

IEEE Sponsored Fourth International Conference on Computing and Communication Systems
Department of Information Technology, North-Eastern Hill University, Shillong

Date/Time	Day-1 (March 16, 2023)	
March 16 2023 10:00-11:00 A.M.	Inaugural Session (Community Hall)	
March 16 2023 11:00-11:30 A.M.	High Tea (Community Hall)	
March 16 2023 11:30-1:00 A.M.	Plenary Talk (Community Hall)	
March 16 2023 1:00-1:45 P.M.	Lunch Recess (Community Hall)	
March 16 2023 2:00-3:30 P.M.	Parallel Technical Sessions (School of Technology)	
	Session I (Seminar Hall, IT)	Session II (Seminar Hall, Energy Engg.)
	Chair: Prof. D. Kandar Co-Chair: Dr. J. Binong Teacher Coordinator: Mrs. S. Neog Technical Staff: Joydeep Das Student Volunteer: Tahmina	Chair: Prof. Iti Saha Misra Co-Chair: Prof. S.C. Arya Teacher Coordinator: Prof. B. Bhuyan Technical Staff: Dary Student Volunteer: Pranodana Das
March 16 2023 3:30-4:00 P.M.	Tea Break	
March 16 2023 4:00-5:30 P.M.	Parallel Technical Sessions (School of Technology)	
	Session III (Seminar Hall, IT)	Session IV (Seminar Hall, BME)
	Chair: Prof Shikhar Kr Sarma, Gauhati University Co-Chair: Dr. Sushanta Kabir Dutta Teacher Coordinator: Mrs. S. Neog Technical Staff: Joydeep Das Student Volunteer: Anupam	Chair: Dr. D. Bhatia Co-Chair: Dr. Samrat Paul Teacher Coordinator: Prof. Goutam Saha Technical Staff: Meban Student Volunteer: Piyush Katyayan

	Session I	Session II	Session III	Session IV
TRACK NAME	Computational Intelligence	Computing Devices and Systems	Computational Intelligence	Biomedical and Bioinformatics
Venue	IT Seminar Hall	Energy Seminar Hall	IT Seminar Hall	BME Seminar Hall
Paper ID	#23 #33 #37 #137 #187 #194 #225	#13 #25 #96 #169 #182	#20 #57 #63 #77 #148 #165 #171 #172	#178 #147 #168 #220 #106

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Date/Time	Day-2 (March 17, 2023)		
March 17 2023 9:30 -11:00 A.M.	Keynote Talk 1 (Seminar Hall, IT)		
	Speaker: Prof. Vincenzo Piuri, University of Milan Topic: Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things		
March 17 2023 11:00-11:30 A.M	Tea Break		
March 17 2023 11:30-1:00 P.M.	Parallel Technical Sessions (School of Technology)		
	Session V (Seminar Hall, IT)	Session VI (Seminar Hall, Energy Engg)	
	Chair: Co-Chair: Teacher Coordinator: Mrs. S. Neog Technical Staff: Joydeep Das Student Volunteer: Tahmina	Chair: Co-Chair: Teacher Coordinator: Prof. B. Bhuyan Technical Staff: Dary Student Volunteer: Pranodana Das	
March 17 2023 1:00-2:00 P.M.	Lunch Recess (School of Technology)		
March 17 2023 2:00-3:30 P.M.	Keynote Talk 2 (Seminar Hall, IT)		
	Speaker: Prof. Shaikh A. Fattah, Director, Institute of Robotics and Automation, BUET, Bangladesh Topic: End-to-end Deep Attention Based Deep Learning Architectures for Automatic Disease Detection from Multidimensional Biosignals		
March 17 2023 3:30-4:00 P.M.	Tea Break		
March 17 2023 4:00-5:30 P.M.	Parallel Technical Sessions (School of Technology)		
	Session VII (Seminar Hall, IT)	Session VIII (Seminar Hall, Energy Engg.)	Session IX (Seminar Hall, BME)
	Chair: Co-Chair: Teacher Coordinator: Mrs. S. Neog Technical Staff: Joydeep Das Student Volunteer: Tahmina	Chair: Co-Chair: Teacher Coordinator: Prof. B. Bhuyan Technical Staff: Dary Student Volunteer: Pranodana Das	Chair Co-Chair: Teacher Coordinator: Prof. Goutam Saha Technical Staff: Meban Student Volunteer: Piyush Katyayan

	Session V	Session VI	Session VII	Session VIII	Session IX
TRACK NAME	Security and Cryptography	Computer Communication and Networking	Computational Intelligence	Computing Devices and Systems	Biomedical and Bioinformatics
Venue	IT Seminar Hall	BME Seminar Hall	IT Seminar Hall	Energy Seminar Hall	BME Seminar Hall
Paper ID	#8 #12 #14 #107 #118 #144 #149 #11 #103 # 153 #215	#21 #30 #44 #71 #99 #112 #160 #199 #226	#9 #17 #66 #121 #130 #181 #29 #34 #162 #210	#16 #42 #48 #62 #135 #140 #141	#18 #43 #81 #100 #143

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Date/Time	Day-3 (March 18, 2023)		
March 18 2023 9:30-11:00 AM.	Parallel Technical Sessions (X, XI and XII) (School of Technology)		
	Session X (Seminar Hall, IT)	Session XI (Seminar Hall, Energy Engg.)	Session XII (Seminar Hall, BME)
	Chair: Co-Chair: Teacher Coordinator: Mrs. S. Neog Technical Staff: Joydeep Das Student Volunteer: Tahmina	Chair: Co-Chair: Teacher Coordinator: Prof. B. Bhuyan Technical Staff: Dary Student Volunteer: Pranodana Das	Chair: Co-Chair: Teacher Coordinator: Prof. Goutam Saha Technical Staff: Meban Student Volunteer: Piyush Katyayan
March 18 2023 11:00 AM-11:30 AM	Tea Break (School of Technology)		
March 18 2023 11:30 AM-12:15 AM	NextGen Information & Communication Technologies (Views of Industry Experts) (Multiuse Convention Hall)		
March 18 2023 12:15-1:00 P.M.	Keynote Talk 3 (Multiuse Convention Hall)		
	Speaker: Prof. G Baruah, Director, IIT Guwahati Title:		
March 18 2023 1:00-2:00 P.M.	Lunch Recess		
March 18 2023 2:00-3:00 P.M.	Industry-Academia Interface (Multiuse Convention Hall)		
	Session Moderator: Prof. G Baruah, Director, IIT Guwahati Panel Members: Academics 1. Vice Chancellor, NEHU 2. Director, NESAC 3. Director, NIT Meghalaya		
March 18 2023 2:00-3:00 P.M.	Industry 1. Kuntal Dey, Accenture 2. Abhishek Dixit, Juniper Networks 3. Trijoy Saikia, HCLTech 4. Mr. Siddhant, Director, STPI Guwahati 5. Mr. Snehasis Banerjee, TCS Research, Kolkata		
	High Tea (Multiuse Convention Hall)		
March 18 2023 3:30-4:30 P.M.	Valedictory Function (Multiuse Convention Hall)		
March 18 2023 6:00-8:30 P.M.	Cultural Evening CUM Gala Dinner (Multiuse Convention Hall)		

	Session X	Session XI	Session XII
TRACK NAME	Computational Intelligence	Computing Devices and Systems	Computer Communication and Networking
Venue	IT Seminar Hall	Energy Seminar Hall	BME Seminar Hall
Paper ID	#19 #31 #109 #116 #122 #133 #136	#108 #111 #113 #152	#117 #124 #125 #131 #139 #170 #183 #195 #227

List of Registered Papers I3CS2023 NEHU Shillong

Sl. No.	Paper ID	Title	Name of the Registered Author
1	8	Blockchain and SDN-IoT based secured voting system	Ngangbam Indrason
2	9	Vocal Singing and Music Separation of Mizo Folk Songs	Nikhil Das
3	11	SPECTRAL EFFICIENCY ANALYSIS USING UNDERLAY COGNITIVE RADIO TRANSMISSION OVER Rician FADING CHANNELS	NAVEEN KUMAR BODDUKURI
4	12	A survey on key management solutions for IoT security	priyanka ahlawat
5	13	LOW POWER SENSE AMPLIFIER FOR A 64x32 BIT SRAM ARRAY FOR IOT APPLICATION	Shyamosree Goswami
6	14	PROPOSAL OF USER-FRIENDLY DESIGN OF NFT MARKETPLACE	Debani Prasad Mishra
7	16	WEB 3.0 DECENTRALIZED APPLICATION USING BLOCKCHAIN TECHNOLOG	Debani Prasad Mishra
8	17	A Feature-Weighted Clustering approach for Context Discovery and Selection of Devices in IoT	Chouhan Kumar Rath
9	18	Extraction of Functionally Related Genes for Schizophrenia using Network Analysis in bulk RNA-Seq Data	Tonmoya Sarmah
10	19	A Comparative Analysis of Ensemble Learning Techniques for Crop Yield Prediction: CYPELA	Deeksha Tripathi
11	20	Identification and Analysis of Assamese vowel speech signal using Formant Feature-Fusion and Feed-Forward Neural Network Model	Ankumon Sarmah
12	21	Performance Analysis of Full-Duplex Cooperative NOMA with Power-Time Splitting Based Energy Harvesting	Alok Kumar Baranwal
13	29	Use of AI & Embedded Technology in Human Identity Chips for IoMT	Swati Swayamsiddha
14	23	Landslide susceptibility mapping using support vector machine for Meghalaya, India	Moziihrii Ado
15	25	Processor Scheduling Algorithms using a Discrete-Event Simulator	Jeyaprakash Chelladurai
16	30	Event Driven State Transition Schedulers for SDN-IoT architecture based on 6LoWSD protocol and its energy evaluation on the QPN model	Wanbanker Khongbuh
17	31	Classification of healthy and unhealthy banana leaves using deep learning approach: A comparative assessment	JONALEE BARMAN KAKATI
18	33	Comparative Analysis of Recent Data-Level Methods for Imbalance Classification	Zahid Ahmed
19	34	Impact of Big Data Analytics and ChatGPT on Cybersecurity	Bibhu Dash
20	37	A survey on fish health monitoring approaches using computer vision techniques	EARNINGSTONE R SANGMA

21	42	Floating Point Adder using Inexact Mantissa Adder	SRIKANT KUMAR BEURA
22	43	Automatic Detection of Diseases from Chest Radiographs Using Image Augmentations and Deep Convolutional Neural Networks	Jutika Borah
23	44	Anisotropic Channel Equalization using optimized clustering and Kalman-HMM trained ADALINE	Priyanko Raj Mudiar
24	48	Validating User-Centric Business Process based Service Composition	Sugyan Kumar Mishra
25	57	Exploring Complex Toroidal Mazes with L-systems	Jeyaprakash Chelladurai
26	62	A TCAD simulation-based analysis of the asymmetrically designed channel effects on double gate-junctionless field-effect nanowire transistor	Hriday Das
27	63	Random Forest Regression based Water Quality Prediction for Smart Aquaculture	V P Harigovindan
28	66	A multilingual clause boundary detection approach for Assamese and Bishnupriya Manipuri	Bhubneswar Das
29	71	Investigations on optimal choice of Gamma parameter for Fast-locking PID controlled Phase-locked loop	GEETAMONI KONWAR
30	77	Prosthetic Face Recognition using a Siamese Neural Network Approach	Atharva Bendre
31	81	Healthier Aging: A Systematic Review of Different Fall Detection Techniques in Home and Outdoor Environments	Tamonash Bhattacharyya
32	96	Real-time classification of haze and non-haze images on Arduino Nano BLE using Edge Impulse	Rahul Gargay Bhamidipati
33	99	Threats to Control Plane of Software Defined Networks: An Extensive Study	Lavesh Nama Kamalesh
34	100	AI Based approaches for identification of COVID and non-COVID Pneumonia	Dr. Satarupa Biswas
35	103	Homomorphic Encryption based Federated Learning for Financial Data Security	Swarnendun Kumar Chakraborty
36	106	Combining Magnetic Resonance Imaging and Dynamic Susceptibility Contrast perfusion imaging: Can it improve prediction of outcome in pediatric tubercular meningitis?	Pranjal Phukan
37	107	RSA Cryptosystem: Block Cipher or Stream Cipher	SAHAR ALI LASKAR
38	108	Photo-electric Characteristics Analysis of Quantum Corrected Strained Nanowire Drift-Diffusion Model based Si/Si _{0.98} C _{0.02} Asymmetrical Super-lattice Near Infrared Photo-detector	Dr. Satarupa Biswas
39	109	Tuning of PID Controller using Driving Training-Based Optimization for Speed Control of DC Motor	Hrishikesh Sarma
40	111	Low-Power Approximate Adder Architecture for Image Processing Applications	Kudari Shreya
41	112	iRASA: Fog Scheduling With Congregation of MVO and PSO	Chandrima Paul
42	113	Power Efficient Approximate Multiplier Architecture for Image Processing Applications	Geethika Induluru
43	116	Convolutional Sequence to Sequence Learning for English-Khasi Neural Machine Translation	Aiusha Vellintihun Hujon

44	117	Electromagnetic Signal Analysis: A Vulnerability to Edge Computing Driven IoT Devices	Devajit Das
45	118	A Blockchain-Assisted Authentication for SDN-IoT Network Using Smart Contract	Birglang Bargayary
46	121	Image Representation of Numerical Data-points for Classification Using Convolutional Neural Network	Dr. Rup Kumar Deka
47	122	A Transfer Learning Based Approach for Human Foot Image Classification	Riti Kushwaha
48	124	Jal Setu: Smart Water Tank for Homes and Public Places	Gaurav Singal
49	125	AutoBot: A Semi-Autonomous Bot	Rithwick Sethi
50	130	BiLSTM with CRF Part-of-Speech Tagging for Khasi language	Ransly Hoojon
51	131	A Comparative Analysis of RPL-based Routing Protocols for Internet of Things	Dr. Hafizur Rahman
52	133	Federated Learning with Edge Intelligence for Efficient PM2.5 Prediction	Satheesh Abimannan
53	135	A Modified PID control for tracking and rejection of Ramp-type signals	Rammurti Meena
54	136	Parallel Corpus Creation for NMT using Web Scraping and Filtering	Farha Naznin
55	137	Face Mask Wearing Condition Classification using YOLOv5 trained with Hybrid Dataset	Sanjog Tamang
56	139	Optimal cloudlet movement and placement strategy in a dynamic environment using cluster based technique	Lizia Sahkhar
57	140	Improved PI-PD controller for Integrating type Time-delayed Industrial Processes	Sudipta Chakraborty
58	141	A Modified PID Control for Higher Order References and Disturbances	Dipjyoti Das
59	143	Design of a Simple PID Controller Tuning rule for Thermal Pain Inducers	VIPIN CHANDRA PAL
60	144	A Comparative Study on Performance and Security issues on authentication and key-agreement schemes for Internet of Things (IoT) based wireless body area network	Donbyntalang Dewkhaid
61	147	Comparative Performance Evaluation of Machine Learning Algorithms and Ensemble Techniques for Hand Gesture Recognition Using Electromyographic Signals	Sushama Dhumal
62	148	Deep Learning Segmentation Based Attention Mechanism Module for Navigation System	Mainkordor Mawblei
63	149	Moving Target Defense - Challenges, Problems and Suitability for Internet of Things	Dipendra Gurung
64	152	A lightweight semantic model for IoT architecture: Smart water meter usecase	Syeda Zeenat Marshoodulla
65	153	Datasets in OCR for Handwriting Recognition: A Survey	Prarthana Dutta
66	160	Comparison of Average Completion Time and Makespan for Various Task Scheduling Techniques	Sanjeev Patel
67	162	Rotating Machine Fault Detection Using Support Vector Machine (SVM) Classifier	Abu Hanif Md Ripon
68	165	Parts of Speech Taggers for Indo Aryan Languages: A critical Review of Approaches and Performances	Kuwali Talukdar

69	168	Comparison of Sparkfun TRIAD AS7265x spectroscopy sensor device with a Spectrophotometer for qualitative and quantitative analysis	Bethuel Daurai
70	169	A Simulation Study of Raised Source Drain Double Gate Junctionless Field Effect Transistor	Rikhit Swargiary
71	170	A Novel Load Balancing Approach in the Internet of Vehicles (IoV)	Phibadeity S Marwein
72	171	A survey on personalized health recommender systems for diverse healthcare applications	Deepjyoti Roy
73	172	An Intelligent Group Recommender System using Henry Gas Solubility Optimization Algorithm-based Adaptive Deep Belief Network	Deepjyoti Roy
74	178	Design and Development of a Wearable Wristband for Measuring Pulse Transit Time (PTT) using Pressure Sensors	Dr. Sukesh Rao M
75	181	Pre-processing and Resource Modelling for English-Assamese NMT System	Mazida Akhtara Ahmed
76	182	DEVELOPMENT OF WEIGHT MEASUREMENT SYSTEM BASED ON BEND SENSOR AND LINEAR COMPRESSION SPRING	Parama Deka
77	183	Outage Analysis of MIMO System with TAS under Beaulieu-Xie Fading Channels	Amardeep Kumar Thakur
78	187	NMT for a Low Resource Language Bodo : Preprocessing and Resource Modelling	SIMANTA KALITA
79	194	A survey on Audio-Visual Speech Recognition System	Anindita Das
80	195	RAW Optimization of IEEE 802.11ah Networks	Md. Arifuzzaman Mondal
81	199	Investigating the Impact of Barrier Adjustment and Priority Caching on Improving Quality of Service in Named Data Vehicular Sensor Network	Dependra Dhakal
82	215	Machine learning-based prediction of sorghum biomass from UAV multispectral imagery data	Nurzaman Ahmed
83	220	An Efficient Deep Learning Architecture for Internet of Medical Things	Ankit Srivastava
84	225	STOCK PRICES PREDICTION USING LONG SHORT TERM MEMORY	Nayanika Das
85	226	Music Genre Classification Using Convolutional Neural Network	Nitin Choudhury
86	227	The Internet Measurement Network (AIORI-IMN)	Anand Raje
87	210	An Optimised BERT Pretraining Approach to Identification of Targeted Offensive Language : Data Imbalance and Potential Solutions	Dr Lpika Deka