

Third International Conference on Computational Systems and Communication 2026

October 5–6, 2026

Thiruvananthapuram, Kerala, India

Organized by LBS Institute of Technology for Women, Thiruvananthapuram

ICCSC 2026 – Schedule

05/10/2026 Day 1 — Online Presentations, DSP LAB— ECE Department, Room No: 303

Time	Paper ID	Track	Paper
9:15–9:30	288	4	AIoT-Based Adaptive Solar Panel Maintenance System
9:30–9:45	151	4	SmartLane: Smart Traffic Signal Management System for Emergency Prioritization
9:45–10:00	218	4	Bayesian Optimisation–Based Stabilised PID Framework Integrated with HANFIS Compensation for Robust Control of a 3-DOF Upper Limb Manipulator
10:00-10:45	Key Note Address Dr. Jimmy Jose, Associate Professor, Department of Computer Science & Engineering, National Institute of Technology Calicut, Topic: "Cryptography: Threat Model Matters"		
10:45-11:00	Break		
11:00–11:15	221	4	EDGE AI-BASED MOTOR CONDITION MONITORING SYSTEM
11:15–11:30	236	3	Energy-Aware Multi-Metric Behavioural Anomaly Detection and Automated Mitigation Framework for Kubernetes-Based Cloud Systems
11:30–11:45	234	4	Robust Adaptive Hybrid Control of Uncertain Nonlinear Soft Continuum Robots
11:45–12:00	303	2	A Cascaded YOLOv8–CNN Hybrid Framework for Region-Level Wind Turbine Blade Defect Inspection
12:00-12:15	226	2	Alzheimer's Dementia Detection from Speech Using Transfer Learning with AlexNet and Stacked Bidirectional LSTM Network
12:15-1:15	Lunch Break		
1:15-2:00	Key Note Address Mr. Soenil Soebedar, Founder SOEBIT, Senior PKI Specialist, Cryptography Consultant/Architect, Penetration tester, SOEBIT Cybersecurity, Topic: "Securing Next-Gen Technologies: Emerging Cyber Threats in AI, IoT, and Critical Infrastructure"		
2:00–2:15	178	1	PRIVACY-PRESERVING DISEASE PREDICTION SYSTEM USING ENCRYPTED PATIENT DATA
2:15–2:30	300	1	Improving Cloud Infrastructure Reliability Using Predictive Modelling-Based Fault Detection and Explainable AI
2:30–2:45	278	1	Adaptive Prioritization Scheduling Algorithm and Beam Direction Using Adaptive Intelligent Surface to Suppress Impact of Eavesdroppers
2:45–3:00	Break		
3:00-3:15	97	1	An Analytical Study of Cloud Computing Architecture and Service Models
3:15-3:30	187	6	A RAG-Enhanced Incident Intelligence System for Automated Root-Cause Diagnosis and Remediation Guidance in IT Operations
3:30-3:45	252	6	AI Driven Speech-to-Presentation Framework to Enhance Audio Notes Using LLM
3:45-4:00	273	6	Adaptive Multimodal Violence Detection in Videos
4:00-4:15	330	6	Error-Centric Downstream Evaluation of Multilingual Sentiment Models for Indic Languages

05/10/2026 Day 1 — Online Presentations, CIS Lab — ECE Department, Room No: 218

Time	Paper ID	Track	Paper
9:15–9:30	71	4	Smart Hospital Management System and Smart Bed Allocation
9:30–9:45	159	2	A Local Framework for Automated Lecture Summarization and Retrieval-Augmented Question Answering
9:45–10:00	233	3	Carbon-Aware Scheduling for Energy-Efficient Cloud Computing
10:00-10:45	Key Note Address Dr. Jimmy Jose, Associate Professor, Department of Computer Science & Engineering, National Institute of Technology Calicut, Topic: "Cryptography: Threat Model Matters"		
10:45-11:00	Break		
11:00–11:15	84	5	Design of Robotic Arm with Simulation System
11:15–11:30	274	5	Physics-Informed Explainable Deep Reinforcement Learning for Adaptive Bidirectional Energy Management in Vehicle-to-Grid Enabled Electric Vehicles
11:30–11:45	135	4	Low-Power IoT Communication Framework for Smart Cities Using Edge AI
11:45–12:00	171	2	Speech Emotion Recognition Using MFCC Features with Hybrid GRU and 1D CNN
12:00-12:15	58	2	Smart OCR-Based Medicine Identification with Multilingual Speech Output
12:15-1:15	Lunch Break		
1:15-2:00	Key Note Address Mr. Soenil Soebedar, Founder SOEBIT, Senior PKI Specialist, Cryptography Consultant/Architect, Penetration tester, SOEBIT Cybersecurity, Topic: "Securing Next-Gen Technologies: Emerging Cyber Threats in AI, IoT, and Critical Infrastructure"		
2:00–2:15	194	1	Performance and Security Analysis of Healthcare Data Sharing Framework Using Fail-over Merkle Trees and Color-Based Encryption
2:15–2:30	122	1	Design and Implementation of a Context-Aware Risk-Based Zero Trust Access Control System
2:30–2:45	175	1	Containment of Ransomware Through Network Isolation and Detection Using a Dual-Layered Defense System
2:45–3:00	Break		
3:00-3:15	111	1	A Federated Learning-Based Fraud Detection Framework for Secure Digital Banking Transactions
3:15-3:30	173	6	AI-DRIVEN DRUG KIT OPTIMIZER FOR REGION AND SYMPTOMS-SPECIFIC MILITARY FIELD OPERATIONS
3:30-3:45	290	6	An Analysis of Intelligent Vision for Public Safety and Missing Person Tracking System
3:45-4:00	271	6	LLMEvalGuard: A Statistical Framework for Real-Time Response Quality Decay Detection and Automated Prompt Repair
4:00-4:15	143	6	Explainable Federated Temporal Graph Learning Framework for Early Stroke Risk Prediction Using Multimodal Electronic Health Records

05/10/2026 Day 1 — Online Presentations, Project Lab— CSE Department, Room No: 419

Time	Paper ID	Track	Paper
9:15–9:30	331	1	Capacity Analysis of a Supercontinuum-Based Optical Wireless Communication System
9:30–9:45	157	1	A Multi-layered Secure Communication Architecture Integrating Generative Cover Synthesis, Dual-Layer Steganography, and Edge Biometrics
9:45–10:00	40	6	Smart Procurement in the Digital Era: How Technological Innovation and Organizational Culture Shape Financial Performance
10:00-10:45	Key Note Address Dr. Jimmy Jose, Associate Professor, Department of Computer Science & Engineering, National Institute of Technology Calicut, Topic: "Cryptography: Threat Model Matters"		
10:45-11:00	Break		
11:00–11:15	61	6	Digital Twin of Learner Cognition: A Real-Time Adaptive Pedagogy Framework
11:15–11:30	284	6	AI-Enabled Multi-Modal IoT Device for Breast Cancer Risk Screening in Coastal Communities
11:30–11:45	315	6	Edge-AI Osteoporosis Screening for Rural Women's Health: YOLO11 Model with LoRaWAN
11:45–12:00	1	6	Harnessing the Potential of Machine Learning Techniques to Address Lemon Leaf Disease
12:00-12:15	47	6	Emotion Recognition-Based Advertisement Effectiveness Measurement
12:15-1:15	Lunch Break		
1:15-2:00	Key Note Address Mr. Soenil Soebedar, Founder SOEBIT, Senior PKI Specialist, Cryptography Consultant/Architect, Penetration tester, SOEBIT Cybersecurity, Topic: "Securing Next-Gen Technologies: Emerging Cyber Threats in AI, IoT, and Critical Infrastructure"		
2:00–2:15	26	6	Cross-Modal Deep Learning for Emotion Recognition in Smart Interactive Systems
2:15–2:30	262	6	Adaptive Behavioral Representation Network with Purchase Affinity Learning
2:30–2:45	118	6	Machine Learning-Driven Air Quality Index Estimation with Explainability
2:45–3:00	Break		
3:00-3:15	119	6	Keratitis Detection in AS-OCT Imaging: A Taxonomy and Comparative Review
3:15-3:30	336	4	SMART GLASS FOR VISUALLY IMPAIRED WITH REAL-TIME CURRENCY RECOGNITION AND VOICE-ASSISTED SHOPPING
3:30-3:45	176	6	A Hybrid Screening Framework for Early ASD Using Facial Expression and Questionnaire Method
3:45-4:00	321	6	Hybrid Transformer-Based Consumer Sentiment Intelligence for Strategic Marketing and Brand Decision Analytics
4:00-4:15	272	6	A Hybrid AI Workflow for Real-Time Object Detection and Contextual Audio Feedback on Edge Devices
4:15-4:30	192	6	Hyperspherical Disentanglement for Graph-Based Collaborative Filtering via Decoupled Prototype Routing

05/10/2026 Day 1 — Online Presentations, SDPK Lab — CSE Department, Room No: 009

Time	Paper ID	Track	Paper
9:15–9:30	231	1	Mouse Movement Pattern Analysis for Bot Detection and Real-Time Active Defense
9:30–9:45	283	1	Encryption in Error Coding: A Systematic Review
9:45–10:00	145	6	Explainable Digital Twin and Graph Neural Network Framework for Predicting Cascading Urban Infrastructure Failures
10:00-10:45	Key Note Address Dr. Jimmy Jose, Associate Professor, Department of Computer Science & Engineering, National Institute of Technology Calicut, Topic: "Cryptography: Threat Model Matters"		
10:45-11:00	Break		
11:00–11:15	134	6	Customer Lifetime Value Prediction Using Ensemble Machine Learning Models
11:15–11:30	208	6	Efficient Spiking U-Net for Image Denoising: A Lightweight Implementation
11:30–11:45	99	6	Low-Carbon Smart Grid Optimization Using Hybrid AI and Game-Theoretic Energy Scheduling
11:45–12:00	100	6	AI-Driven Emotion-Aware Interfaces Using Multimodal Signal Fusion Techniques
12:00-12:15	113	6	AI Model for Real-Time Credit Scoring Using Hybrid Deep Neural Networks
12:15-1:15	Lunch Break		
1:15-2:00	Key Note Address Mr. Soenil Soebedar, Founder SOEBIT, Senior PKI Specialist, Cryptography Consultant/Architect, Penetration tester, SOEBIT Cybersecurity, Topic: "Securing Next-Gen Technologies: Emerging Cyber Threats in AI, IoT, and Critical Infrastructure"		
2:00–2:15	108	6	HUMAN: A Hybrid Unsupervised Multi-Aspect Network for Explainable Pattern Discovery in Heterogeneous Tabular Data
2:15–2:30	299	6	Context-Aware Multimodal Emotion Recognition Using HuBERT, ResNet-18, BERT and Context Transformer
2:30–2:45	54	6	MediXplain: An Explainable AI Framework for Evidence-Linked Diagnostic Reporting
2:45–3:00	Break		
3:00-3:15	263	6	Generative AI-Powered Corporate Performance Optimization through Human and Financial Capital Analytics
3:15-3:30	229	6	Model Z+: An Industry 4.0 Predictive Energy Management System Using Transformer-Based Regression
3:30-3:45	312	1	SecureVote: Smart Authentication in Blockchain-Based Digital Voting System Using Multi-Factor Biometric Authentication
3:45-4:00	8	6	Multi-Agent Collaboration Systems using AI Agents
4:00-4:15	17	6	MMBRCA: A Multimodal Deep Learning Framework for Early Breast Cancer Risk Stratification
4:15-4:30	318	1	GAN Based Hybrid Intrusion Detection System

06/10/2026 Day 2 — Offline Presentations, ECE Seminar Hall, Room No: 302

Time	Paper ID	Track	Paper
9:15–9:30	186	4	Autonomous Fire Extinguishing Robot with Self-Preservation Mechanisms and Wireless Emergency Protocols
9:30–9:45	247	4	NyxGuard: An IoT-Based Smart Luggage Security and Tracking System Using Biometric Authentication
9:45–10:00	270	2	Padam: An AI-Assisted Malayalam Dictation Assessment Framework with TrOCR-Based Handwritten Word Recognition
10:00–10:15	156	4	IoT-Based Smart Medication Assistance System with Automated Drawer Actuation and Weight-Based Medication Removal Detection
10:15–10:30	164	4	Cybersecurity for Connected and Autonomous Vehicles: A Review of AI-Equipped Intrusion Detection and Decentralized Security Mechanisms
10:30–10:45	301	4	Unified Accessibility Assistance Framework: A Modular Service-Orchestration Architecture for Wheelchair Support
10:45–11:00	277	4	Q-FLO — Smart Fuel Quality and Quantity Detection at Refueling Point
11:00–12:30	—	—	INAUGURATION FUNCTION — Main Seminar Hall
12:30–1:30	—	—	KEYNOTE ADDRESS — Dr. B. S. Manoj, Sr. Professor, IIST
1:30–2:30	—	—	LUNCH BREAK
2:30–2:45	2	6	Comparative Study of Deep Learning Models for Person Detection from CCTV Footage
2:45–3:00	202	6	State-of-Charge Estimation of Lithium-Ion Batteries Using a 3RC Equivalent Circuit Model and Discrete Kalman Filter

06/10/2026 Day 2 — Offline Presentations, CSE Seminar Hall Room No: 402

Time	Paper ID	Track	Paper
9:15–9:30	206	1	Network Intrusion Detection Through Ensemble Learning: A Comparative Evaluation
9:30–9:45	203	6	Deep Feature-Based Multi-Class Classification of Real, Stable Diffusion-Laundered, and Fully Synthetic Images
9:45–10:00	149	6	LawBot AI: An Intelligent Legal Assistant for Simplifying Law and Enhancing Access to Justice
10:00–10:15	346	6	Speech Recognition Model for Speech-Language Pathologists Using a Malayalam Audio Dataset
10:15–10:30	11	6	Logic AI
10:30–10:45	287	6	COGNILYTICS: A Multi-Modal Explainable AI System for Cognitive Disorder Assessment and Classification
10:45–11:00	249	6	Effect of Pose Estimation on Cricket Batting Stroke Classification
11:00–12:30	—	—	INAUGURATION FUNCTION — Main Seminar Hall
12:30–1:30	—	—	KEYNOTE ADDRESS — Dr. Rajasree M S, Chief Executive Officer, TrEST Research Park
1:30–2:30	—	—	LUNCH BREAK
2:30–2:45	280	6	DriftGauge: A Lightweight Feature-Level Data Drift Detection and Severity Visualization Platform
2:45–3:00	213	6	Towards a Socratic Educational Assistant for Low-Resource Languages: Continual Fine-Tuning and Prompt-Guided Deployment in Malayalam

06/10/2026 Day 2 — Offline Presentations, CIS Lab, Room No: 218

Time	Paper ID	Track	Paper
9:15–9:30	196	3	Mathematical Modeling and Simulation of Vehicle Exhaust Emission Control Using a Three-Way Catalytic Converter
9:30–9:45	216	5	Deployment of Edge AI Inference on Indigenous RISC-V SoCs: TensorFlow Lite Micro on the VEGA RISC-V Processor Family
9:45–10:00	297	5	Design of a Modified AXI4-Lite to APB4 Bridge with Error Detection
10:00–10:15	219	4	UAV Swarm-Based Communication Restoration in Disaster Zones
10:15–10:30	195	4	RescueRay: Multi-Target Human Life Sign Detector
10:30–10:45	253	4	REAL-TIME HOSPITAL WASTE CLASSIFICATION AND SEGREGATION USING A VISION-BASED SMART BIN
10:45–11:00	225	4	Autonomous Water Sampling and Real-Time Water Quality Monitoring Using a GPS-Guided Robotic Boat
11:00–12:30	—	—	INAUGURATION FUNCTION — Main Seminar Hall
12:30–1:30	—	—	KEYNOTE ADDRESS — Shri. Varghese Cherian, Head of Technology Services, UST
1:30–2:30	—	—	LUNCH BREAK
2:30–2:45	103	6	A Comprehensive Review of Information Extraction from Electronic Health Records
2:45–3:00	227	6	Transfer Learning Approaches with Deep Learning for DNA-Based Disease Identification