International Conference on Innovations in Science, Engineering and Technology 2022 (ICISET 2022)

Program Schedule

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

Programs at a glance (Page: 1-2)

Friday, 25 February 2022		
Time	**Program**	**Venue**
10:00 – 12:30	Inaugural Ceremony	IIUC Auditorium
18:30 – 20:00	University Industry Collaboration Program Panel Discussion on IoT and Automation in Industries Organized by: IEEE IUC Student Branch & IEEE Women in Engineering IIUC Branch	Online
20:30 – 21:30	Parallel Tutorial Sessions	Online

Saturday, 26 February 2022	
Time	**Program (Online Sessions)**
09:00 – 10:30	Plenary Session 1
09:00 – 10:30	Plenary Session 2
10:30 – 11:00	Break
11:00 – 13:00	Plenary Session 3
11:00 – 13:00	Plenary Session 4
13:00 – 14:30	Prayer and Lunch Break
14:30 – 16:00	TS–1A: Computer Vision with Deep Learning – 1
14:30 – 16:00	TS–1B: Machine Learning – 1
14:30 – 16:00	TS–1C: Algorithms and Signal Processing
14:30 – 16:00	TS–1D: Power and Energy System–1
14:30 – 16:30	TS–1E : Electronics and Materials Science – 1
14:30 – 16:30	TS–1F : Antenna and Electromagnetism – 1
14:30 – 16:30	TS–1G: Pharmacy
16:30 – 17:00	Prayer and Refreshment Break
17:00 – 17:45	Plenary Session 6
17:45 – 18:30	Prayer and Refreshment Break
18:30 – 20:00	TS–2A: Computer Vision
18:30 – 20:00	TS–2B: Machine Learning – 2
18:30 – 20:00	TS–2C: Information Systems
18:30 – 20:00	TS–2D: Power and Energy System – 2
18:30 – 20:00	TS–2E: Electronic and Materials Science – 2
18:30 – 20:00	TS–2F: VLSI and Embedded System

Sunday, 27 February 2022	
Time	**Program (Online Sessions)**
09:00 – 10:30	Plenary Session 7
09:00 – 10:30	Plenary Session 8
10:30 – 11:00	Break
11:00 – 13:00	Plenary Session 9
11:45 – 13:00	Plenary Session 10
13:00 – 14:30	Prayer and Lunch Break
14:30 – 16:00	TS–3A: Computer Vision with Deep Learning – 2
14:30 – 16:00	TS–3B: Machine Learning – 3
14:30 – 16:00	TS–3C: Natural Language Processing
14:30 – 16:00	TS–3D: Power and Energy System – 3
14:30 – 16:00	TS–3E: Embedded System and IoT – 1
14:30 – 16:00	TS–3F: Antenna and Electromagnetism – 2
16:00 – 16:30	Plenary Session 11
16:00 – 16:30	Plenary Session 12
16:30 – 17:00	Prayer and Refreshment Break
17:00 – 17:45	Plenary Session 5
17:45 – 18:30	Prayer and Refreshment Break
18:30 – 20:00	TS–4A: Computer Vision with Deep Learning – 3
18:30 – 20:00	TS–4B: Machine Learning – 4
18:30 – 20:00	TS–4C: Power and Energy System – 4
18:30 – 20:00	TS–4D: Embedded System and IoT – 2
18:30 – 20:00	TS–4E: Optical Communication and Blockchain
18:30 – 20:00	TS–4F: Environmental Science and Civil Engineering
18:30 – 20:00	Session with IEEE Bangladesh Section

Monday, 28 February 2022		
Time	**Program**	**Venue**
10:00 – 12:30	Closing Ceremony	IIUC Auditorium

* The Inaugural Ceremony will be livestreamed from the following Facebook pages:
https://www.facebook.com/iiuc.ac.bd
https://www.facebook.com/ICISET2022
https://www.facebook.com/ieeeiiucsb

26 February 2022, Saturday (Page: 3-13)

Plenary Session 1	
Date: Saturday, 26 February 2022	**Time: 09:00 – 10:30**
Zoom Link: https://bdren.zoom.us/j/67351165548 **Meeting ID:** 673 5116 5548	
Session Chairs: Prof. Dr. Nur Mohammad, Chittagong University of Engineering and Technology Prof. Dr. Engr. Muhammad Abu Eusuf, International Islamic University Chittagong	
Moderators: Md. Mahiuddin, CSE, IIUC **(Convener)** Dr. Md. Aasim Ullah, EEE, IIUC	
Name of the Speaker	**Topic**
Prof. Dr. Tek Tjing Lie, SMIEEE Deputy Head of School Auckland University of Technology (AUT) Electrical and Electronic Engineering, Auckland, New Zealand	**Hierarchical Control Strategies for DC Microgrids Clusters: A Review**
Prof. Dr. Faisal Hossain, Fellow AMS John R Kiely Endowed Professor Civil and Environmental Engineering University of Washington, Seattle, USA	**Producing More with Less using Sensing, Information Technology and Machine Learning**

Plenary Session 2	
Date: Saturday, 26 February 2022	**Time: 09:00 – 10:30**
Zoom Link: https://bdren.zoom.us/j/66934221440 **Meeting ID:** 669 3422 1440	
Session Chairs: Prof. Dr. M. Moshiul Hoque, Chittagong University of Engineering and Technology Prof. Dr. Muhammad Shahidur Rahman, Shahjalal University of Science and Technology	
Moderators: Dr. Muhammed J. A. Patwary, CSE, IIUC **(Convener)** Mohammad Abdul Kader, EEE, IIUC	
Name of the Speaker	**Topic**
Prof. Dr. Xi-Zhao Wang, FIEEE, FCAAI Vice Director Big Data Institute College of Computer Science and Software Engineering Shenzhen University, Guangdong, China	**Uncertainty Modelling in Adversarial Learning**
Professor Dr. Shaikh Anowarul Fattah, SMIEEE, FIEB Dept. of Electrical and Electronics Engineering Bangladesh University of Engineering and Technology (BUET) Bangladesh	**Multi-perspective Learning for Biosignal Analysis**

Plenary Session 3	
Date: Saturday, 26 February 2022	**Time: 11:00 – 13:00**
Zoom Link: https://bdren.zoom.us/j/61785944260	**Meeting ID: 617 8594 4260**
Session Chairs: Prof. Dr. Mohmmad Kaykobad, BRAC University Prof. Dr. Muhammad Ahsan Ullah, Chittagong University of Engineering and Technology	
Moderators: Mohmmad Abdul Kader, EEE, IIUC **(Convener)** Mohammad Woli Ullah, ETE, IIUC	
Name of the Speaker	**Topic**
Prof. Dr. Jianqing Wang, FIEEE Department of Electrical and Mechanical Engineering Nagoya Institute of Technology Nagoya, Japan	**Wide Band Human Body Communication Technology for Wearable Robot Control**
Prof. Dr. Mohamed-Slim Alouini, FIEEE Distinguished Professor Electrical and Computer Engineering King Abdullah University of Science and Technology, KSA	**Towards connecting the remaining 3+ billion**
Dr. Gökhan Erdemir Assistant Professor Department of Electrical and Electronics Engineering Istanbul Sabahattin Zaim University Halkali, Istanbul, Turkey	**A review: Robotic applications for power line inspection**

Plenary Session 4	
Date: Saturday, 26 February 2022	**Time: 11:00 – 13:00**
Zoom Link: https://bdren.zoom.us/j/68074016629	**Meeting ID: 680 7401 6629**
Session Chairs: Prof. Dr. Md. Abdur Rashid, University of Dhaka Prof. Dr. Engr. Muhammad Abu Eusuf, International Islamic University Chittagong	
Moderators: Mohammed Abu Sayeed , Pharmacy, IIUC **(Convener)** Md. Shamim Ahmed, CE, IIUC	
Name of the Speaker	**Topic**
Prof. Dr. Sisi Zlatanova President ISPRS TCIV (The International Society for Photogrammetry and Remote Sensing) Head GRID, School of BE, A.D.A Faculty of Built Environment University of New South Wales, Sydney, Australia	**Spatial Digital Twins for Sustainable Urban Modelling**
Prof. Dr. Md Jamal Uddin Graduate School of Pharmaceutical Sciences Ewha Womens University, Republic of Korea	**CO releasing molecule-2 protects acute kidney injury through HO-1-mitochondrial fitness in mice**

Prof. Dr. Man Hee Rhee President, The Korean Society of Ginseng Department of Veterinary Physiology College of Veterinary Medicine Kyungpook National University, South Korea	**Korean Red Ginseng and its circulation activity**

Technical Session: TS–1A	
Session Title: Computer Vision with Deep Learning – 1	
Date: 26 February 2022	**Time: 14:30 – 16:00**
Zoom Link: https://bdren.zoom.us/j/67396089965 Meeting ID: 673 9608 9965	
Session Chairs: Prof. Dr. Md. Moshiul Hoque, Chittagong University of Engineering and Technology Dr. Md. Azher Uddin, Heriot-Watt University Dubai Campus, UAE	
Session Moderators: Shayhan Ameen Chowdhury, CSE, IIUC **(Convener)** Jamil As-ad, CSE, IIUC	

Paper ID	Title of the Paper
167	Recognition of Bangla Sign Language Characters and Digits Using CNN *Ar-Raji Billah, Fakhrul Islam Fahad, Saffat Rafiq Raaz, Arnab Saha and Qamrun Nahar Eity*
176	Real Time Hand Gesture Based User Friendly Human Computer Interaction System *Koushik Roy, Md. Akiful Hoque Akif*
212	Bangla Sign Language Recognition from Hand Gestures using Convolutional Neural Network *Sadia sultana, Umme Subrina Jannat, Rounok Afza Doha, Mohammad Mahadi Hassan, Muhammad J. A Patwary*
217	Bangla Image Captioning with Bidirectional GRU & Attention Mechanism *Fatema Tuz Zohora, Zainal Abedin*
448	Deep Learning for Depression Symptomatic Activity Recognition *Fariha Anjum, Sadia Alam, Erfanul Hoque Bahadur, Md. Ziaur Rahman, Abdul Kadar Muhammad Masum*

Technical Session: TS–1B	
Session Title: Machine Learning – 1	
Date: 26 February 2022	Time: 14:30 – 16:00
Zoom Link: https://bdren.zoom.us/j/66206664577 Meeting ID: 662 0666 4577	
Session Chairs:	
Prof. Dr. Mohammad Osiur Rahman, University of Chittagong	
Dr. Mohammad Aman Ullah, International Islamic University Chittagong	
Session Moderators:	
Lutfun Nahar, CSE, IIUC **(Convener)**	
A.B.M. Yasir Arafat, CSE, IIUC	

Paper ID	Title of the Paper
375	Prediction of Weight Range of Neonate (Newborn) Using Machine Learning Approach *Saleem Adeeba, Banujan Kuhaneswaran, B.T.G.S Kumara*
376	Forecasting of Bank Performance using Hybrid Machine Learning Techniques *Ummana Islam, Abdul Kadar Muhammad Masum, Nishat Anjum, ABM Yasir Arafat*
377	Predictive Analysis on University Dropout Rate of Bangladesh in Covid-19 *Mia Hossain, Shams Bin Md. Shamim Azad, Md Labib Hossen, Shahidul Islam Khan, Abdul Kadar Muhammad Masum*
436	A novel technique to solve class imbalance problem *Israt Jahan Emu, Dilshad Jahin, Subrina Akter, Muhammed J. A. Patwary, Shamima Akter*

Technical Session: TS–1C	
Session Title: Algorithms and Signal Processing	
Date: 26 February 2022	Time: 14:30 – 16:00
Zoom Link: https://bdren.zoom.us/j/64781081648 Meeting ID: 647 8108 1648	
Session Chairs:	
Prof. Dr. Ekramul Hamid, University of Rajshahi	
Dr. Abu Nowshed Chy, University of Chittagong	
Session Moderators:	
Md. Mahmudur Rahman, CSE, IIUC **(Convener)**	
Md. Rashedul Islam, CSE, IIUC	

Paper ID	Title of the Paper
142	Non-linear Power Exponent Effect in GFCC for Bangla and Malay speech Separation *Md Atiqul Islam*
170	Algorithms for model order reduction of structured periodic control system and simulations of results *Mohammad-Sahadet Hossain, Atia Afroz, Musannan Hossain*
324	English character recognition using EEG-based visual stimulations: A machine learning analysis *Md. Safaiat Hossain, Tuhin Hasan, Md Mahmudul Hasan, Md. Mustafizur Rahman, Most. Mahfuza Sabiha*
382	Outcomes of Deep Neural Network Hyperparameter Tuning on Bengali Speech Token Classification *Md Rakibul Hasan, Md. Mahbub Hasan, Md Zakir Hossain*
467	Emotion state analysis by Electroenchephalogram *Dil Afroz, Nafiul Hasan*

Technical Session: TS–1D	
Session Title: Power and Energy System – 1	
Date: 26 February 2022	Time: 14:30- 16:00
Zoom Link: https://bdren.zoom.us/j/69963899712 Meeting ID: 699 6389 9712	
Session Chairs:	
Prof. Dr. Abdur Razzak, Independent University Bangladesh	
Dr. Yasir Arafat, International Islamic University Chittagong	
Session Moderator:	
Sk. Md. Golam Mostafa, EEE, IIUC (Convener)	
Engr. Md. Shahid Ullah, EEE, IIUC	

Paper ID	Title of the Paper
3	Power compensation and Voltage flicker control of Solar-wind hybrid microgrid with optimized DSTATCOM using a control technique *Md. Mosaraf Hossain Khan, Aasim Ullah, S M Shahnewaz Siddiquee, M. Shafiul Alam, Kallol Biswas, Rafat Bin Ali*
24	Grid Connected Microgrid Fault Current Reduction Using Non-Superconducting Fault Current Limiter *Nurul Mostafa Tarek, Aynul Farid Bin Rahim, Md. Rashidul Islam, Md. Fokhrul Hasan, Muhammad Azharul Islam*
279	Numerical Performance Analysis of Solar Parabolic Dish Collector with Different point Focusing Cavity Receiver for Optimizing the Thermal Performance *Nahyan Ahnaf Pratik, Md. Hasan Ali, Nafisa Lubaba, Nahid Hasan*
461	Fuzzy Logic Control of Supercapacitor Energy Storage System in a Microgrid *A.H.M.A.Rahim*

Technical Session: TS–1E	
Session Title: Materials Science	
Date: 26 February 2022	Time: 14:30 – 16:00
Zoom Link: https://bdren.zoom.us/j/63496418078 Meeting ID: 634 9641 8078	
Session Chairs:	
Prof. Dr. Faruk Hossain, Rajshahi University of Engineering and Technology	
Dr. Md. Tawabur Rahman, Khulna University of Engineering and Technology	
Session Moderators:	
Muhammad Athar Uddin, EEE, IIUC (Convener)	
Dr. Zahid Hasan, EEE, IIUC	

Paper ID	Title of the Paper
9	Analysis of Photovoltaic Parameters for Hot-compressed ZnO Based DSSC Under Illumination and Dark Condition *Abdullah Al Mamun, Mohammad Rafiqul Islam, A. A. Abuelwafa, M. Shafiul Alam, T. Soga and M. S. H. Choudhury*
45	Tri-band Nano-Meta Absorber for Solar Energy Harvesting Employed in the Optical Regime *Johan Uddin, Md Hasanul Karim, Sultan mahmud, Sikder Sunbeam Islam*
178	Analyzing the Effect of Nickel Tetraphenylporphyrin Doping on the Crystallite Parameters of ZnO Nanoparticles *Md Al Saeid Chowdhury, Amran Hossain, Mohammad Rafiqul Islam, M. Shafiul Alam, Tetsuo Soga, Md. Shamimul Haque Choudhury*

235	Measurement Performance of NKN Piezo Material for Powering Shoe-mounted Sensor *Md. Ismail Haque, Ryota Yamamoto, Jianqing Wang, Ken-ichi Kakimoto*
501	Optimization of Electrophoretic Deposition Parameters for Uniform ZnO Deposition on Conductive Glass Substrate *Md. Muhidur Rahman, Nurul Islam, M. Shafiul Alam, Muhammad Athar Uddin, T. Soga, M. S. H. Choudhury*
503	Electrochemical Impedance Spectroscopy Analysis to Find the Effect of Compression Temperature on the Performance of P25 Based Dye-sensitized Solar Cell *M. S. H. Choudhury, Md. Inzamam-Ul-Alam Chowdhury, Md Mohsin Hossain, M. Shafiul Alam, Mohammad Rafiqul Islam, Tetsuo Soga*

Technical Session: TS–1F	
Session Title: Antenna and Electromagnetism – 1	
Date: 26 February 2022	**Time: 14:30 – 16:00**
Zoom Link: https://bdren.zoom.us/j/65852934913 Meeting ID: 658 5293 4913	
Session Chairs: Prof. Dr. Rezaul Azim, University of Chittagong Dr. Touhidul Alam, Universiti Kebangsaan Malaysia	
Session Moderators: Mohammed Jashim Uddin, ETE, IIUC **(Convener)** Md. Ibrahim, ETE, IIUC	
Paper ID	**Title of the Paper**
42	Design and Analysis of Multiband Microstrip Patch Antenna Array for 5G Communications *Md Tohedul Islam, Abu Zafar Md Imran, Fahim Chowdhury, Md. Nur Nobe Hridoy, Md. Humayun Kabir, Abdul Gafur, Syed Zahidur Rashid*
46	A New Inverted-L-Shaped EMR Obeying Meta-Atom for C-Band Applications *Sikder Sunbeam Islam, Jubaida Nahar Tuli, Sultan Mahmud, Brishty Shil*
49	Terahertz Antenna for Biomedical application. *Tanvir Hossain, Masud Parvez, Abu Zafar Md. Imran, Mohammed Jashim Uddin, Abdul Gafur, Syed Zahidur Rashid*
54	A Simple UWB Antenna with WiMAX/WLAN/X Triple Band Rejection Features *Mehedi Hasan Chowdhury, Radowanul Haque, Fahad Uddin, Syed Zahidur Rashid, Md Mohiuddin Soliman, Abdul Gafur*
61	Inverted F-Shaped Two-Component META-ATOM for Multiband Application *Jubaida Nahar Tuli, Sultan Mahmud, Sikder Sunbeam Islam*
123	An Epsilon Negative Metamaterial for Dual Band Operation in Microwave Range *Md. Shoyab Abdullah Chy, Sultan Mahmud, Shihabun Sakib, Md Abdul Kader, S. S. Islam*

Technical Session: TS–1G	
Session Title: Pharmacy and Biological Science	
Date: 26 February 2022	**Time: 14:30 – 16:30**
Zoom Link: https://bdren.zoom.us/j/66851731121 Meeting ID: 66851731121	
Session Chairs: Prof. Dr. Sohel Rana, Jahangirnagar University Prof. Dr. Mamunur Rashid, Rajshahi University	
Session Moderators: Mohammed Abu Sayeed, Pharmacy, IIUC (**Convener**) Dr. Hazrat Ali, Pharmacy, IIUC	

Paper ID	Title of the Paper
23	Honey as a Promising Lifetime Intradermal Implant for Type 2 Diabetes Mellitus *Zahir Uddin Mohammed Babar, Irwandi Jaswir, Hafidz Mahamad Maifiah, Soraya Binti Ismail, Raha Ahmad Raus, Mohammed Abu Sayeed, Arafat Faraque*
25	Potential Role of Magnolol in Managing Neurological Disorders: A Review *Nasrin Sultana, Mohammed Abu Sayeed, Marajul Islam*
67	Association between rs1801157 Single Nucleotide Polymorphism of SDF-1 β Gene and Type 2 Diabetes Mellitus in Bangladeshi Population *Md. Abdullah Al Mobin, Fayejun Nesa, Mehedi Mala Mitu, Ferdous khan, Khawaza Nazim Uddin, Md. Hasanuzzaman Shohag*
78	*In Silico* Pharmacokinetic Profiling and Molecular Docking Study of *Alpinia calcarata* Roscoe to Identify the Major Molecules having Anti-inflammatory and Hypoglycemic Action *Abdullah Al Noman, Md. Masudur Rahman*
343	Repression of Multiple Carcinomas by Predicting the AKT2 Inhibition Engaging Machine Learning Methods on Molecular Descriptors *Mohammad Badhruddouza Khan, Rahat Shahrior, Ahmed Jebail Meraj, Jannatul Ferdouse Shaky*
356	Secondary Metabolites Phenolic Acid from *Azadirachta indica* (Neem) to Discovery of Anti-COVID-19 Drug: *In-silico* Approach *Miah Roney, Mohd Fadhlizil Fasihi Mohd Aluwi*
420	A review on potential biological activities of medicinal plants in the management of Covid-19 infection *Tasmiul Zannat, Md. Ashraf Chowdhury, Jannatun Namme*

Plenary Session 6	
Date: Saturday, 26 February 2022	**Time: 17:00 – 17:45**
Zoom Link: https://bdren.zoom.us/j/66236782992 Meeting ID: 662 3678 2992	
Session Chairs: Prof. Dr. Md. Sanaullah Chowdhury, University of Chittagong Dr. Shahidul Islam Khan, International Islamic University Chittagong	
Moderators: Muhammad Mostafa Amir Faisal, ETE, IIUC (**Convener**) Mr. Jamil As-ad, CSE, IIUC	

Name of the Speaker	Topic
Dr. Md. Arafatur Rahman, SMIEEE Senior Lecturer, School of Mathematics and Computer Science University of Wolverhampton Wulfruna St, Wolverhampton WV1 1LY, United Kingdom	**Intelligent Networking Connecting towards Multi-Domains in Computer Science & Engineering**

Technical Session: TS–2A	
Session Title: Computer Vision	
Date: 26 February 2022	Time:18:30 – 20:00
Zoom Link: https://bdren.zoom.us/j/64433675411 Meeting ID: 644 3367 5411	
Session Chairs: Prof. Dr. Kaushik Deb, Chittagong University of Engineering and Technology Dr. Golam Rabiul Alam, BRAC University	
Session Moderators: Md. Khaliluzzaman, CSE, IIUC **(Convener)** Mohammad Hasin Abrar, CSE, IIUC	

Paper ID	Title of the Paper
10	An analysis on SVM and BPNN for CT Patient Table Detection using Distance-verses-angle Signature Feature *Kanishka Sarkar, Tanmoy Kanti Halder, Ardhendu Mandal, Progyan Biswas, Simran Aryal, Barnali Kundu, Preyasha Chakraborty*
63	On the Effectiveness of Deep Transfer Learning for Bangladeshi Meat Based Curry Image Classification *Minhajur Rahman, Saimunur Rahman, Mohamed Uvaze Ahamed Ayoobkhan*
110	A Robust Webcam-based Eye Gaze Estimation System for Human-Computer Interaction *Koushik Roy, Dibaloke Chanda*
165	Computer Vision Based Industrial and Forest Fire Detection Using Support Vector Machine (SVM) *Md. Abdur Rahman, Sayed Tanimun Hasan, Mohammed Abdul Kader*

Technical Session: TS–2B	
Session Title: Machine Learning – 2	
Date: 26 February 2022	Time:18:30– 20:00
Zoom Link: https://bdren.zoom.us/j/63008049149 Meeting ID: 630 0804 9149	
Session Chairs: Dr. Abdul Kader Muhammad Masum, International Islamic University Chittagong Dr. Muhammed J. A. Patwary, International Islamic University Chittagong	
Session Moderators: Mohammad Manjur Alam, CSE, IIUC **(Convener)** Mohammad Sazid Zaman Khan, CSE, IIUC	

Paper ID	Title of the Paper
335	Machine Learning Models for Content Classification in Film Censorship and Rating *Syma Afsha, Mahmudul Haque, Hussain Nyeem*

Paper ID	Title of the Paper
344	Boosting Guided Probabilistic Ensemble-based Approach for Phishing Website Detection *Avisheak Das, Fahim Irfan Alam, Sadia Sharmin, Rokan Uddin*
409	Benchmarking Unsupervised Machine Learning for Mobile Network Anomaly Detection *Md Rakibul Ahasan, Mohammed Fahim Momen, Mirza Sanita Haque, Mohammad Rubbyat Akram, Golam Rabiul Alam, Md Zia Uddin*
442	Robust Ensemble Machine Learning for Precision Agriculture *Majwega Jackson, Ggaliwango Marvin, Amitabha Chakrabarty*

Technical Session: TS–2C	
Session Title: Information Systems	
Date: 26 February 2022	**Time: 18:30 – 20:00**
Zoom Link: https://bdren.zoom.us/j/67987230849	**Meeting ID: 679 8723 0849**
Session Chairs: Dr. Mohammad Shamsul Arefin, Chittagong University of Engineering and Technology Dr. Mohammad Shafiul Alam, Ahsanullah University of Science and Technology	
Session Moderator: Md. Mahiuddin, CSE, IIUC **(Convener)** A.B.M. Yasir Arafat, CSE, IIUC	
Paper ID	**Title of the Paper**
108	A Budget and Nutrition-aware Mobile Application Featuring Food Menu Generation and Monitoring for the School Feeding Programme in Bangladesh *Ajoy Deb Nath, Mahfuzulhoq Chowdhury, Mehedi Hassan*
473	A Study on Author Ranking *Palash Ranjan Roy, Md. Noushin Islam, Labiba Tasfiya Jeba, Md. Adnanul Haq, Iffat Afsara Prome, Mohammad Kaykobad, Tanvir Kaykobad*
494	A Novel Technique for Predicting The Optimum Time For Reallocating Fragments In MCRUD Based DDBS Using Machine Learning *Shahidul Islam Khan, Md. Yeasin Al Azad, Mohammad Jonayed Tanjim*
496	Mining Job description to understand the on-demand skills and expertise in big data & analytics *Feras Safi, Md Masbaul Alam Polash*

Technical Session: TS–2D	
Session Title: Power and Energy System – 2	
Date: 26 February 2022	**Time: 18:30 – 20:00**
Zoom Link: https://bdren.zoom.us/j/68633283706	**Meeting ID: 686 3328 3706**
Session Chairs: Prof. Dr. Shahriar Khan, Independent University Bangladesh Dr. Sampad Ghosh, Chittagong University of Engineering & Technology	
Session Moderators: Engr. Md. Rashidul Islam, EEE, IIUC **(Convener)** Engr. Md. Shahid Ullah, EEE, IIUC	

Paper ID	Title of the Paper
69	A Real-Time Digital Protection Scheme for VSC-HVDC System with LR Type Solid State Current Limiter Controller *M. Shafiul Alam, Aasim Ullah, Fahad Saleh Al-Ismail, Md. Shamimul Haque Choudhury, Yasir Arafat, Mohammad Shoaib Shahriar, S. M. G Mostafa*
116	Different Scenario Analysis of PJM 5- Bus Test System by Changing Load Demand *Md. Kamrul Hasan, Nur Mohammad*
257	Stability Enhancement of Western Grid of Bangladesh Using Unified Power Flow Controller *Pollen Barua, Muhammad Quamruzzaman, M.G Rabbani*
425	ABO3 Perovskites' Formability Prediction and Crystal Structure Classification Using Machine Learning *Minhaj Uddin Ahmad, Abdur Rahman Akib, Md. Mohsin Sarker Raihan, Abdullah Bin Shams*
479	Exponential Moving Average Extended Kalman Filter for Robust Battery State-of-Charge Estimation *Hafiz Ahmed, Aasim Ullah*

Technical Session: TS–2E	
Session Title: Electronics and Materials Science	
Date: 26 February 2022	**Time: 18:30 – 20:00**
Zoom Link: https://bdren.zoom.us/j/66202686539 Meeting ID: 662 0268 6539	
Session Chairs: Prof. Dr. Md. Johurul Islam, Rajshahi University Dr. Mohammad Shamimul Haque Choudhury, International Islamic University Chittagong	
Session Moderators: Dr. Zahid Hasan, EEE, IIUC **(Convener)** Muhammad Athar Uddin, EEE, IIUC	

Paper ID	Title of the Paper
199	Performance Analysis of n+ Pocket DG-JLFET with SiO_2 and High-K Oxide Thin Layer for Biomedical Application *Md. Mahfuzul Haque, Sheikh Hasib Cheragee*
302	Changes on Forward Recovery among Si, Ge and SiC-Based PiN Diode *Kazi Mahamud Al Masum, Tanvir Yousuf Shohag, Md. Shahid Ullah*
332	Inspection of Temperature-Dependent Electrical Attributes of CNTFET Under Ballistic Condition *Washik Adnan, Md Ittehad Hasan, Nafisa Anjum, Riffat Ara Islam Ritu, Md Faysal Nayan*
471	Ferromagnetic Core Geometry Effect Analysis on EVs Ground Clearance for Wireless Power Transfer *Minhazur Rahman, Fariha Rahman*
505	Noise Figure Modeling Subject to Frequency and Temperature for AlGaN/GaN HEMTs *Mohammad Abdul Alim, Ali A. Rezazadeh, Christophe Gaquiere*

Technical Session: TS–2F	
Session Title: VLSI and Embedded System	
Date: 26 February 2022	Time: 18:30 – 20:00

Zoom Link: https://bdren.zoom.us/j/68968757220 Meeting ID: 689 6875 7220

Session Chais:
Dr. Fakir Sharif Hossain, Ahsanullah University of Science and Technology
Dr. Sajid Muhaimin Choudhury, Bangladesh University of Engineering and Technology

Session Moderators:
Dr. Mohammad Shamimul Haque Choudhury, EEE, IIUC **(Convener)**
Sayed Allamah Iqbal, EEE, IIUC

Paper ID	Title of the Paper
68	Area-Efficient Design of a Quantum-Dot Cellular Automata Based Full Adder Having Low Latency *Upal Barua Joy, Shourov Chakraborty, Joy Das, Joyonti Das, Afra Tasnim, Shams Jarin*
94	Design and Implementation of Surface Disinfection Robot Using UVC Light and Liquid Sanitizer *Fahim Bin Rahman, Anik Das, Md. Fakwer Uddin Mazumder, Imon Deb Nath, Mohammed Abdul Kader*
105	A Wearable Hearing Protection Device for Vehicle Drivers to Mitigate the Impact of Sound Pollution for Noisy Places in Bangladesh *Joy James Costa, S.M. Toha Al Kadir, Suchinto Roy Dhrubo, Md. Ferdous Wahid, Zubair Ahmed Ratan, Dipta Roy*
119	A High Speed Dynamic Logic Circuit Design with Low Propagation Delay and Leakage Current for Wide Fan-In Gates *Md Maharaj Kabir, Fahim Abrar, Md. Rashidul Islam, Riazul Islam, Muhammad Athar Uddin, Abdul Asad*
465	Transient Effect Ring Oscillator PUF Based on Programmable Delay Lines *Yangpingqing Hu, Yuqiu Jiang, Weizhong Wang*

27 February 2022, Sunday (Page: 14-23)

Plenary Session 7	
Date: Sunday, 27 February 2022	**Time: 9:00 – 10:30**
Zoom Link: https://bdren.zoom.us/j/62774423257 **Meeting ID: 627 7442 3257**	
Session Chairs: Prof. Dr. Mohammad Shahadat Hossain, University of Chittagong Prof. Dr. Muzahidul Islam, United International University	
Moderators: Mr. Shayhan Ameen Chowdhury, CSE, IIUC Md. Humayun Kabir , CCE, IIUC	
Name of the Speaker	**Topic**
Dr. Md Zakirul Alam Bhuiyan, SMIEEE Assistant Professor Department of Computer and Information Sciences Fordham University JMH 334 E Fordham Road, Bronx, NY 10458 USA	**Is Your Smartphone Smart Enough to Prevent You from Being Watching Through its Wi-Fi: An Up-and-Coming Security Concerns?**
Prof. Dr. Nikhil R. Pal, FTWAS, FIEEE Electronics and Communication Sciences Unit Center for Artificial Intelligence and Machine learning Indian Statistical Institute, Calcutta, India	**Artificial Intelligence -Are we ready for "AI everywhere"?**

Plenary Session 8	
Date: Sunday, 27 February 2022	**Time: 9:00 – 10:30**
Zoom Link: https://bdren.zoom.us/j/69798020885 **Meeting ID: 697 9802 0885**	
Session Chairs: Prof. Dr. Faruk Hossain, Rajshahi University of Engineering and Technology Prof. Dr. Md. Shah Amran, University of Dhaka	
Moderators: Mohammad Athar Uddin, EEE, IIUC **(Convener)** Md. Masudur Rahman, Pharmacy, IIUC	
Name of the Speaker	**Topic**
Professor Dato' Dr. Abu Bakar Abdul Majeed Faculty of Pharmacy & Director, Research Management Centre (RMC) Universiti Teknologi MARA, Selangor, Malaysia	**Intra-Nasal Drug Delivery of a Centrally Active Drug**
Prof. Dr. A.K.M. Azharul Islam, FInstP, CPhys, FBAS, ISESCO Laureate Professor Emeritus, Department of Electrical and Electronic Engineering and Former Vice-Chancellor, IIUC, Bangladesh	**MAX phases etched into 2D MXene materials: Exciting Technological Horizon**

Plenary Session 9	
Date: Sunday, 27 February 2022	**Time: 11:00 – 13:00**
Zoom Link: https://bdren.zoom.us/j/62570898492 Meeting ID: 625 7089 8492	
Session Chairs: Prof. Dr. Md. Saidur Rahman, Bangladesh University of Engineering and Technology Prof. Dr. M. Jahirul Islam, Shahjalal University of Science and Technology	
Moderators: Mr. Md. Khaliluzzaman, CSE, IIUC **(Convener)** Mr. Muhammed Nazmul Arefin, CSE, IIUC	
Name of the Speaker	**Topic**
Prof. Dr. Md Atiqur Rahman Ahad, SMIEEE, SMOPTICA Dept. of Media Intelligent Osaka University, Japan	**Skeleton and Sensor for Healthcare**
Prof. Dr. Ujjwal Maulik, FIEEE Alexander von Humboldt Fellow, Germany, Senior Associate, ICTP, Italy, Department of Computer Science and Engineering Jadavpur University, Kolkata, WB, India	**Data Science and Artificial Intelligence: Recent Issues and Challenges**
Prof. Dr. Md Raisuddin Khan, SMIEE Department of Mechatronics Engineering, International Islamic University Malaysia 53100 Kuala Lumpur, Malaysia	**Evolutionary Modular Robot for Versatile Manipulation**

Plenary Session 10	
Date: Sunday, 27 February 2022	**Time: 11:45 – 13:00**
Zoom Link: https://bdren.zoom.us/j/65974709219 Meeting ID: 659 7470 9219	
Session Chairs: Prof. Dr. Muhammad Ahsan Ullah, Chittagong University of Engineering and Technology Dr. Abdul Kadar Muhammad Masum, International Islamic University Chittagong	
Moderators: Zinnia Sultana, CSE, IIUC **(Convener)** Engr. Md. Jalal Uddin, EEE, IIUC	
Name of the Speaker	**Topic**
Prof. Dr Celia Shahnaz, SMIEEE, Fellow IEB, Dept. of Electrical and Electronics Engineering, Bangladesh University of Engineering and Technology (BUET), Bangladesh,	**Machine and Deep Learning for Biomedical and Healthcare Applications**
Prof. Dr. Subarna Shakya, SMIEEE Department of Electronics and Computer engineering Pulchowk Campus, Institute of Engineering Tribhuvan University, Nepal	**Security solutions in SAAS Environment**

Technical Session: TS–3A	
Session Title: Computer Vision with Deep Learning – 2	
Date: 27 February 2022	**Time: 14:30 – 16:00**
Zoom Link: https://bdren.zoom.us/j/65856839390 **Meeting ID: 658 5683 9390**	
Session Chairs: Prof. Dr. Rashed Mustafa, University of Chittagong Dr. Md Zia Uddin, Sintef Digital, Norway	
Session Moderator: Zinnia Sultana, CSE, IIUC **(Convener)** Farzana Tasnim, CSE, IIUC	

Paper ID	Title of the Paper
498	Low Light Enhancer: A Low Light Image Enhancement Model Based on U-Net using Smartphone *Tahia Binte Chowdhury, Md. Khaliluzzaman, Md. Jashim Uddin, Karnish Khanam, and Md. Monirul Islam*
182	An Efficient and Lightweight Convolutional Neural Network for Carcinogenic Polyp Identification *Md. Imrul Kayes, Rashida Feroz Prome, Maria Noor, Shovan Bhowmik, Mamun Ahmed*
395	MRI Brain Tumor Classification Using Deep Convolutional Neural Network *Takowa Rahman, Md. Saiful Islam*
334	Developing BrutNet: A New Deep CNN Model with GRU for Realtime Violence Detection *Mahmudul Haque, Syma Afsha, Hussain Nyeem*

Technical Session: TS–3B	
Session Title: Machine Learning – 3	
Date: 27 February 2022	**Time: 14:30 – 16:00**
Zoom Link: https://bdren.zoom.us/j/63833746671 **Meeting ID: 638 3374 6671**	
Session Chairs: Prof. Dr. Celia Shahnaz, Bangladesh University of Engineering and Technology Dr. Tahsina Farah Sanam, Bangladesh University of Engineering and Technology	
Session Moderators: Dr. Md. Jamshed Alam Patwary, CSE, IIUC **(Convener)** Subrina Akter, CSE, IIUC	

Paper ID	Title of the Paper
345	Depression Detection in Text Using Long Short-Term Memory-Based Neural Structured Learning *Md Zia Uddin*
180	Explainable Augmented Intelligence and Deep Transfer Learning for Pediatric Pulmonary Health Evaluation *Ggaliwango Marvin, Md. Golam Rabiul Alam*
221	Machine Learning Approaches to Identify Significant Features for the Diagnosis and Prognosis of Chronic Kidney Disease *Nosin Ibna Mahbub, Md. Imran Hasan, Md. Martuza Ahamad, Sakifa Aktar, Mohammad Ali Moni*
160	Explainable AI for Safe Water Evaluation for Public Health in Urban Settings *Nakayiza Hellen, Ggaliwango Marvin*

313	Predicting Autism Spectrum Disorder (ASD) meltdown using Fuzzy Semi-supervised Learning with NNRW *Sara Karim, Nazina Akter, Muhammad J.A. Patwary*

Technical Session: TS–3C	
Session Title: Natural Language Processing	
Date: 27 February 2022	**Time: 14:30 – 16:00**
Zoom Link: https://bdren.zoom.us/j/63645346144 Meeting ID: 636 4534 6144	
Session Chairs: Dr. Aminul Islam Akhando, Khulna University of Engineering and Technology Dr. Md. Shahriar Mahbub, Ahsanullah University of Science and Technology	
Session Moderators: Md. Mahmudur Rahman, CSE, IIUC **(Convener)** Lutfun Nahar, CSE, IIUC	

Paper ID	Title of the Paper
118	Bengali Hate Speech Detection in Public Facebook Pages *Nasif Istiak Remon, Nafisa Hasan Tuli, Ranit Debnath Akash*
175	Sentiment Analysis Using Ensemble Technique on Textual and Emoticon Data *Mohammad Aman Ullah, Korimunnesa Munmun, Fatematuz Zohra Tamanna, Md. Shahnur Azad Chowdhury*
288	Exploiting Diverse Contextual Features Through Transformers for Detecting Informative Tweets *Abu Nowhash Chowdhury, Shawon Guha, Nurul Amin, Shahidul Islam Khan*
463	Sentiment Analysis on Reviews of E-commerce Sites Using Machine Learning Algorithms *Md. Jahed Hossain, Dabasish Das Joy, Sowmitra Das, Rashed Mustafa*
495	Bengali Text Categorization Based on Deep Hybrid CNN–LSTM Network with Word Embedding *Samrat Alam, Md Afnan Ul Haque, Ashiqur Rahman*

Technical Session: TS–3D	
Session Title: Power and Energy System – 3	
Date: 27 February 2022	**Time: 14:30 – 16:00**
Zoom Link: https://bdren.zoom.us/j/69194300984 Meeting ID: 691 9430 0984	
Session Chairs: Dr. Md Shafiullah, King Fahd University of Petroleum and Minerals, KSA Dr. Md Alamgir Hossain, Griffith University, Australia	
Session Moderators: Dr. Aasim Ullah, EEE, IIUC **(Convener)** Engr. Md. Shahid Ullah, EEE, IIUC	

Paper ID	Title of the Paper
90	Modified Bi-directional Switching System for Unity Power-Factor in Adjustable Speed Drive *Tanzim Mushtary*

112	Installation of a Waste to Energy Based Power Plant Incorporating Wind Power for Producing Electricity in Chattogram, Bangladesh: A Planning Process *Jobair Al Rafi, Md. Shakib Hossain, S.M.G. Mostafa, Md. Minhaj Hossain, Minhazul Hoque Tamim Chowdhury, Md. Aasim Ullah*
404	Hybrid Power Generation Using Speed Breaker *Md Faiyad Bin Bintu, Mohammad Woli Ullah, Mohammed Ismail Hossain, Muhammad Mostafa Amir Faisal, Muhammad Foyazur Rahman*
480	Prospects of Smart Metering System in Bangladesh: Cost Benefit Analysis *Yasir Arafat, Md. Mohibul Hassan, Mahmudul Alam*

Technical Session: TS–3E
Session Title: Embedded System and IoT – 1

Date: 27 February 2022	Time: 14:30 – 16:00

Zoom Link: https://bdren.zoom.us/j/61911785534 Meeting ID: 619 1178 5534

Session Chairs:
Prof. Dr. Shamim Ahmad, Rajshahi University
Prof. Dr. Engr. Muhibul Haque Bhuyan, South East University

Session Moderators:
Dr. Mohammad Shamimul Haque Choudhury, EEE, IIUC **(Convener)**
Dr. Zahid Hasan, EEE, IIUC

Paper ID	Title of the Paper
36	IoT Based Air Quality and Weather Monitoring System with Android Application *Ashfaqul Haq, Sayed Sahriar Hasan, Md. Zillur Rahman, Dipesh Das, Ata Ullah*
52	IoT based Automated Examination Management System with Biometric Portal *Nadia Tabassum, MD. Shahnauze, Ishita Chowdhury, Uzzal Basu*
71	Microcontroller Based Feeder Protection System from Various Fault Conditions in Distribution Line *Y Upal Barua Joy, Shourov Chakraborty, Tanbir Kabir Murad, Afra Tasnim, Bijoy Barua, Joy Das*
72	IoT Based Smart Automatic Water Management System with RF Communication and Remote Monitoring *Imon Deb Nath, Md. Fakwer Uddin Mazumder, Md. Naeem Uddin Novel, Mohammed Abdul Kader*
307	Design and Implementation of an IoT-Based Healthcare Monitoring System and Automatic Hand Sanitizer *Mohammed Zaki, Mohammed Moinul Islam, S. M.G Mostafa, M. Shafiul Alam, Aasim Ullah*

Technical Session: TS–3F
Session Title: Antenna and Electromagnetism – 2

Date: 27 February 2022	Time: 14:30 – 16:00

Zoom Link: https://bdren.zoom.us/j/66473567791 Meeting ID: 664 7356 7791

Session Chairs:
Prof. Dr. Md. Fokhrul Islam, Islamic University of Technology
Dr. Sikder Sunbeam Islam, International Islamic University Chittagong

Session Moderators:
Muhammad Mostafa Amir Faisal, ETE, IIUC **(Convener)**
Md. Ibrahim, ETE, IIUC

Paper ID	Title of the Paper
74	A 1×2 Rectangular Patch Array Antenna for 6 GHz WiFi Applications *Himel Kumar Saha, Liton Chandra Paul, Sk. A. Shezan, Rezaul Azim, Azremi Abdullah Al-Hadi*
75	A Wideband Inset-fed Simple Patch Antenna for Sub-6 GHz Band Applications *Liton Chandra Paul, Himel Kumar Saha, Tushar Kanti Roy, Rezaul Azim, M. T. Islam*
113	Design of Compact E-Shaped Microstrip Patch Antenna for Wireless Body Area Network. *Umme Afruz, Md. Ahasan Kabir*
146	A H-shaped Slotted Circular Patch Antenna for Sub-6 GHz Applications *Liton Chandra Paul, Md. Tanvir Rahman Jim, Tithi Rani, Md. Shizer Rahman, Md. Samsuzzaman, Rezaul Azim*
173	An Omni-directional Rectangular Patch Antenna for 5G/WiFi/WiMAX Applications *Liton Chandra Paul, Md. Tanvir Jim, Tithi Rani, Md Samsuzzaman, Md. Shizer Rahman, Rezaul Azim*

Plenary Session 11	
Date: Sunday, 27 February 2022	**Time: 16:00 – 16:30 PM**
Zoom Link: https://bdren.zoom.us/j/62727671248 **Meeting ID: 627 2767 1248**	
Session Chairs: Prof. Dr. Raju Ahmed, Dhaka University of Engineering and Technology Prof. Dr. M. Mofazzal Hossain, University of Liberal Arts Bangladesh	
Moderators: Dr. Md. Aasim Ullah, EEE, IIUC **(Convener)** Engr. Khandakar Abdulla Al Mamun, EEE, IIUC	
Name of the Speaker	**Topic**
Dr. Muzamir Isa Associate Professor School of Electrical System Engineering Universiti Malaysia Perlis (UniMAP), Malaysia	**On-Site Partial Discharge Measurement and Characterization Using Rogowski Coil for Insulation Condition Monitoring in Medium Voltage Cable**

Plenary Session 12	
Date: Sunday, 27 February 2022	**Time: 16:00 – 16:30 PM**
Zoom Link: https://bdren.zoom.us/j/67551290663 **Meeting ID: 675 5129 0663**	
Session Chairs: Prof. Dr. Sitesh Chandra Bachar, University of Dhaka Prof. Dr. Mohammed Aktar Sayeed, International Islamic University Chittagong	
Moderators: Dr. Hazrat Ali, Pharmacy, IIUC **(Convener)** Dr. Md. Areeful Haque, Pharmacy, IIUC	
Name of the Speaker	**Topic**
Dr. Masanari Umemura Senior lecturer, Cardiovascular Research Institute (CVRI) Yokohama City University Graduate School of Medicine Yokohama, Japan	**Innovative Technology of Synthesizing Commercially** **Available Drugs with Intrinsic Magnetic Property**

Plenary Session 5	
Date: Sunday, 27 February 2022	**Time: 17:00 – 17:45**
Zoom Link: https://bdren.zoom.us/j/68433549527 **Meeting ID: 684 3354 9527**	
Session Chairs:	
Prof. Dr. Celia Shanaz, Bangladesh University of Engineering and Technology	
Dr. M. Shafiul Alam, King Fahd University of Petroleum and Minerals, Saudi Arabia	
Moderators:	
Sk. Md. Golam Mostafa, EEE, IIUC **(Convener)**	
Dr. Yasir Arafat, EEE, IIUC	
Name of the Speaker	**Topic**
Prof. Dr. Lina Bertling Tjernberg, SMIEEE School of Electrical Engineering and Computer Science KTH Royal Institute of Technology, Stockholm, Sweden	**Power grid technologies for a sustainable society**

Technical Session: TS–4A	
Session Title: Computer Vision with Deep Learning-3	
Date: 27 February 2022	**Time: 18:30 – 20:00**
Zoom Link: https://bdren.zoom.us/j/65632737475 **Meeting ID: 656 3273 7475**	
Session Chairs:	
Dr. Taskeed Jabid, East West University	
Dr. Muhammad A Hasan, University of Liberal Arts Bangladesh	
Session Moderators:	
Muhammad Moazzam Hossen, CSE, IIUC **(Convener)**	
Subrina Akter, CSE, IIUC	

Paper ID	Title of the Paper
266	Image Translator: An Unsupervised Image-to-Image Translation Approach using GAN *Silvia Satoar Plabon, Mohammad Shabaj Khan, Md. Khaliluzzaman, and Md. Rashedul Islam*
125	Performance Analysis of Glaucoma Detection Using Deep Learning Models *Nazmus Shakib Shadin, Silvia Sanjana, Sovon Chakraborty, Nusrat Sharmin*
126	Face Mask Detection using Deep Learning and Transfer Learning Models *Nazmus Shakib Shadin, Silvia Sanjana, Daiyan Ibrahim*
194	Hand Gesture Based Speed and Direction Controlof DC Motor Using Machine Learning Algorithm *Mohammed Abdul Kader, Md. Jahid Hasan, Md. Ariful Islam Emon, Abdul Karim, Sultan Mahmud, Tahia Tahsin*
352	Fine-Tuned Convolutional Neural Networks for Bangladeshi Vehicle Classification *Minhajur Rahman, Saimunur Rahman, Mohamed Uvaze Ahamed Ayoobkhan*

Technical Session: TS–4B	
Session Title: Machine Learning – 4	
Date: 27 February 2022	Time: 18:30 – 20:00
Zoom Link: https://bdren.zoom.us/j/69258201776 Meeting ID: 692 5820 1776	

Session Chairs:
Dr. A. B. M. Alim Al Islam, Bangladesh University of Engineering and Technology
Dr. Shahidul Islam Khan, International Islamic University Chittagong

Session Moderators:
Mohammad Sazid Zaman Khan, CSE, IIUC **(Convener)**
Farzana Tasnim, CSE, IIUC

Paper ID	Title of the Paper
101	A Machine Learning Approach to Analyze the Performance of Bangladesh Cricket in T20 *Tamal Joyti Roy, Md. Ashiq Mahmood, Aninda Mohanta, Diti Roy, Jannatun Tuba Jyoti, Pran Krishna Ghosh*
209	Building Prediction Models and Risk Factor Identification for Mobile Cellular Subscription Rate in Bangladesh *Md. Shafiullah, Mehenaz Chowdhury, Mst. Irin Sultana, Md. Nazmus Salehin*
239	Machine Learning Approaches to Predict Rice Yield of Bangladesh *Tasnia Rahman, Sakifa Aktar*
348	An Investigation into Crime Forecast Using Auto ARIMA and Stacked LSTM *Sadia Sharmin, Fahim Irfan Alam, Avisheak Das, Rokan Uddin*
416	Multi-Variate Regression Analysis for Stock Market price prediction using Stacked LSTM *Rokan Uddin, Fahim Irfan Alam, Avisheak Das, Sadia Sharmin*

Technical Session: TS–4C	
Session Title: Power and Energy System – 4	
Date: 27 February 2022	Time: 18:30 – 20:00
Zoom Link: https://bdren.zoom.us/j/65074321395 Meeting ID: 650 7432 1395	

Session Chairs:
Dr. Yasir Arafat, International Islamic University Chittagong
Dr. M. Shafiul Alam, King Fahd University of Petroleum and Minerals, KSA

Session Moderators:
Engr. Khandakar Abdulla Al Mamun, EEE, IIUC **(Convener)**
Engr. Md. Jalal Uddin, EEE, IIUC

Paper ID	Title of the Paper
143	Design and Implementation of Data Analysis-Based Energy Monitoring System *Mohammad Shahadat Hossain, Minhajul Islam, Prosenjit Barua, Md. Ahsan-Ul Hoque*
228	Analysis of Energy Consumption for a Hybrid Green Data Center *Md. Tabil Ahammed, Nourin Osman, Chinmoy Das, MD. Anwar Hossain, Sabbir Hossain, Mehedi Hasan Kaium*
326	Demand-based Electricity Pricing in a Deregulated Market Scenario in Bangladesh *Nazmul Haider Sonet, Shadman Saqlain Rahman, Insan Arafat Jahan, Arik Subhana, Fahim Abid*

| 444 | Energy Conservation and Load Shifting based DSM approach in residential sector: applicability and impacts analysis in the case of developing countries |
| | *Muhammad Azharul Islam, Md. Sarowar Hossain, Md. Rabiul Hasan, Md Sayedul Islam Babu, Hasan Al Banna, Md. Nahid Hasan Rashed, and Md. Shafiul Alam* |

Technical Session: TS–4D	
Session Title: Embedded System and IoT – 2	
Date: 27 February 2022	**Time: 18:30 – 20:00**
Zoom Link: https://bdren.zoom.us/j/69650207120 Meeting ID: 696 5020 7120	
Session Chairs:	
Prof. Dr. Shamim Ahmad, Rajshahi University	
Dr. Md Shakowat Zaman Sarker, Uttara University	
Session Moderators:	
Mr. Sayed Allamah Iqbal, EEE, IIUC **(Convener)**	
Dr. Zahid Hasan, EEE, IIUC	

Paper ID	Title of the Paper
99	IoT Based Greenhouse Environment Monitoring and Smart Irrigation System for Precision Farming Technology
	Arindom Chakraborty, Monirul Islam, Animesh Dhar, Mohammad Shahadat Hossain
124	IoT Based Air Pollution Monitoring & Prediction System
	Mohammed Rakib, Sanaulla Haq, Md. Ismail Hossain, Tanzilur Rahman
476	Design and Implementation of Bangla Braille Key for Blind Examinees of Bangladesh
	Sumaiya Afroj, Muhammad Muinul Islam
484	IoT-GSM Based Controlling and Monitoring System to Prevent Water Wastage, Water Leakage, and Pollution in the Water Supply
	Abdullah Al Shahid Chowdhury, Yasir Arafat, M. Shafiul Alam

Technical Session: TS–4E	
Session Title: Optical Communication and Blockchain	
Date: 27 February 2022	**Time: 18:30 – 20:00**
Zoom Link: https://bdren.zoom.us/j/68821453697 Meeting ID: 688 2145 3697	
Session Chairs:	
Prof. Dr. Mohammad Sanaullah Chowdhury, University of Chittagong	
Dr. Md. Sakir Hossain, American International University-Bangladesh	
Session Moderators:	
Engr. Abdul Gafur, ETE, IIUC **(Convener)**	
Abu Zafar Md. Imran, ETE, IIUC	

Paper ID	Title of the Paper
50	Securing Certificate Management System Using Hyperledger Based Private Blockchain
	Saha Reno, Mamun Ahmed, Saima Ahmed Jui, Shamma Dilshad
65	Low Loss Flatband THz Guidance in Nodeless Antiresonant Hollow Core Fiber
	Azra Sadia Sultana, Abdul Khaleque, Kumary Sumi Rani Shaha, Mafin Muntasir Rahman, Md. Sarwar Hosen

128	3D Design for Lightweight S-Box *Tasnuva Ali, A. H. Azni, Nur Hafiza Zakaria*
153	IoT and Machine Learning-Based Hypoglycemia Detection System *Fahim Hossain Sifat, Rahnuma Mahzabin, Sadia Anjum, Al-Akhir Nayan, Muhammad Golam Kibria*

Technical Session: TS–4F	
Session Title: Environmental Science and Civil Engineering	
Date: 27 February 2022	**Time: 18:30 – 20:00**
Zoom Link: https://bdren.zoom.us/j/66492430230 **Meeting ID:** 664 9243 0230	

Session Chairs:
Prof. Dr. Engr. Muhammad Abu Eusuf, International Islamic University Chittagong
Dr. Shamzani Affendy Mohd. Din, International Islamic University Malaysia

Session Moderators:
Md. Shamim Ahmed, CE, IIUC **(Convener)**
Md. Khorshed Ali, CE, IIUC

Paper ID	Title of the Paper
107	Surface Morphology and Atomic Spectroscopy Analysis of Brick Particles as an Adsorbent to Remove Toxic Metals (Cr, Pb and Fe) from Solution *Md. Anwarul Karim, Sharmin Sultana Dipti and Md. Abul Kalam Azad*
183	Physicochemical Assessment of Dhanmondi Lake Water in Dhaka City, Bangladesh *Md. Khorshed Ali, Ahmed Jubaer, Md. Tasneem Zafar, Md. Zahirul Islam Talukder*
230	Review the Structural Health Monitoring (SHM) System and the Built Environment: A literature review. *Md Mostafizur Rahman Raju, Muhammad Abu Eusuf*
470	Probabilistic Indicators for the Assessment of Structural Characteristics and Understanding Professional Ethics: A Multi- Dimensional Approach *Muhammad Abu Eusuf, Md. Shamim Ahmed, M.S.R.S Eusuf and Wira Mohd. Noor*