Keynote Addresses

On Thursday and Friday, consecutive keynote addresses will take place in the Auditorium and A 106 of Administrative Block. Each keynote address will have a duration of 30-35 minutes, followed by 10-15 minutes of discussion.

THURSDAY 08/06/2023, 11:30-12:30

"Digital Energy Transformation and micro Grids for Low Carbon Power System" – Prof. S N Singh

"Micro and Nano Fabrication of THz Waveguide Components" – Dr. Rakesh Kumar Bhardwaj

FRIDAY 09/06/2023, 9:00-10:30

"Real Application of Machine Learning (REALM): Situation Knowledge on Demand (SKOD)" – Prof. Bharat K. Bhargava

"Evolution for a secured path using NexGen firewalls" – Dr. Rajkumar Banoth

"How IoT and AI can Accelerate Innovation" – Mr. Sai Prasad Parameswaran



Prof. S N Singh

Fellow of IEEE, FIEEE (USA),
FNAE, FIET (UK), IE(I), IETE(I),
FAvH Director, ABV IIITM Gwalior, India

Digital Energy Transformation and micro Grids for Low Carbon Power System

ROOM: Auditorium Date: 08/06/2023 TIME: 11:30-12:30

ABSTRACT

Due to the increased interconnections and loading of the network with liberization and environmental pressure, the power systems have become complex and facing many challenges in their optimal, secure and efficient operation. Smart grid initiatives seem to provide remedial measured to these problems by computational intelligence, automation, advanced measurements, and application of information and communication technology (ICT). Future power system structure, operation, control and management will be quite different from the existing one as it will foresee large market players with direct involvement of consumers, more renewable energy sources and trading of electricity. Due to the emergence of digital technologies (IoT, AI, ML, Computing, Blockchain), arrival of increasingly affordable distributed power technologies (with better operation and control), and decarbonization through the renewable energy and energy efficiency options (low carbon technologies), power system is transforming to digital energy. The main objective of this talk is to discuss the key issue in the digital energy transformation and micro-grids for low carbon power system. The talk provides a platform to an in-depth discussion on the various challenges and their possible remedies in digital energy transformation which will benefit participants from academic and R&D institutions, engineers of utilities and policy makers.

Prof S. N. Singh obtained his M. Tech, and Ph. D. in Electrical Engineering from Indian Institute of Technology Kanpur, in 1989 and 1995, Presently, Prof Singh is Director, Atal Bihari Baipayee- Indian Institute of Information Technology and Management Gwalior (MP), India (on leave from Professor (HAG), Department of Electrical Engineering, Indian Institute of Technology Kanpur, India). Before joining IIT Kanpur as Associate Professor, Dr Singh worked with UP State Electricity Board as Assistant Engineer from 1988 to 1996, with Roorkee University (now IIT Roorkee) as Assistant Professor from 1996 to 2000 and with Asian Institute of Technology, Bangkok, Thailand as Assistant Professor from 2001 to 2002. He was ViceChancellor of Madan Mohan Malviya University of Technology Gorakhpur during April 2017 to July 2020. Dr Singh received several awards including Young Engineer Award 2000 of Indian National Academy of Engineering (INAE), Khosla Research Award of IIT Roorkee, and Young Engineer Award of CBIP New Delhi (India), 1996, Prof Singh is receipt of Humboldt Fellowship of Germany (2005, 2007) and Ottomonsted Fellowship of Denmark (2009-10). Prof Singh became first Asian to receive 2013 IEEE Educational Activity Board Meritorious Achievement Award in Continuing Education. He is also recipients of INAE Outstanding Teacher Award 2016 and IEEE R10 region (Asia-Pacific) Outstanding Volunteer Award 2016. Dr Singh is appointed as IEEE Distinguish Lecturer of Power & Energy Society from 2019 and Industry application Society for 2019-2021. He is also recipient of NPSC 2020 Academic Excellence Award and 2021 IEEE Industry Application Society (IAS) Outstanding Educator/ Mentor Award. His research interests include power system restructuring, FACTS, power system optimization & control, security analysis, wind power, etc. Prof Singh has published more than 500 papers (h-index=57, Citation=12k+) in International/ national journals/conferences and supervised 40 PhD (8 PhD under progress). He has also written 30 book chapters, 8 Edited books and 2 text-books one on Electric Power Generation, Transmission and Distribution and second is Basic Electrical Engineering, published by PHI, India. Prof Singh has completed three dozen of technical projects in India and abroad. His two NPTEL (YouTube) video lectures on HVDC Transmission and Power System Operation & Control are very popular. Prof Singh was Chairman, IEEE UP Section for 2013 & 2014, IEEE R10 (Asia-Pacific) Conference & Technical Seminar Coordinator 2015-18 and R10 Vice-Chair, Technical Activities (2019-2020). Presently Prof Singh is Immediate Past Chairman of IEEE, India Council. Dr Singh is Fellows of IEEE (USA), IET (UK), INAE, IE(I), IETE, AvH.



Dr. Rakesh Kumar Bhardwaj

Group Director Scientist-F
Defence Electronics Applications Laboratory
(DEAL) DRDO Dehradun

Micro and Nano Fabrication of THz Waveguide Components

ROOM: A106 Date: 08/06/2023 TIME: 10:00-10:30

ABSTRACT

The demand of high-speed wireless communication has increased, which need the data rate of the order of Terabyte per second (Tbps) in near future. Terahertz (THz) band communication is a key wireless communication technology to satisfy this future demand. This will also reduce the spectrum scarcity and capacity limitation of current wireless systems. Micro fabricated folded waveguides are potential compact source of wide band and high-power terahertz radiation. This talk would primarily focus on machining technology for THz waveguide components requiring ultra-high precision micro machining. Rectangular waveguides especially folded waveguides are even more difficult to manufacture using conventional machining techniques due to their small size and very tight tolerances. The criticalities in micromachining of Terahertz waveguide Components staring from 100 GHz to 1100 GHz would be discussed. Application of micro milling as reasonably suitable for the THz waveguides followed by ultrasonic cleaning would be explored.

BIO

Dr. Rakesh Kumar Bhardwai, is working as Scientist: F, Group Director Finance at Defence Electronics Applications Laboratory (DEAL) of Defence Research and Development Organisation (DRDO) at Dehradun Uttrakhand. He has his B.Tech Degree from College of Engineering obtained Thiruvananthapuram, Kerala University in 1996 and M.Tech in Production Engineering from IIT Delhi in 2006. He also completed hid Ph.D in the field of Micro and nano fabrication of THz waveguide components from IIT Delhi. He joined DRDO as Scientist B in 1997, since then he is working in Design and Development of microwave and mm-Wave components ranging from X, L,S, Ku, Ka and W band. He is recepant of Padamshee M M Suri Project award at IIT Delhi in 2006, National Science Day oration and Gold medal in 2007, Agni Award for Excellence in Self Reliance of Defence Technology in 2011 and National Technology Day Oration and Titanium Medal in 2015. He has published 31 technical papers in Journals and conferences. He has also published two book chapters. His Area of Specialization is Production Engineering, CAD/CAM, Composite materials, Precision Engineering, Micro and nano manufacturing. His current activity includes design and development mm-Wave and terahertz waveguide components withing desired tolerances. He is a member of ASME, SSME and Fellow of Institution of Engineers India.



Prof. Bharat K. Bhargava

Department of Computer Sciences
Purdue University

"Real Application of Machine Learning (REALM): Situation Knowledge on Demand (SKOD)"

ROOM: A106 Date: 09/06/2023 TIME: 09:00-09:30

BIO

Bharat Bhargava is a professor of the Department of Computer Science with a courtesy appointment in the School of Electrical & Computer Engineering at Purdue University. His recent research is on Intelligent Autonomous Systems and data analytics and machine learning. It includes cognitive autonomy, reflexivity, deep learning and knowledge discovery. His earlier work on Waxed Prune with MIT and NGC built a prototype for privacy preserving data dissemination in cross-domains. Currently he is leading the NGC REALM consortium.

He has graduated the largest number of Ph.D students in CS department at Purdue and is active in supporting/mentoring minority students. In 2003, he was inducted in the Purdue's Book of Great Teachers. In 2017, he received the Helen Schleman Gold Medallion Award for supporting women at Purdue and Focus award for advancing technology for differently abled students.

ABSTRACT

Extracting relevant patterns from heterogeneous data streams poses significant computational and analytical challenges. Identifying such patterns and pushing corresponding content to interested users according to mission needs in real-time is the challenge. This research utilizes the best in Database systems, Knowledge representation, Machine Learning to get the right data to the right user at the right time with completeness and low noise. If user's need is unmet, queries evolve and get modified to come close to satisfy mission needs which may themselves be unclear. If need is partially met, when new streaming data streams in, our research connects relevant data to queries. The knowledge for further processing is kept in the form of queries (megabytes) vs. database (giga bytes). The project deals with multi-media data at peta and zeta scale.

The research leads to a scalable, real-time, fault-tolerant, privacy preserving architecture that consumes streams of multimodal data (e.g., video, text, sound) utilizing publish/subscribe stream engines and RDBMS microservices. We utilize neural networks to extract relevant objects from video and latent semantic indexing techniques to model topics for unstructured text. We presents a unique Situational Knowledge Query Engine that continuously builds a multimodal relational knowledge base constructed using SQL queries and pushes dynamic content to relevant users through triggers based on modeling of users' interests. We analyze an extensive collection of Cambridge data (millions of Twitter tweets, 35+ structured datasets, and 100+ hours of video traffic, and needs for police, public works and citizens). At present data from West Lafayette police is being analyzed to provide identifying suspicious activity and deal with disasters such as school shooting. A recent paper in IEEE Computer magazine discusses the Missing person location problem.

Research has resulted in Darpa proposals with USC, collaborations with Sandia, JPL, and multiple NGC IRADS and many research papers and Ph.D thesis.



Dr. Rajkumar Banoth

Associate Professor of Instruction
University of Texas at San Antonio, USA

Evolution for a secured path using NexGen firewalls

ROOM: A106 Date: 09/06/2023 TIME: 09:30-10:00

BIO

Bharat Bhargava is a professor of the Department of Computer Science with a courtesy appointment in the School of Electrical & Computer Engineering at Purdue University. His recent research is on Intelligent Autonomous Systems and data analytics and machine learning. It includes cognitive autonomy, reflexivity, deep learning and knowledge discovery. His earlier work on Waxed Prune with MIT and NGC built a prototype for privacy preserving data dissemination in cross-domains. Currently he is leading the NGC REALM consortium.

He has graduated the largest number of Ph.D students in CS department at Purdue and is active in supporting/mentoring minority students. In 2003, he was inducted in the Purdue's Book of Great Teachers. In 2017, he received the Helen Schleman Gold Medallion Award for supporting women at Purdue and Focus award for advancing technology for differently abled students. https://www.cs.purdue.edu/homes/bb/

ABSTRACT

Since the Internet was not designed with security in mind, numerous security protocols and tools had to be afterwards incorporated. A firewall is a crucial piece of equipment that provides the bare minimum security for Internet based connected networks and devices. Standard firewalls are unable to handle new threats like targeted along with data-focused attacks. This paper will examine the development of conventional firewalls, the requirement for NGFW, their features, and trends in industrialized usage. Additionally, the benefits of modern firewalls were contrasted with those of traditional firewalls. We will also examine how NGFW may assist new machine learning techniques and enhance IoT system security.



Mr. Sai Prasad Parameswaran

Chief Technology Officer,
IoT & Digital Engineering, Tata Consultancy Services

How IoT and AI can Accelerate Innovation

ROOM: A106 Date: 09/06/2023 TIME: 10:00-10:30

BIO

Sai Prasad is the Unit CTO for IoT and Digital Engineering at TCS based in Bangalore. Sai is a Bachelor in Engineering from Bangalore University and a PG Diploma in Design Thinking & Innovation from Emeritus, Singapore.

Sai has over 30 years of experience in working with various technologies in Digital Engineering and IoT. He is also skilled in product development and product management and has built products in different domains such as Life Sciences, Retail and Manufacturing.

He has filed 3 patents related to Digital Twins for logistics, manufacturing, and process industries and is also a registered Patent Agent in India. His areas of interests include Design Thinking and fostering an innovation culture.

ABSTRACT

A growing number of businesses, value chains, and industries are becoming interconnected, resulting in an ecosystem of suppliers, partners, customers, and even organizations. The Internet of Things, automation, and artificial intelligence (AI) power these ecosystems. We believe the Internet of Things can provide real-time data consumption and alerts as well as 'self-aware' data and alerts by enabling devices to act independently. To put it another way, TCS believes in bringing life to things through technology. TCS Bringing Life to ThingsTM allows companies to use digital intelligence to respond to a physical context, unlock exponential value, drive mass personalization, embrace risk, and leverage emerging ecosystems to drive mass personalization. We will discuss how loT and Al can accelerate innovation and what the future holds in IoT and Digital Engineering with the recent advances in these fields.

IC2E3 2023 Track

Session	ROOM	Day and Date	Name	Time
Session 1.01	LH10	THURSDAY, JUNE 8	RF & Microwave Circuits for Next Gen Communications	12:30 - 14:00
Session 1.02	LH11	THURSDAY, JUNE 8	VLSI for Applied and Future Computing 1.0	12:30 - 14:00
Session 1.03	LH12	THURSDAY, JUNE 8	AI, Data Science and Scalable Machine Learning 1.0	12:30 - 14:00
Session 1.04	LH13	THURSDAY, JUNE 8	AI, Data Science and Scalable Machine Learning 2.0	12:30 - 14:00
Session 1.05	LH14	THURSDAY, JUNE 8	Power Electronics Converters and Applications 1.0	12:30 - 14:00
Session 1.06	LH15	THURSDAY, JUNE 8	Remote sensing systems	12:30 - 14:00
Session 2.01	LH16	THURSDAY, JUNE 8	VLSI for Applied and Future Computing 2.0	14:30 - 16:30
Session 2.02	LH10	THURSDAY, JUNE 8	Power Electronics Converters and Applications 2.0:	14:30 - 16:30
Session 2.03	LH11	THURSDAY, JUNE 8	Electric Mobility, Advanced control system & Applications	14:30 - 16:30
Session 2.04	LH12	THURSDAY, JUNE 8	Software Analytics & Visualization 1.0	14:30 - 16:30
Session 2.05	LH13	THURSDAY, JUNE 8	Power System, Microgrid & Smartgrid	14:30 - 16:30
Session 2.06	LH14	THURSDAY, JUNE 8	Next Gen Communications, Networks & IoT	14:30 - 16:30
Session 3.01	LH10	THURSDAY, JUNE 8	AI, Data Science and Scalable Machine Learning 3.0	16:30 - 18:00
Session 3.02	LH11	THURSDAY, JUNE 8	AI, Data Science and Scalable Machine Learning 4.0	16:30 - 18:00
Session 3.03	LH12	THURSDAY, JUNE 8	Cloud Systems Security, Privacy and Trust in Distributed Systems	16:30 - 18:00
Session 3.04	LH13	THURSDAY, JUNE 8	Cyber-physical system forensics	16:30 - 18:00
Session 4.01	LH10	FRIDAY, JUNE 9	Power system Protection Security and Reliability	10:30-12:30
Session 4.02	LH11	FRIDAY, JUNE 9	Renewable Energy Integration and Applications	10:30-12:30
Session 4.03	LH12	FRIDAY, JUNE 9	Battery charging technologies:	10:30-12:30
Session 4.04	LH13	FRIDAY, JUNE 9	Machine Learning & IoT 1.0	10:30-12:30
Session 4.05	LH14	FRIDAY, JUNE 9	Machine Learning & IoT 2.0	10:30-12:30
Session 5.01	LH10	FRIDAY, JUNE 9	Electronics, Sensors and System	14:00-16:00
Session 5.02	LH11	FRIDAY, JUNE 9	Next Gen Computing application 1.0	14:00-16:00
Session 5.03	LH12	FRIDAY, JUNE 9	Power and Green Energy	14:00-16:00
Session 5.04	LH13	FRIDAY, JUNE 9	Next Gen Computing application 2.0	14:00-16:00
Session 5.05	LH14	FRIDAY, JUNE 9	Next Gen Computing application 3.0	14:00-16:00
Session 5.06	LH15	FRIDAY, JUNE 9	Next Gen Computing application 4.0	14:00-16:00
Session 5.07	LH16	FRIDAY, JUNE 9	Electrical & Electronics System	14:00-16:00

SESSION 1.01(THURSDAY, JUNE 8)

RF & Microwave Circuits for Next Gen Communications

ROOM: LH-10 TIME: 12:30 – 14:00

Paper ID	Title
981	Spectral Efficiency Evaluation of Selection Combiner under Nakagami-m fading channels using different Adaptive Transmission Techniques-A Review Hasan*; Stuti Shrivastav; Sumit Singh Panwar; Aditi Chauhan; Shalini Singh
31	Design of Dual Band Dipole Loaded With Dielectric Resonator Antenna Subham Banerjee*; Md Sujauddin Ahmmed; Arun Kumar Ray; Santanu Mondal
80	Design of an 8-Elements DGS based Dual Band MIMO Antenna with Improved Isolation for Wireless Communications Dinavahi B N V Sai Durga Sri Raja Ram*; Sanjukta Nej; Marepally Sumith ; santosh kumar bairappaka; Anumoy Ghosh
339	Dual Band Notch and Dual Port MIMO Antenna with End Fire Radiation Pattern for UWB Applications Abhishek Patel*; Manoj Parihar; Trivesh Kumar
406	Design and Performance Analysis of Defected Grounded Hexagonal Patch Antenna at 5.17 GHz Mishor Biswas*; Soham Ghosh; Chameli Mitra; Bhaskar Gupta
955	Antenna Substrate Requirements For Integration Over Solar Cell Priyanka Choudhary; Sanjay Prakash Pathak*
387	Dual Band Meander Line Antenna for 5G and WLAN Application Sachin Khade*; Saharsh Jain; Sidharth Tembhare; Rajat Ingale; Pratik Dilip Gawali; Chitra Bawankar
675	Cylindrical Dielectric Resonator Antenna Optimization: A Machine Learning Perspective. Ankit Kumar Kushwaha; Vivek Rai ; Gaurav Kumar ; Vinay Kumar*; Ashish Pandey; Rabindra K Barik
789	Design of Edge Slotted Waveguide Scanned Linear Array antenna with Low Side Lobe Levels for X Band Radar Applications. Neeresh Kumar*; Bal Mukund Jha; Akhil Gupta; Manoj Kumar Dwivedi; Ajay Kumar Sharma

SESSION 1.02 (THURSDAY, JUNE 8)

VLSI for Applied and Future Computing 1.0

ROOM: LH-11 TIME: 12:30 – 14:00

Paper ID	Title
124	Resistor less Wave Filter Design employing DXCCDITA Prerna Rana*; Ashish Ranjan; Tajinder Singh Arora
271	Router-Router Switching Communication and Logic Verification with Configured Hardware Chip Prateek Agarwal*; Tanuj Garg; Adesh Kumar
770	Tantalum disulfide (TaS2) Based Novel Surface Plasmon Resonance Sensor with Enhanced Sensitivity using Aluminium Arsenide(AlAs)and Thallium Bromide(Tl Br) Virendra Kumar*; Sarika Pal
500	Energy Efficient Approximate Floating Point Divider J Namratha Nadh ; Ayesha Sk ; Sree Hari V. ; Noor Mahammad Sk
733	Design and Realization of Fractional-order VM Biquad Filter using CFOA Sukanya Deshamukhya*; Shalabh Kumar Mishra; Bhawna Aggarwal
829	FPGA Implementation and Validation of Particle Swarm Optimization suited for varied applications Muhilan Ravindran; Suhaim Sarbaras; Sindhuja S Selvam; Moorthi Sridharan*
982	Design and development of a low-cost blood pressure monitoring device Amit Soni*; Ashok Kumar
999	Nanomagnetic Logic Simulation of Digital Logic Design Ramesh Kumar*; Surya Naidu ; Vidya Sagar ; Gopal Reddy

SESSION 1.03 (THURSDAY, JUNE 8)

AI, Data Science and Scalable Machine Learning 1.0

ROOM: LH-12 TIME: 12:30 – 14:00

Paper ID	Title
91	Detection of Canine Parvovirus using ELM and Support Vector Machine Algorithm from blood tests Silica Kole*; Venkatanareshbabu Kuppili
342	QLEN: A Load Distribution Algorithm to Improve QoS Factors Among Fog Devices Pranav Hegde*; Saileshwar Karthik; Shashank Udyavar Madan; Sumukh Raju Bhat; Dr.T.S.B. Sudarshan
81	A Data Augmentation-based Road Surface Classification System using Mobile sensing Tarun Kumar*; Debopam Acharya; Divya Lohani
896	Multi Scale aided Deep Learning model for High F1-score classification of fundus images based Diabetic Retinopathy and Glaucoma R S Naga Kumar Ganugula*; Raja Sekhar S S; Dr Sri Phani Krishna K.
855	Gastro-Intestinal Tract Image Segmentation using Edge U-Net and U- Net VGG19 Sashank Talakola*; Madhusudhan Suryaprathap Reddy; Rishi Nagam ; Srilatha Chebrolu
303	Automatic Nuclei Segmentation Method using Median Filter for Denoising Shivam Mishra*; Amit Dr. Vishwakarma; Anil Kumar
667	Key-Frame based Video Summarization using Optimized K-means Clustering. Abhishek Dhiman; Maroti Deshmukh*

SESSION 1.04 (THURSDAY, JUNE 8)

AI, Data Science and Scalable Machine Learning 2.0

ROOM: LH-13 TIME: 12:30 – 14:00

Paper ID	Title
721	BCDNet: GoogLeNet based Bladder Cancer Detection model from Urinary Cytological Images. Anagha Chand R*; Arathy Menon N P; Pournami P N ; Jayaraj P B
246	Implementation and optimization of Deep learning models for Musculoskeletal image classification for detection of Osteoporosis. Shubham Singh *; Shubham Vats ; Anupama Bhan; Numa Gulzar
260	MARG-DARSHAK: A Machine Learning Approach for Career Prediction. Aman Wakade*; Urusa Qureshi ; Dharmendra Parmar; Jatinder Kumar; Smruti Rekha Swain; Ashutosh Kumar Singh
393	A Deep Learning Approach for Development of Web Application for Automated Knee OA Classification. Deepak Saini*; Ashima Khosla; Trilok Chand; Davendra Chouhan; Makesh Prakash
774	A LIME-Based Explainable Machine Learning Technique for the Risk Prediction of Chronic Kidney Disease. Ankit Vijayvargiya*; Aarsh Raghav; Anchal Bhardwaj; Naveen Gehlot; Rajesh Kumar
107	Sequential Transfer Learning Models with Additional Layers for Pneumonia Diagnosis. Gulshan Kumar Sharma; Priyanka Harjule *; Tushar Sadhwani; Basant Agarwal; Rajesh Kumar
929	Are we undermining data breaches? Protecting education sector from data breaches. Ram Govind Mr. Singh*; Naveenkumar D
583	Simulating Quantum Hardware using Qiskit Metal Siri Revant*; Satyadhyan Chickerur

SESSION 1.05 (THURSDAY, JUNE 8)

Power Electronics Converters and Applications 1.0

ROOM: LH-14 TIME: 12:30 - 14:00

Paper ID	Title	
9	Studies on Input DC Current of 1-Phase Inverter for Unipolar and Bipolar Switching Brijesh Kumar*; Bibhu Prasad Panigrahi	
45	Seven Level Single Source Switched-Capacitor Multilevel Inverter implemented with NLC and Level Shift PWM Technique Ahmad Rafey Moonis; Mohd Zaid Khan*; Mohammad Zaid; Adil Sarwar; Md Adil Azad; M Saad Alam; Yasser Rafat	N
92	High Efficient High Power Factor Single phase LED Driver with Constant Output Current without Electrolytic Capacitor Ramesh Babu Pallapati*; Ramulu Chintam; Roshan Mahesh Panuganti; Akhil Gavvala	
283	A new asymmetric inverter with minimum number of switch count Lakshmi Prasanna*; T. R. Jyothsna	
302	A Novel High Gain Non-Isolated Three-port Converter for Stand-Alone PV Applications Sreedevi S Nair*; Mini Rajeev	
306	A Novel Six-Level Inverter with Reduce Number of Components for Five-Phase Open-End Winding Induction Motor Drive Ashutosh Yadav*; Sanjiv Kumar	
396	A Multilevel Switched Capacitor based High-Gain Non-Isolated Hybrid Switched Inductor Cascaded Boost DC-DC Converter Soham Chakraborty; Amritesh Kumar; Nabanita Adhikary	

SESSION 1.06 (THURSDAY, JUNE 8)

Remote sensing systems

ROOM: LH-15 TIME: 12:30 – 14:00

Paper ID	Title
883	A comparative analysis of reflective and transmissive PPG sensor in pulse acquisition system Sukesh Rao M*; Roopa B Hegde; Sanith C Bangera
850	Dual-stream Mobile Beacon Based Localization Scheme for Wireless Sensor Network Suyash saxena*; munesh singh; Alok R Prusty
156	Design of 2.4 GHz LNA Using Microstrip Narrow Band Pass Filter Manogna N S *; Rashmi Seethir
581	Evaluation of a Novel Filter Function With Different Exponential Powers for Alleviation of Gibbs Artifacts Parul saini*; Lokendra K. Balyan; Anil Kumar; Girish K. Singh
169	STUDY OF THREATS AND SECURITY ASPECTS OF UNMANNED ARIEL VEHICLES Shiva Dwivedi*
328	A Wideband Single Polarization Radio Receiver - Precursor to Low Frequency Radio Telescope Agaram, Raghunathan*; Sethi, Shiv; Deshpande, Avinash A; K B, Raghavendra; Satish, Keerthipriya; ., Sandhya; S, Arasi; K R, Vinod; H.N, Nagaraj;
851	A Survey on Visible Light Communication for 6G: Architecture, Application and Challenges Prashant Dwivedy*
825	A PUF Based Authentication Schemes for UAV. Vineet Soni *; Binod Prasad

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Paper ID	Title
65	Power efficient VLSI architecture based logistic regression for classification of breast cancer Sahith Guturu*; Sai Jaswanth Vuppalapati; Purna Srivatsa Boggavarapu; Vikas Shivakumar; Uppugunduru Anil Kumar; Syed Ershad Ahmed
344	Application Of Liquid Crystal In The Design Of Memory And Thermistor Vidya P Janaki*; Moorthi Sridharan; M L N Madhu Mohan
868	A Review on Role of Epitaxial Engineering in Improving the Drive Current and Subthreshold Swing in Area Scaled Tunnel FETs Nisha Yadav*; Sunil Jadav; Gaurav Saini
823	Armchair Graphene Nanoribbon Resonant Tunneling Diode: Influence of numbers of V-cuts as barrier Bikramjit Basumatary*
250	An Approximate Full-Adder to Eliminate Carry Propagation in Lower Significant Stage of a Multi-Digit Adder Sudheshna Bingumalla; Chetan K Vudadha*; Prashant Wali; Gopal Krishna Kamath
938	Simulation Study on Adhesion Force (Fadh) for Microelectromechanical (MEM)-based Non-Volatile Memory (NVM) Application Khanjan Joshi
83	Implementation of SC-FDE waveform on SDRP Using Vitis HLS Pankaj Bhatoe*, Rajendra Kumar Gupta, Abhishek Jain, Rajendra Singh

SESSION 2.02 (THURSDAY, JUNE 8)

Power Electronics Converters and Applications 2.0

ROOM: LH-11 TIME: 14:30 – 16:30

Paper ID	Title
399	Comparative Analysis of Symmetrical and Asymmetrical Submodule Topologies of Modular Multilevel Converter Himanshu N Chaudhari*
776	Performance Analysis of WBG Based High Power Dense T-Type Inverter for Next Generation Carbon Neutral Energy Application Uppalapati Sudheer Kumar*; Sukanta Halder; Anish Verma; Sushant Pandey ;Naveen Yalla ; Jayaram Nakka
940	Thyristor dodged VSC: An Enhanced Efficiency Conception for HVDC Applications Shourya Sharma; Siba Kumar Patro
947	Derived Hybrid Multilevel Topologies for VSC-HVDC Systems Shourya Sharma; Jayant Kumar; Siba Kumar Patro
954	Resonance Damping in Active Power Decoupled Single-Phase Grid-tied Differential Buck Inverter. Praful P Kumbhare; Sanjay Tolani*; Sukanta Halder
398	Cross Connected Five-Level Boosting Inverter with Self Voltage Balancing and Reduced Switch Count Asmita Singh*; Sandeep N
856	Dynamic modelling, Design and experimental analysis of closed loop-controlled Zeta Converter using OPAL-RT Dynamic modelling, Design and experimental analysis of closed loop-controlled Zeta Converter using OPAL-RT Sumit Kumar Naudiyal*; Shimi Sudha Let
808	Performance Analysis of GaN Inverter fed Electric Traction Drive System for EV Application. Uppalapati Sudheer Kumar*; Krunal Bhuvir; SukantaHalder; Sanjay Tolani; Soumava Bhattacharjee; Aurobinda Panda

SESSION 2.03 (THURSDAY, JUNE 8)

ROOM: LH-12 TIME: 14:30 – 16:30

Paper ID	Title
113	Model Free Reinforcement Learning based Control of Permanent Magnet Synchronous Motor Drive Vikas Kumar*; Pankaj Yadav; Bharat Singh; Rajesh Kumar
408	Optimal Model Parameter Identification of Solid Oxide Fuel Cell Using Honey Badger Algorithm Rahul Khajuruia*; Srinivas Yelisetti; Ravita Lamba; Rajesh Kumar
836	New predefined-time sliding mode controller for synchronization of non-identical hyperchaotic systems Ankit Tiwari*; Rahash Nathasarma; Shilalipi Sahoo; Samuel A Gebereselassie; Binoy Roy
902	Super-twisting sliding mode control of a new muti-scroll hidden chaotic system Shilalipi Sahoo*; Ankit Tiwari; Samuel A Gebereselassie; Binoy Krishna Roy
14	Neural Network Based Prediction of Feedback Gain Parameters in Networked Control System Desh Deepak Sharma*
216	ML based Prediction for Grid support in a Solar Photovoltaic Electric Vehicle Charging Station Sindhu M R*; Badri Rama Krishnan V
265	Mathematical Modelling and Analysis of Adaptive Traction Control for Electric Vehicles Pronita Boro; Subhankar Chakraborty; Santanu Sharma
924	Income model for EV public charging station in India Jeykishan Kumar K*

SESSION 2.04 (THURSDAY, JUNE 8)

Software Analytics & Visualization

ROOM: LH-13 TIME: 14:30 – 16:30

Paper ID	Title
211	From Templates to Transformers: A survey of Multi modal Image Captioning Decoders. Himanshu Sharma*; Devanand Padha
138	Exploring Stock Price Prediction Techniques: A Systematic Review and Empirical Study of Pattern Recognition and Hybrid Approaches Ashish Garg*; Kamal Kumar Ghanshala; Sachin Sharma; Divyanshu Bathla
799	An Early Recommendation Tool to Enhance Medicinal Plants Growth based on GIS and Soil Data. Syeda Muskan*; Roopashree Shailendra; Abhina B; Jagruthi G; Suryateja Challa
555	An Efficient Approach For To Predict The Quality Of Apple Through Its Appearance. Devansh Goel; Divya Singh; Amit Gupta*; Satya Prakash Yadav; Manish Sharma
594	Accelerating fluid flow in Quantum Computing using GPU. Joel Samson Dandin*; Satyadhyan Chickerur
470	Empowering Last-Mile Connections: A Comprehensive Study on Emerging Technological Advancements Kuldeep S Yadav*; Madhurima Sharma; Amit Malik; Preeti Sharma; Vijay Samal; Sujata Dutta
773	Power Efficient Multiplier Design using Hybrid 4:2 Compressor Mohit V; Madhukumar Patnala; Kruthika J; Sree Hari V; Noor Mahammad Sk*
529	Performance of Interpolation Techniques for Compression of Crop Image: A Comparative Study. Deepak Mishra*; Anil Kumar; Vijaypal Singh Rathor
698	Maithi-Net: A Customized Convolution Approach for Fake News Detection using Maithili Language Debendra Muduli, Santosh Kumar Sharma, Dinesh Kumar, Akshat Singh, Shubham Kumar Srivastav

ROOM: LH-14

TIME: 14:30 - 16:30

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Paper ID	Title
116	Battery Energy Storage Sizing and Operational Strategy for Microgrid with State of Charge Scenarios. Nikhil Kumar*; Vikash Kumar Saini; Srinivas Yelisetti; Ravita Lamba ; Rajesh Kumar
44	IoT Based Solar Photo Voltaic Fault Detection System. Supriya Jaiswal*; Mridul Jaiswal; Bhuvnesh Vashishat; Anil Kumar; Rohit Kumar
43	Dung Beetle Optimizer Algorithm Based OPF Solution considering Renewable Energy Sources Supriya Jaiswal, Yog Raj Sood, Ankur Maheshwari, Vineet Kumar, Sumit Sharma and Mukesh Singh
876	Comparative Performance Analysis of Modern Digital Filters for Power Quality Improvement Using Distributed Static Compensator (DSTATCOM) Divyansh Shailly
7	Fault Detection Algorithm Based on Resistance Approach for DC Micro-grids Nageswara Reddy*; Raja P; Moorthi Sridharan; Venkatakirthiga Murali
786	Data Envelopment Analysis Approach for Performance Evaluation of Power Distribution Sector of Srilanka. Udayanga Hemapala; Perera KVR; Gnana Swathika OV
56	Additional logic for Alpha Plane Algorithm under Ground faults Suryanarayana Gangolu*; Saumendra Sarangi
580	Investigation on Photovoltaic Cells with Battery Integration Rajendra Kumar Prajapati*; Rahul Kumar; Rohit Kumar
769	Column Rotation Transpose Based PV Array Reconfiguration Method For Efficient Shade Dispersion under PSCs Anwesh D. Behera*; Anubhav Maheshwari; Abhijeet Prakash; Vinod K Yadav

SESSION 2.06 (THURSDAY, JUNE 8)

ROOM: LH-15

Next Gen Communications, Networks & IoT

TIME: 14:30 - 16:30

Movement Tracking with Machine Learning and Stereo Camera a, Kartikey fferent Diversity Combiner Under Log-Normal Shadowing Channels aghunath Mandal; Aditi Chauhan; Shalini Sharma; Shalini Singh	s- A Review
	s- A Review
IoT-based Anti-spoofing Technique for Liveness Detection and Fac bhishek Tiwari	ce Recognition
on of Finger Movement with Machine Learning sh Jena; Ankit Vijayvargiya ; Rajesh Kumar	
n Using SAR Polarimetry with Feature Combination and Machine Leain	earning Technique
)e Li	nboo species classification on matK DNA barcode sequences using l Deepti Shrimankar; Lal Singh; Anurag Agrahari; Sagar Lachure; Neeraj Likes and Retweets Engagement of Indian Politicians on Twitter. el; Anshika Ginodia; Rishabh Kaushal

ROOM: LH-10

TIME: 16:30 - 18:00

Paper ID	Title
162	A Light Convolutional Neural Network Architecture for Cross-Spectral Face Recognition. Nilu R Salim*; Srinivasaraghavan Sundar; Tejas Sivan; Kongathi Mythri; Dr.Umarani Jayaraman
193	Deep Learning Recurrent Attention Optical Character Recognition Network with Data Augmentation for Cheque Data Extraction. Hitesh M Chaitanyaswami*; Ashwin Dobariya
694	A Machine Learning Approach for Autism Spectrum Disorder Detection using BOLD-fMRI signals and ABIDE-II Dataset. Ashish Singh Chib*; Deepti Malhotra; Mehak Mengi
874	Performance evaluation of various Machine Learning algorithms for Class-Imbalanced Landslides Identification. Aseem Narwal*; Naveen Chauhan
657	An Approach of Cable Sheath Bonding for Critical Airport Application Gnana Swathika OV*; Aayush Karthikeyan; Karthikeyan K; Udayanga Hemapala; Manikandan T
910	Multi-band Convolutional Neural Network for Efficient Utilization of Model Parameters. Milton Mondal*; Bishshoy Das; Brejesh Lall; Pushpendra Singh; Sumantra Dutta Roy; S D Joshi
578	Comparative review of Vid2Vid and Fast Vid2Vid Models for Video-to-Video Synthesis on Cityscapes Dataset. Lalit Kumar*; Dushyant Kumar Singh
756	MRI Based Multiple Brain Disease Detection using Lightweight Deep Neural Network Basit, Mohammad Sarosh*; Khan, Adeeba; Omar Farooq Aligarh Muslim U India Biomedical DSP, Prof.; Izharuddin, Ahmad Ibne
763	Underwater Image Processing with Normalized AttUNet. Mandeep Singh Soorma, Anushka Chaudhary, Sonali, Sarthak Pal and Dharmendra Kumar Upadhyay

SESSION 3.02 (THURSDAY, JUNE 8)

Al, Data Science and Scalable Machine Learning 4.0

ROOM: LH-11 TIME: 16:30 – 18:00

F	Paper ID	Title
	944	Genetic algorithm based approach for solving Roman {3}-domination problem. Aditya Billore*; P. Venkata Subba Reddy
	300	Real-Time Traffic Signal Prediction and Control using Deep Q-Network. Shyam V M Mohan*; Krishnendhu P; Prabu Mohandas
	37	Optimal Unit Scheduling using Modified Ant Lion Optimization Algorithm for Secure Operation. Abhishek Saini*
	498	Credit Risk Prediction using Stacking Ensemble. Shashank Barthe*
	988	Prediction of COVID-19 using Hybrid Voting Classifier. Kirti Singh*
	341	An efficient drug synergy model based on deep learning for malignant diseases. Pooja Rani*; Kamlesh Dutta; Vijay Kumar
	142	Self-Governing Assessment Network (SGAN) Based Super-Resolution for CT chest images Pujari Venkata Yeswanth*; Jithin Rajan; Bhanu Pratyush Mantha; Pottabathina Siva; S Deivalakshmi
	338	Underwater Image Processing with Normalized AttUNet Mandeep Singh Soorma, Anushka Chaudhary , Sonali, Sarthak Pal, Dharmendra Upadhyay

SESSION 3.03 (THURSDAY, JUNE 8) Cloud Systems Security, Privacy and Trust in Distributed Systems

ROOM: LH-12 TIME: 16:30 – 18:00

Paper ID	Title
958	Metaheuristics approaches task scheduling in cloud. Ravi Shankar Jha; Manpreet Kaur ; Shashank Bist; Anika Kumar; Pradeep Singh Rawat
911	Anomaly Detection: A Machine Learning And Deep Learning Perspective. Saubhagya Dua*; Shivam Rastogi; Sanjay Kumar
942	Dual-Layered Defence Mechanism For Prevention of XSS Attack. Aditi D Anchan; Avanish Patil; Shreyas basri; Surya M N; Nagasundari S*
984	NS4: a Novel Security approach for extracted video keyframes using Secret Sharing Scheme. Shamal Sanjay Kashid*; Lalit K.Awasthi; Krishan Kumar; Parul Saini
841	A Secured Audio Encryption Algorithm Based On Gauss and Henon Chaotic Maps. Samuel A Gebereselassie*; Shilalipi Sahoo; Ankit Tiwar; Rahash Nathasarma; Binoy Krishna Roy
29	An Investigation: Effective Use of the Internet of Things (IoT) in the Construction Industry Jayesh R. Pitroda*; Jagdish Rathod; Yogeshkumar R Prajapati; Arjan Bambhaniya; Rupamkumar Maru; Indrajit Patel
436	Evaluation of Quality of Service Parameters for LoRaWAN IoT Driven Smart Dustbin Service Sabout Nagaraju

SESSION 3.04 (THURSDAY, JUNE 8)

ROOM: LH-13

Cyber-physical system forensics

TIME: 16:30 - 18:00

Paper ID	Title
778	Security Attacks and it's Countermeasures on Smart Grid: A Review Sujoy Roy*; Alok Kumar; Udai Rao
378	Styled-QReal: A real-time technique for QR code stylisation. Stuti Jain*; Sundeep Chand; Swraj Kant Sharma; Rajni Jindal
867	Federated Learning for Beginners: Types, Simulation Environments, and Open Challenges. Monalisa Panigrahi*; Sourabh Bharti; DR. Arun Sharma
869	An Autoencoder-based Efficient Scheme for DDoS Detection. Ujjwal Shrivastav*; Manoj Kumar
985	Automating Citation Intent Classification on SciCite Dataset. Aishwarya Lenin; Pragti Chauhan; Tusharika Mehta; Niyati Baliyan*; Deepak Kumar Sharma
861	Securing IoT with Blockchain: Detecting Malicious Nodes with TLS Certificates. Shalini Singh*; Shubham Kumar; Binod Prasad
810	A Novel Attribute based Encryption with implicit user authentication for Cloud. Kamini Ms Sahu*; Lalit K Awasthi; Abhimanyu Kumar

SESSION 4.01(FRIDAY, JUNE 9)

Power system Protection Security and Reliability TIME: 10:30 - 12:30 ROOM: LH-10

Paper ID	Title
613	Privacy Protection and Cost of Privacy in Smart Grid Shubham Patwari*; Mukesh Shivran; Satish Sharma; Parul Mathuria
806	A Study on the Impact of SDBRs on the Fault Ride-through Capability of DFIG based Wind Farms Aftab Ahmed Ansari*
106	Comparative analysis of directional overcurrent relay coordination using linear and nonlinear protection schemes Raghvendra Tiwari*
740	Fault Detection and Localization in Distribution System using Sparse Matrix Reconstruction Yash Kumar; V. P. Meena*; Akhilesh Mathur; Vinay Pratap Singh
332	Analytical Voltage Sag and Swell Characterisation Using Differential Geometry Nitin Sundriyal; Juan M Ramirez; Parvesh Dr Saini*; Ashutosh Dixit
336	A Differential Geometry Perspective to Study Power and Harmonics in Three-Phase Circuits. Nitin Sundriyal ; Juan M Ramirez; Parvesh Dr Saini*
905	Efficient condition monitoring of off shore wind turbines using deep networks Rajvardhan Jigyasu*; Vivek Shrivastava; sachin singh
682	Design of FOPID controller for Riverol-Pilipovik Water Treatment Plant Exploiting Jaya Algorithm. V. P. Meena *; Vinay Pratap Singh

SESSION 4.02 (FRIDAY, JUNE 9)

Renewable Energy Integration and Applications

ROOM: LH-11 TIME: 10:30 – 12:30

Paper ID	Title
160	Design and Evaluation of Hydrogen Based Fuel Cell as a Green Energy Source Prachi Salodkar *; Omhari Bipin Shrivastava; Mohit Nagpure
259	Numerical Simulation of Inverted Hybrid Perovskite Solar Cell Ujjwal Chaudhary; Chandani Dubey; Gopal Rawat*
460	Modelling of Thermoelectric Module for Generating Power Arati Nilesh Kane*; Sumedh Kane; Amritesh Kumar
1005	Revolutionizing rural electrification with PV Integrated energy storage system: The DC House Solution Vijaya Huchche*; Uday B Mujumdar; Purva Virulkar; Deepti Sinha
957	Performance Analysis and Anomaly detection of Power Distribution Insulators using Deep Learning Techniques Raja Sekhar Sankuri*
588	Performance Analysis of CZTS Solar Cell with ZnS+ZnMgO as a Buffer layer using SCAPS-1D Amrita Srivastava and Bramha Prasad Pandey

SESSION 4.03(FRIDAY, JUNE 9)

ROOM: LH-12

Battery charging technologies

TIME: 10:30 - 12:30

Paper ID	Title
803	An Improved CCCV Controlled Charging Technique for Electric Vehicles Ankush Koli*; Vikramaditya Dave; Prahlad Mundotiya; Harpal Tiwari
798	Robust Battery Management System for Electric Vehicles Dhruv Vaish; Ranjith Ravindranathan Na
848	Implementation of an E-Bike Charger Using Cuk Converter and Resonant LLC Converter Kanimozhi G*
442	Optimal Parameter Estimation of CAPN Model for Li-ion Battery Soumya Bharti*; Vikash Kumar Saini; Anshul Kumar Yadav; Rajesh Kumar; Ameena Saad Al-Sumaiti
819	Lithium-Ion Battery's SOH Estimation Using Machine Learning with Multi-Channel Charging Profiles Balram Kasniya*; Tirupathiraju Kanumuri; Vivek Shrivastava; Yoganshu Kuwal
362	Comparative Analysis of Non-Linear Kalman Filters for Li-ion Battery SoC Estimation with RLS-VDF Technique for Parameters Identification Himanshu Jaiswal*; Swapnil Ghule; Varsha A Shah

SESSION 4.04 (FRIDAY, JUNE 9)

ROOM: LH-13

Machine Learning & IoT 1.0 TIME: 10:30 -12:30

Paper ID	Title
1009	IoT based automated mosquito based disease Detection Ankur Dumka*; Parag Verma; Alaknanda Ashok; Vaibhav Chaudhari
1002	Detection of Leaf Diseases in Agricultural Plants Using Machine Learning Deepak Kholiya; Amit Kumar Mishra*; Ankur Dumka; Neeraj Kumar Pandey; Neha Tripathi
979	Diabetic Retinopathy Detection based on LBP and Statistical Features using Machine Learning Imtiyaz Ahmad*; Vibhav Prakash Singh; Manoj Madhava Gore
821	Edge Computing based An Efficient Lightweight authentication protocol for Smart Grid communication Sachin Choudhary; Abhimanyu Kumar; Krishan Kumar*
357	SFC-ACO: A Robust Path Failure Handling Method for Service Function Chaining in Kubernetes on OpenStack Magnum. Nithya G*
376	Enhancement in IoT through Custom ISAs and TinyML: Review Sandhya P*; Priya Chandran
282	Data Correlation behaviour on Privacy Leakage in Differential Privacy. Hemkumar D*
1008	Jelly Bot - Revolutionizing Beach Safety Mohammad Aadil Sehrawat*; Karan Allagh; Bhupendra Singh

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ROOM: LH-14	ROOM: LH-14 TIME: 10:30 – 12:30	
Paper ID	Title	
86	Mathematical Modeling and Analysis of Energy Dissipation in Magnetorheological Dampers Subhankar Chakraborty; Santanu Sharma*	
683	Multilingual Obnoxious Message Classification using Bidirectional Encoder Representation from Transformers (BERT) Mridul Gupta*; Nikhil Banka; Sparsh Narang; Abhay Sharma; Deepak Upadhya	
194	Relevant tweets identification from disaster-related tweets. Amit Kumar*; Jagrati Singh	
828	Power and Area Aware Bump Physically Unclonable Function, Sandeepkumar Pandey*; Jitendra Zalke; Rutuparna Patkar; Pranjal Sohani	
247	An improved melting point detector algorithm for the determination of the melting point of crystalline chemical substances. Anurag Shrivastava*; Rama Sushil	
384	Intelligent Course Recommendation for Higher Education based on Learner Proficiency. Jayapriya J *; Vinay M	
323	Breaking Down Data Silos: Data Mesh to Achieve Effective Aggregation in Data Localization. Jaganmohan Reddy Kancharla*; S D Madhu Kumar	
343	Deep Learning Techniques for Malware Detection: A Comprehensive Survey. Ajvad Haneef K*; S D Madhu Kumar	
818	Intelligent Traffic Monitoring and Management System. Magadum, Hemant Jeevan*; E B, Benoygopal; M, Abhilash; Jose, Divya	

Paper ID	Title
2	Design of MIMO-FSO based IoT system Meet Kumari*
231	Optical Biosensor for Early Diagnosis of Cancer Tarun Agrawal*; Jyoti Gupta; Prabhishek Singh; Manoj Diwakar
21	Design Demonstration of Frequency Reconfiguration Antenna using Varactor diode with SiO2 Smrity Dwivedi*
66	A Frequency Agile Textile Based Wearable Antenna for On Body Biomedical Applications Suchanda Das*; Anjan Kumar Kundu; Pujayita Saha
141	Assessment of Bulk Acoustic Wave Based Solidly Mounted Resonator (BAW-SMR) as Ozone Sensor Using ITO Sensitive Layer Vinita Vinita*; Jitendra Singh
85	Improved Speech Recognition using Vector Quantization, Genetic Algorithm and Neural Networks. Charu Sharma*; Sandhya Bansal; Meenu Bala
389	Improving Image Classification With Quantum Neural Network Reejisha A S*
366	Gyroscope Aided Blur Kernel Estimation for IR Image Deblurring Kaustubh Saurabh Singh; Manoj Diwakar*; Prabhishek Singh; Chandrakala Arya
690	Analysis of Deep Learning Classification Models for Predicting Plant Species from Single Leaf Images. Irish K Sajan*; Lidiya Thampi; Cinu C Kiliroor

SESSION 5.02 (FRIDAY, JUNE 9)

ROOM: LH-11

Next Gen Computing Applications 1.0

TIME: 14:00 - 16:00

Paper ID	Title
281	Citrus fruit disease prediction using ML on a decentralized and secure smart platform. Shantilata Palei; Rakesh Kumar Lenka*; Tapan Kumar Sahoo; Soubhagya Ranjan Mallick; Dwibik Patra; Anita Sahoo
288	Block Agro: Towards Blockchain assisted IoST Framework for Agricultural Sector. Soubhagya Ranjan Mallick*; Hemant Kumar Apat; Rakesh Kumar Lenka; Manas Ranjan Senapati; Suraj Sharma; Rabindra K Barik
395	Application of canopy clustering for categorization of states based on crime against children. Suresh Babu Changalasetty*
119	Online Shows Recommendations using Machine Learning in Big Data Environment Neeraj Kumar Pandey*; Nandini Singh; Kishlay Kumar; Siddhantth Sekhar Baruah; Manoj Diwakar; Amit Kumar Mishra
285	Understanding Cloud Structures from Satellite Images using Deep Learning. Vishnu Narayanan A*; Sweety Kunjachan; Kala S
192	Intelligent user interfaces for Industry 4.0: Improving workplace security by systematically applying machine learning and image processing to identify face mask usage. Sandip Mukherjee; Sayanti Samanta; Bhaswati Roy; Niloy Bhattacharjee; Aparna Bhaduri; Subir Gupta*
199	Dual-encrypted privacy preservation in Blockchain-enabled IoT healthcare system. Anita Sahoo; Rakesh Kumar Lenka*; Soubhagya Ranjan Mallick; Shantilata Palei; Manas Mukul; Rabindra K Barik
388	Social Distancing Detection AI System using YOLO. Karthiga M*; Kavitha D
674	Movie Recommendation System and Data Analysis. Sudhanshu S. Gonge*; Digha Jain; Atishay Jain; Rahul R Joshi; Sonali Kothari; Ketan Kotecha

ROOM: LH-12

Paper ID	Title
224	A Novel Control algorithm for LVRT Enhancement of a Grid-Connected DFIG-Based WECS Arindam Chakraborty*; Tanmoy Maity
505	A solar tracking system with light-dependent resistors and a stepper motor controlled by a microcontroller Rashid Ahmed Khan*; Sayeedurrahman; Bushra Sabir; Dawood Masood; Aslam Nat
453	Optimal design of an off-grid hybrid system using HOMER Pro Subhi Jain*
22	High Gain Active Switched Inductor Non-Isolated Z Source Based DC to DC Converter Topology Elizabeth Paul; S Mageshwari*
151	Design of Memristor Based Controller for Speed Control of Induction Motor Dipanjan Paul; Manab Dey; Anirban Sengupta*
1000	Analysis of Conventional PWM Techniques for Enhanced Ultra High Gain Z-Network Vadthya Jagan*; Bhavadish Chary Maheshwaram; Mallesh Usirikapally ; Sankeerthana Mettu; Aishwarya Kusumba; Nikhil Sriramoju
1001	Voltage-lift- type impedance-network Improved-Z-Source Inverter Vadthya Jagan*; Bhavadish Chary Maheshwaram ; Sankeerthana Mettu ; Aishwarya Kusumba ; Nikhil Sriramoju ; Mallesh Usirikapally
1007	A Superior Boost Active-Switched Impedance Network Quasi Z-Source Inverter Vadthya Jagan*; Bhavadish Chary Maheshwaram; Sankeerthana Mettu; Aishwarya Kusumba; Nikhil Sriramoju; Deepika Kola
811	DC Nano-Grid with Power Management System. Shivam Bharti*; Anmol Ratna Saxena

ROOM: LH-13

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aper ID	Title
536	MSViT: A video anomaly detection for real time unconstrained environment Manoj Diwakar, Sanjay Roka
633	Image Spam detection in E-mails using Grasshoppers optimization technique. Deepika Mallampati*; Nagaratna P Hegde
430	A New Proposed Data Security Model in Cloud Computing Environment. Pallab Banerjee*; Vishal Prasad; Kanika Thakur; Probal Banerjee
269	Communication Through Indian Sign Language: An Approach For Data Preprocessing. Himanshu Shah; Shubham Chaudhary; Shlok S Kalekar*; Jenish Chavda; Prajakta A. Khadkikar
814	Hybrid Model for Image Forgery Detection In Smart Healthcare Using Machine Learning V Sri Lakshmi; Abhinav Chinta*; Purushotham Dasari; Nikhil Godalla; S.V. Varshith
437	A Novel Perspective on Brain Tumor Classification Using Hybrid Algorithm Jayanthi R; Hepzibah Christinal A*; Hephzibah R; Shekinah T; Chandrajit Bajaj; Abraham Chandy D
229	Building an automated model to predict and detect early onset osteoarthritis. Madhulika Bhatia*; Manraj Singh; Ritik Kohli

SESSION 5.05(FRIDAY, JUNE 9)

Next Gen Computing Applications 3.0

ROOM: LH-14 TIME: 14:00 – 16:00

Paper ID	Title
636	Optimization Techniques for Car Price Prediction. Vijaya J; Arunkumar Gopu*; Aryan Kaul; Vishwambhar Reddy
209	Traffic Congestion Detection from Surveillance Videos using Deep Learning. G. Bindu Madhavi; A. Durga Bhavani; Y. Sowmya Reddy; Ajmeera Kiran; N. Thulasi Chitra; P Chandra Shaker Reddy*
208	Abnormal Behavior Prediction in Elderly Persons Using Deep Learning. Attili Venkata Ramana; Ujwala Bhoga; Ramya Krishna Dhulipalla; Ajmeera Kiran; B Deepthi Chary; P Chandra Shaker Reddy*
164	Video-based road accident detection on highways: A less complex YOLOv5 approach. K. A. D. Devindu Dharmadasa; Goutam Kumar Sahoo*; Santos Kumar Das; Poonam Singh
783	Partial Face Identification using Local Features Extraction on Different Matching Classifiers. Manisha Kumari Meena*
764	Fall detection system for monitoring elderly people using YOLOv7-pose detection model. Sindhu R*; Ruzelita Ngadiran; Pranavan V M; Maunika Shekar; Sri Lasya Pragathi B
494	AGROFERDURE: Intelligent Crop Recommendation System For Agriculture Crop Productivity Using Machine Learning Algorithm. Sushopti D Gawade*; Parth T Kochar; Tushar Nambudiri; Gargi Rout; Varun Ahire
139	Severity Grading of Diabetic Retinopathy using CNN Samiya Majid Baba*; Indu Bala
423	loT Based Smart Greenhouse Using Raspberry Pi Jaya Lakshmi A; Ratnasunder Dasari; Manikanta Chilukuri ; Yashwanth Tirumani; Pramod Kumar Aylapogu*

SESSION 5.06 (FRIDAY, JUNE 9)

ROOM: LH-15

Next Gen Computing Applications 4.0

TIME: 14:00 - 16:00

Paper ID	Title
64	Performance Evaluation of Recurrent Neural Networks - LSTM and GRU for Automatic Speech Recognition. Dhiraj Kumar; Shahid Aziz*
767	Design of Plant Leaf Diseases Detection System employing IoT. Varun Katoch; Karan Verma; Shruti Jain*
859	Prediction of Session duration of Electric Vehicle Using Machine Learning and Deep Neural Networks Harshit Rathore*; Hemant Kumar Meena; Prerna Jain
752	Hybrid of DNN Feature Extraction and Ensemble Classification for Identification of Esophagitis and Barretts in Upper Gastrointestinal Tract Images. Vikas Khullar; Veeramanickam M.R.M*; Muthukumarasamy S; Chander Prabha; Dr Harjit Pal Singh; Pavankumar Vadrevu
998	Enhancing Wave Function Collapse Algorithm using Bitwise Operations. Yash Punia*; Priyanka; T.P. Sharma
1010	AB-LSTM: Attention Bidirectional Long Short-Term Memory for Multivariate Time-Series Forecasting Xiaofeng Zhou ; Andri Pranolo*; Yingchi Mao
793	Indigenous Development of Water Quality Monitoring System for Urban Areas using IoT & ML. Priyansh Garg; Rohit Raj; Tushar Paul*; Shruti Jain; Rajiv Kumar
943	SegFishHead: A Semantic Segmentation Approaoch for the identification of fish species in a Cluttered Environment. Arnab Banerjee*

SESSION 5.07(FRIDAY, JUNE 9)

Electrical & Electronics System

ROOM: LH-14 TIME: 14:00 – 16:00

Paper ID	Title
312	Single-Phase Single-Stage PFC Converter with Soft Switching for EV Applications Anshul, G K Naveen Kumar, Harpal Tiwari
458	Modelling and Implementation of 0.5 V to 1.8 V Level Shifter Reflected output and Dual Wilson Current Mirror Technique Aylapogu PramodKumar, V Mosherani, D.Nagajyothi, Kalivaraprasad B, A.Jayalakshmi
634	Aspects of Enhancing Loop Band Width for FVF based LDO Regulators : An Intuitive Analysis Antaryami Panigrahi, Agile Mathew
692	A Study On Single Phase On-Board Charger Topologies For Light Electric Vehicle Aryalakshmi C , Deepa M U
933	A Simulation Study of ZnO/Si Based Efficient UV-Photodetector in COMSOL Multiphysics Sanjeev Mani Yadav, Amritanshu Pandey
624	A Grid Connected Multilevel Inverter With Improved Reliability and Fault Tolerant Capability Santhosh S and Sandeep N