



INTERNATIONAL CONFERENCE ON SMART ELECTRONICS AND COMMUNICATION SYSTEMS

ISENSE 2026

11 - 12 SEPTEMBER 2026

VENUE: IIIT KOTTAYAM

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• **Dr. Della Thomas**, IIIT Kottayam

• **Dr. Jalaja M J**, IIIT Kottayam

2026 INTERNATIONAL CONFERENCE ON SMART ELECTRONICS AND COMMUNICATION SYSTEMS (ISENSE 2026) PROVIDES A PLATFORM FOR SCIENTISTS, RESEARCHERS AND FACULTY FROM ACADEMIA, RESEARCH LABORATORIES, AS WELL AS RESEARCHERS FROM INDUSTRY AND GOVERNMENT TO COME TOGETHER TO SHARE AND LEARN ABOUT STATE OF THE ART DEVELOPMENTS IN THE FIELDS. SMART SOLUTIONS ARE THE NEED OF THE HOUR FOR SUSTAINABLE DEVELOPMENT. SMART ELECTRONICS AND COMMUNICATION SYSTEMS DRIVE INNOVATION AND GROWTH TODAY AND CREATE NEW SUSTAINABLE OPPORTUNITIES AND HAVE BECOME ESSENTIAL FOR DAY TO DAY LIVING.

ISENSE 2026 IS THE SECOND EDITION OF THE CONFERENCE BEING ORGANIZED BY THE DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, INDIAN INSTITUTE OF INFORMATION TECHNOLOGY KOTTAYAM (IIIT KOTTAYAM), INDIA.

THE AIM OF THE CONFERENCE IS TO BRING TOGETHER LEADING ACADEMICS, SCIENTISTS, RESEARCHERS AND ENGINEERS WORKING IN EMERGING CUTTING-EDGE TECHNOLOGIES TO DISCUSS NOVEL IDEAS, TECHNOLOGIES AND APPLICATIONS IN THE FIELDS OF VLSI, SIGNAL PROCESSING, COMMUNICATIONS AND ARTIFICIAL INTELLIGENCE. IT ALSO AIMS TO CREATE AN INTERDISCIPLINARY PLATFORM TO SHARE RESEARCH IDEAS ON DEVELOPING NEW MODELS AND SYSTEMS FOR SUSTAINABLE DEVELOPMENT AND PROVIDE INTELLIGENT PARADIGM SHIFTS TO DEAL WITH UNCERTAINTIES IN REAL WORLD; AS WAYS OF ACHIEVING GROWTH THAT IS INCLUSIVE AND RESILIENT. THE CONFERENCE WILL FEATURE PROMINENT SPEAKERS AND PARALLEL TECHNICAL SESSIONS. THE CONFERENCE IS ORGANIZED IN TECHNICAL COLLABORATION WITH THE IEEE KERALA SECTION. ACCEPTED AND PRESENTED PAPERS OF THE CONFERENCE WILL BE SUBMITTED FOR POSSIBLE PUBLICATION IN IEEE XPLORER.

Call for Papers Announcement: **01/11/2025**

Draft Paper Submission: **14/03/2026**

Notification of Acceptance: **04/05/2026**

Final Camera-ready Paper: **03/06/2026**

For Paper Submission: <https://cmt3.research.microsoft.com/ISENSE2026>

Contact: Department of Electronics and Communication Engineering, IIIT Kottayam, Valavoor, Pala, Kottayam, Kerala 686635.
isense26@iitkottayam.ac.in

ISENSE 2026 invites contributions in the following tracks, but not limited to:

VLSI AND EMBEDDED SYSTEMS

- SEMICONDUCTOR MEMORIES
- DEVICE DESIGN AND MODELLING
- LOW POWER VLSI CIRCUITS
- ANALOG/RFIC/MIXED-SIGNAL VLSI DESIGN
- 3D INTEGRATION AND PACKAGING
- VLSI PHYSICAL DESIGN AUTOMATION
- HIGH SPEED VLSI CIRCUITS
- DIGITAL VLSI DESIGN
- VLSI TESTING AND VERIFICATION
- NANOTECHNOLOGY AND BEYOND CMOS
- SYSTEM-ON-CHIP (SOC)
- VLSI CIRCUITS FOR COMMUNICATIONS
- ASIC/FPGA DESIGN
- DSP IMPLEMENTATION AND ARCHITECTURES
- AUTOMOTIVE EMBEDDED SYSTEMS
- EMBEDDED SYSTEM
- EMBEDDED SYSTEMS TESTING AND VALIDATION
- CYBER-PHYSICAL SYSTEM (CPS)
- NANO-ENGINEERED ENERGY STORAGE MATERIALS
- ENERGY EFFICIENT EMBEDDED SYSTEMS
- INTERNET OF THINGS(IOT)

COMMUNICATION SYSTEMS

- SOURCE CODING AND DATA COMPRESSION
- CODING FOR DATA COMMUNICATIONS AND STORAGE
- MIMO AND MILLIMETRE-WAVE COMMUNICATIONS
- COMMUNICATION TECHNOLOGIES FOR 5G/6G
- NETWORK CODING AND APPLICATIONS
- INTEGRATED SENSING AND COMMUNICATIONS
- CYBER PHYSICAL SYSTEMS
- INFORMATION AND CODING THEORY
- WIRELESS COMMUNICATIONS
- SATELLITE AND SPACE COMMUNICATIONS
- QUANTUM COMMUNICATIONS AND COMPUTING
- NETWORK AND LEARNING THEORY
- 5G/B5G/6G/NEXT-GENERATION NETWORKS
- WIRELESS AND WIRELINE NETWORKS
- NETWORK AND LEARNING THEORY
- WIRELESS AND WIRELINE NETWORKS
- QUANTUM NETWORKING
- DETECTION AND ESTIMATION
- FREE SPACE OPTICAL COMMUNICATION
- VISIBLE LIGHT COMMUNICATION

RF, MICROWAVE & OPTICS

- MICROWAVE DEVICES AND META SURFACES
- ANTENNAS AND PHASED ARRAYS
- MICROWAVE/MM-WAVE/TERAHERTZ COMMUNICATION AND IMAGING
- OPTIMIZATION AND MACHINE LEARNING AIDED DESIGN OF ANTENNAS AND MICROWAVE COMPONENTS
- RADARS , REMOTE SENSING AND WIRELESS POWER TRANSFER
- OPTICAL COMMUNICATION
- OPTICAL NETWORKS AND SYSTEMS
- OPTICAL NETWORK SECURITY

- VISIBLE AND IR FREE-SPACE OPTICAL COMMUNICATION SYSTEMS
- OPTICAL INTERCONNECT TECHNOLOGIES
- MACHINE LEARNING AND AI IN LASER APPLICATIONS,
- ELECTRONICS AND INSTRUMENTATION FOR LASERS,
- LASER PLASMA INTERACTION,
- LASER ADDITIVE MANUFACTURING;
- LASERS MATERIALS, DEVICES AND COMPONENTS
- SIGNAL, SPEECH AND IMAGE PROCESSING
- AUDIO, ACOUSTIC AND BIOMEDICAL SIGNAL PROCESSING
- IMAGE, VIDEO, AND MULTIMEDIA SIGNAL PROCESSING
- COMPUTATIONAL IMAGING

EMERGING TECHNOLOGY

- MACHINE LEARNING/AI- BASED SOLUTIONS FOR WIRELESS COMMUNICATIONS,
- PATTERN RECOGNITION AND MACHINE LEARNING,
- BIG DATA AND LEARNING ALGORITHMS FOR NETWORKS,
- HARDWARE-EFFICIENT ML METHODS,
- DIGITAL TWIN, BLOCKCHAIN, METaverse,
- GREEN TECHNOLOGIES, CYBER PHYSICAL SYSTEMS,
- QUANTUM COMPUTING, SMART GRID AND POWER LINE COMMUNICATIONS
- QUANTUM COMMUNICATION, MOLECULAR, BIOLOGICAL AND MULTI-SCALE COMMUNICATIONS,
- BIOLOGICAL NETWORKS, COMPLEX NETWORKS, SOCIAL NETWORKS,
- APPLICATIONS IN ASTRONOMY/ASTROPHYSICS, QUANTUM SCIENCE

SECURITY & PRIVACY

- SECURITY AND PRIVACY ISSUES IN COMMUNICATIONS
- NETWORK SECURITY AND PRIVACY,
- SECURE NETWORK CONTROL SYSTEM
- INTELLIGENT SYSTEMS SECURITY WITH DEEP LEARNING AND NEURAL NETWORKS
- HARDWARE SECURITY: MACHINE LEARNING IN HARDWARE SECURITY, SECURITY OF AI HARDWARE SYSTEMS, SECURITY OF EMERGING MEMORY CHIPS

IoT AND SENSOR NETWORKS

- CYBER-PHYSICAL SYSTEMS / IoT, EDGE COMMUNICATIONS, NETWORK ECONOMICS AND PRICING,
- SENSOR AND AD HOC NETWORKS, SOFTWARE-DEFINED NETWORKING,
- CLOUD & FOG/EDGE COMPUTING AND NETWORKING, WIRELESS SENSOR NETWORKS,
- MEDICAL ELECTRONICS: BIO-MEDICAL INSTRUMENTATION, BIO-SIGNAL PROCESSING, AND MEDICAL-IMAGE PROCESSING

- GRAPH SIGNAL PROCESSING
- SPEECH SIGNAL PROCESSING
- ADVANCED SIGNAL PROCESSING TECHNIQUES
- DEEP LEARNING/MACHINE LEARNING FOR SIGNAL PROCESSING AND COMMUNICATIONS
- IMAGE PROCESSING, PROCESSING AND COMMUNICATIONS
- ADAPTIVE SIGNAL PROCESSING
- BIOMEDICAL SIGNAL PROCESSING
- SPEECH, AUDIO, AND LANGUAGE PROCESSING
- SPARSE SIGNAL PROCESSING, IMAGE, MULTIMEDIA, AND VIDEO SIGNAL PROCESSING
- SECURE SIGNAL PROCESSING
- OPTIMIZATION FOR SIGNAL PROCESSING

For More Details Visit Us:

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ISENSE 2026 IS BEING ORGANIZED BY THE DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, IIIT KOTTAYAM, IN ASSOCIATION WITH THE IEEE KERALA SECTION. THE CONFERENCE CONTINUES THE ISENSE SERIES, AIMING TO PROVIDE A PREMIER FORUM FOR THE LATEST ADVANCES IN VLSI, SIGNAL PROCESSING, COMMUNICATIONS AND ARTIFICIAL INTELLIGENCE. IT ALSO PROMOTES INTERDISCIPLINARY RESEARCH TOWARD SUSTAINABLE AND INTELLIGENT SYSTEMS CAPABLE OF ADDRESSING REAL-WORLD CHALLENGES.

THE IEEE KERALA SECTION, ESTABLISHED IN 1975, IS KNOWN FOR ITS VIBRANT TECHNICAL AND PROFESSIONAL ACTIVITIES. ITS INNOVATIVE INITIATIVES FOR STUDENTS AND PROFESSIONALS HAVE BEEN RECOGNIZED GLOBALLY, AND IT HAS ORGANIZED SEVERAL HIGH-QUALITY INTERNATIONAL CONFERENCES IN RECENT YEARS.

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY KOTTAYAM (IIIT KOTTAYAM) IS AN INSTITUTE OF NATIONAL IMPORTANCE UNDER THE MINISTRY OF EDUCATION, GOVERNMENT OF INDIA. ESTABLISHED IN 2015, THE INSTITUTE OFFERS B.TECH/B.TECH (HONS.) IN ECE, CSE, CYBERSECURITY AND AI & DATA SCIENCE; AN INTEGRATED M.TECH (BCA-MCA) IN AI & DATA SCIENCE; AND M.TECH PROGRAMS FOR WORKING PROFESSIONALS IN AI & DATA SCIENCE, CYBER SECURITY AND CSE WITH SPECIALIZATION IN BIG DATA & MACHINE LEARNING. IIIT KOTTAYAM ALSO OFFERS PH.D. PROGRAMS IN ECE, COMPUTATIONAL MATHEMATICS AND CSE.

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VLSI and Embedded Systems

Communication Systems

RF, Microwave & Optics

Signal, Speech and Image Processing

IoT AND SENSOR NETWORKS

Security & Privacy

EMERGING TECHNOLOGIES

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