

## Schedule of the Technical Sessions

**\*\*\*The schedule is given in Bangladesh local time (GMT +6)**

<b>Session 1.A: Date: 27 February 2021 Time: 1115 – 1230 hrs</b> <b>Track: Sustainable and Green Technology</b>	
Paper ID	Title
2	Design and Implementation of Three-Axis Solar Tracking System with High Efficiency
151	Solar Energy based Net Metered Easy-Bike Charging Station in Bangladesh
154	Generating Hydroelectricity using Recycled Water
240	A Fruit Cultivation Recommendation System based on Pearson's Correlation Co-efficient
279	Challenges of Radiation from Telecommunication Installations in Bangladesh

<b>Session 1.B: Date: 27 February 2021 Time: 1115 – 1230 hrs</b> <b>Track: Artificial Intelligence</b>	
Paper ID	Title
50	Tomato Plant Diseases Classification Using Deep Learning Based Classifier from Leaves Images
54	Roles of Brand Image and Effectiveness on Smartphone usage over Digital Marketing
62	A Convolutional Neural Network Model for Early-Stage Detection of Autism Spectrum Disorder
116	Rice Disease Detection using Intensity Moments and Random Forest
117	JCVirusNEntamoebaNET (JCENET): A Deep Neural Network for John Cunningham Virus and Entamoeba Parasite Detection

<b>Session 1.C: Date: 27 February 2021 Time: 1115 – 1230 hrs</b> <b>Track: Artificial Intelligence</b>	
Paper ID	Title
140	Movie Genre Classification with Deep Neural Network using Poster Images
149	Deep Learning based Detection and Segmentation of COVID-19 & Pneumonia on Chest X-ray Image
190	Improved Image Reconstruction Using Multi frequency Data for Diffuse Optical Tomography
191	A Lightweight Convolutional Neural Network Model for Child Pneumonia Classification
220	Development of a Smartphone-based Real Time Outdoor Navigational System for Visually Impaired People

<b>Session 1.D: Date: 27 February 2021 Time: 1115 – 1230 hrs</b> <b>Track: Applications of AI and Machine Learning</b>	
Paper ID	Title
224	A Lightweight CNN Architecture to Identify Various Rice Plant Diseases in Bangladesh
225	Social Group Optimized Machine-Learning Based Elderly Fall Detection Approach Using Interdisciplinary Time-Series Features
234	GPU Accelerated Tensor Computation of Hadamard Product for Machine Learning Applications
253	A Hybrid Collaborative Recommendation System Based on Matrix Factorization And Deep Neural Network
285	Artificial Intelligence based Driver Vigilance System for Accident Prevention

<b>Session 1.E: Date: 27 February 2021 Time: 1115 – 1230 hrs</b> <b>Track: Artificial Intelligence, Cloud Computing, and Big Data</b>	
Paper ID	Title
288	Towards Social Group Optimization and Machine Learning Based Diabetes Prediction
295	A Deep Learning Based Approach for Edible, Inedible and Poisonous Mushroom Classification
71	Security Policy Based Network Infrastructure for Effective Digital Service
63	Tree-Based Classifier for Hyperspectral Image Classification via Hybrid Technique of Feature Reduction
64	Analysis on Handwriting Using Pen-Tablet for Identification of Person and Handedness

<b>Session 2.A: Date: 27 February 2021 Time: 1445 – 1600 hrs</b> <b>Track: Cloud Computing, Big Data and Machine Learning</b>	
Paper ID	Title
188	Image Segmentation Based on Fuzzy C Means Clustering Algorithm and Morphological Reconstruction
194	A New Coordination Approach to Mitigate Composition Attack
239	An Anti-pattern Detection Technique Using Machine Learning to Improve Code Quality
146	Dementia Identification for Diagnosing Alzheimer's Disease using XGBoost Algorithm

<b>Session 2.B: Date: 27 February 2021 Time: 1445 – 1600 hrs</b>	
<b>Track: Image Processing and Biomedical Engineering</b>	
Paper ID	Title
66	A Novel Approach of Detecting Image Forgery Using GLCM and KNN
72	Improved Prediction of Glutarylation PTM Site using Evolutionary Features with LightGBM Resolving Data Imbalance Issue
98	Noninvasive Heart Rate and Blood Glucose Level Estimation Using Photoplethysmography
303	COVID-19: Update, Forecast and Assistant - An Interactive Web Portal to Provide Real-Time Information and Forecast COVID-19 Cases in Bangladesh
145	Septic Fruit's Maturity Inspection and Grade Evaluation Adopting Computer Vision -A Review

<b>Session 2.C: Date: 27 February 2021 Time: 1445 – 1600 hrs</b>	
<b>Track: Internet of Things</b>	
Paper ID	Title
60	An L-slot Compact Antenna for Medical, Wearable Device and IoT Applications
102	WSN based Advanced Emergency Fire Alarm System Using MQTT Centric Star Topology
119	Proposing an Energy optimized routing protocol for UWASN based on clustering
124	Design and implementation of a PLC based automatic industrial drainage system
166	Unconventional energy harvesting from wind velocity and VIV resonance phenomenon by using bladeless wind turbine (BLWT)

<b>Session 2.D: Date: 27 February 2021 Time: 1445 – 1600 hrs</b>	
<b>Track: Internet of Things</b>	
Paper ID	Title
201	Network Repair Crew Scheduling Using Benders Decomposition Method: A Case Study of Dhaka City
245	A Blockchain-based approach to secure cloud connected IoT Devices
266	A Microcontroller-based Fire Protection System for the Safety of Industries in Bangladesh
289	Predicting Periodic Energy Saving Pattern of Continuous IoT Based Transmission Data Using Machine Learning Model
43	Predicting COVID-19 infections and deaths in Bangladesh using Machine Learning Algorithms

<b>Session 2.E: Date: 27 February 2021 Time: 1445 – 1600 hrs</b>	
<b>Track: Wireless Communication and Internet of Things</b>	
Paper ID	Title
139	Automatic Digit and Alphabet Recognition Based Online Toll Collection System
226	A Secret SIM Switching Technique to Adapt the upcoming Technology Trends.
256	Anomaly Detection Method for Sensor network in Under Water Environment
290	An Autonomic LASER Tag Combat Simulation System Based on IPS Using RSSI From Wireless Devices
309	Prospects of Internet of Things for Bangladesh

<b>Session 3.A: Date: 28 February 2021 Time: 1000 -1115 hrs</b>	
<b>Track: Business Analytics and Blockchain</b>	
Paper ID	Title
10	Impact of Sentiment Analysis in Fake Online Review Detection
223	Securely Transfer Information with RSA and Digital Signature by using the concept of Fog Computing and Blockchain
230	Application of Blockchain for the Security of Decentralized Cloud Computing
110	A Hybrid MCDM Approach based on AHP, and TOPSIS to select a ERP system in Bangladesh
122	A Comprehensive Study of Machine Learning algorithms for Predicting Car Purchase Based on Customers Demands

<b>Session 3.B: Date: 28 February 2021 Time: 1000 -1115 hrs</b>	
<b>Track: Cyber Security</b>	
Paper ID	Title
68	Privacy Preserving Serial Publication of Trajectory Data
307	Cybersecurity Challenges and Policy Options for Bangladesh
308	Cyber Emergency Response Team for Bangladesh
310	Cyber-Partnership and Cyber-Alliance – Options for Developing Nations

<b>Session 3.C: Date: 28 February 2021 Time: 1000 -1115 hrs</b>	
<b>Track: Data Mining</b>	
Paper ID	Title
20	A Data Mining Approach to Identify the Stress Level Based on Different Activities of Human
39	Opinion Mining: Is Feature Engineering Still Relevant?
40	Prediction of Thyroid Disease (Hypothyroid) In Early Stage Using Feature Selection And Classification Techniques
74	Data Assimilation: Two Different Perspectives Based on the Initial-Condition Dependence
268	A Belief Rule Based Expert System to Assess Multiple Human Reaction in the Context of Facebook posts under Uncertainty

<b>Session 3.D: Date: 28 February 2021 Time: 1000 -1115 hrs</b>	
<b>Track: Data Mining and Information System Engineering</b>	
Paper ID	Title
158	Mining Significant Features of Diabetes through Employing Various Classification Methods
197	Prediction of Hepatitis Disease Using K-Nearest Neighbors, Naive Bayes, Support Vector Machine, Multi-Layer Perceptron and Random Forest
200	Clusterization of Different Vulnerable Countries for Immigrants due to COVID-19 using Mean Probabilistic Likelihood Score and Unsupervised Mining Algorithms
165	Chinese Temple shaped slotted monopole UWB patch antenna for Microwave Imaging Applications
255	A Review on Twitter Sentiment Analysis Approaches

<b>Session 3.E: Date: 28 February 2021 Time: 1000 -1115 hrs</b>	
<b>Track: Machine Learning</b>	
Paper ID	Title
3	Forecast the Rating of Online Products from Customer Text Review based on Machine Learning Algorithms
26	Bengali Sentiment Analysis of E-commerce Product Reviews using K-Nearest Neighbors
283	Document Level Emotion Detection from Bangla Text Using Machine Learning Techniques
33	Preterm Baby Birth Prediction using Machine Learning Techniques
57	Birth Mode Prediction using Bagging Ensemble Classifier: A Case Study of Bangladesh

<b>Session 4.A: Date: 28 February 2021 Time: 1315 – 1430 hrs</b> <b>Track: Machine Learning and Natural Language Processing</b>	
Paper ID	Title
155	Application of Machine Learning for Optimal Placement of Distributed Generation
157	Automated Diagnosis of Pneumonia from Classification of Chest X-Ray Images using EfficientNet
4	A Hybrid Approach for Automatic Extractive Text Summarization
42	Bangla aspect-based sentiment analysis based on aspect term extraction
61	A Comparative Study of Classification Approaches for COVID-19 Prediction

<b>Session 4.B: Date: 28 February 2021 Time: 1315 – 1430 hrs</b> <b>Track: Natural Language Processing and Neural Network</b>	
Paper ID	Title
217	An Approach to Improve the Accuracy of Detecting Spam in Online Reviews
298	Design and implementation of EEG based domestic load control system
302	A Novel Deep Learning based Sentiment Analysis of Twitter Data for US Airline Service
21	High Performance Classification of Caltech-101 with a Transfer Learned Deep Convolutional Neural Network
306	Multi-label Bengali article classification using ML-KNN algorithm and Neural Network

<b>Session 4.C: Date: 28 February 2021 Time: 1315 – 1430 hrs</b> <b>Track: Power System, Robotics, Automation and Control</b>	
Paper ID	Title
6	Analyze the Impact of Demand Side Management on Grid Power for a Isolate Zone for a Sustainable IEEE 14 Bus System
229	Design and Implementation of a synchronous generator with Rotor angle stability control for damping interarea oscillations of interconnected power systems via pss
281	PID Controller Based Automatic Generation Control for Three Area Interconnected Power System
30	Design and Development of a Smart Wheelchair for the Disabled People
55	Vision System Actualization for Object Localization Robot

<b>Session 4.D: Date: 28 February 2021 Time: 1315 – 1430 hrs</b>	
<b>Track: Robotics, Semiconductor, Devices, and Optical Communication</b>	
Paper ID	Title
150	Mars Rover and its strategic Implementation
44	Impact of structural modification by spacer layer inclusion on AlGa <sub>N</sub> /Ga <sub>N</sub> HEMT performance
159	Mid-infrared Supercontinuum Generation in As <sub>2</sub> Se <sub>3</sub> Glass Based C <sub>2</sub> H <sub>5</sub> OH Filled Square Photonic Crystal Fiber
238	Tolerating Soft Errors using Enhanced Matrix Code
305	BER Performance Analysis of Different O-OFDM Techniques in VLC

<b>Session 4.E: Date: 28 February 2021 Time: 1315 – 1430 hrs</b>	
<b>Track: Application of ICT, Social Network, Smart System and Wireless Sensor Network</b>	
Paper ID	Title
219	Integrating ICT in Teaching and Learning at University Level Focusing Education 4.0
286	Municipal Solid Wastes Based Power Generation: A Case Study in Chittagong City
236	ADS-B Based Air Traffic Management System Using Ethereum Blockchain Technology
13	Coordinates Determination of Submerged Mobile Sensors for Non-parallel State using Cayley-Menger Determinant