

13th IEEE International Conference on Intelligent Systems and Embedded Design (ISED-2025)



Wednesday – Friday 17 – 19 December, 2025

13th
ISED-2025

Schedule Book



Contact: The Organizing Chairs, ISED 2025

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**13th IEEE International Conference
on
Intelligent Systems and Embedded Design (ISED-2025)
(17 – 19 December 2025)**



**Pre-conference Talk
16/10/2025**

Preconference Talk

Date: 16th December 2025

Time: 3:30 PM – 5:30 PM



Prof. Sanjaya Kumar Panda, NIT Warangal

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A Glimpse of Day-1 Schedule

December 17th, 2025, Wednesday (* All timings are in IST, IST is GMT+5.30)

Time	Program		
9:45 AM – 11:00 AM	Inaugural Function		
11:00 AM - 11:30 AM	High Tea		
11:30 AM – 12:30 PM	Keynote Session – 1 (Prof. Siba K Udgata, University of Hyderabad)		
12:30 PM - 13:30 PM	Keynote Session – 2 (Prof. Ponnurangam Kumaraguru, IIIT Hyderabad)		
13:30 PM – 14:30 PM	Lunch Break		
14:30 PM - 15:30 PM	Keynote Session – 3 (Prof. Priyadarsan Patra, NIST University)		
15:30 PM – 17:00 PM	S1 → Track # 1, 7, 8 (Offline)	S2 → Track # 2, Sp tr # 2 (Offline)	S3 → Track # 11 (Offline)
Paper IDs	220, 441, 448, 646, 733, 772	157, 296, 338, 596, 619	92, 129, 219, 244, 253, 776
15:30 PM – 17:00 PM	S4 → Track # 3 (Offline)	S5 → Track # 6 (Offline)	S6 → Track # 11, 12 (Offline)
Paper IDs	445, 648, 649, 712, 717, 732	297, 307, 424, 679	329, 335, 591, 630, 686
17:00 PM – 18:00 PM	Tea Break and Interaction Session		
07:00 PM - 10:00 PM	Gala Dinner		

Keynote Session 1

Date: 17th December 2025

Time: 11:30 AM – 12:30 PM



Prof. Siba K Udgata, University of Hyderabad

Keynote Session 2

Date: 17th December 2025

Time: 12:30 PM – 1:30 PM



Prof. Ponnurangam Kumaraguru, IIIT Hyderabad

Keynote Session 3

Date: 17th December 2025

Time: 14:30 PM – 15:30 PM



Prof. Priyadarsan Patra, NIST University

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A Glimpse of Day-2 Schedule

December 18th, 2025, Thursday (* All timings are in IST, IST is GMT+5.30)

Time	Program	
10.00 AM - 11.00 AM	Keynote Session – 4 (Prof. Partha Roop, University of Auckland, New Zealand)	
11:00 AM – 11:30 AM	Break	
11:30 AM – 12:30 PM	Keynote Session – 5 (T. V. Vijay Kumar, JNU India)	
12:30 PM – 13:30 PM	Lunch Break	
13:30 PM – 15:00 PM	S7 → Track # 1, 2 (Online)	S8 → Track # 3 (Online)
Paper IDs	1, 64, 212, 228, 384, 662, 769	434, 443, 638, 674, 698, 715, 716
13:30 PM – 15:00 PM	S9 → Track # 2 (Online)	S10 → Track # 4, 7 (Online)
Paper IDs	99, 328, 345, 452, 582, 600, 606	69, 389, 406, 435, 515, 623, 634
15:00 PM - 15:30 PM	Tea-Break	
15:30 PM – 17:00 PM	S11 → Track # 4, 12 (Online)	S12 → Track # 1, 3 (Online)
Paper IDs	214 , 359, 472, 513, 597, 622, 535	240, 241, 666, 667, 677, 730, 731
15:30 PM – 17:00 PM	S13 → Track # 3, 5, 6, 9,11 (Online)	S14 → Track # 8, 10 (Online)
Paper IDs	213, 502, 532, 548, 556, 628, 734	162, 201, 267,271, 553, 643, 464
15:30 PM – 17:00 PM	S15 → Track # 11 (Online)	S16 → Track # 11 (Online)
Paper IDs	4, 17, 18, 19, 20, 46, 74, 179, 221	119, 135, 274, 320, 339, 366, 393, 620
17:00 PM - 19:00 PM	S17 → Track # 11 (Online)	S18 → Track # 11 (Online)
Paper IDs	199, 402, 405, 419, 421, 450, 528, 529	204, 376, 259, 549, 557, 559, 576, 617
17:00 PM - 19:00 PM	S19 → Track # 11 Spl Track # 3(Online)	S20 → Track # 1, 3, 11, 12 (Online)
Paper IDs	746, 755, 756, 757, 758, 759, 760, 767	262, 743, 744, 541, 321, 322, 724

Keynote Session 4

Date:18th December 2025

Time: 10:00 AM – 11:00 AM



Prof. Partha Roop, University of Auckland, New Zealand

Keynote Session 5

Date:18th December 2025

Time: 11:30 AM – 12:30 PM



Prof. T. V. Vijay Kumar, JNU India



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A Glimpse of Day-3 Schedule

December 19th, 2025, Friday (* All timings are in IST, IST is GMT+5.30)

Time	Program	
10:00 AM – 11:00 AM	Industry Talk (Biplab Rout, AMD)	
11:00 AM – 11:30 AM	Break	
11:30 AM – 12:30 PM	Industry Talk (Dr. Santosh Kumar Sahu, ONGC)	
11:00 AM – 11:30 AM	Tea Break	
11:30 AM – 13:00 PM	S21 → Track # 1, 2, 4 (Online)	S22 → Spl Track # 2 (Online)
Paper IDs	82, 613, 637, 655, 683, 685, 696	403, 505, 572, 633, 661, 668, 699
11:30 AM – 13:00 PM	S23 → Spl Track # 3 (Online)	S24 → Track # 3 (Online)
Paper IDs	552, 579, 701, 702, 703, 704, 709	684, 705, 707, 714, 718, 721, 729
11:30 AM – 13:00 PM	S25 → Adjusted (Online)	
Paper IDs	609, 685,	
12:30 PM – 13:30 PM	Lunch	
16:00 PM - 17:00 PM	Valedictory	

Industry Talk

Date: 19th December 2025

Time: 10:00 AM – 11:00 AM



Dr. Deepak Panda, Oracle

Industry Talk

Date: 19th December 2025

Time: 11:30 AM – 12:30 AM



Prof. Santosh Kumar Sahu, ONGC

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Detailed Schedule Day-1 (17th December 2025) (Offline)

Technical Session#1		Date: 17 th December 2025	Time: 15:30 PM-17:00 PM
Session#1 (S1) (Offline)		Track- 1, 7, 8 (offline)	
Paper ID	Paper Title	Authors	
220	ECG Arrhythmia Detection using SVM Classifier on FPGA	Rahul Narendrakumar Gonawala, Abhilasha S Mandloi, Priyank Prajapati, Anand. D. Darji	
441	AvioDepth: An Ultra-Lightweight Sequential Attention Framework for Real-Time Monocular Depth Estimation in UAVs	Kaustubh Kapil , Rinkesh Patel, Meet Amin, Anand P. Darji, Pinal Engineer	
448	A Novel Dynamic Model Switching Approach for Deep Learning on Edge Devices with Performance Evaluation	Aatman Shah, Dedipya Konidena, Satyam Srivastava,Shalini Nehra,Suraj Kumar Mukhiya	
646	Brain Tumor Classification using Hybrid Deep-Wavelet Feature Fusion with Probabilistic PCA-based Feature Reduction	Akash Pandey, Suwendu Rup, Prof. Sudhakar Pandey	
733	HEMNet: A Hardware Efficient MobileNet for Gastrointestinal Pathological Findings Classification	Debaraj Rana, Shreerudra Pratik, Bunil Kumar Balabantaray , Om Prakash Sahu, Rangababu Peesapati	
772	SirpurDigital: A Real-Time Digital Twin Framework for Predictive Heritage Monitoring and Intelligent Cultural Preservation	Vinay Pathak, Shubham Sharma, Prafull Goswami, and Manu Vardhan	
Technical Session#2		Date: 17 th December 2025	Time: 15:30 PM-17:00 PM
Session#2 (S2) (Offline)		Track- 2, sp tr -2 (offline)	
Paper ID	Paper Title	Authors	
157	IoT-Enabled Waterlogging Prediction using a YOLO-Based Deep Learning Model	Vrajesh Kumar Chawra, Saurin Parikh,Manav Patel,Sarthak Methaniya,Gaurang Raval,Sharada Valiveti	
296	Design and Implementation of a 32-bit RISC-V Pipelined Processor by using Verilog for IoT	Suman Tiwari, Ashutosh Gupta, Kaushiki Kumari, Piyush Singh, Pooja Kumari, Pragyan Parimita Padhan, Prashant Pranav, Vineet Kumar, Vijay Nath	
338	Deep Learning Architecture for Classification of Kidney Histopathology Images	Syed Tazmeerul Hasnain, Pragyan Parimita Padhan , Prashant Pranav, Vineet Kumar, Pooja Kumari, Vijay Nath	
596	Hybrid Ag-AI Grating based D-Shaped Optical Fiber Surface Plasmon Resonance Sensor	HANSA JHA, Dr. Bijayananda Patnaik, Sudhanshu Lenka	
619	HIGH SENSITIVE CAPACITIVE POSITION SENSOR DESIGN USING COMSOL MULTIPHYSICS	Manda Sowmya Latha, Bijayananda Patnaik,D Deepak Reddy ,Sunil Kumar Dash	

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Detailed Schedule Day-1 (17th December 2025)

Technical Session#3		Date: 17 th December 2025	Time: 15:30 PM-17:00 PM
Session#3 (S3) (Offline)		Track- 11 (offline)	
Paper ID	Paper Title	Authors	
92	A Meta Learning Based Stacked Ensemble Model (MetaCervX) for Enhanced Cervical Cancer Prediction	Chandani Bhagchandani, Tripti Swarnkar	
129	Next-Gen Sports Analytics: Enhancing Player Performance Evaluation with Hybrid RNN-LSTM Models	JASMINI KUMARI, Likhith Badiga, Sambit Kumar Mishra, Sushmita Kumari	
219	A Vegetable-Specific Machine Learning based Methodology for Tomato Plant Disease Forecasting based on Climatic Conditions	Prachi Mehta, Kalpana Jain, Zeesha Mishra, Bibhudendra Acharya	
244	A Hybrid Predictive Framework for Career Path Recommendation using Ensemble Learning and Fuzzy-Logic Based Plausibility Assessment	Ashirvad Samanta, Swayam Patnaik, Soumyajit Mohanty, Rama Ranjan Panda, K Nikhil	
253	SMART-MI: Scalable Machine-learning Approach for Risk Tracking in Myocardial Infarction Prediction	ABHISHEK SHRIVASTAVA, Santosh Kumar , Nenavath Srinivas Naik	
776	Depression Detection Using Stacking Ensemble with Pronoun-Based Linguistic Features	Prashant Kashyap, Jitendra Kumar Rout	

Technical Session#4		Date: 17 th December 2025	Time: 15:30 PM-17:00 PM
Session#4 (S4) (Offline)		Track- 3 (offline)	
Paper ID	Paper Title	Authors	
445	Hardware-Enabled Root of Trust for Enhanced Security in Embedded Systems	Siddharth Patel, Rohit Singh	
648	A Multi-Stage Framework for Efficient Deep Neural Network Compression on Edge Devices	SATISH KUMAR DUBEY, DR. NAEEM AHMAD	
649	Intelligent IIoT-driven Machine Fault Diagnosis and Lifespan Forecasting: Advancing Predictive Maintenance in Industry	Abhishek Shrivastava, Kavita Jaiswal, Aneesha Tiwari	
712	Multi-Attribute AI Storytelling Framework with IoT Deployment for Real-Time Narration: A Parameter-Efficient Approach	Sankalp Nayak, ARADHANA BEHURA, SAMRIDDHI SHARMA, PRABHU PRASAD DEV, JITENDRA KUMAR ROUT	
717	Secure Comparative Evaluation of Alzheimer MRI Classification Models Using Blockchain	Abdhisuta Dash, Fahad Amin, Subham Kumar Sahoo, Sambit Kumar Mishra	
732	DYOLO: Deformable based YOLOV7 for polyp detection	Shreerudra Pratik, Rahil Agarwal, Debaraj Rana, Bunil Kumar Balabantaray	

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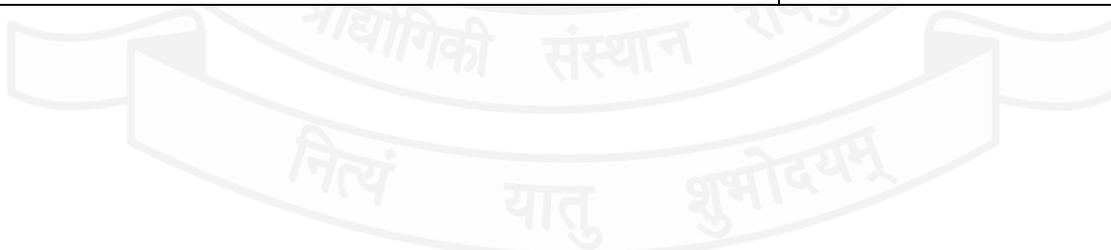


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Detailed Schedule Day-1(17th December 2025)

Technical Session#5		Date: 17 th December 2025	Time: 15:30 PM-17:00 PM
Session#5 (S5) (Offline)		Track- 6 (Offline)	
Paper ID	Paper Title	Authors	
297	Design and Implementation of a Small-Scale Batch Mixing System using RISC-V Architecture	Angira Mukherjee, Debjit Kar, Pragyan Parimita Padhan, Vineet Kumar, Nutan Lata, Prashant Pranav, Apurva Smita, Nikhat Anjum, Priyanshu Kumar, Aditya Sankar Sengupta, Pooja Kumari, Vijay Nath	
307	Design and Implementation of A DSP-Enhanced RISC-V Pipelined Processor Using Verilog HDL	Aditya Goswami, Kumar Rishi, Vineet Kumar, Nikhat Anjum, Pragyan Parimita Padhan, Prashant Pranav, Pooja Kumari, Pratyush Pranjal, Vijay Nath	
424	CU8B-I : A Unique 8-bit CPU Architecture with Reduced Fetch Cycle and Upward Compatibility with 8080/8085	Snehil Sanyal, Shrish Verma, Arman Sahu, Hetram, Niti Jain, Pradhyumn Dwivedi	
679	MULTI - DISEASE DETECTION USING DEEP LEARNING	Arya Singh, Deo Prakash, Dr. Om Prakash	
Technical Session#6		Date: 17 th December 2025	Time: 15:30 PM-17:00 PM
Session#6 (S6) (Offline)		Track- 11,12 (Offline)	
Paper ID	Paper Title	Authors	
329	A Decentralized Framework for Inter-Domain Authentication Using Blockchain	Poonam Yerpude, Preeti Chandrakar	
335	Android Malware Detection Framework using Attention-driven Fusion Technique and InceptionNet Transfer Learning Model	Vishakha Shukla, Govind P Gupta	
591	Odia News Headlines Classification using Convolutional Neural Network	Deepak Kumar Jena, Lalatendu Muduli	
630	Improved HSI Classification via Hybrid Spatial-Spectral Deep Features and Kernel ELM	Suchismita Behera, Partha Pratim Sarangi, Bhabani Shankar Prasad Mishra, Sayak Hatui	
686	A Brief Survey of Persistence Approaches in Real World Malwares	Bhavesh Gilhare, Vikas Sihag, Gaurav Dave	



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Detailed Schedule Day-2(18th December 2025)

Technical Session #7		Date: 18th December 2025	Time: 13:30 PM-15:00 PM
Session#7 (S7) (Online)		Track- 1, 2 (Online)	
Link: Session_7 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
1	A Federated Learning Framework for Multi-Parameter Optimization in Edge Computing	Rajesh Soma, Subham Kumar Sahoo, Fahad Amin, Sambit Kumar Mishra	
64	Performance Evaluation and Comparison of YOLOv8, MobileNet-SSD, and MTCNN for Face Detection in Smart Attendance System	Arvinder Singh Dhoul, Burhanuddin Saifee, Ruchi Patel, Santosh Vishwakarma, Ritu Ahluwalia	
212	High-Level Synthesis of AlexNet CNN based model for Brain Tumor Diagnosis through FPGA Deployment Using Vitis HLS	SAYANTAN DUTTA, Indrajit Chakrabarti	
228	Enhanced Wild Animal Intrusion Detection using Faster R-CNN with Debiasing Technique	Pranav Mukundan A, Sairam Krithik S, Santhosh Kumar R R, Dr. S. Bhuvaneshwari	
384	A Lightweight Embedded Intelligent Threat Detection System Using TSANet on Android Platforms	Jagannath Malode, Manish Sabnis , Varun Gani , Ananya Banahatti , Prema T. Akkasaligar , Ryan Dias	
662	Explainable AI for Preclinical Risk Detection of Bile Duct Cancer Using Multi-Omics, Microbiome Data and Clinical Biomarkers	Amit Singh, Aditya Kumar, Akhilesh Kumar Gupta, Saurabh Bilgaiyan, Chiranjib Parida	
769	Edge AI Acceleration on Ultra96 SoC: Rapid Model-to-FPGA Hardware Mapping Using NNGen	Swati, Harshkumar Parmar, Pinalkumar Engineer	
Technical Session#8		Date: 18th December 2025	Time: 13:30 PM-15:00 PM
Session#8 (S8) (Online)		Track - 3 (Online)	
Link: Session_8 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
434	Design and Implementation of a Lightweight Platform Independent Ring Oscillator PUF for IoT Applications	Bibhash Sen, Surajit Dutta, Toshiyapang Ozk, Mahabub Hasan Mahalat	
443	Encoder-Based Transformer Architecture for Hardware Trojan Detection Based on Power Side Channel Analysis	Surajit Dutta, Bibhash Sen, Anindan Mondal	
638	Performance Analysis of Traditional and Deep Learning Models for Agricultural Yield Estimation	Khush Aghera K., Ruchi Patel, Megha Mudholkar, Pankaj Mudholkar	
674	A novel Machine Learning- based framework for UAV detection under interference to enhance safety and security	Jyotiranjana Rout, Anil Kumar Parhi, Nimisha Mohanty, Banaja Manjari Das	
698	Deep Learning-Based Optimization and Processing of Speech Features for Parkinson's Disease Detection	Sambit Satpathy	
715	Leveraging Graph Databases for Real-Time Spam Detection on Social Media	Sakshi Srivastava , Dharendra Kumar Shukla	
716	Malware Detection using Stacked Machine Learning Model	Brijendra Pratap Singh, Dharendra Kumar Shukla, Rajnish Chaturvedi, Sambit Satpathy	



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Detailed Schedule Day-2 (18th December 2025)

Technical Session#9		Date: 18 th December 2025	Time: 13:30 PM-15:00 PM
Session#9 (S9) (Online)		Track- 2 (Online)	
Link: Session_9 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
99	Intelligent Home Automation System With Weather Forecasting and Alert Integration	Mr. Harsh Agarwal, Syed Muhammad Rizvi, Souvik Konar, Siddhesh Sudhir Bijwe, Safa. M	
328	Designing a Novel Incentive Mechanism in Blockchain based Semi - Asynchronous Federated Learning using Effective Game Theory Model	Rekhasree Manthu, Rakesh Tripathi, Tirath Prasad Sahu, Bala Prakasa Rao Killi	
345	Smart Automated Irrigation System with Pest Control & IoT Monitoring	Yuvraj Sachin Ware, Sampada Yanpallewar, Yash Agrawal, Yash Lulla, Riya Wankhede, Yash Mantri, Devata Anekar	
452	Solar-Powered Wearable Device for Real-Time Health Monitoring with Integrated SOS and GPS Tracking	Roselin Thoms GC, Sambit Kumar Mishra	
582	Enhancing Transfer-Learning with Unsupervised Clustering for Diabetic Retinopathy	Dibyasundar Das, Shreeya Swagatika Sahoo	
600	Enhanced CNN-based DoS Attack detection in WSN and IoT using SMOTE for class imbalance handling	Ingudam Gomita, Takhellambam Sonamani Singh, Hanjabam Saratchandra Sharma	
606	Field-Validated IoT Framework for Weather-Driven Onion Thrip Prediction and Advisory	Tabassum Shaikh, Manas Sewatkar, Ashlesha Gaikwad, Ashwini Gajarushi, Suresh Gawande, Maryam Shojaei Baghini, Rajbabu Velmurugan	
Technical Session#10		Date: 18 th December 2025	Time: 13:30 PM-15:00 PM
Session#10 (S10) (Online)		Track- 4 , 7 (Online)	
Link: Session_10 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
69	Agribot: Smart Farming Robot with RFID Navigation for Selective Pesticide Spraying	Likhith Bommera, Shushruth Sai Reddy Karna, Haritha Mittapally, Gireeshma Nunsavathu, Rohit Karvanga	
389	Smart Healthcare Evolution: Deep Learning Meets Cyber-Physical Systems in Brain CT Image Interpretation	LALIT KUMAR BEHERA, Sujata Chakravarty, Tumbanath Samantara	
406	Depthwise Separable Convolution architectures for 3D Object Recognition	Lalitha Swamy Thayumanavar , Sukumar Nandi, Bunil Kumar Balabantaray	
435	Hybrid MAC Protocol with Integrated Multi-Layered Security for Resource-Constrained UAV Swarm Communications	Vidushi Kumar, Dhruvil Bhatt	
515	Dynamic Response Optimization of a 6-DOF Robotic Manipulator Using PID-Controlled Lead Compensation	Akshan K, Dharshanaa KB, Abhinav S, Ganesan M	
623	Leveraging Explainable AI based classifiers for localizing road damage with drone imagery	Krishna Sameer, Jashmin Swain, Siba Kumar Udgate	
634	Automated and Remote-Controlled Smart Whiteboard Cleaner	Prem Kala Kharka, Tashi Dorji, Sherab Lotey, Khenrab Tshultrim Gyeltshen, Kazuhiro Muramatsu	

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Technical Session#11		Date: 18th December 2025	Time: 15:30 PM-17:00 PM
Session#11 (S11) (Online)		Track- 4, 12 (Online)	
Link: Session_11 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
214	Homomorphic Logistic Regression for Secure Blood Pressure Abnormality Detection	Swaraj Singh Pal, Jaseem K, Maroti Deshmukh, Sneha Chauhan	
535	Enhancing Credit Risk Assessment with Sentiment Analysis and Feature Engineering	Krishna Chakravarty, Sharanya Baidya, Raktim Kundu, Aaratrika Bhattacharya, Jagannath Singh	
359	Real-Time Detection of DNS Spoofing Attacks using LSTM-Based Neural Networks	Kalyan Sudarsan, Amrith Krishna Vignesh, Bhavadharini R M	
472	Qancient: A Low-Depth Quantum Dataset	Ashish Arya, Vinay Pathak, Mukesh Mann	
513	Intelligent Smishing Detection Technique Towards Security of E-commerce Applications	Vipin Kumar, Kakali Chatterjee	
597	ADVANCED CRYPTOGRAPHIC SOLUTIONS FOR ENHANCED CLOUD SECURITY, AUDITING AND KEY MANAGEMENT IN 6G SMART CITIES	VIKAS DUBEY, DR. ABHISHEK SHUKLA	
622	622 AI-Driven Ensemble Intrusion Detection System for Secure IoT Networks	Priyanka Vashistha, S. Zeeshan Hussain	
Technical Session#12		Date: 18th December 2025	Time: 15:30 PM-17:00 PM
Session#12 (S12) (Online)		Track- 1, 3 (Online)	
Link: Session_12 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
240	AutoPilot-K8s: An Autonomous Reinforcement Learning Framework for Self-Optimizing Kubernetes Clusters	Radhakrishnan Krishna Kripa	
241	AutoShard: Intelligent Multi-Tenant Sharding and Privacy-Aware Resource Allocation for Serverless Architectures on AWS	Radhakrishnan Krishna Kripa	
666	EdgeHive: Federated Learning on IoT Clusters in Unreliable Networks	Rashmi Gupta	
667	DataVault: Secure On-Field IoT Data Logging using Blockchain and IPFS	Rashmi Gupta	
677	Compliance by design for IoT cloud platforms: a reference architecture and case study	Kunal Khanvilkar	
730	Scalable, Fault-Tolerant Quantum Algorithms for Cryptanalysis-Resistant Communications	Ankith Konda	
731	Hybrid Quantum-Classical Agentic AI for Resource-Efficient Optimization of National Power Grids	Ankith konda	



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Detailed Schedule Day-2(18th December 2025)

Technical Session#13		Date: 18th December 2025	Time: 15:30 PM-17:00 PM
Session#13 (S13) (Online)		Track- 3, 5, 6, 9,11 (Online)	
Link: Session_13 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
213	Quantum Annealed Geometric Mean Optimization for Calibrated Optimization of KAN	Ayush Mishra, Nibedan Panda	
502	Driver Drowsiness Detection with Smart IoT-Enabled Edge-Cloud Computing	Kadirvelu G, V. Parthipan	
532	A Systematic Comparison of Machine Learning Regressors for PM2.5 Concentration Forecasting: An AutoML-Driven Approach	Ravi Shanker Pathak, Dr. Vinay Pathak, Dr. Amit Rai	
548	GeoSense: Symbolic Regression based Localization Without Global Positioning System	Vidhyashankar R, Ranjan P, Tejeswar G, Pritick V, Prakash Venugopal	
556	Design and Development of an Innovative AI and IoT enabled patient specific programmable pollution measurement and real time alert system	Subhadip Ghanta, Prof. (Dr.) Sudip Dogra, Adwitiyo Bera, Didipsha Guha, Anurima Chakraborty, Subhadip Ghanta, Prof. (Dr.) Sudip Dogra, Adwitiyo Bera, Didipsha Guha, Anurima Chakraborty	
628	A Multi-Layered Security Framework for NIfTI Images Using CNN Feature Extraction, Arnold Scrambling and DWT Watermarking	Aradhana Soni, Amit Kumar Dewangan, Ankit Kumar	
734	Training PSNN using Improved GA for Enhanced Closing Price Prediction of Natural Gas and Crude Oil	Sudersan Behera, Sukhavasi Hemasri, Yerraginnela Shravani, Sreenivas Madupu, Sasikumar A N, M. Ramesh	
Technical Session#14		Date: 18th December 2025	Time: 15:30 PM-17:00 PM
Session#14 (S14) (Online)		Track- 8, 10 (Online)	
Link: Session_14 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
162	MelanomaNet: A Deep Residual Learning Approach for Multi-Class Melanoma Classification	Anjishnu Saw, Minakhi Rout, Rabindra Barik, Lipika Mohanty	
201	Neuromorphic Image Processing for Enhancing Simulated Prosthetic Vision	Binitha Sara Mathew, Subhash K.M. , Pournami P.N.	
267	HEART: Hybrid Energy-Aware Resilient Trust Evaluation Model for Healthcare-IoT	Pramit Kumar Samant, Vinay Pathak, Waqar Ahmad	
271	Explainable AI for Classifying Human Leg Movement Patterns in Load-Carrying Scenarios	Nithyakalyani D, T. Venkatesh, V.S. Balaji, M. Harini, K. Adalarasu	
553	Hypothyroid Disease Prediction Using Machine Learning	Shaik Shakeer, Bindushree D C	
643	Enhancing Accuracy in Heart Disease Prediction Using GAN	Abhinay Verma, Dharmender Singh Kushwaha, Nikita Singh	

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464	Graphical Digital Models for Green (Paperless) Analysis of Hardware Engineering Lab Experiments to reduce Carbon Emissions	Dumpa Naveen, Maddineni Jahnavi, Akula Devasri, D Venkat Sai, M V Pankaj Lahari
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Technical Session#15		Date: 18th December 2025	Time: 15:30 PM-17:00 PM
Session#15 (S15) (Online)		Track- 11 (Online)	
Link: Session_15 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
4	Diagnosis of Leaf Disease using Jaya Optimized Convolutional Neural Networks	Shantilata Palei, Puspanjali Mohapatra, Bhabatosh Mahanta	
17	A Dual-Stage Summarization Framework for Research Papers Using Extractive Filtering and Abstractive Generation	Akhila Sahithi Ch, Narayanam Sai Sahithi, Vundekode Rashmita, Anil Carie Ch, Dasari Sai Naga Haritha	
18	Quantum Tunneling-inspired Salp Swarm Algorithm (QT-SSA) for resilient coalition of point clouds	Umang Kumar Agrawal, Nibedan Panda	
19	Exploring Attention Modules in Vision Transformers to Enhance Automated and Interpretable Skin Cancer Diagnosis	Shri Venkatakrishnan, H Muhilan, P S Nithyeshwaran, Syed Fareed, Arti Anuragi	
20	An Explainable and Optimal Deep Transfer Learning Approach for Forest Fire Detection Using Grad-CAM Visualizations	Aishwarya Pitchumani, Sameer Mansoori, Nila Sangamitra Arul, Vignesh S, Arti Anuragi	
46	A Multivariate Parallel LSTM based Model for Bond Credit Rating Prediction	Rohit Ahuja, Santosh Singh Rathore	
74	Machine Learning-Based Detection of DDoS Attacks: An Evaluation of SVM and Random Forest Approaches	Pranav Bhawsar, Abhinav Kumar, Sunny Kumar, Vikas Gupta, Rahul Rana, Prachi Mehta, Zeesha Mishra	
179	Autoencoder and Surrogate-Assisted PSO with Latent-Focused Search and Global Guidance	Susheel Joshi, Rohit Kumar	
221	Model Context Protocol (MCP): A Lightweight, Modular Framework for Tool-Augmented LLM Agents	Nisharg Nargund, Anil Kumar Swain, Naliniprava Behera	

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Technical Session#16		Date: 18th December 2025	Time: 15:30 PM-17:00 PM
Session#16 (S16) (Online)		Track- 11 (Online)	
Link: Session_16 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
119	Detecting Fraud on the Ethereum Blockchain Using the XGBoost Algorithm	Pragya, Shaik Jeelani Basha, Shreya Majumdar, Ayushi Prasad, Prachi Mehta, Zeesha Mishra	
135	An Alzheimer Stage Detection Method Using Deep Learning based Features from MRI Images	Aleena Swetapadma, Nandini Das, Brijesh Raj Swain, Ayushi Gautam	
274	Automated Detection of Diabetic Macular Edema Using Deep Learning on Fundus Images	Pratham Shrivastav, Satvik Bajpai, Som Sekhar Parida, Ved Jadhav, Ushasukhanya S, T Y J Naga Malleswari	
320	Visual and Linguistic Fusion: Building Effective Image Caption Generator	Aniket Tiwari Chetana Thaokar, Aniket Tiwari, Pratibha Kokardekar	
339	Risk-Aware Restaurant Profiling via Aspect-Based Sentiment Analysis and Temporal Trend Detection	Nithish Kumar S, Lalithamani N	
366	Explainable Deep Learning Framework for Child Autism Detection via EEG and Facial Features with Confidence-Based Decision-Level Fusion	Sapthak Mohajon Turjya, Joyeta Mondal Kotha, Tusher Bhakta, Rahul Biswas, Md Shahriar Hosan Parvez, Shovro Nandi	
393	A Lightweight CNN Framework for Multi-Class Cassava Leaf Disease Detection	Shrey Chamoli , Dr. Sneha Chauhan	
620	GeetaVani: A Generative AI and LLM Chatbot Inspired by Bhagavat Geeta	Nutakki Namratha, Y Sai Sarat Spuran Naidu, Nutakki Namratha, Kshira Sagar Sahoo, Manthan Singla, Bhavana V S S S R Praneeth	

Technical Session#17		Date: 18th December 2025	Time: 17:00 PM-19:00 PM
Session#17 (S17) (Online)		Track- 11 (Online)	
Link: Session_17 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
199	A Comprehensive Framework for Web Application Penetration Testing: Leveraging Automated and Manual Methods for Enhanced Security	Pranav Bhawsar, Pranav Bhawsar	
402	Hybrid SVM+Naive Bayes Ensemble with LIME and SHAP for Transparent Air Quality and Health Risk Prediction	Mukilan A.M, Abirami K, Keerthishree K, Dr. Srivani M, and Dr. Vanitha V	
405	FinAssist: An AI-Powered Financial Management Platform with Hybrid Recommendation System	Amit M, Julian Aaron Raj, Dr. Srivani M, Dr. Vanitha V	
419	Age-Stratified Tea Leaf Quality Grading Using Residual Squeeze-and-Excitation Attention Networks (RSEAN) With Data Augmentation	Rajat Amat, Mourina Ghosh, Pulak Mondal	
421	YOLOv8s-AeroLite: A Lightweight and Aerial-Optimized Detector for UAV-Based Object Detection on the VisDrone Dataset	Manjit Jaiswal, Kapil Kumar Nagwanshi, Amit Kumar Chandanan	
450	DeepMarineSegNet: A Multi-Scale Attention-Enhanced Network for Underwater Semantic Segmentation	Rajat Amat, Mourina Ghosh, Amitava Nag, Robin Pathak	
528	TermiTeach: Natural Language Command Line Interface Tutoring Via Generative AI Simulations	Vibhutesh Kumar Singh	
529	Chronic Kidney Disease Prognosis Using Various Machine Learning Based Classifiers	Astik Kumar Pradhan, Jitendra Kumar Rout, Arvind Kumar Pandey, Akash Kumar Bhagat, Divya Paikaray	



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Technical Session#18		Date: 18 th December 2025	Time: 17:00 PM-19:00 PM
Session#18 (S18) (Online)		Track- 11 (Online)	
Link: Session_18 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
204	MalRevRule: An Automated Framework for Hybrid Malware Analysis, Signature and Firewall Rule Generation	Pranav Bhawsar, Shubhankar Mishra, Deepak Kumar Chakraborty	
376	LightDiff-Shadow: A Lightweight Global Guided Diffusion Model for Real-Time Shadow Removal	Stutee Mohanty, Rajiv Senapati	
259	Autonomous Hexapod Robot Development for Search, Rescue, and Surveillance Operations	Sumaanyu Nayak, Yogita T Hambir, Shibam Ghosh, Shreyash Agarwal, Subhi Jain	
549	Prediction of the Breast Cancer in Histopathology Images using JAYA-Optimized Deep Network	K V L Bhavya, Figlu Mohanty, K Pranathi, Ch. Harika, Suwendu Rup	
557	HybridNet: A High-Accuracy Attention-Based Lightweight CNN for UAV-Based Aerial Disaster Image Classification	Subhrajeet Ganguly, Dr. Ningthoujam Johny Singh	
559	Early detection in lung cancer degenerative predictive imaging based on classification by machine learning algorithms	Divya Paikaray, Dr. Danish Ali Khan, Dr. Ashok Kumar Mehta	
576	EfficientNetB3-Adapted Hybrid U-Net with Attention-Guided Decoding for Urban Scene Segmentation	Ayushi Kuldipsinh Joddha, Manasvi Shah, Swayam Kalburgi, Himani Trivedi	
617	Understanding the Role of Hemispheric Asymmetry as a Framework Towards AI-Human Interface: A Neurocognitive Experimental Study	Tulika Ghosh, Shashikanta Tarai, Moksha Singh	
609	Explainable AI Techniques on CBCT Image Quality Improvement model for Breast Cancer Surgery Patients	Papia Banerjee, Rajashree Nayak, Kasturi Barik	



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Technical Session#19		Date: 18 th December 2025	Time: 17:00 PM-19:00 PM
Session#19 (S19) (Online)		Track- 11, Spl Track - 3 (Online)	
Link: Session_19 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
746	Explainable, Verifiable Agentic AI with Provably Reduced Failure Modes Using Quantum Verification Subroutines	Satyanarayana Burugupalli	
755	PayGuard: An Event-Driven, Policy-Graph--Guided AI Pipeline for Real-Time Payroll Risk Detection and Conformal Remediation	Raghuveer Prasad Yerneni	
756	AegisFin: Zero-Trust Confidential AI for Hybrid-Cloud Financial Systems	Raghuveer Prasad Yerneni	
757	RAG-Augmented Payroll Intelligence Stack: A Zero-Trust, Policy-Verified Architecture for Compliant and Explainable Payroll Automation	Raghuveer Prasad Yerneni	
758	Enterprise Memory Architecture for Agentic AI: A Policy-Aware, Provenance-First, Multi-Tier Memory Stack for Long-Horizon Agents	Raghuveer Prasad Yerneni	
759	AgentHR: Agentic AI for Human--AI Collaboration in Workforce Planning and Internal Mobility	Chaitanya Kumar Seri	
760	SightLine: Identity-Free In-Store Attention Measurement via Geometry-Aware Gaze Proxies	Chaitanya Kumar Seri	
767	ChunkWise LoRA: Adaptive Sequence Partitioning for Memory-Efficient Low-Rank Adaptation and Accelerated LLM Inference	Ketan Thakkar, Maitreyi Chatterjee, Ramasubramanian Balasubramanian, Achyuthan Jootoo, Rajendra Ugrani	



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Technical Session#20		Date: 18 th December 2025	Time: 17:00 PM-19:00 PM
Session#20 (S20) (Online)		Track- 1, 3, 11, 12 (Online)	
Link: Session_20 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
262	A Deep Multi-Modal Attention Network for Predicting User Engagement with Contextual Ads on Social Media Platforms	Anusha Musunuri	
743	ParaMind: Parallelized Adaptive Memory Integration for Long-Context Large Language Models	Sandesh Basrur	
744	Transferable Agentic AI for Accelerating Quantum Algorithm Discovery: Meta-Learning and AutoML for Parameterized Quantum Circuits	Satyanarayana Burugupalli	
541	AutoBudget: A Reinforcement Learning Framework for Adaptive Enterprise Budget Planning	Vikramraj Kumar Thiyagarajan, Deepan Vishal Thulasi Vel, Deepan Vishal Thulasi Vel	
321	SideSec: Detecting and Mitigating Microarchitectural Side-Channel Attacks in Cloud VMs via Entropy Monitoring and Dynamic VM Reallocation	Taslimmirza Altafhusen Mansur	
322	RiskNet: Graph Neural Networks for Predictive Cyber Risk Propagation Across Interdependent Digital Assets in Enterprises	Taslimmirza Altafhusen Mansur	
724	LLMCache: Layer-Wise Caching Strategies for Accelerated Reuse in Transformer Inference	Harsh Vardhan Bansal	



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Technical Session#21		Date: 19 th December 2025	Time: 11:30 AM – 13:00 PM
Session#21 (S21) (Online)		Track- 1, 2, 4 (Online)	
Link: Session_21 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
82	Intelligent Route Optimization Using Ant Colony Algorithm in Dynamic Networks	Tejanshu Bhandary	
613	Soil Quality Analysis and Yield Prediction Using Remote Sensing and Machine Learning	DHEERENDRA PRATAP SINGH, Kamlesh Mani	
637	Depth Embedding Based 3D Image Steganography	Dr Shuvendu Rana, Rohitha Aiswarya Dora H, Dinesh K, Pranay Deep K, Sai Durga Vara Prasad P	
655	Dual-Domain Learning for Gender Classification from Ear Images using Vision Transformers and Frequency-Aware CNNs	Sanjita Phijam, Aryan Kumar Singh, Deep Saikia, Md Shohan Mia	
683	Deep Learning for LiDAR Vegetation Segmentation with Bayesian Hyperparameter Optimization	Dr. Rakesh Sahu, Dheerendra Pratap Singh ,Mukund Pratap Singh	
685	Enhancing Contextual Retrieval and Generation of Text through RAG and Knowledge Graph with Custom Cosine Similarity	KVTKN Prashanth, KVTKN Prashanth, Nidhi Vadodariya, Sanjib Kumar Raul, T. Ramakrishnudu	
696	Comparative Machine Learning Approaches to Permafrost Probability Mapping in the Western Himalayaâ€™s Jhelum Basin	Rohit Kumar Singh, Sunil Kumar, Rakesh Sahu	
Technical Session#22		Date: 19 th December 2025	Time: 11:30 AM – 13:00 PM
Session#22 (S22) (Online)		Track: Spl Track - 2 (Online)	
Link: Session_22 Meeting-Join Microsoft Teams			
Paper ID	Paper Title	Authors	
403	Brain Tumor Classification with Deep Neural Networks: Benchmarking ResNet++ Against DenseNet121	Aksh Ashvinbhai Dharodiya, Rahul Dixit , Tanmoy Hazra	
505	Early Glaucoma Screening Using YOLO and Deep Features from Fundus Images	Lavanya Singh , Divyanshi Singh, Nirbhay Kumar Tagore, Y N Singh	
572	Development of Solar-Powered Pesticide Spray Vehicle with Remote Control Operation	Nangsel Dorji, Phurpa Wangdi, Khandu Wangchuk, Pasang Dem, Kazuhiro Muramatsu	
633	Hybrid CLAHE-EfficientNet U-Net for Mammogram-Based Breast Cancer Detection	Bhawna Singroul, Bhawna Singroul , Anil Kumar Soni	
661	Unsupervised Deep Learning for Multi-Modality Tumor Detection Using Generative Adversarial Networks	Widhika Shah, Shaswatik Giri, Ankita Khorai, Saurabh Bilgaiyan, Chiranjib Parida	
668	Emotion and Cognitive Stress Radar (ECSR): An Integrated Multimodal Architecture with Adaptive Fusion for Robust Affective Computing	Aniruddha Ghosh, Swarna Dutta, Saurabh Bilgaiyan, Chiranjib Parida	
699	Privacy-Preserving Federated Transfer Learning for Secure Cross-Domain Knowledge Sharing in Healthcare	Murali Ponaganti, Murali Ponaganti, P Rohini	

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Technical Session#23	Date: 19 th December 2025	Time: 11:30 AM-13:00 PM
Session#23 (S23) (Online)		Track: Spl Track - 3 (Online)
Link: Session-23 Meeting-Join Microsoft Teams		
Paper ID	Paper Title	Authors
552	Wavelet-enhanced Convolutional neural network integrated with the Kolmogorov-Arnold Network (WCKAN) for Hyperspectral Imagery	Ashish Kumar, Rahul Dev Garg
579	Enhancing IoT-Cloud Performance with P4-Driven Edge Gateways: Emulation on the G ⁺ EANT Network	Nitin Shukla, Neeraj Jain, Dharendra Kumar Shukla, Shabir Ali, Akhilesh Kumar
701	Application of ChatGPT in Today's Medical System	Madhu Lata Nirmal, Gaurav Kumar, Sambit Satpathy
702	Evaluation of YOLOv11 and CNN Approaches for Lung Cancer Detection in CT Scan Data	Dhananjay Kumar Sharma, Manoj Kumar Pal, Dharendra Kumar Shukla, Sanjay Srivastava, Gaurav Narain Singh, Param Goel, Vijay Kumar Dwivedi
703	Cybersecurity in IoT Networks: Machine Learning Approaches for Threat Detection	Suchitra Dutta, Snehlata, Vijay kumar Diwedi, Dharendra Kumar Shukla, Sambit Satpathy
704	Real-Time Face Surveillance: Challenges, Opportunities, and Future Directions	Shashwat, Suchitra, Dharendra Kumar Shukla, Vijay Kumar Dwivedi, Sambit Satpathy
709	Adaptive and Predictive Routing in SDN Using Q-Learning and Neural Networks	Nitin Shukla, Ratish Srivastava, Dharendra Kumar Shukla, Sambit Satpathy

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Technical Session#24	Date: 19 th December 2025	Time: 11:30 AM-13:00 PM
Session#24 (S24) (Online)		Track: 3 (Online)
Link: Session_24 Meeting-Join Microsoft Teams		
Paper ID	Paper Title	Authors
684	Scalable Vehicle Toll Model using Second Layer Blockchain	Sujit Sangram Sahoo, Akash kumar, Pravas Ranjan Bal, Vijay Kumar Chaurasiya
705	Secure and Intelligent Healthcare: Evaluating Blockchain with AI for Chronic Disease Prediction	Dharendra Kumar Shukla, Sambit Satpathy
707	Artificial Intelligence Integrated Microsoft Power Apps for Streamlining Small-Scale Businesses	Pamula Udayaraju
714	The Blockchain Deployment Deficit in AI-Enabled Healthcare Frameworks	Sambit Satpathy
718	Zig-RAPM: A Cost Effective Zigbee-driven Real-time Remote Air Pollution Monitoring System in Industrial Belt, an Experimental Approach with Field Survey	Suman Paul, Sufyan Nadeem, Sunam Jana, Tahrir Fatma, Sneha Chowdhury, Zainab Fatima
721	Self-Healing Autonomic IoT Security: A Multiclass Ensemble-Based Intrusion Detection System	Swati Das, Suvendu Chandan Nayak
729	Explainable Ensemble Machine Learning Approach for severity prediction of Hemophilia A	Vikalp Kumar Sigh, Maheshwari Prasad Singh, Ashutosh Mani



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