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PSG Institute of Technology and Applied Research

Avinashi Road, Neelambur, Coimbatore - 641 062, Tamilnadu, INDIA



Department of Electronics and Communication Engineering organizes

INTERNATIONAL CONFERENCE ON SMART SYSTEMS FOR ELECTRICAL, ELECTRONICS, COMMUNICATION AND COMPUTER ENGINEERING IC(SEC)² – 2024

THEME: SYNERGY IN SUSTAINABLE TECHNOLOGIES

Technical Co-Sponsor



Conference id: 61126

DATE: 28-29 JUNE, 2024

FOR ANY QUERIES KINDLY CONTACT

Dr. P.Vijayakumar

HoD-ECE and Dean (Electrical and Computer Engineering)

Organising Chair, IC(SEC)² -2024

PSG Institute of Technology and Applied Research

Neelambur, Coimbatore - 641062

Email: icssecc@psgitech.ac.in

Mobile: +91 9894994643



About PSG iTech :

PSG iTech, the latest initiative of PSG and Sons' Charities, aims to realize its objective of enhancing youth empowerment through technical education. This institute caters to various engineering disciplines, focusing on learning, industry engagement of students, innovative and inclusive pedagogy, and ethics. PSG Institute of Technology and Applied Research, started in the year 2014, is an AICTE approved institution and affiliated to Anna University, Chennai. It aims at effective transfer of knowledge, pursuit of truth and moulding the students to become ideal citizens of the country. Within a short span of time, the Institution has emerged to be one of the most preferred institutions for the engineering aspirants in Tamilnadu. The institution is equipped with various Centres of Excellence such as Innovation Centre, NI Graphical System Design Centre, Keysight RF circuit & System Design Lab, Festo Lab, NEXMOO Mobile & IoT Centre of Excellence, CISCO Network Academy and eYantra Lab. PSGiTech aims to achieve excellence in education and research and nurture engineers with ethics, who will face global challenges to serve industry and society.

Vision of the College :

To achieve excellence in education and research, and nurture engineers with ethics, who will face global challenges to serve industry and society.

Mission of the College :

- To facilitate active learning and vocational training.
- To encourage and promote questioning spirit and 'can-do' entrepreneurial attitude.
- To foster industry - institute collaboration.
- To ignite passion for creative work and selfless service towards a sustainable world.
- To provide an intellectually stimulating environment, conducive for research.

About the Department :

The Department of Electronics and Communications Engineering strives to produce top-notch engineers with global competence for industry, research and academia. The major objective of the department is to foster innovation, design, and creation of eco-sustainable products to meet the growing technological demands. The department serves over 300 undergraduate students with a team of dedicated faculty members who are committed towards teaching and research in the areas of Signal Processing, Electronic Circuit design, Communication Systems, VLSI, Machine Learning, Internet of Things (IoT), and Embedded Systems. The collaboration with industries such as National Instruments, Keysight Technologies, Texas Instruments, and PASCO has aided the department in providing a good platform for the faculty members and students to learn the concepts experientially and to work on real-time industrial problems.

About PSGCARE:

The PSG Center for Academic Research and Excellence was founded in October, 2015 by the PSG & Sons Charities Trust with a mission to promote teaching excellence in all the colleges under the Trust. Toward this end, CARE will encourage the use of learner-centric pedagogical practices that facilitate effective learning and will foster dialogue and reflection on effective teaching through workshops, seminars, one-to-one consultation and other activities. The center also focuses on creating and sustaining effective faculty student relationships and aims to pursue its mission by:

- Helping educators at PSG to practice a learner-centric course design, innovative pedagogy and effective assessments so as to shift the focus of the teaching learning process from delivery of knowledge to facilitation of knowledge acquisition
- Offering an effective one-to-one mentoring system to the faculty in various topics pertaining to learner-centric pedagogy and effective faculty student relationships
- Promoting the use of technology in the PSG classrooms and establishing an environment for effective use of technology in enhancing the teaching- learning process.
- Helping faculty members assess the effectiveness of their teaching through appropriate student and peer feedback mechanisms
- Encouraging research activities that enhance the quality of teaching at PSG and supporting dissemination of research findings about the teaching learning process.

About the Conference

The International Conference on Smart Systems for Electrical, Electronics, Communication, and Computer Engineering IC(SEC)² – 2024 stands as a pivotal congregation, uniting a global community of pioneering researchers, esteemed academics, industry mavens, and proficient practitioners. This gathering serves as a cornerstone for the exchange of cutting-edge insights, transformative innovations, and visionary concepts in the realms of electrical, electronics, communication, and computer engineering.

This multidimensional platform is meticulously curated to facilitate a comprehensive exploration of the rapidly evolving landscape of smart systems. It offers a robust framework for participants to delve into a spectrum of topics, ranging from the latest advancements in smart electrical systems to the intricate intersections of communication technologies and the burgeoning frontiers of computer engineering.

With the overarching theme, " Synergy in Sustainable Technologies," IC(SEC)² – 2024 endeavors to catalyze collaborative endeavors that drive innovation, reshape industries, and pave the way for transformative and sustainable solutions. It serves as a catalyst for synergistic collaborations among diverse stakeholders, propelling the collective journey towards harnessing the full potential of smart technologies.

Keynote Speakers



Loganathan Ravi
Process Engineer (MOCVD)
IQE plc, UK
Saint Mellons, Wales, United Kingdom



Dr. Balaji Srinivasan
General Manager
Bosch Global Software
Technologies,
Coimbatore.

Call for Papers & Manuscript Submission

We welcome articles reporting novel and unpublished results of conceptual, creative, experimental, and theoretical work or study in any of the topic areas mentioned in Call For Papers. Authors are invited to submit the original manuscript in pdf or doc/docx format as per IEEE Manuscript Template. kindly use the following link to submit.

<https://cmt3.research.microsoft.com/ICSSECC2024>.

CLICK HERE for IEEE Template.

All articles will be peer-reviewed in a double-blind manner. Relevancy, research technique, ethical conduct, language standard, result presentation, proficiency, format, and a variety of other aspects are all taken into account throughout the process of assessment. All submissions will be screened for plagiarism and similarity checks.

Based on the reviewers' recommendation and careful consideration by the Program Committee Chair, the manuscripts will be shortlisted for the conference and the decision on acceptance of the paper will be communicated to the authors. The authors of shortlisted manuscripts will be required to submit the camera ready copy in the required format incorporating all the suggestions given by the reviewers. Please note that no submissions will be entertained beyond the deadline.

Conference tracks :

ELECTRICAL STREAM

Track A1: Energy Technologies

- Renewable energy (solar, wind, biomass, wave, fuel-cells), Distributed generation, Energy storage systems (batteries, pump hydro, superconducting, flywheels, hydrogen), Virtual power plants, Grid integration of small-scale and large-scale renewable resources, Hydrogen storage to support power grids, Renewable energy to power electrolyzers, Black Start Capability of Renewable Power Plants, Sustainable energy technologies

Track A2: Power and Energy Transformation and Utilisation, Enabling Technologies

- Smart Grids and micro-grids, Power grid infrastructure planning, Industrial drives, Load modelling, uilding energy management system, Distributed control in power systems, Smart solid-state transformers, Magnetic link and magnetic bus, Inductive and conductive power charging, Power converters for electrolyzers and fuel-cells, Smart meters, Data driven control for smart inverters.

Track A3: Future Grids with Electric Vehicles

- Plug-in Electric vehicles (bicycle, car, bus, train, autonomous vehicles), Electric vehicle charging stations., Impact of electric vehicles to power grids, Grid infrastructure for hosting electric vehicle fleets, Hybrid electric vehicles, Vehicle to grid and vehicle to home, Hydrogen-powered vehicles

ELECTRONICS STREAM:

Track B1: Wireless Technologies

- Antennas and RF, Channel Modelling and Estimation, Free Space Optical Communication, Next Generation MIMO and Massive MIMO, Visible Light Communications, Wireless Power and Information Transfer, Multihop Networks, Cooperative Communication and Networking, Energy-Efficient and Green Networking, Satellite and Deep Space Communications, Software Defined Radio and Networks,5G & B5G

Track B2: Integrated Circuits and Embedded Systems

- Analog & Mixed Signal and, RF Circuits, Hardware and Systems Security, Test, Verification, and Reliability, Electronic Design Automation, Advanced process and Material, Device design and modelling, Emerging Computing & Post-CMOS Technologies, Low power Digital Systems, Intelligent Embedded Systems, Wearable Computing, Robotics and Control Systems, Heterogeneous SoC and Multicore Embedded System,Reconfigurable Embedded Computing

Track B3 : Instrumentation and Automation

- Intelligent Robot Technology, Soft Computing and Their Applications, Networked and Distributed Control Systems, Multi-Agent Systems, Fault Diagnosis and Fault-Tolerant Control, Real-time systems control, Time-frequency analysis, Biological inspired sensors, Modelling, analysis, and control of discrete-event systems, Modelling, analysis, and control of hybrid dynamical systems

COMPUTER SCIENCE STREAM

Track C1: IoT, Big Data Analytics and AI

- IoT Communication Technologies and Protocols, Energy Efficiency and Sustainability in IoT, Real-world IoT Deployments, Big data management, Platforms and technologies for big data, Supervised learning and Unsupervised learning, Social Networks, Evolutionary Algorithms, Data Mining techniques, Machine Learning and Deep Learning, Generative AI, Edge Computing, Edge Intelligence and Fog Networks

Track C2: Computer Vision

- Biometrics, Signal and image analysis, Optical Character Recognition, , Object motion and tracking, , Image segmentation, 3D Object Reconstruction, Augmented Reality, Natural Language Processing

Track C3 : Cyber Security and Privacy

- Blockchain for AI, Cyber security and Cyber physical systems, Machine learning for Biometric security and privacy,Security and privacy in wireless sensor networks, Cryptographic algorithms, Security Analytics, Quantum Computing, Security Issues and Challenges

Registration Fee Details

CATEGORY	INDIAN DELEGATES		FOREIGN DELEGATES	
	NON-IEEE	IEEE	NON-IEEE	IEEE
INDUSTRY EXPERTS	11,000 INR + 18% GST	11,000 INR + 18% GST	150 USD +18%GST	125 USD +18%GST
ACADEMICIANS	9,000 INR + 18% GST	8,000 INR + 18% GST	125 USD +18%GST	100 USD +18%GST
RESEARCH SCHOLARS	8,000 INR + 18% GST	7,000 INR + 18% GST	125 USD +18%GST	100 USD +18%GST
ATTENDEES	3,000 INR + 18% GST	3,000 INR + 18% GST	100 USD +18%GST	100 USD +18%GST

Important Dates

Last date for Manuscript Submission	30 th April 2024
Acceptance Notification	30 th May 2024
Last date for registration	5 th June 2024
Camera Ready Paper Submission:	10 th June 2024
Date of Conference:	28 th and 29 th June 2024