



International Conference on Sustainable Development in Technology for 4th Industrial Revolution

Date: March 12-13, 2021

Detail Program Schedule of Technical Sessions

Platform: Zoom

Day-1: March 12, 2021 (Friday)

PARALLEL TECHNICAL SESSION-D1-A			
Time	Technical Session - A1-TS1: Smart Textile and Sustainable Industrialization Session Chair: Prof. Dr. Engr. Md. Zulhas Uddin, BUTEX Zoom Link: https://eu01web.zoom.us/j/63470735079		
11.00AM-12.30PM(BST) 05.00AM-06.30AM(UTC)	Paper Title	Paper ID	Authors
	EXPLOITATION OF NATURAL DYE (WATERMELON) INTO THE COLORATION OF CVC FABRIC	35	Md. Rezaul Karim, Salman Ahmed, Tamzid Hossain, Shubhajit Dutta and Rafiul Islam
	COTTON AND SILK DYEING WITH NATURAL DYE EXTRACTED FROM DRAGON FRUIT (Hylocereuspolyrhizus)	66	Tohidur Zaman Tamim, Asif Sakib and Salman Ahmed
	A COMPREHENSIVE ANALYSIS ON MULTIFARIOUS PROSPECTS OF MEDICAL TEXTILES AT GLOBAL MARKET IN CONTEXT OF COVID-19	87	Thouship Waqer, Md. Nazif Hasan Chowdhury, Md. Abdus Salam and Safwana Hussain
	JUTE: A HIDDEN TREASURE OF DIFFERENT DIVERSIFIED PRODUCT	92	Jony Kumar Dey, Sany Barua, Md. Rezaul Karim and Rafiul Islam
Time	Technical Session - A1-TS2: Machine Learning Session Chair: Prof. Dr. Muhammed Moshuiul Haque, CUET Zoom Link: https://bdren.zoom.us/j/63030523295		
11.00AM-12.30PM (BST) 05.00AM-06.30AM (UTC)	Paper Title	Paper ID	Authors
	EVOLVING A NEW SDLC MODEL (TRIGON MODEL) FOR SOFTWARE DEVELOPMENT	36	Md. Farhan Nasir, Md. Jasim Uddin Qureshi, Papri Mitra and Thohidul Islam
	STATISTICAL AND DEEP LEARNING TECHNIQUES BASED TIME SERIES FORECASTING	41	Prosangit Kumer Barman, Maqsudur Rahman and Md. Tofael Ahmed
	CONTENT BASED DYNAMIC SPAM EMAIL FILTERING USING NAÏVE BAYES CLASSIFIER	55	Md. Miraj Ahamad, Muhammad Anwarul Azim and Mohammad Khairul Islam
	SPLITTING BASED TEXTURE CLASSIFICATION USING LOCAL BINARY PATTERN	58	Aditi Sen, Muhammad Anwarul Azim, Mohammad Khairul Islam and Tahmina Akter
	STUDENT PERFORMANCE ANALYZING AND PREDICTING BASED ON MACHINE	67	Md. Hafizur Rahman, Tayube Sharif Khan,



	LEARNING APPROACH		Manoara Begum
PARALLEL TECHNICAL SESSION-D1-B			
Time	Technical Session - B1-TS1: Communication, Wireless Technology Session Chairs: Dr. Md. Azad Hossain, CUET Dr. Muhammad AsadRahman, CUET Zoom Link: https://bdren.zoom.us/j/63949275181		
03.00PM– 04.00PM(BST) 09.00AM– 10.00AM(UTC)	Paper Title	Paper ID	Authors
	DESIGN OF A TRIPLE FEED MICROSTRIP PATCH ARRAY ANTENNA FOR CIRCULAR POLARIZATION AT X-BAND	33	Piyas Chowdhury, Md. Azad Hossain and QuaziDelwar Hossain
	DESIGN AND PERFORMANCE STUDIES OF A HAMMER-SHAPED FED SLOT ANTENNA FOR SUB-6 GHZ 5G APPLICATIONS AT LTE BANDS 42/43	46	Sourav Dhar, Swarup Chakraborty, Md. Sifat Hossen and Md. Amranul Haque
	A METAMATERIAL CSRR INSPIRED MICROSTRIP PATCH ANTENNA FOR BANDWIDTH ENHANCEMENT	60	Sneha Deb and Md Azad Hossain
	A COMPACT DUAL BAND MICROSTRIP PATCH ANTENNA WITH GAIN ENHANCEMENT TECHNIQUE FOR X BAND APPLICATIONS	86	Md. Sifat Hossen, Md. Amranul Haque, Swarup Chakraborty and Sourav Dhar
Time	Technical Session -B1-TS2: Structuraland TransportationEngineering Session Chair: Prof. Dr. Bipul Chandra Mondal, CUET Zoom Link: https://eu01web.zoom.us/j/65533309340		
03.00PM– 04.00PM(BST) 09.00AM– 10.00AM(UTC)	Paper Title	Paper ID	Authors
	SUITABILITY OF LIME WITH FLY ASH AS STABILIZERS IN CLAY SOIL FOR CONSTRUCTING RURAL AND LIGHT TRAFFIC ROADS	17	Md. Jamil Ahsan and Abu Siddique
	AN IN-DEPTH ESTIMATION OF ROAD TRAFFIC ACCIDENT COSTS IN BANGLADESH	29	Md. Jamil Ahsan, Sourav Roy and ArmanaSabiha Huq
	RAIL PASSENGERS SERVICE DURING COVID-19: A CASE STUDY IN CHITTAGONG RAILWAY STATION, CHITTAGONG	49	Md Sifat Bin Siraj, Md Tawkir Ahmed, Muhammad Majedul Haque Chowdhury, Mohammad Helal Uddin and Mohammad Shariful Islam
	PEDESTRIAN'S BEHAVIOUR ON ROAD CROSSING AT UN-SIGNALIZED INTERSECTION BASED ON TWO MAJOR CITY KHULNA AND CHITTAGONG.	50	Md Sifat Bin Siraj, Md Tawkir Ahmed, KhadizaAkerRatna, Md Jahidul Islam and Mohammed Kabir Hossain



Day-2: March 13, 2021 (Saturday)

PARALLEL TECHNICAL SESSION-D2-A			
Time	Technical Session –A2-TS1:PowerSystem, EnergyConversion Session Chairs: Prof. Dr. Md. Raju Ahmed, DUET Prof. Dr. Nur Mohammad, CUET Zoom Link: https://bdren.zoom.us/j/64256939205		
09.00AM– 10.30AM(BST) 03.00AM– 04.30AM(UTC)	Paper Title	Paper ID	Authors
	SOLAR IRRADIANCE FORECASTING USING ELMAN NEURAL NETWORK WITH DIFFERENT TRAINING ALGORITHMS	22	Pardeep Singla, Manoj Duhan and Sumit Saroha
	MULTI-OBJECTIVE MANAGEMENT OF A RENEWABLE MICRO-GRID WITH GRID CONNECTED AND ISLAND MODE OPERATIONS	30	Gnanaprakash M and MangaiyarkarasiS.P
	GRID-TIED POWER GENERATION THROUGH CROSS-CONNECTED SOURCE BASED MULTILEVEL INVERTER	38	Rubell Sen Goopta and Avik Bhattacharya
	A COMPREHENSIVE ANALYSIS OF POWER GRID WITH IEEE 14 BUS SYSTEM MODEL FOR DEREGULATED COMPATIBILITY OF AN ISOLATED GRID	83	Syed Salam
Time	Technical Session –A2-TS2:CivilandEnvironmentalEngineering Session Chair: Prof Dr. Md. Saiful Islam, CUET Zoom Link: https://bdren.zoom.us/j/61227756353		
09.00AM– 10.30AM(BST) 03.00AM– 04.30AM (UTC)	Paper Title	Paper ID	Authors
	APPLICATION OF STRESS INDUCED PIEZOELECTRIC HARVESTERS IN THE CONTEXT OF BANGLADESH	21	Ibrahim Kaiser and Md. Jamil Ahsan
	A PORTRAYAL OF CULTURAL HERITAGE IN MYMENSINGH: ARCHITECTURAL FEATURES, IDENTIFYING DAMAGES AND PROBABLE CONSERVATION GUIDELINES	73	AnikGouala, Nandita Banik and Limon Paul Joy
	DEVELOPMENT OF RAINFALL INTENSITY DURATION FREQUENCY (IDF) CURVES FOR CHATTOGRAM CITY	53	Md. Mehedi Hassan Masum and Dr. Sudip Kumar Pal
	A SYNOPSIS OF CHILD TRAFFIC CASUALTIES IN BANGLADESH	80	Armana Huq and Md. Mahmud Hasan
PERFORMANCE EVALUATION OF COUNTER BASED CITY BUS SERVICE OF CHATTOGRAM: A CASE STUDY OF METRO PROVATI	74	AnikGouala and Nandita Banik	
PARALLEL TECHNICAL SESSION-D2-A			
Time	Technical Session –A2-TS3:ImageProcessing Session Chair: Prof. Dr. Muhammed Khairul Islam, CU Zoom Link: https://eu01web.zoom.us/j/66441469867		

	Paper Title	Paper ID	Authors
10.30AM-12.00PM(BST) 04.30AM-06.00PM(UTC)	VISUAL CRYPTOGRAPHY FOR SECURE HARD-COPY TRANSFER	28	Md. Marufur Rahman, Muhammad Anwarul Azim
	FUZZY LOGIC BASED DEEP UNDERWATER IMAGE ENHANCEMENT USING CONVOLUTION NEURAL NETWORK	32	MoomtahinaSharly, Ms. TaslimaBinte Hossain
	HUMAN EAR RECOGNITION USING HISTOGRAM OF ORIENTED GRADIENT	45	Joyasree Chakraborty and Muhammad Anwarul Azim
	RECOGNITION OF HUMAN IRIS USING HISTOGRAM OF ORIENTED GRADIENTS AND SUPPORT VECTOR MACHINE	54	Nasrin Aktar, Muhammad Anwarul Azim, Mohammad Khairul Islam and TahminaAkteer
	HAND GESTURE RECOGNITION FOR INTERPRETATION OF SIGN LANGUAGE	56	TahminaAkteer, Muhammad Anwarul Azim and Mohammad Khairul Islam
Time	Technical Session –A2-TS4: TextilemanufacturingandIndustrialEngineering Session Chair: Prof. Dr. Md. MahbulAlam, CUET Zoom Link: https://eu01web.zoom.us/j/61944399620		
10.30AM-12.00PM(BST) 04.30AM-06.00PM(UTC)	Paper Title	Paper ID	Authors
	THE INVESTIGATION OF CHALLENGES OF IMPLEMENTING INDUSTRY 4.0 IN BANGLADESH	34	Md. Abdus Shabur, MonowarWadudHridoy and KaziAfzalur Rahman
	CASE STUDY OF LEAN MANUFACTURING IMPLEMENTATION IN GARMENTS INDUSTRY: BANGLADESH PERSPECTIVE	78	S. M. Fahim Faisal and Md. Ahesan Kabir
	IMPLEMENTATION OF NEW METHOD IMPROVEMENT TECHNIQUES TO INCREASE PRODUCTIVITY IN APPAREL INDUSTRY	91	Niaz Morshed Rifat, Mohammad Tayub, Suva Das and Md. Rafiul Islam
	ROOT CAUSE ANALYSIS & CORRECTIVE ACTION FOR LYCRA DEFORMATION OF DENIM FABRIC HAVING DIFFERENT COMPOSTION	94	Md. Rafiul Islam, Mohammad ShahariaSadek, Imon Ahmed, Md. Rezaul Karim and Niaz Morshed Rifat
Time	Technical Session –A2-TS5:Robotics, ControlandAutomation Session Chairs: Prof. Dr. Md. Anwarul Abedin, DUET Dr. Sampad Ghosh, CUET Zoom Link: https://eu01web.zoom.us/j/68846035240		
	Paper Title	Paper ID	Authors
	A BUDGET-FRIENDLY NON-CONTACT HAND WASH DISPENSER CONSIDERING THE COVID SITUATION IN BANGLADESH	64	Fardeen Mahbub, Rashedul Islam, Shouherdho Banerjee Akash and Sayed Abdul Kadir Al-Nahiun
	DUAL AXIS SOLAR EMBEDDED POULTRY FARM	72	Papri Mitra, Thohidul Islam, Md. Farhan Nasir, Md. Abu Sayeed,



10.30AM-12.00PM(BST) 04.30AM-06.00PM(UTC)			Md. Jasim Uddin Qureshi and Maqsudur Rahman
	INTEGRATING BLOCKCHAIN, OPEN RAN AND IOT PLATFORMS INTO RURAL COMMUNITY NETWORKS	82	SreeLekshmi S, MojtabaEnayati, Bhanu Prakash Poluparthi, Lakshmi Rajagopal and SeshaiiahPonnekanti
	DESIGN AND IMPLEMENTATION OF A SMART BUILDING MANANGEMENT SYSTEM	101	Nahiduddin Mohammad Musa, Maruf Rahman, Md. PabelSikder, Lamiya Rahman, Md. Mamunur Rahman and Dr. Md Shahrukh Adnan Khan