IEEE MADRAS SECTION

IEEE

25 YEARS

IEEE International Conference on
EMERGING TECHNOLOGIES IN ENGINEERING APPLICATIONS

ICETEA 2025
5 – 6 June 2025

Track-1: Communication, Signal & Image Processing						
Day1: 5ᵗʰ June 2025 (Thursday)- Session-1						
Session Details	Paper ID	Paper Title	Authors Details	Date of Presentation	Timing	Venue Details
1	96	Integrating Camera Technology And Sound Frequencies To Mitigate Wildlife-Caused Crop Damage: A Sustainable And Cost-Effective Approach	Rishi Arun, L.Josephine Usha Laksharaj Jha, Akash Sharma,	5ᵗʰ June 2025	11.00 AM-1:00 PM	COE-1
	197	Automated Skin Cancer Diagnosis: A Multi-Stage Deep Learning Approach For Malignancy Detection And Classification Using Dermoscopic Images	K.Kathirvel, Archana K.S			
	203	Fingerprint Image Segmentation Using Machine Learning Techniques	N. Arunkumar. V. Gunaseelan			
	299	Assistive Learning Technologies Using Image Processing Exploration For Special Needs Education: Color Blind	Keerthi Kiran U, S. Veni, Rajeswari Raju,			
	370	Intelligent Athletic Performance Monitoring System For Player Movement Detection and Step Analysis Using Yolo	Sathish G,Sujan P, Arul Prasanths, Someshwar V, Sam Varghese George			
	377	Tomato Plant Disease Recognition Using Efficient DET	S.Chandru, S.Prabhu			
	495	Enhancing Fish Quality Inspection Through Yolov9 Based Deep Learning Techniques	D. Jayakumar , M. Lokesh, M.O. Ramkumar , P. Sudharsana Moorthy , R. Rajmohan			
	753	Sign Language Detection and Translation using Machine Learning	A.R. Ahnaf Ahmad , R.K. Somesh Kumar , Ramya.G			
	1529	Real-Time Bidirectional Assistive Communication System for Speech and Hearing-Impaired Persons Using Deep Learning Models	Vellanki Navya Bharathi, Shaik Rizwan, Aditya Thangapandi, and Rakesh Reddy Gangavarapu			

		Day1: 5th June 2025 (Thursday)- Session-2					
2	44	Real-Time Smart Vehicle Alert System for Blind Spot Roads	A. Sarighasri, S. Magalakshmi, R. Ragavi, Priyadharshini, A. Mridhula, T. M. Inbamalar	5th June 2025	2.00 PM-4:30 PM	COE-1	
	84	Next Generation Smart Cultivator for Sustainable Agricultural Development	Selvam N, Nandhini.P, Naveen.S, Naveenkumar.P				
	112	Predictive Analytics based driver drowsiness detection and Health Monitoring system	Kanishq Raj G Kavina A Kishorekumar P Baghyalakshmi K				
	117	Agriculture Water Management System Using IoT	Kalpana Murugan, T.Shanmuga Priya, K.Selvarani , Krishnankoil				
	118	Iot Powered Automatic Irrigation System	Kalpana Murugan, T.Shanmuga Priya, K.Selvarani				
	228	Iot-Based Precision Farming: Enhancing Agricultural Efficiency And Sustainability	S.Dhanasekaran, N.Sakthisowndharya S.Shree Samicksha M.Sruthi M.Swetha				
	293	Fatigue Detection for Accident Avoidance using Mobile Application	Murugasami R, Vishnupriya Y, Nithishkumar C, Sunil Kumar S				
	316	IoT and Smart sensor based waste management system for Smart cities	S.Amosedinakaran, V L N Phani Ponnapalli, Jarabala Ranga, Baburao Pasupulati, S.Vinoth John Prakash, Vinoth kumar K				
	344	An IoT Enabled PLC Based Multichannel Temperature Monitoring and Controlling System	V.Parameshwari, P.Dinesh				
	375	AI - IoT Based Smart Water Management System for Smart City and Rural Development	P. Chittesh, P. Sathiya Priya				
	428	Wireless Iot Monitoring System For Biomedical Signals In Healthcare Applications	N Nithiyanandam, Venkata Krishna Chaitanya, Surendra Kumar				
	499	Next-Generation IoT Smart Cradle System for Infant Health and Monitoring	M.Arun Kumar, Rohan.J,, Rithick.R, Priyadharshini.T, Mohamed Ajmal.S				
	703	IoT-Based Lithium-Ion Battery Monitoring System in EV	Malathy S, Aaarthi R, Aditi C, Mahalakshmi A, Sheha V				
	1112	Automating Animal Intrusion Detection in Agriculture Fields	Manivannan D , Manikandan N K , Ravikumar S, Ch Anand M Vamshi, Bharath Kumar				
	1605	Image Enhancement Using Reinforcement Learning for Underwater Images	Aaditya Bagaddeo, Ajay Varma Mudunuri, Yash Ullhas Ambre and Sathian Dananjayan				

Day1: 5th June 2025 (Thursday)- Session-3

3	93	DNN Based Sum Rate Prediction For Time And Power Partitioning RSMA In 5g And Beyond	Nishandhi Soudarsanane, Sundaresan Sabapathy,Surendar Maruthu	5th June 2025	2.00 PM- 4:30 PM	COE-2
	394	Churn Prediction and Factor Identification in Telecommunication Industry using Machine Learning	Harini J S, A. Anusuya, Dr. P. Kanimozhi, T. Ananthkumar			
	598	Neural Network-Based Beamforming Techniques for Optimized Coverage in Cellular Networks	Radhika Baskar,Vinoth T,Rizwanbasha A, Nadhiya S, S.Kerthy , R.Jothika			
	645	Zigee Based Real Time Earthquake Monitoring And Alert System Using IoT	Kanimozhi M, Banumathy , Pravin M , Sanjay S, Yogesh G			
	721	A Robust Adaptive Framework for Channel Estimation in Massive MIMO Systems with Intelligent Reflecting Surfaces	E.Elakkiyachelvan, R.J.Kavitha, V. Balamurugan, Ilakkiaselvan Dhandapani, T.Thamizhmani, P.Ananadavalli			
	880	A Novel DnCNN-Based Approach for Efficient Video Stabilization and Noise Reduction	Siva Ranjani C , Mahaboob Basha, S			
	893	Low-Latency Communication in IoT Devices Using Mesh Network Protocols For networking	Kannan Ramakrishnan, Jestus J Madesh P			
	1286	A high performance 60-90 GHz 90-nm CMOS Low Noise Amplifier for Radio Astronomy Receivers	V. Vaithianathan, L .J. Richard Robinnson , S. Kamalakar, Karthikeyan.K			
	1288	A High-Performance 8–12 GHz CMOS LNA for Radio Astronomy with Minimum NF	V. Vaithianathan, K.Karthikeyan, S. Kamalakar, .L.Sivayogarajan L			
	1454	Performance analysis of Gate All Around NanowireFET in subthreshold region on 14nm channel length	Aravinda Krishnan , Gokul , Vuddagiri Kaushal Sri Surya, Kuleen Kumar			
	1541	Multiband Wi-Fi and Wi-Max Antenna for IOT Applications	Pratheep R , S S Harish , Vaisshale Rathinasamy Deepa Thangarasu			
	1586	Design and Implementation Of APB Based Memory Commuication	Ch.Chaitanya Laxmi Prasad, J.Charles Pravin,Ramesh.G			
	1598	Circuit Analysis Of A Junctionless Finfet By Incorporating Buried Metal Layer	Ashok Kumar Shanmugaraj, Anbarasu K, Vasanth R, Vishvakeerthi C			
	1600	Performance Enhancement of ring Oscillator based architecture for 5G Communication	J.Charles Pravin,G. Manikanth Reddy.R. Shiva Shankar Reddy,N. Karthik,S. Ram Kiran			
	1603	A 1x4 Arrow-Headed MIMO Antenna with Integrated Band Rejection and High Isolation for 6G Communication Systems	Subbarao Genikala E. Aravindraj, Kanekal Afreen Ponnuru Ajay Abhiram Mayakuntla			

	1633	Design of X-band Bandpass Frequency Selective Surface and Optimization using Spider Monkey Algorithm	Partibane Bactavatchalame			
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		Day2: 6th June 2025 (Friday)- Session-4				
4	16	Robust Multi - Scale Semantic Segmentation Of Aerial Images Using Hybrid Coupled Neuro Trans - Classifier	B. I. Madhumetha, , H. Manikandan , R. Shyamala Devi M. Martina Jose Mary	6th June 2025	9.30 AM- 1:00 PM	COE-1
	17	Enhanced Eye Disease Detection With Yolov10 And Convolutional Neural Networks(CNN) In Deep Learning	D. Raghu Raman, R. Lokesh			
	215	Hybridizing Steganography And Cryptography For Multilayered Multimedia Security	Mahalakshmi R, Krishnavel M Shyamala Devi R, Martina Jose Mary M			
	328	Advanced Kidney Disease Analysis Using Yolov10 And Stacked U-Net++ Framework	A.Inbavalli ,R.Dhanush, V.Janani S.Nithyabharathi , C.Manimegalai , M.Naresh Krishnan			
	396	Optimized CNN Architecture Using Bio-Inspired And Computing For Lung Cancer Detection In Infrared Images.	Rosario Gilmary, M. Geetha Prasath, M. Mathan			
	732	Ai-Assisted Real-Time Ppg Signal Analysis For Preliminary Cardiovascular Diagnosis With Explainable Ai In Clinical Practice	Ankit Vatsa , P. Savaridassan			
	754	Predictive Analysis Of PM 2.5 Concentrations For Enhanced Air Quality Monitoring	Abijeet B R., Sanjaykumar S, G. Ramya			
	786	Advanced Image Denoising Generative Models Utilizing Hyperspectral Images	Ramya .M, Dharsini .M, Soundharayalakshmi.M, Arun Kumar .M			
	898	Estimation Of Air Pollutant Density In Chennai Using Kernel Density Approach	Mariselvam A K, N.Jothy, Valarmathi Ramasamy, Bashyam Sugumaran,. K. A. Yasar Arafath S. Imran Hussain			
	961	USB Microcontroller Based High Resolution Ultrasonic Velocity Meter For Solids And Liquids	N. Mythili, K.T.Arulmozhi, V.Nivetha, V.Suvetha			
	1414	Optimized Bayesion Diagnostic Assistant: Superior Accuracy With Minimal Patient History	S.Selvaraj, S Rajaprakash, Shantha Shalini K, R.Mariappan			
	1563	Surface Modified MIMO Antenna For 5G Indoor Base Stations	M.Ranjitha, M.Thachayani			
	1602	Micropatch Meandered Dual-Polarized Slot-Fed Dielectric Resonator Antenna (Mmd-Psf-Dra)	Sivaraj M, R.Rajalakshmi, K.Kiruthigaa, M.S.Harsha@Hemalatha			
	1604	An Exclusive Survey On Embedded Metamaterial And Superstrate Metamaterial Antennas	Rasheeda Bibi, P. Arunagiri, E. Aravindraj, G. Nagarajan			

Day2: 6th June 2025 (Friday)- Session-5

5	395	Development Of An Early Warning System For Landslides Using IoT Sensors And Machine Learning	A.Balachandar, Aravindhan M, Suganthan s, Ragul A Dhanuraaj R.Bharani Sri K	6th June 2025	2.00 PM-4:00 PM	COE-1
	398	Lung Cancer Detection Using 3d U-Net Based Densenet With Multimodal Images Ct Scans And Histopathological Images	MO. Ramkumar, R. Monica, D.JayaKumar, V.ArulSelvam, Dr.R.Rajmohan			
	989	A Python Programmed Resnet-50 CNN Designed for Low Light Image Enhancement	S. Ganesan, G.G. Muthukumar, J. Aravindsamy, A. Giribabu, S. Satishkumar, S. Udhayachandidran,			
	1057	6G And Iot: A Future Of Ultra-Low Latency And Hyperconnectivity	A.karunamurthy, V.Udhayakumar, P. Rajapandian			
	1163	Lora Based Remote Monitoring Emergency System For Underground Miners	P. Suseendhar, T S Krishnapriya , Dr. J. Pradeep, Mr. A KOUSHIK KABILAN , Mr. Balakumaran. R, Mr. Keerthivasan			
	1171	Low-Power Non-Volatile Flip-Flop Design Using NAND-Spin Logic for Energy-Efficient Systems	J. Pradeep, S. Radhika			
	1239	Design of a Highly Stable and Robust 9T SRAM cell using CNTFET for Low Power Smart Device Applications	Jayanthi Srinivasan, Raja Periyasamy, Harish Murugaiyan, Gurunarayana Sundaram, Dhanaveeran V			
	1336	Smart Traffic Alert System For Mountainous Regions	Navaneethakrishnan V M, R.Kurinjimalar Guru Prasath S Viswa M, Guru Priyan V,			
	1421	Frequency-Adaptive Low-Light Image Enhance	Kurinjimalar.R, Pradeep.J Harikrishnan.M			
	1672	FOPID Control of Boost Converters using Slime Mould Algorithm for PV Applications	Punitha R, Arounassalame Mouttou, Sivagiriraju S, Madhavan A, Sharmila P			