6th IEEE International Conference on Power, Control & Embedded Systems (ICPCES-2026)

Organized by

Department of Electrical Engineering,
MNNIT Allahabad
27th -29th November, 2026

Technically Co-Sponsored by IEEE UP SECTION (INDIA)

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Technical Sessions Paper Presentation Schedule

Session: **TS-01 (Power Systems & Intelligent Energy Management)**

Date: 27th November, 2026 (Friday) **Time:** 12:00 PM - 01:30 PM

Session Chair (s): **Dr. Navneet Kumar Singh**
Dr. Prashant Malik

Student Coordinators(s): **Kuldeep Vishwakarma (9557054350)**
Shriyam Upadhyay (7281844446)

Venue: **Institute Seminar Hall**

S. No.	Paper ID	Author	Title
1.	**30**	Devashish Rai, Giriwar Chaurasia, Subho Paul	Investigation into the Application of Deep Reinforcement Learning for Solving the Cost Minimization Problem in an EVCS Microgrid
2.	**263**	Palash Jain, Pratik Rana	Method and System for Reducing Park Pawl Release Load Prior to Park Lock Disengagement
3.	**35**	Shubhranshu Ojha, N. C. Sahoo	A Methodological Review of Transmission Loss Allocation Approaches in Modern Power Systems
4.	**60**	Anamika Talukdar, Tapan Maiti	Event-triggered prescribed time sliding mode control for frequency regulation and state of charge management in hybrid thermal microgrid systems
5.	**75**	Hemant Kumar, M. Venkatesh Naik, Rahul Kumar	Comparative Design and Performance Evaluation of DFIG and PMSG Based WECS Under Variable Wind Conditions
6.	**83**	Degala Akanksha, Moumita Saha	Recent Advances in AI-Assisted EV Charging Stations: Converter Topologies, Energy Management, and Renewable Energy Integration

Technical Sessions Paper Presentation Schedule

Session: **TS-02 (VLSI Design & Secure Communications)**

Date: 27th November, 2026 (Friday) **Time:** 12:00 PM - 01:30 PM

Session Chair (s): **Dr. Shweta Tripathi**
Dr. Pilik Basumatary

Venue: **EED Seminar Hall**

S. No.	Paper ID	Author	Title
1.	**135**	Muskan Shukla, Shilpa Gupta, Rishabh Shukla	Energy-Efficient 16-Bit ALU Design Using Advanced Power Reduction Techniques
2.	**142**	Alok Agrawal, Uddin Ahmad, Ameen	A Hybrid Array Configuration for Reducing Mismatch Loss in Partially Shaded PV Systems
3.	**157**	Rishabh Shukla, Purnima Sharma, Sunny Vig	Optimizing Grid Efficiency and Cost Reduction through ML-Driven V2G Operations
4.	**225**	Prashant Singh	Key Enablers for Developing Sustainable and Resilient Manufacturing Systems: A Henry Garrett Approach
5.	**214**	Alok Agrawal	A Structured Asymmetric Solar PV Array Configuration for Mismatch Loss Reduction Under Partial Shading Conditions
6.	**203**	Aditya Prasad Padhy, Prateek Pratyasha	A Spatio-Temporal Graph Transformer with Bayesian Hyperband Optimization for Multi-step Solar Irradiance Prediction

Technical Sessions Paper Presentation Schedule

Session: **TS-03 (Renewable Energy & Power Electronics)**

Date: 27th November, 2026 (Friday) **Time:** 05:00 PM - 06:30 PM

Session Chair (s): **Dr. Niraj Kumar Choudhary**
Dr. Shubh Lakshmi

Venue: **EED Seminar Hall**

S. No.	Paper ID	Author	Title
1.	**228**	Shishir Maheshwari	Chi-Square and PCA-Based Feature Reduction for PCOS Detection Using Support Vector Machine
2.	**259**	Chandan Kumar	Design, Development, and Experimental Validation of a Single-Actuator Dual-Axis Solar Tracking System Using a Sensor-Linkage Mechanism
3.	**271**	Avaneendra Yadav, Mudit Choudhary Vishal	Constraint-Aware Deep Reinforcement Learning for Cost-Efficient Battery Dispatch in Microgrids
4.	**274**	Binti Kumari, Dr. V. Prem Prakash	A Hybrid Differential Evolution with RNN-Guided Reinforcement Learning for Fairness-Aware Pricing in Indian Local Energy Communities
5.	**277**	Sachhidanand Savarkar, Ravindra Kumar Singh	Metaheuristically Optimized Cascaded LC Filter Design for Dual-Source AC/DC Converters
6.	**77**	Veeranna Dhanavath, M Venkatesh Naik, Rahul Kumar	Performance Evaluation of a Four-Phase Interleaved Buck Converter for 48-V AI Processor Point-of-Load Applications

Technical Sessions Paper Presentation Schedule

Session: **TS-04 (Embedded Systems & Nanoelectronics)**

Date: 28st November, 2026 (Saturday) **Time:** 02:00 PM - 03:30 PM

Session Chair (s): **Dr. Rajeev Gupta**
Dr. Satnesh Singh

Venue: **CED Seminar Hall**

S.No.	Paper ID	Author	Title
1.	**96**	Anil Paswan	Area-Delay based 2-D DWT using Multiplier-less and Modified CSLA Structure for Image Processing Application
2.	**144**	Rishabh Shukla, Gaurav Aggarwal, Mukkamalla Sree Harinath Reddy	A Configurable Dual-Clock Asynchronous FIFO with Programmable Almost-Flags and Scoreboard-Based CDC Verification
3.	**191**	Manish Rai, Abhishek Kumar	Performance Analysis of Junctionless Nanowire Transistors with Different Semiconductor Materials for Sub-10 nm Technology
4.	**193**	Amit Singh, Anshuka Chandra Raj, Surendra Kumar	A survey on stretchable transistors and functional circuits for human integrated electronics
5.	**248**	Abhigyan Shreelay, Mohd. Afroz Akhtar, Jagat Jyoti Rath	A Multi-Rate Cascaded Flight Control Framework for Quadrotor UAVs with Hardware-Identified Actuator Dynamics
6.	**260**	Neha Agarwal, Haranath Kar	Stability of Lipschitz nonlinear interfered discrete-time systems under saturation using strict passivity approach

Technical Sessions Paper Presentation Schedule

Session: **TS-05 (Biomedical Signal Processing & Healthcare Applications)**

Date: 28st November, 2026 (Saturday) **Time:** 02:00 PM - 03:30 PM

Session Chair (s) **Dr. Srinivasan Aruchamay**

Dr. Neelu

Venue: **Control System Lab EED**

S.No.	Paper ID	Author	Title
1.	**87**	Bhupender Rawat, Nida Siddiqui, Hemendra Shankar Sharma	A Comparative Study of SHAP and LIME for Explainable Machine Learning in Heart Disease Prediction
2.	**95**	Kunvar Patel	Performance Enhancement of Cardiac Disease Classification Architecture Using Hybrid Fuzzy Inference Weight Optimization Technique
3.	**170**	Manjeet Kour	Deep Learning for Retinal Disease Detection: A Critical Review of Explainability, Generalization, and Clinical Translation.
4.	**221**	Urwashi Sad, Hemant Choubey, Deepak Batham	Automated Epileptic Seizure Detection Using Continuous Wavelet Transform Based on Learning Spatiotemporal EEG Representation
5.	**251**	Anjum Siddiqi, Jaydip Kumar, Shail Kumar Dinkar	Hybridised Machine Learning Model to Extract Feature for Early Dementia Detection Using MRI Datasets
6.	**252**	Deeksha Baweja, Arun Kumar Singh	Balancing Accuracy and Computational Cost in Malware Detection: A Comparative Study of Machine Learning Models with XGBoost-Based Feature Selection

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Technical Sessions Paper Presentation Schedule

Session: **TS-06 (Intelligent Computing, Robotics & Embedded Applications)**

Date: 28th November, 2026 (Saturday) **Time:** 05:00 PM - 06:30 PM

Session Chair (s): **Dr. Ranvijay**

Dr. Shishir Maheshwari

Venue: **Control System Lab EED**

S.No.	Paper ID	Author	Title
1.	**254**	Deeksha Baweja, Dhruv Shah, Arun Kumar Singh	APEX: A Hybrid Deep Learning–Reinforcement Learning Framework for Predictive Autoscaling in Multi-Cloud Microservice Architectures
2.	**265**	Mega Das, Debasish Biswas, Sanchita Sarkar, Chakraborty, Shouvik Sarkar, Chinmoy Ghorai	DIVERSA: Structural Diversity-Preserving Memetic SPEA2 for Multiobjective Image Segmentation
3.	**235**	Sunny Vig	Design and Development of a Flex Sensor-Based Anthropomorphic Robotic Hand Using STM32F446RE for Real-Time Finger Motion Replication
4.	**68**	Veeraragavan S, Virendra Kumar, Siva Rama Krishna Vadali, Sambhunath Nandy	An Approach to Link Design for Underwater Robotic Manipulators Based on Inertia Optimization
5.	**104**	Sayak Mukhopadhyay, Siva Ram Krishna Vadali, Srinivasan Aruchamy, Veeraragavan S, Jyotirmoy Karmakar, Sambhunath Nandy	Monocular Vision-Based Dock Pose Estimation for Terminal Docking of an Underwater Vehicle
6.	**230**	Abinaya S	Explainable Glaucoma Detection Using EfficientNet-B3, Hypergraph Neural Networks and Vision-Language Transformers

Technical Sessions Paper Presentation Schedule

Session: **TS-07 (Cybersecurity, & Aerospace Systems)**

Date: 28th November, 2026 (Saturday) **Time:** 05:00 PM - 06:30 PM

Session Chair (s): **Dr. Dipayan Guha**

Dr. Anant Milan Khalko

Venue: **VI Lab EED**

S.No.	Paper ID	Author	Title
1.	**39**	Jakkireddy Reddy, Rosi Venkata, Vadali, Krishna Siva Ram, Vankayalapati Radhika, Sambhunath Nandy, Srinivasan Aruchamy	Federated Blockchain-Enabled Multi-Zone Fence Perimeter Surveillance Using Edge-Fog-Cloud Intelligence
2.	**133**	Pavani Chalumuri, Shrija Madhu	Enhancing Device Compatibility for Secured Transactions in Blockchain Technology
3.	**227**	Shishir Maheshwari	DUCBF-Net: A unified deep learning model for enhancing plant leaf disease classification
4.	**229**	Shishir Maheshwari	A statistical-features based approach for tuberculosis detection from chest X-ray images
5.	**247**	Mohan Kashyap, Rishabh Dev Shukla, Omer Kasab	Dynamic Topology–Aware Detection of Black Hole Attacks in WBANs
6.	**61**	Aditi Rai, Dinakar Rai, Divyanshu; Noman Aziz, Basudeba Behera	A Secure and Resilient Software Architecture for LEO Satellite Payloads Using Container Technology

Technical Sessions Paper Presentation Schedule

Session: **TS-08 (Special Online Session)**

Date: 28st November, 2026 (Saturday) **Time:** 05:00 PM – 06:30 PM

Session Chair (s): **Dr. M. Venkatesh Naik**
Dr. Arvind Kumar Prajapati

Venue: **CED Seminar Hall (Online Mode)**

S. No.	Paper ID	Author	Title
1.	**64**	Sudhamathi B, Sudha V	Grey Wolf Optimization-Based PTS for PAPR Reduction in OTFS Systems
2.	**130**	Ujjwal Datt Sharma	Power Delivery as the Limiting Factor for Continuous AI Inference on the NVIDIA Jetson Orin Nano Super
3.	**261**	Sivakumar Rajendran	Assessment and Comparison of Deep Learning Approaches for Paddy Disease Detection and Classification
4.	**224**	M Kannan	Design an Oval Structured Switched Capacitor Based Nine Level Inverter (O – SC- NLIs) with Fewer Voltage Stress
5.	**211**	Ayan Khan	Federated Learning for Privacy-Preserving DDoS Detection in 5G Open Radio Access Networks

Technical Sessions Paper Presentation Schedule

Session: **TS-09 (Emerging Computing & Embedded Technologies)**

Date: 29th November, 2026 (Sunday) **Time:** 01:30 PM - 03:00 PM

Session Chair (s): **Dr. Deepak Kumar**
Dr. B. Lokesh Gupta

Venue: **CED Seminar Hall**

S.No.	Paper ID	Author	Title
1.	**215**	Umesh Pandey	Beyond the C Standard Library: A Unified Native-Code Benchmark and a Reduced-Domain Kernel for Sine Computation
2.	**272**	Debabrata Samanta	Quantum Imaging Technologies for Skin Cancer Detection: A Quantum-Enhanced Multimodal Imaging Framework for Early Diagnosis
3.	**264**	Sunny Vig	Design Framework for an Embedded Mechanical Ventilator with Pressure–Flow Monitoring and Safety-Oriented Control.
2.	**34**	Spoorthi Ponnala, Sri Vaishnavi Thalloju, Shyam Krishan Joshi, Satnesh Singh	Explainable AI for Electrical Load Projection (Moved from 27th, session I)
5.	**143**	Mohan Kashyap, Rishabh Shukla, Gaurav Aggrawal	High-Speed Optical Transmission System Using Dispersion Compensation Techniques
6.	**140**	Harpreet Singh, Shilpa Gupta, Rishabh Shukla	Low-Power Scan Chain Optimization Using Clock Gating in an 8-Bit RISC-8 Processor

Technical Sessions Paper Presentation Schedule

Session: **TS-10 (Aerospace & Avionics Engineering)**

Date: 29th November, 2026 (Sunday) **Time:** 01:30 PM - 3:00 PM

Session Chair (s): **Dr. Vishal Kumar Gaur**
Dr. Umesh Kumar Soni

Venue: **EED Seminar Hall**

S.No.	Paper ID	Author	Title
1.	**126**	Siddharth	Design and implementation of an intelligent antenna control system for nano satellite tracking
2.	**188**	Rishav Raj Rishi, Arun Dev Pandey, Sarika Tripathi, Niraj Kumar Choudhary, Kumar Shantanu, Nitin Singh	Detection of False Data Injection Attacks Using UKF Based Dynamic State Estimation and Physics Based Validation
5.	**238**	Nidhi Maurya, Shiv Narayan Gupta, Km Vikasika Verma	Design and Analysis of a Precision-Scalable Hybrid MAC Unit for FPGA-Based DSP Systems
4.	**273**	Abhishek Shukla, Ankur Sinha, Faiz Hamid	Neuron Gating-based Neural Architecture Search
5.	**44**	Kritee Saxena, Rakesh Sahoo, Manoranjan Sinha,	Hybrid Mode Tracking of Satellite Rendezvous and Docking Using Finite-Time Sliding Mode Control
6.	**88**	Vandana Jha	Animal Tracking and Health Monitoring System with RFID
7.	**257**	Abhijeet Anand, Rishav Kumar, Aman Shankar, Nakka Kiran Siva Koushik, Mohammed Junaid Akhtar	Comparative Analysis Between Three-Phase Inverter and Three Independent Single-Phase Inverter Fed Induction Motor Drive for Electric Vehicle Applications