadiq; Md. Tahidul Islam*; Most. Nur A Marjan Esha; Md. Mahmudul Hasan; Md. Abu Johab; Md. Roton Ahmed

[186] Network-Based Approaches and Gene Expression Profiling to Identify the Molecular Mechanism of Stomach Cancer. Md Naeem Mia; Nitun Kumar Podder*; S. M. Mehdi Hasan Zim; Md Raihanul Haque; Rajesh Ghosh

[205] Improving Missing Data Imputation with GF-WAI: An Explainable AI-Based Ensemble Method for Dengue Disease Prediction. Sigma Khanam; Maisha Maliat; Bineta Abedeen; Farjana Khan; Farzana Tasnim; Shafayatuj Johara Chowdhury; Tanjim Mahmud*; Kaushik Deb; Mohammad Shahadat Hossain; Abubokor Hanip

[214] Explainable Machine Learning for Fall Detection and Alert System: A Cloud-Integrated Approach Using Smartphone Sensors. Asma Sadia Khan; Tanjim Mahmud*; Sadia Tabassum; Fariba Tasnia Khan; Ibna Zubair; Abubokor Hanip; Mohammad Shahadat Hossain; Sapayev Valisher Odilbek Uglu; Muzaffar Shojonov

SATURDAY, 19 JULY 2025, 09:30 AM – 10:30 AM

TECHNICAL SESSION 31

[153] A Blockchain-Based Voting System Using Hyperledger Fabric with a React Interface. MD Mohimul Alam*; Shazneen Islam; Md. Ataur Rahman; Jubaida Nur Jumana; Shannidhay Lal Ghosh; Rifat Ara Rouf; Mahady Hasan

[193] Adaptive Aggregated Federated Learning for Real-Time Intrusion Detection in Edge Computing. Maisha Tabassum; Shadman Rafid; Mehnil Khan; Fernaz Nur*

[204] SimBlock-PoS: Enhancing SimBlock to Evaluate Stake-Based and Work-Based Blockchain Consensus Mechanisms. Rodel Advan*; Annajiat Alim Rasel

[215] Malicious Domain Detection with Deep Learning and Bayesian Optimization Approaches. Tanu Sree Roy Tama; Md. Sakir Hossain*; B.M. Rahful Hasan Shawon; Md. Abeer Hossain; Farhan Tanvir

SATURDAY, 19 JULY 2025, 09:30 AM – 10:30 AM

TECHNICAL SESSION 32

[069] Hybrid Artificial Intelligence for Forecasting Renewable Energy Consumption with Ensemble Machine Learning and Time Series Models. Wazia Onti*; Safiul Haque Chowdhury; Muhammad Minoar Hossain; Mohammad Mamun

[194] An Intelligent Bin with Sensor Integration and Ensemble Machine Learning-Based Fill Prediction. Tamrin Nahar Lam; Amrin Nahar Meem; Suity Akter Ety; Al-Amain*

[199] Vision Guard: Computer Vision-Based Door Detection and Navigation Assistance for the Visually Impaired. Polok Poddar*; Mourika Nigar Mouny; Labib Hasan Khan; Md Sabbir Hossain; Annajiat Alim Rasel

[033] A Systematic Taxonomy of Neural Network Architectures: Principles, Trade-offs, and Future Directions. Sowad Rahman*; Raisha Rafa

SATURDAY, 19 JULY 2025, 09:30 AM – 10:30 AM

TECHNICAL SESSION 33

[036] Obstructive Sleep Apnea detection using 1D CNN-LSTM approach. Sadiatul Marzia*; Md. Jahedul Islam; Reana Raen.

[044] Deep Learning-Enhanced OCT Image Analysis Pipeline: Integrating Denoising, Super-Resolution, and Fuzzy Logic for Improved Clinical Diagnostics. Emam Hasan*; Emon Karmoker

[055] Early Thyroid Disease Diagnosis Using a Hybrid Ensemble Learning Approach with Feature Selection, SMOTE, and Model Explainability. Md.Tofael Ahmed Bhuiyan; Shahriar Manzoor; Nur A Alam Munna; Khandaker Mohammad Mohi Uddin*

[066] Privacy-Preserving Prediction of Chronic Kidney Disease Using Ensemble Machine Learning with Laplacian Differential Privacy and Explainable AI. Mohammad Mamun*; Mohammed Ibrahim Hussain; Mohammed Sowket Ali; Md. Shafiul Alam Chowdhury; Safiul Haque Chowdhury; Muhammad Minoar Hossain

SATURDAY, 19 JULY 2025, 09:30 AM – 10:30 AM

TECHNICAL SESSION 34

[068] Channel Attention Mechanism in Hybrid Deep Learning Model for Accurate Brain Tumor Classification. Md Sayem Ahamed; Sumaiya Akter Dina; Iram Ishika; Roni Das; Riasat Azim*

[074] An Explainable and Ensemble Approach for Skin Lesion Classification Using Attention-Based Lightweight CNNs. Abhijite Deb Barman; Kamona Rani Roy; Tazfia Sultana; Ashis Kumar Mandal; Pankaj Bhowmik*

[077] FAKD-XAI: Feature-Aligned Knowledge Distillation with Explainable AI for Efficient Brain Tumor Classification. Md. Abdur Rahman*; Sabik Aftahee; Md. Ashiqur Rahman; Lamim Zakir Pronay

[083] An Interpretable Hybrid Framework for Brain Tumor Classification: Fusion of EfficientNetV2L, ViTs, and Attention Mechanisms. Robinul Haque Robin; Sadia Mahmud; Md. Abid Hasan Rafi; Md. Fazle Rabbi; Mohammad Mahim; Pankaj Bhowmik*

SATURDAY, 19 JULY 2025, 3:00 PM – 5:00 PM

TECHNICAL SESSION 41

[015] AI-Driven Multilayered Cybersecurity Intelligence Framework for Critical Infrastructure Protection. Md Solaiman Ahamed; Kh. Md. Nazmul Hossain; Mohammad Arafath Uddin Shariff; Iftamum Ul Haque; Sara Mahjabin Hridita; Md Abu Talha*

[117] A Neural Network-Based Sockstress DDoS Detection System. Md. Istiak Hossain*

[137] Graph-Based Intrusion Detection for CAN Bus Security: An Explainable AI Approach. Md Tamim Dari Chowdhury*; Maloy Kumar Devnath

[115] Ethical Dilemmas in EdTech: Student Perspectives on Data Privacy in Online Learning Platforms. Md Eaoumoon Haque; Delower Hossen Tuhin; Md. Tauhid Hossain Rubel; Md. Mostakin Ali; A K M Emran; Munshi Minhazul Haque Antu; Kazi Redwan*; Mustakim Ahmed

[185] An Evaluation of LLM Tools for Continuous Quality Improvement in Outcome-Based Education. Md. Shafqatur Rahman; Mahdi Redwan; Ahsanur Rahman*; Riasat Khan; Rajesh Palit

SATURDAY, 19 JULY 2025, 3:00 PM – 5:00 PM

TECHNICAL SESSION 42

[152] Evaluating the Effectiveness of Large Language Models in Multi-Document Summarization of Bangla News Articles. Sadik Yasin; Ajwad Abrar*

[161] Style Transfer Using Generative Adversarial Network: Tagore to Nazrul. Hasanat Nihal*; Nakib Aman; Md. Abu Johab; Farjana Yasmin; Md. Imran Ali; Mahmudul Hasan Marsel

[184] Bangla Speech Emotion Recognition Using 3D-CNN: A Multi-Corpus and Cross-Lingual Study. Md Habibul Islam; Nitun Kumar Podder*; Md. Nazmus Sakib; Ankur Kumar Mondol; Md Raihanul Haque; Mst. Shaima Aslam Chaity

[197] Detecting AI-Generated Text Using Machine Learning: A Comparative Study of MLP and RoBERTa-Based Models. Tahnia Binte Shafi; Toaha Siddique; Farzana Tasnim; Shefayatuj Johara Chowdhury; Mohammad Saeed Hasan Chowdhury; Tanjim Mahmud*; Kaushik Deb; Mohammad Shahadat Hossain; Abubokor Hanip

[226] An Evaluation of Advanced Neural Network and Machine Learning Models for Sentiment Analysis on Product Reviews. Md. Emon; Niloy Roy; Tahmina Akter; Mst. Sharmin Akter; Tanjim Mahmud*; Nurullaeva Nodira; Atayev Shokir; Abubokor Hanip; Mohammad Shahadat Hossain

[227] Harnessing Machine Learning to Analyze Passenger Sentiments in the Bangladesh Railway System. Manoara Begum; Md Jahirul Haque Rifat; Tanjim Mahmud*; Mohammad Tarek Aziz; Nurullaeva Nodira; Atayev Shokir; Abubokor Hanip; Mohammad Shahadat Hossain

SATURDAY, 19 JULY 2025, 3:00 PM – 5:00 PM

TECHNICAL SESSION 43

[098] Explainable Hybrid Convolutional Networks for Accurate Malaria Diagnosis in Blood Smear Images. Mohammad Mehedi Hasan Munna*; Nakib Aman; Smita Saha; Toriqul Islam; Iqbal Hossain Safy; Fairuj Saima; Sabiha Nusrat

[099] Neural Networks with Neuroplasticity: Adaptive Learning through Connection Pruning and Hebbian Updates. Abrar Fahyaz*

[132] Ensemble Machine Learning-Based Approach to Predict Human Mental States with Optimized Feature Selection and Data Balancing. Md. Tofael Ahmed Bhuiyan; Shahriar Manzoor; Khandaker Mohammad Mohi Uddin*

[133] Mortality Prediction in Pediatric Respiratory Disorders Using Ensemble Machine Learning and Explainable Artificial Intelligence. Anjuman Ansary; Md. Tofael Ahmed Bhuiyan; Shahriar Manzoor; Khandaker Mohammad Mohi Uddin*

[135] HairLossMultinet: A Multi-Scale Feature Fusion Method using Deep Learning Approach. Nizamul Haque Sohan; Md. Mahbubur Rahman*; Ahmed Shafkat; Ahsan Mahbub; Nazmul Hassan; Bijon Mallik

[136] AcneMultiNet: A Deep Learning-Based Hybrid Architecture for Acne Detection. Lamia Nurjahan Tisha; Md Mahbubur Rahman (University of Wyoming); Riasul Islam; Minhajul Hasan; Ahmed Shafkat*; Bijon Mallik

[149] Pneumonia Detection from Chest X-Ray Images based on Deep Learning. Shahriar Siddique Arjon*; Tamanna Yasmin; Ankur Kumar Mondol; Nakib Aman; Shabbir Mahmood

SATURDAY, 19 JULY 2025, 3:00 PM – 5:00 PM

TECHNICAL SESSION 44

[162] A Deep Feature Extraction and Optimization Framework for ECG Classification via Pretrained Vision Networks. Md Rahat; Md. Minhaj Ul Islam*; Md. Zahid Akon; Rahat Hossain Faisal

[177] Ensemble Learning-Based Framework for Anemia Screening Using Clinical Hematological Parameters. Pankaj Bhowmik*; Mostofa Kamal Nasir

[183] MultiNet Ensemble: A Deep Learning Approach for Accurate Malaria Detection Using Microscopic Images. Md.Tofael Ahmed Bhuiyan; Shahriar Manzoor; Khandaker Mohammad Mohi Uddin*

[188] Comparative Analysis of Classification and Regression Models for Schizophrenia Risk Prediction. Syed Mossabbir Hossain; Nitun Kumar Podder*; Md Raihanul Haque; Tasfia Rahman Asma

[190] A Review for Bridging Clinical and Technical Gaps with Hybrid-ML in Schizophrenia Diagnosis. Syed Mossabbir Hossain; Nitun Kumar Podder*; Md Raihanul Haque; Tasfia Rahman Asma

[034] Predicting and Explaining Fatal Road Casualty Types in Great Britain: A Comparative Analysis of Machine Learning, Deep Learning, and Transformers. Umar Hasan*; Mohammad Abdul Qayum

[075] Handling Imbalanced Datasets with Real-World Positive Samples in Dengue Prediction Using Machine and Deep Learning Models. Pronab Kumar Paul; Akash Ghosh; Md. Takrim-UI-Alam; Kaushik Deb; Md. Golam Rashed; Dr. Dipankar Das*

Poster Demonstration Session

FRIDAY, 18 JULY 2025, 11:45 AM TO 4:00 PM (EXCEPT PRAYER AND LUNCH BREAK)

VENUE: EATL INNOVATION HUB LOBBY AREA

[026] A Transformer-based approach for Real-Time Sentiment Analysis of Transliterated Bengali Text. MD KAVIUL HOSSAIN*

[031] Comprehensive Predictive Insights: Leveraging Clinical Data for Hepatitis C Prediction with Machine Learning and Deep Learning. Al- Amain; Fatema Tuj Janin; Nur A Alam Munna; Md. Mahbubur Rahman; Khandaker Mohammad Mohi Uddin*

[058] Preprocessed Lung Data Evaluation Using SVM for Superior Cancer Diagnosis. Md. Tofael Ahmed Bhuiyan; Al- Amain; Nusrat jahan; Mirza Nadim Saad; Istiack Amin; Shifat Ahmed*; Rajon Bardhan

[082] Advancing Web-based Bilingual Spam Detection System with XLM-RoBERTa: Dataset Creation and Model Fine-Tuning. Md. Istiaq*; Nowshin Tasnim

[150] Assessing the Effectiveness of Supervised Learning Models in Predicting Risks of Diabetes and Cardiovascular Disease with Explainability Analysis. Ahmed Shafkat*; Kohinur Parvin; Samin Yasar; Md. Mahbubur Rahman; Bijon Mallik; Nasirul Mumenin

[160] A Hybrid System for Robust Santali-English Language Identification. Hasanat Nihal*; Nakib Aman; Dolon Roy; Farjana Yasmin; Md. Imran Ali; Mahmudul Hasan Marsel

[172] A Systems Biology Approach to Identify Shared Genetic Signatures between Dengue and Comorbidities. Md Raihanul Haque; Nitun Kumar Podder*; Syed Mossabbir Hossain; Poly Akter; S. M. Mehdi Hasan Zim; Mst. Shaima Aslam Chaity

[173] Accessible AI-Navigation for the Visually Impaired: State, UX & Directions. Ehsanur Rahman Rhythm*; Rakibul Hasan; Md Mahadi Hasan; Labib Hasan Khan; Md Sabbir Hossain; Annajiat Alim Rasel; Mohammad Zahidur Rahman

[201] Design and Implementation of an AI-Powered Outcome-Based Education (OBE) Management System. Md. Shafqatur Rahman; Mahdi Redwan; Ahsanur Rahman*; Riasat Khan; Rajesh Palit

[206] Logistic Regression-based Machine Learning Model for Early Alzheimer's Detection Using the OASIS Dataset. Ankur Kumar Mondol*; S. M. Hasan Sazzad Iqbal; Pabitra Kumar Biswas; Md Habibul Islam; Shahriar Siddique Arjon; Tamanna Yasmin

[212] Harnessing AI for Early Detection of Tomato Leaf Diseases: A Machine Learning Perspective. Faisal Imran*; Md Shariful Islam

[213] RoadNet: A Deep Learning Framework for Road Extraction from Remote Sensing Data. Taspiya Alam; Nafisa Lubaba; Tahmina Akter; Mst. Sharmin Akter; Mohammad Tarek Aziz; Tanjim Mahmud*; G.M. Sakhawat Hossain; Md. Khaliluzzaman; Nurullaeva Nodira; Atayev Shokir; Abubokor Hanip; Mohammad Shahadat Hossain

[223] A Multi-Agent RAG System for Legal Information Retrieval in Bangladesh. Abdullah Al Raiyan, Md. Sifat Haque Zidan, Rahil Mehnaz, Rashedur M. Rahman*

[234] The Key Determinants of Road Accidents: A Machine Learning Analysis. MD. Tahidul Islam*; Md. Abu Johab; Md. Roton Ahmed; Md. Nayem Hossain; Nakib Aman