Session Details

Session I : Communication systems at Dr. Triguna Sen Auditorium on 10th Dec. 2022 from 12:15 pm		
Session Chair : Prof. Jaydeb Bhaumik.		
Sl. No.	Paper ID	Paper Title
1	9	Performance Analysis and Experimental validation of PD-NOMA using Constrained Optimization for Different Modulation Schemes
2	42	Ultra Dense Three -Tier 5G Heterogeneous Network Model for Improved Coverage and Rate
3	59	Experimental Studies of FSO Communication Channel Using Visible Wavelengths Coherent Optical Sources in Artificial Rainy Condition
4	65	Energy Harvesting Assisted- Cooperative Non Orthogonal Multiple Access(NOMA) using Time Switching Relaying(TSR) Protocol

Session II : Electrical Machines, & Drives in K. P. Basu memorial Hall on 10th Dec. 2022 from 12:15 pm		
Session Chair : Prof. Sujit Kr. Biswas		
Sl. No.	Paper ID	Paper Title
1	15	A Statistical Approach on the Stator Current Performance Analysis Under Balanced, Unbalanced and Inter turn Fault Condition of Three Phase Induction Motor
2	67	Multi-Objective Optimization Approach for Energy Loss Minimization of Distribution Networks using Single Series and Multiple Shunt Compensators
3	78	A review of voltage control strategies in active distribution networks
4	75	Sliding Mode Speed Control of a Permanent Magnet Synchronous Motor using Twelve Sectors Modified DTC

Session III : Cognitive sensor network   at   TEQIP Building on 10th Dec. 2022 from 12:15 pm

Session Chair : Prof. Joyanta Kumar Roy

Sl. No.	Paper ID	Paper Title
1	100	Determination of k-partitions of Mobile WSN ensuring one-hope communication with total coverage
2	154	Design a Hardware model of RFID based Tracking System for Bird Flu affected Chickens
3	92	V2X Communication Challenges and Performance Evaluations for Cooperative Multi-hop Platooning
4	82	Performance Study of open-circuited uniform and Stepped Impedance Resonator stubs with respect to their leaky wave characteristics
5	8	Building a Model for RFID based Traffic Density Measurement System

Session IV :   Power & Energy I   at   K. P. Basu memorial Hall on 10th Dec. 2022 from 3:30 pm

Session Chair : Prof. Debasish Chatterjee

Sl. No.	Paper ID	Paper Title
1	76	Sensor-Less Performance Estimation of Induction Motor
2	114	Performance analysis of different rotor configuration of LSPMSM for Electric Vehicles
3	156	Effects of X/R on Rural Distribution Systems connected with Micro-grid
4	159	Direct Torque Control of PMSM following Duty Ratio Modulation with MTPA Scheme

Session V :   Healthcare Informatics   at   TEQIP Building on 10th Dec. 2022 from 3:30 pm

Session Chair : Dr. Sarbani Roy and Dr. Chandreyee Chowdhury

Sl. No.	Paper id	Paper Title
1	30	Developing an Application for Intelligent Transportation System for Emergency Health Care
2	33	Bioinformatics pipeline to unveil the heterogeneity of Glioblastoma Multiforme
3	34	Classification of Cardiac Abnormality using PPG Fiducial Parameters and Probabilistic Neural Network
4	116	A CNN- Dempster Shafer based tuberculosis detection system from chest x-ray images
5	141	Detection of Psychological Trauma in Refugee Children by Analysis of Drawings using Machine Learning

		Session VI	Signal and Data Processing, Instrumentation and Control

Session VI   **Signal and Data Processing, Instrumentation and Control**
at   Dr. Triguna **Sen Auditorium on 11th Dec. 2022 from 10:00 am**

Session Chair : Prof. Amitava Chatterjee

Sl. No.	Paper ID	Paper Title
1	49	Authentication of Thermal Tomographic Images using Histogram Similarity Detection Techniques
2	125	Optimal Biquadratic Approximation of the Fractional-Order Laplacian Operator Yielding Improved Constant-Phase Behavior
3	138	Identification of Multiple Power Quality Disturbances based on Median Filter
4	151	Adaptive Backstepping Control Scheme for Duffing-Holmes Chaotic System with Unknown Disturbances

Session VII   **Advance device**   at   **K. P. Basu Memorial Hall on 11th Dec. 2022 from 10:00 am**

Session Chair : Prof. Angsuman Sarkar

Sl. No.	Paper ID	Paper Title
1	48	Impact of Channel Thickness on Single-Event Transient in InAs Quantum Well n-MOSFETs
2	56	Design and Performance Analysis of Step Channel Stack Oxide DG-TFET for Dielectrically Modulated Bio-sensing Applications
3	99	Strain induced electronic structure and bandgap transition in bilayer MoSe2 of AB and AA stacking order

Session VIII   **Data Analytics**   at   **TEQIP Building on 11th Dec. 2022 from 10:00 am**

Session Chair : Dr. Ram Sarkar

Sl. No.	Paper id	Paper Title
1	7	Power line detection from aerial vehicles using Hough Transform
2	22	Classification of Polarimetric SAR Image using JS-Divergence Profile
3	61	An Improved Image Denoising Technique by designing cascaded filter Using Slime Mould Algorithm
4	70	Retinal Blood Vessel Segmentation and Analysis using Lightweight Spatial Attention based CNN and Data Augmentation
5	95	Interlayer Textural Variabilities to Study the Benignancy/Malignancy of Brain Tumors using MR Modalities Images

Session IX   Evolving Techniques in Testing of Electrical Systems   at   Dr. Triguna Sen Auditorium on 11th Dec. 2022 from 2:30 pm

Session Chair : Prof. Abhijit Mukherjee

Sl. No.	Paper ID	Paper Title
1	93	Energy Saving Potential of Lamps with Different Spectral Composition in Outdoor Lighting Applications under Mesopic Photometry System
2	98	A Comprehensive Review of Recent Developments in Thermal Condition Monitoring of Dry-type Transformers
3	147	Dye-sensitized solar cell testing with Raspberry pi: A cost-effective novel approach
4	161	Estimation on Aging State of Epoxy-Alumina Nano-Composites for Dry-Type High Voltage Insulation Using Debye Model Parameters

Session X   Computing and Applications   at   K. P. Basu Memorial Hall on 11th Dec. 2022 from 2:30 pm

Session Chair : Dr. Zeenat Rehena

Sl. No.	Paper id	Paper Title
1	57	Spatial Attention Enhanced Network for Segmentation of Exudate
2	119	Can social media represent an emerging event -- case study on Indian citizenship debate
3	144	Structure Preserving Semantic Texture Filtering
4	145	Predicting Missing Value for Ozone Data Based on Optimal Site-Selection Strategy
5	146	Game Theory Based Energy-aware Virtual Machine Placement towards Improving Resource Efficiency in Homogeneous Cloud Data Center

Session XI   VLSI system   at   TEQIP Building on 11th Dec. 2022 from 2:30 pm

Session Chair : Prof. Debesh Das

Sl. No.	Paper ID	Paper Title
1	106	A comparative study between two and three component color mixing of LEDs for wide range tunable CCT indoor lighting system
2	77	A Novel Technique to Compress Photoplethysmogram Signal: Improvised with Particle Swarm Optimization and Rivest-Shamir-Adleman Algorithm
3	28	Breakdown Characteristics Study of III-Nitride/β-Ga2O3 Nano-HEMT as a function of Field-Plate Length & AlN Nucleation Layer Thickness

Session XII	Power & Energy II	at	K. P. Basu Memorial Hall on 11th Dec. 2022 from 4:00 pm

	Session Chair : Prof. Sudipta DebNath		
Sl. No.	Paper ID		Paper Title
1	35		Dual-output flyback driver topologies for tunable white LED lighting applications
2	84		Effects of Injection of Solar Photovoltaic Voltage to the Electrical Grid
3	107		Optimal velocity profile identification of EV suited for standard driving cycles using PSO to reduce power requirement
4	129		Prediction of Power Outage During Cyclone Using Machine Learning

On-line Session I 10th Dec. 2022 from 12:30 pm		
Session Chair : Prof. Debangsu Dey		
Sl. No.	Paper ID	Paper Title
1	27	Design and Analysis of a Microgrid System in Grid Tied Mode Using ETAP
2	47	Secondary adaptive frequency consensus of AC microgrid exposed to network delays and high frequency noise signal
3	108	An Analytical Approach for Optimal DG Placement in Distribution Network Contaminated With Harmonics
4	117	Optimization of Hybrid Renewable Energy System using Homer-Pro in both Standalone and Grid systems.
5	64	Short Term Missing Data Prediction of Power System Using Discrete Cosine Transform and Simple Continued Fraction Compressed Long Short Term Memory Network
6	160	Insights and New Practices for Advanced Metering Infrastructure and Smart Energy Metering Framework in Smart Grid- A Case Study

On-line Session II 10th Dec. 2022 from 2:30 pm		
Session Chair : Prof. Debangsu Dey		
Sl. No.	Paper ID	Paper Title
1	52	Behavioral Model and Analysis of Mechanical and Electromechanical Dampers in Light Vehicles.
2	88	CLASSIFICATION OF STAGES OF ALZHEIMER'S DISEASE THROUGH VOLUMETRIC ANALYSIS OF MRI DATA
3	29	Heading Control of an Autonomous Underwater Vehicle using Unfalsification Approach
4	118	Performance Analysis of Breast Cancer Classification from Mammogram Images Using Vision Transformer
5	163	Machine Learning Based Wavelet Decomposition Aided Surface Contamination Prediction of Outdoor Silicone Rubber Insulators

On-line Session III 10th Dec. 2022 from 1:30 pm		
Session Chair : Prof. Atanu Kundu		
Sl. No.	Paper ID	Paper Title
1	110	gm/ID based Noise Optimization for Folded-Cascode Fully Differential Difference Amplifier
2	131	Design of a Raspberry Pi Based Electronic Travel Assistant for Visually Impaired Persons
3	134	Design and Analysis of High-Throughput Two-Cycle Multiply-Accumulate (MAC) Architectures for Fixed-Point Arithmetic
4	51	4H-SiC Semi-Circle Gate Power MOSFET with Low ON-Resistance and High Breakdown Voltage
5	80	KF-BACK: Kalman Filter-Based Activation of Block Acknowledgement in IEEE 802.11ax