I C T E S T - 2025
Paper Presentation Schedule

03-04-2025 TIME: 9.00 AM - 10 AM, 12 Noon - 1.00 PM		TRACK-1: AI, ML & DS	VENUE: Hall 1-VASCO DA GAMA
SESSIONS: CS-1, CS-4		CHAIR (EXT): Dr Pramod Pavithran	

Sl. No	PAPER ID	TITLE	
1	65	Skin Disease Identification Using CNN	
2	72	Optimizing Acute Myeloid Leukemia Subtype Classification Through Data Balancing Techniques	
3	92	Leveraging Convolutional Block Attention Module in Transfer Learning for Scalable Multi-class Classification of Knee Osteoarthritis	
4	163	Genemate: A Real-Time Animation of a 3D Human Model	
5	439	AI and Machine Learning in Software Testing: Bridging the Gap Between Defect Prediction, Test Automation, and Continuous Integration	
6	474	FEDERATED LEARNING BASED CROP DISEASE DETECTION IN PRECISION AGRICULTURE	
7	497	Efficacy of Topological Data Analysis for Contextual Plagiarism Detection: A Literature Analysis.	
8	559	Her Shield:Speech Emotion Recognition for Women Safety	

03-04-2025 TIME: 9.00 AM - 10 AM, 12 Noon - 1.00 PM		TRACK-1: AI, ML & DS	VENUE: Hall 2-MARCO POLO
SESSIONS: CS-2, CS-5		CHAIR (EXT): Dr Shailesh Sivan	

Sl. No	PAPER ID	TITLE	
1	114	Dual Approach for Video Summarization: Key Frame Captioning and Audio Summarization	
2	301	AI-Driven Financial Advisory Systems: Optimizing Investment Strategies with Sentiment Analysis and Predictive Modeling	
3	314	A Comparative Analysis of Medical Image Segmentation utilizing U-Net Architectures : EfficientNet-B7, Half U-Net and Nested U-Net	
5	451	Learn to Fuse: A Reinforcement Learning Framework for Multi-Focus Image Fusion	
6	458	Cyberbullying Detection Using Fine-Tuned BERT	
7	542	Smart Farming: Improving Disease Detection in Pepper Leaves Using AI and Image Processing	
8	584	Enhancing Medical Image Segmentation with 3D U-Net and Explainable AI for Trustworthy Healthcare	

03-04-2025 TIME: 12 Noon - 1.00 PM		TRACK-1: AI, ML & DS	VENUE:Hall 4-RASLEELA
SESSIONS: CS-3		CHAIR (EXT): Dr Annie Julie Joseph	

Sl. No	PAPER ID	TITLE	
1	39	ParkIt : An ANPR based Automated Parking Registry Using YOLO And EasyOCR	
2	68	Deepfake Image Detection using a Unified Inception-V3-Xception Net Framework	
3	164	SignMate : Real-Time Speech to Sign Language Translation	
4	492	Impact of Advanced Image Preprocessing Techniques on Automated Chromosome Metaphase Detection with Deep Learning Models	

03-04-2025 TIME: 2.00 PM - 5.00 PM TRACK-1: AI, ML & DS VENUE: Hall 1-VASCO DA GAMA

SESSION: CS-6, CS-9 CHAIR (EXT): Dr Preetha Theresa Joy

Sl. No	PAPER ID	TITLE
1	119	A Custom 1D ResNet-GRU Model for Accurate Pork Adulteration Classification in Beef
2	152	Rectilinear Hybrid Belief Classifier for Cyber-Physical Attack Detection in Water Distribution Systems
3	206	SafeDrive: Intelligent Pothole Detection and Mapping System
4	445	Unravelling Protein-DNA Interaction Predictions: A State-of-the-Art review
5	506	Autonomous UAVs and Cable-Fusion Technology for Real-Time Coral Reef Health Assessment
6	512	Digital Cultural Heritage Preservation:A Literature Analysis
7	523	Neural Indicators of Deception: EEG Data Analysis for Lie Detection
8	527	Analysing Facial Dynamics - Navarasas in Kathakali Videos Using Deep Learning
9	554	Advancements in software assisted speech recognition for individuals with speech impairments – A comprehensive review
10	577	Women Stress Detection System using Neural Networks

03-04-2025 TIME: 2.00 PM - 3.00 PM TRACK-1: AI, ML & DS VENUE: Hall 2-MARCO POLO

SESSION: CS-7 CHAIR (EXT): Dr. Jeena Kleenankandy

Sl. No	PAPER ID	TITLE
1	171	Automated Vision-Based System for Real-Time Detection and Classification of Rice Diseases using YOLO - NAS
2	291	Automatic Number Plate Recognition Powered by Deep Learning
3	540	ARoma: Revolutionizing Dining Experiences with Augmented Reality Interactive Menus

03-04-2025 TIME: 3.00 PM - 5.00 PM TRACK-2 Cybersecurity and Network Technologies VENUE: Hall 2-MARCO POLO

SESSION: CS-10 CHAIR (EXT): Dr. Jeena Kleenankandy

1	83	ADVANCED RESOURCE ALLOCATION TECHNIQUES FOR EFFICIENT CLOUD COMPUTING
2	108	Secured Information Hiding principle for Concealing 448-Bit Key of Blowfish Algorithm on Digital Images using Chess game based Queen placement s
3	132	FAIRHIRE : AI-DRIVEN RESUME PROFILING AND TECHNICAL INTERVIEW AUTOMATION
4	368	Bayesian Neural Network Uncertainty Estimation for Detecting Adversarial Attacks on Network Intrusion Detection Systems
5	422	NOMA-Based Secure Physical Layer Communication in UAV Networks with Artificial Noise Injection
6	434	Enhancing UAV Reliability and Security: A Machine Learning-Based Framework for Anomaly Detection and Classification
7	443	Investigating the BERT Capabilities with GRU Model in Semantic Extraction for Short Answer Grading Tasks: A Regression Problem

04-04-2025 TIME: 9.00 AM - 11.00 AM   TRACK-3: Image Processing, Signal Processing and Communication Systems   VENUE: Hall 1-VASCO DA GAMA

SESSION: EC-1, EC-3   CHAIR (EXT): Dr Rajesh Cherian Roy

Sl. No	PAPER ID	TITLE
1	155	Sphere Decoding with BER Enhancement in MIMO Systems: A Radius Prediction Approach with Wiener Filtering
2	165	A data efficient segmentation to localization framework for effective copy move image forgery localization
3	248	CPW-Fed Monopole Antenna Employing Sierpinski Triangle Fractal Designs for Compact Wireless Systems
4	264	Deep Learning Models for Classification of Lung Cancer Types from Histopathology Images
5	351	Performance Evaluation of various Image Enhancement Techniques for Gastric Polyp Detection in the K-vasir Dataset
6	361	A high-capacity reversible data hiding on grayscale images using threshold-based clustering
7	500	Comparative Study of Signal Processing Algorithms for Noise Reduction and Sonar Signal Reconstruction
8	510	Multiple Apex Frame Detection and Emotion Analysis in Micro Expression Videos

04-04-2025 TIME: 11.00 AM - 1.00 PM   TRACK-3: Image Processing, Signal Processing and Communication Systems   VENUE: Hall 1-VASCO DA GAMA

SESSION: EC-5   CHAIR (EXT): Dr Jobin K Antony

Sl. No	PAPER ID	TITLE
1	469	Spectrally Efficient High-Speed MDM-FSO Using Higher-Order Modes
2	483	3D-Printed Bionic Arm with Flex Sensor Control
3	576	Evaluation of Kalman and Unscented Kalman Filters for Multiple Object Tracking in ADAS Applications using the KITTI Dataset
4	590	ANKLE FOOT ORTHOSIS FOR FOOT DROP
5	592	Modeling and Evaluation of Photonics RadarLiDAR Configuration for Enhanced Target Detection

04-04-2025 TIME: 9.00 AM - 11.00 AM   TRACK-4: VLSI   VENUE: Hall 2-MARCO POLO

SESSION: EC-2, EC-4   CHAIR (EXT):Dr. Arun A V

Sl. No	PAPER ID	TITLE
1	118	K-means Clustering for Image Segmentation Using Approximate Booth Multiplier
2	167	Optimal Defect Testing of Radiation-Tolerant SRAM for Spacecraft Avionics
3	174	Development of Configurable Controller ASIC for Spacecraft Power Systems
4	182	Design & Verification of Reconfigurable SRAM Controller with AMBA AXI Protocol Interface for Automobile Application
5	496	A Compression Technique for NoC Packets to Enhance Compression Time
6	502	FPGA-based Adaptive Noise Cancellation System for Audio Systems
7	552	Differential Amplifier Optimization using Black Widow Algorithm

	04-04-2025 TIME: 11.00 AM - 1.00 PM	TRACK-1: AI,ML & DS	VENUE: Hall 2-MARCO POLO

SESSION:CS-12   CHAIR (EXT):Dr. Anil Raj J

Sl. No	PAPER ID	TITLE
1	190	MEDVEND:AUTOMATED MEDICINE VENDING MACHINE
2	288	Autonomous Wheeled Robot For Intelligent Supermarket Restocking
3	401	Performance Evaluation of a Predesigned Compact Bow-Tie Slot Antenna in Medical Imaging
4	454	Fine-Tuning TinyLLaMA and GPT-2 with Proximal Policy Optimization for Sentiment Enhancement and Toxicity Reduction
5	528	An AI-Powered Web Application for Automating Brain Tumor Identification

	04-04-2025 TIME: 9.00AM - 10.00 AM	TRACK-5: BE & HT	VENUE: Hall 3-KENSINGTON

SESSION:BE-1   CHAIR (EXT):Dr. Anil Raj J

Sl. No	PAPER ID	TITLE
1	449	A Comprehensive Review of the Short-Term Load Forecasting Techniques Using Different models
2	450	Reading Assistance and Obstacle Detection Device for the Visually Impaired
3	570	Attention-Based Feature Fusion With External Attention Transformers for Ovarian Cancer Histopathology Analysis
4	571	Methodology for Automatic diagnosing Colon and Lung Carcinoma using TSA- PSODL Algorithm

	04-04-2025 TIME: 10.00 AM - 1.00 PM	TRACK-5: BE & HT	VENUE: Hall 3-KENSINGTON

SESSION: BE-2, BE-3   CHAIR (EXT): Dr. Saritha S

Sl. No	PAPER ID	TITLE
1	106	Design and development of console-based gaming for balance training in Autism Spectrum Disorder Children
2	159	Recognition and Analysis of Colours Using Generative AI And Brain Computer Interface
3	245	Development of a Wearable Biosensor System for Remote Monitoring of Physiological Parameters to Aid Prognosis and Diagnosis in Indigenous
4	260	Exploring the Distinguishable Characteristics of EEG Signals of Visually impaired Persons (VIPs): Cognitive Load Perspective
5	267	Design and Development of a Novel Volume-Gated Syringe for Precise Dosage Control and Data Logging
6	276	MediLoc:Navigating Healthcare with GIS Precision
7	421	Pediatric Focal Cortical Dysplasia Classification through SPP ConvNet
8	514	A Biomechanical Approach for Assessing Rheumatoid Arthritis Progression
9	585	Deep Learning-Based Seasonal Forecasting of Oceanographic Parameters Using LSTM Networks

04-04-2025 TIME: 11.00 AM - 1.00 PM	TRACK-1: AI,ML & DS	VENUE: Hall 3-KENSINGTON

SESSION: CS-11	CHAIR (EXT): Dr. Preetha Theresa Joy

Sl. No	PAPER ID	TITLE
1	42	Advancing Through the Integration of Deep Neural Networks and EEG Analysis: A Data-Driven Approach
2	127	Real-Time Weapon Detection and Alerting System Using YOLOv7
3	240	An Enhanced Crack Detection System Using YOLOv11 Model for Underwater Marine Structures
4	463	Leveraging Machine Learning for Localized Disease Prediction and Alert System: A Comprehensive Approach to Public Health Monitoring and
5	470	Blind Assist System for Currency Recognition Using Sequential Convolutional Neural Networks
6	511	Fake News Detection using BERT Model

04-04-2025 TIME: 3.00 PM - 4.30 PM	TRACK-4 VLSI	VENUE: Hall 4-RASLEELA

SESSION: EC-7	CHAIR (EXT): Dr. Varun P Gopi

Sl. No	PAPER ID	TITLE
1	8	Hybridized Efficiency: A Combined Approach of Parallel Prefix and Hybrid Adders for High-Performance Arithmetic Circuit
2	139	Comparitive Analysis of gem5 and ChampSim: Essential Simulators for Microarchitecture Research
3	233	Comparator Design using Carbon Nanotube Field-Effect Transistors
4	236	Performance Improvement of 9T SRAM Cell by Efficient Memory Design
5	586	Novel FPGA based Systolic Array Design for Dynamic Workflows

04-04-2025 TIME: 2.00 PM - 4.30 PM	TRACK-1 AI, ML, & DS	VENUE: Hall 1-VASCO DA GAMA

SESSION: CS-13, CS-14	CHAIR (EXT): Dr. Varun G Menon

Sl. No	PAPER ID	TITLE
1	93	Leveraging Augmented Samples as an Auxiliary Task for Enhancing Spoken Language Identification in Indian Languages
2	217	SecureNest - Smart Home Security System
3	310	FaceFinder: Advanced Facial Recognition and Enhancement for Security and Surveillance
4	348	TRAFFIX: DAPP FOR TRAFFIC VIOLATION REPORTING
5	382	Healthcare-SignNet: Advanced Medical Sign Language Recognition using CNN+LSTM model
6	399	Audio-Based Emotion Analysis Using Deep Learning Techniques
7	550	Machine Learning Integrated Driver Drowsiness Detection System Using Facial Features
8	575	Machine Unlearning in recommendation systems

04-04-2025 TIME: 2.00 PM - 3.00 PM	TRACK-6 Image Processing, Signal Processing and Communication Systems	VENUE: Hall 2-MARCO POLO

SESSION: EC-6   CHAIR (EXT): Dr Remya V R

Sl. No	PAPER ID	TITLE
1	251	AI-Enhanced 2.45 GHz Microstrip Patch Sensor for Milk Adulteration Detection
2	266	Design and Testing of Circular Patch Antenna at 2.45GHz for Wireless Power Transfer Applications with DGS
3	432	Augmented Reality Multiplayer Game for Interactive Character Control Using Unity
4	495	MICROSTRIP ANTENNA FOR NON-DESTRUCTIVE METAL CRACK DETECTION

04-04-2025 TIME: 3.00 PM - 4.30 PM	TRACK-7 Internet of Things(IoT), Blockchain Technologies and Smart Systems	VENUE: Hall 2-MARCO POLO

SESSION: EE-8   CHAIR (EXT): Dr Remya V R

Sl. No	PAPER ID	TITLE
1	250	Towards Robust Media Integrity: Semi-Supervised Image Forgery Localization with DeepLabv3 and ELA
2	350	Initial Setup and Calibration of Direction Control Using Magnetic Field Sensors
3	494	Development of an IoT-Based Smart System for Toxic Gas Detection and Monitoring of Manholes and Workers
4	566	Methodology for Identifying the Cancerous Cells in 3D Visualization of Gastric Histopathology Images using CNN LSTM Algorithm

04-04-2025 TIME: 2.00 PM - 4.30 PM	TRACK-1 AI, ML & DS	VENUE: Hall 3 - KENSINGTON

SESSION: CS-17, CS-18   CHAIR (EXT): Dr. Vince Paul

Sl. No	PAPER ID	TITLE
1	79	PrecisionCare: A Personalized Medical Recommendation System Using Artificial Intelligence and Machine Learning
2	227	Generative AI-based Interpretation of Human Ultrametrics and Analysis (GIHUA)
3	391	KPI-Based Analysis and Prediction of Supplier Performance Using Machine Learning
4	424	Towards Secure AI: Detection of Prompt Injection Attacks with Explainability
5	440	Automated Grocery List Generator
6	448	Automated Banking Complaint Classification using Stochastic Gradient Descent
7	486	Exam Guard: Enhanced Academic Integrity Surveillance System for Real-Time Behavioral Analysis in Examination Settings
8	589	A Topological Deep Knowledge Graph Approach for Protein Interaction : Sheaf Neural Networks in Drug Discovery

05-04-2025 TIME: 09.00 AM - 10.00 AM   TRACK-8: Power Electronics, Power Systems and Renewable Energy   VENUE: Hall 1-VASCO DA GAMA

SESSION: EE-1   CHAIR (EXT): Dr. Deepa Sankar

Sl. No	PAPER ID	TITLE
1	189	Analysis of HHO gas production based on the types of Electrodes for Electrolyzer
2	379	Classification Of Partial Discharge Signals Through Acoustic Sensor On Basis Of Propagation Paths
3	429	Fault Detection and Monitoring in Microgrids using Intelligent Controllers and Synchrophasor Integration

05-04-2025 TIME: 09.00 AM - 10.00 AM   TRACK-9: Electric & Hybrid Vehicles and Battery Technologies   VENUE: Hall 2 - MARCO POLO

SESSION: EE-2   CHAIR (EXT): Dr. Linss T Alex

Sl. No	PAPER ID	TITLE
1	33	ETEDPOF Gain Optimization for Cuk Converter Fed Induction Motor Coupled with DC Motor for Smart EV
2	104	An InC-based Double Integral Sliding Mode Controlled Synchronous Boost Converter for Grid-Connected Solar EV Charging System With Surplus
3	447	A Review of Dynamic Wireless EV Charging
4	529	A Comprehensive Review of Active Cell Balancing Techniques in EV Battery Management Systems

05-04-2025 TIME: 10.00 AM - 11.30 AM   TRACK-10: Mechatronics, Robotics, Control and Automation   Hall 1-VASCO DA GAMA

SESSION: EE-3   CHAIR (EXT): Dr. Ani Harish

Sl. No	PAPER ID	TITLE
1	241	A Holistic Approach to Wheeled Robot Design: Mechanical Structure and Control Strategies
2	273	Enhanced Design of Rocker-Bogie Mechanism for All-Terrain Military Surveillance Rover
3	517	UNDERWATER ROV WITH SONAR TRACKING
4	526	Review on mmWave Radar Sensor for 3-D Mapping

05-04-2025 TIME: 10.00 AM - 11.30 AM   TRACK-7: Internet of Things(IoT), Blockchain Technologies and Smart Systems   VENUE: Hall 2 - MARCO POLO

SESSION: EE-4   CHAIR (EXT): Dr. Linss T Alex

Sl. No	PAPER ID	TITLE
1	354	A SMART DRUG INVENTORY AND SUPPLY CHAIN TRACKING SYSTEM USING IoT
2	406	Design of Fire Detection System with Extended Range
3	442	CLOUD-ENABLED UV DISINFECTION SYSTEM FOR REMOTE HEALTHCARE SANITIZATION DURING PANDEMICS
4	508	Smart Glove Based Sign Language Recognition System of Malayalam Alphabets

05-04-2025 TIME: 11.30 AM - 1.00 PM   TRACK-8: Power Electronics, Power Systems and Renewable Energy   VENUE: Hall 1-VASCO DA GAMA

SESSION:EE-5   CHAIR (EXT): Dr. Deepa Sankar

Sl. No	PAPER ID	TITLE
1	117	Effect of active layers on solar device structure
2	255	Design and Comparison of LCL Filters in STATCOM
3	261	Implementation of PV fed QZSI using F28379D TI controller
4	342	Modular Multilevel Converter based Grid connected DC Microgrid Integrating Wind Energy
5	501	Smart Solar Flower

05-04-2025 TIME: 11.30 AM - 1.00 PM   TRACK-2: Cybersecurity and Network Technologies   VENUE: Hall 2 - MARCO POLO

SESSION:CS-19   CHAIR (EXT): Dr Shailesh Sivan

Sl. No	PAPER ID	TITLE
1	280	EDUCHAIN:A BLOCKCHAIN BASED SYSTEM FOR EFFICIENT AND SECURE CERTIFICATE VERIFICATION
2	423	ENHANCED CANOPY STRESS DETECTION IN VERTICAL FARMING USING EXPLAINABLE AI
3	478	SMART GLOVE FOR SIGN LANGUAGE INTERPRETATION AND VOCALIZATION
4	522	UAV-Assisted AR Visualization for Real-Time Agricultural Field Monitoring Using Multispectral Data and U-Net Segmentation
5	555	Deep Convolutional Neural Network-Based Sarcasm Detection and Sentiment Analysis on Social Media

05-04-2025 TIME: 2.00 PM - 3.00 PM   TRACK-7: Internet of Things(IoT), Blockchain Technologies and Smart Systems   VENUE: Hall 1-VASCO DA GAMA

SESSION: EE-7   CHAIR (EXT): Dr. Ani Harish

Sl. No	PAPER ID	TITLE
1	91	A Comprehensive IoT-Enabled LoRa Tracking System for Enhancing Adventurer Safety and Situational Awareness
2	97	Smart Healthcare: IoT driven Environmental Integration in EMR systems for Real Time Healthcare Monitoring
3	405	Analytical Assessment of Prospective Technologies Tailored to Industrial Needs
4	551	Development of Novel Chronic Kidney Stone and Tumor Detection using Deep Sequential CNN

05-04-2025   TIME: 2.00 PM - 3.00 PM   TRACK-1: AI.ML, & DS   VENUE: Hall - 2-MARCO POLO

SESSION: CS-16   CHAIR (EXT): Dr Shailesh Sivan

Sl. No	PAPER ID	TITLE
1	413	Blockchain-Powered Platform for Microloans and Lending Solutions
2	425	Comparative Analysis of Machine Learning Models for Speech Disorder Detection
3	464	Explainable AI for Disease Detection and Body Constitution Analysis Using Tongue Imaging: A Deep Learning Approach for Non-Invasive Diagnostics
4	524	Explainable AI for Diabetes Risk Stratification Using Severity Index Indicators