Bansilal Ramnath Agarwal Charitable Trust's

Vishwakarma Institute of Technology, Pune
(An Autonomous Institute affiliated to University of Pune)
Department of Instrumentation Engineering

Paper Presentation Schedule for I4Tech2025 Conference

Day 1: Friday, 19th Sept 2025

Paper Track: On Campus

Day and Date: Friday, 19th Sept 2025

Time: 2.30 pm to 5.30 pm

Venue: Room no 4207 (Building 4, Instrumentation Department, Second Floor)

Sr. No	Paper ID	Paper Title
1	83	Simulation-Based Study of Advanced Battery Thermal Management for Enhanced Performance, Durability, and Grid Integration
2	102	Thermal Failure Mitigation in Two Wheeler EV MCU Discharge MOSFETs: A Control-Oriented Strategy with Real-World Validation
3	363	Evaluation of PI and Fuzzy Logic Control for Altitude Control of a 1-DOF Helicopter
4	289	Hybrid Approach to Emotion Detection using Deep Learning
5	434	Performance and Thermal Behaviour Analysis and Monitoring of Lithium-ion Cells
6	508	Efficient Medical Image Classification in Model-Heterogeneous Federated Learning
7	359	Towards Sustainable Farming: Fertilizer Recommendation Using Machine Learning
8	466	Design and Implementation of a Compact Vector Network Analyzer Using a Voltage-Controlled Oscillator

Paper Track: Network and Communication

Day and Date: Friday, 19th Sept 2025

Mode: Online on Webex

Time: 2.30 pm to 5.30 pm

Sr. No	Paper ID	Paper Title
1	58	Wireless Attack Simulation using Python: A Real-Time Evaluation of Common Wi-Fi Threats
2	315	An Enhanced Data Security Framework (FinTechSec++) for FinTechs and CBDCs
3	316	Malware Detection Using Machine Learning A Neural Network-Based Approach
4	371	Secure and Efficient E-Voting Using Parallelized RSA-Based Digital Signatures
5	414	A Lightweight Protocol for Secure Communication Using Two-Layered Encryption
6	497	Ensemble-Based Intrusion Detection Enhanced with LLM-Driven Incident Response Automation
7	533	Electromagnetic Characterization of Dual-Band FSS Structures with Equivalent Impedance Network Models using IoT

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Paper Track: Automation and Control

Day and Date: Friday, 19th Sept 2025

Mode: Online on Webex

Time: 2.30 pm to 5.30 pm

Sr. No	Paper ID	Paper Title
1	160	Advance Control Scheme for Precise Temperature Regulation of Peltier Module
2	368	Probabilistic Localization Framework for Autonomous UAV Navigation
3	370	Multi-Bird Biomimetic Controllers for UAV Flight Dynamics
4	423	Overcoming exe Execution Challenges in Robot Framework on Linux Using Wine
5	488	Power Estimation of Lithium-Ion Battery in Electric Vehicles Using 2RC Model and MATLAB/Simulink
6	503	Automotive Smart Seat Adjustment with Embedded Control
7	520	Multi-Directional Car License Plate Detection Using MDYOLO

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Paper Track: Sensor and Technology

Day and Date: Friday, 19th Sept 2025

Mode: Online on Webex

Time: 2.30 pm to 5.30 pm

Sr. No	Paper ID	Paper Title
1	124	Point Cloud Registration Method for Bulk Cargo Hold Material Surface Based on RPMNet
2	125	Machine Vision-Based Automated Perception System for Portal Cranes
3	238	RF- Based Characterization of Soil Fertility Using a Custom Dielectric Cell
4	473	An Enhancing Organic Thin-Film Transistor Performance Through Contact Structure Optimization for Flexible Electronics
5	474	Analysis of Electrode and Semiconductor Materials in Organic Field-Effect Transistors for Electronic Applications
6	490	Software-in-Loop simulation and validation of airbag ECU for communication and diagnostics
7	494	Hybrid A-PGNN with Classical Social Network Analysis for Enhanced Recommendation Systems

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Paper Track: Data Science and Analysis

Day and Date: Friday, 19th Sept 2025

Mode: Online on Webex

Time: 2.30 pm to 5.30 pm

Sr. No	Paper ID	Paper Title
1	133	The TREND TRY-ON: Discover Your Perfect Look With Virtual Try-Ons
2	150	Enhancing Software Defect Prediction Accuracy through Feature Selection-Driven Hybrid Intelligence
3	264	Sentiment Analysis on Flipkart Reviews Using Aspect-Level Attention and Fuzzy Logic
4	388	Machine Learning-Based Early Prediction and Classification of Obesity Levels Using Ensemble Models
5	451	Ensemble Deep Learning Framework for Robust Arrhythmia Detection
6	517	Deep Learning Based Dog SkinPrediction: A Multi Label Classification Approach using Resent18
7	525	An Autoencoder-ANN Framework for Anomaly Detection in Smart Grids Using Deep Learning
8	532	Water Quality Assessment Via Ensemble Machine Learning

Paper Track: Signal and Image Processing

Day and Date: Friday, 19th Sept 2025

Day and Date: Friday, 19th Sept 2025

Mode: Online on Webex

Time: 2.30 pm to 5.30 pm

Sr. No	Paper ID	Paper Title
1	507	VAE-WGAN: A Hybrid Deep Learning Malware Classification Approach from PE Files
2	182	AI Fitness Assistant For Gym
3	239	Automatic Health Monitoring From Multi-View Images of Cattles Using Fuzzy Logic
4	398	A Lightweight Deep learning model for Early Disease Detection of Rice plants
5	443	Active Transfer for Multi-Modal Data Selection Improving Classification Accuracy and Resource Efficiency
6	467	Confidence-Aware SSD Ensemble with Weighted Boxes Fusion for Weapon Detection
7	469	A Dense U-Net Framework for Speech Enhancement with Channel-Sequence Attention

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Paper Track: Artificial Intelligence and IOT-II (AIOT-II)

Day and Date: Friday, 19th Sept 2025

Mode: Online on Webex

Time: 2.30 pm to 5.30 pm

Sr. No	Paper ID	Paper Title
1	426	Optimized Neural Network Compression for Efficient Corrosion Detection in Metal Surfaces
2	435	Parallelized Path Planning for Real-Time Autonomous Vehicle Navigation
3	468	Inventory Management Using A2C Reinforcement Learning: Performance Comparison with Heuristic and Bandit Methods
4	477	Distributed Task Coordination with Leader Election and Dependency Management
5	509	PrivMod: Collaborative Content Moderation in Decentralized Platforms with Federated Learning
6	514	Advanced System for Real-Time Crash Detection and Analysis
7	128	Building an EEG Dataset: A Comprehensive Workflow from Signal Capture to Preprocessing

Day 2: Saturday, 20th Sept 2025

Paper Track: Artificial Intelligence and IOT-I (AIOT-I)

Day and Date: Saturday, 20th Sept 2025

Mode: Online on Webex

Time: 10.00 am to 1.00 am

Sr. No	Paper ID	Paper Title
1	197	Recognizing Teacher and Student Activities in Higher Education Using a Hybrid CNN-LSTM Approach
2	202	Integrating Fuzzy Logic and Machine Learning for Analyzing Consumer Behavior in Digital Marketing
3	283	An AI-Powered Framework for Automated Diagnosis of Dental Conditions from orthopantomograms
4	285	Exponential Leaf in Wind Optimization based Siamese Dense Block Capsule Network for detection of anomaly in Fog-Assisted IoVs Network
5	327	Enhancing Data Privacy in Multi-Institutional Medical AI: A Secure Vertical Federated Learning Framework
6	349	Advancing Diabetic Retinopathy Detection: YOLOv11-Based Real-Time Analysis with OCR Integration
7	362	Optimizing ARIMA-XGBoost Hybrid Model Performance through HPC Integration for Scalable Financial Forecasting

Paper Track: International Authors Paper

Day and Date: Saturday, 20th Sept 2025

Mode: Online on Webex

Time: 2.30 pm to 5.30 pm

Sr. No	Paper ID	Paper Title
1	537	A Blockchain-based Decentralized Secure Data Aggregation Scheme with ZKP for WSNs
2	545	Portable Real-Time System for Disease and Pest Detection in Grapevine Leaves using Edge Computing
3	547	Future of Farming: An Architecture for Industrie 4.0 in Plant Factories
4	546	Thermal Image Analysis for Precision Agriculture
5	492	A Non-Invasive Cross-platform Supported Pocket ECG Device for Heart Monitoring
6	499	MultiSpecGNN: Multi-Scale Spectral Graph Neural Networks for Long-Range Graph Learning
7	548	Development of a cybersecurity framework for cloud environments adapted to the retail sector