

2024 IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (2024 IEEE DISCOVER)

October 18-19, 2024

Organized by :

IEEE Mangalore Subsection

Hosted by :

St Joseph Engineering College, Mangaluru, Karnataka- 575028



2024 IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (2024 IEEE DISCOVER) is being organized by **IEEE Mangalore Subsection (R001901)** will be held in the serene premises of St Joseph Engineering College in the region of Mangaluru, Karnataka, India. Being the Eighth international conference under IEEE Mangalore Subsection, 2024 IEEE DISCOVER intends to attract people working in diverse fields: Distributed Computing, Software Engineering, VLSI, Verification, Communication Engineering, Electrical and Electronic Circuits, Robotics and Healthcare. The conference is designed to create a platform for researchers from academia and industry, practicing engineers, and students. A series of keynote presentations, technical paper and poster presentations are planned to foster vigorous exchange of research findings and ideas among the participants. All accepted and presented papers will be submitted for possible publication in IEEE Xplore® Digital Library (IEEE Conference ID: 62353), through the IEEE Conference Publications Program (CPP). The proceedings of earlier editions of DISCOVER were published in IEEE Xplore and indexed in Scopus.

CALL FOR PAPERS

2024 IEEE DISCOVER solicits paper submissions across six tracks as listed below. Kindly note that the submissions are not limited to the topics mentioned in each track.

Track 1: Distributed Computing

Multi-core Architecture
Parallel & Distributed Systems
Agent-Based Systems
Autonomic Computing
Mobile & Ubiquitous Computing
Service-Oriented Computing
Scalable Servers and Systems
Intelligent Computing
Secured Computing
GPU Programming
Parallel & Distributed Algorithms
Compiler Technologies for HPC
Peer to Peer Computing
Cloud Computing
Network Storage Systems
High Performance Storage Systems

Edge Computing
Serverless Computing

Track 2: Communications

Network Algorithms
Network Control & Management
Disaster Recovery of Networks
Cognitive Communications
Wireless Sensor Networks
Software Defined Networks
Future Internet Architecture
Optical Networks
Internet of Things
Network Performance Analysis
QoS for Emergency Applications
Optical Communications
Photonics

Wireless and Mobile Networks
Ad hoc and Mesh Networks
Named Data Networking
LTE and 5G Networks
Body Area Networks
Unmanned Aerial Vehicle Networks
RF and Microwave Engineering
Antenna Engineering
Waveguide and Filter design
Microwave Compatability
Electromagnetic Interference
Microwave Theory and Techniques
Optical Fiber Communications

Track 3: VLSI

VLSI Circuits and Systems
RF Circuit Design and Testing
Emerging Trends in VLSI
Reconfigurable Systems
System on Chip
Heat Dissipation Analysis
Design of MEMS Devices
Optical MEMS Devices
Nanotechnology
Photovoltaics
Analog / Mixed Signals
RF Circuit Analysis
Field Programmable Systems
System Level Design
Physical Design and Testing
Power Awareness Analysis

Design of NEMS Devices
Electrical Packaging / codesign
Thin film and devices

Track 4: Electrical and Electronic Circuits

Electrical AC/DC Circuits
Analog and Digital Circuits
High-speed/low-power circuits
Near and sub-threshold circuits
Nonlinear Circuits & Systems
Neural/fuzzy-logic circuits
Energy efficient systems and circuits
FPGA based systems

Track 5: Robotics

Robotic Technologies
Robots for Industrial Applications
Robots for Domestic Premises
Robots for Education
Robots for Health Care
Robots for Transportation
Robots for Commercial Usage
Humanoids

Track 6: Healthcare

Biomedical Sensors and Wearable Systems
Therapeutic and Diagnostic Systems and Technologies
Biomedical and Health Informatics
Translational Engineering for Healthcare Innovation and Commercialization
Biomedical Signal and Image Processing
Pattern Recognition

About the Host Institution – St Joseph Engineering College, Mangaluru

St Joseph Engineering College (SJEC) - Mangaluru, a premier educational institution and a hub for Creativity and Innovations in Engineering. SJEC was established in the year 2002 with an aim to educate the youth in Engineering, Technology and Management. SJEC is an Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi, in the Karnataka State and recognized by All India Council for Technical Education (AICTE), New Delhi. SJEC is professionally managed and forms a part of over 250 educational institutions of the Diocese of Mangalore. The College offers top-class education in Engineering, Business Administration and Computer Applications at UG, PG and Research levels.

The Institution has secured NAAC Accreditation with A+ Grade. Programmes (CSE, ME, ECE, EEE, CV, MBA) offered by the Institution have also been accredited by NBA, New Delhi. It has well-qualified staff, state of the art laboratories and modern amenities for all round development of the students. Presently around 3000 students are studying in the College. At SJEC, the OBE system has been implemented since 2011. SJEC is located in a serene place at Vamanjoor, 10 km from Mangaluru city.



IMPORTANT DATES

Paper Submission Deadline: Friday, May 31, 2024

Acceptance Notification: Thursday August 8, 2024

Registration Deadline: Wednesday, September 18, 2024

CRC Submission Deadline: Wednesday, September 18, 2024

Conference Dates: October 18 - 19, 2024 (Friday and Saturday)

BEST PAPER AWARDS

- Technical Programme Committee of DISCOVER will select One Best Paper in each of the tracks mentioned above.
- Best Paper Awards will be announced and distributed during the Conference.

PAPER SUBMISSION LINK

<https://cmt3.research.microsoft.com/DISCOVER2024/>

CONFERENCE WEBSITE

<https://www.ieee-discover.org/>

EMAIL

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REGISTRATION

Type of Registration	Indian Author	Foreign Author
Regular Author (Industry)	INR10000	USD 350
Regular Author (Academia)	INR 8000	USD 300
IEEE Author	INR7500	USD 250
Student Author	INR7000	USD 250
IEEE Student Author	INR 6500	USD 200
Regular Attendee	INR3000	USD 150
Student Attendee	INR 2500	USD 100

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