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Prospective authors are invited to submit full papers describing original, previously unpublished, complete work (not currently under review by another conference/ journal) up to six to eight pages in IEEE double column format including figure, results, references and brief profile of authors. The Conference Manuscript Sample Copy Format is available on

http://www.matrusri.edu.in. Send papers on conference official e-mail id provided. Papers will be accepted in word format only.

## **Contact Details**

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\*All the selected papers presented will be published in the Conference Proceedings with ISBN Number and Some selected papers will be recommended to publish in the journal, "International Journal of Micro-system & IOT(IJMIT), ISSN 2584-0495 which is in the process of indexing in SCOPUS, WoS.







# MATRUSRI ENGINEERING COLLEGE

(An Autonomous Institution)
(Sponsored by Matrusri Education Society,
Estd.1980)

Department of Electronics and Communication Engineering

# **CALL FOR PAPERS**

National Summit on VLSI for Smart Signal Processing: The AI & Edge Revolution

(NV-SIGPROC: AI & Edge)

(May 23<sup>rd</sup> & 24<sup>th</sup>, 2025)





Indian Society for VLSI Education (ISVE)

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The Institution of Electronics and Telecommunication Engineers (IETE)

## **About College**

Matrusri Engineering college, Saidabad, Hyderabad was established in 2011 by Matrusri Education Society. The college offers BE Undergraduate program with specializations in Civil Engineering, Computer Engineering, Computer Science and Engineering, CSE in Data Science, Electronics and Communication Engineering, Electrical and Electronics Engineering, Information Technology and Mechanical Engineering with a total intake of 720 students per year.

Over the years, Matrusri Engineering College has emerged as a leading Autonomous institution in Hyderabad, providing quality engineering education to aspiring professionals. With its strong academic foundation, excellent infrastructure, and a focus on industry collaboration, the college is well-positioned to equip students with the necessary skills and knowledge to excel in their chosen careers.

## **About the Department**

The Department of Electronics and Communication Engineering (ECE) at Matrusri Engineering College is a dynamic and progressive department dedicated to providing quality education in the field of electronics and communication. Established in 2011 with intake of 60 and subsequently increased its strength to 120 students. Accredited by National Board of Accreditation (NBA) twice and has a dedicated team of 30 teaching faculty and Support Staff.

#### **About ISVE**

The Indian Society for VLSI Education (ISVE) is a registered (Act 21,1860) non-profit organization dedicated to advancing VLSI education and research in India. It organizes workshops, seminars, and conferences, fosters industry-academia collaborations, conducts training programs, and supports research projects to enhance VLSI skills and knowledge among students, faculty, and professionals, contributing significantly to the growth of the Indian VLSI industry.

### **About Conference**

The ever-growing demand for intelligent and efficient signal processing systems fuels advancements in Very-Large-Scale Integration (VLSI) design. This National Summit on VLSI for Smart Signal Processing: The AI & Edge Revolution (NV-SIGPROC: AI & Edge) aims to convene leading researchers, industry pioneers, and policymakers to explore the transformative synergy between VLSI, Artificial Intelligence (AI), and Edge computing in shaping the future of signal processing.

This Summit program includes Key Note Addresses, Invited Talks, Panel Discussions, Paper Presentations, Tech Demos, Exhibitions, Poster Sessions & Workshops.

Themes of Conference (Includes the following, but not limited to..)

#### AI at the Edge:

- •Edge AI Architectures and Implementations
- •Power-Efficient AI Inference at the Edge
- •Security and Privacy in Edge AI
- •Real-time AI Processing at the Edge

## **VLSI for Smart Signal Processing:**

- •Custom VLSI for Signal Processing Accelerators
- •Emerging Technologies for Signal Processing (
- Design Automation for Signal Processing Circuits
- •Low-Power Signal Processing Circuits

## **AI and Signal Processing Applications:**

- •AI for Communication Systems
- •AI for Biomedical Signal Processing
- •AI for Sensor Networks
- •AI for Internet of Things (IoT)
- •AI for Autonomous Systems

## **AI-Accelerated Signal Processing:**

- Deep Learning for Signal Processing
- Machine Learning for Signal Processing
- Neural Networks for Signal Processing

## **Edge Computing and Signal Processing:**

- •Edge Computing Platforms for Signal Processing
- •Distributed Signal Processing in Edge Networks
- •Fog Computing for Signal Processing

#### VLSI Design for AI:

- •Hardware Accelerators for Deep Learning
- •Analog and Mixed-Signal AI Circuits
- •3D Integration for AI Chips

## Security and Privacy in Edge AI:

- •Secure Edge AI Inference
- •Privacy-Preserving Edge AI
- •Trustworthy AI at the Edg

## **Emerging Trends:**

- •AIoT and Signal Processing
- •6G and Signal Processing
- •Quantum Signal Processing
- •Neuromorphic Computing for Signal Processing

## **Target Audience**

•Graduate Students, Research Scholars, Faculty from Academia,Industry Professionals

Important Dates		
Start date of Paper Submission	January 20 <sup>th</sup> , 2025	
Last date of Paper Submission	April 10 <sup>th</sup> , 2025	
Notification of Acceptance	April 25 <sup>th</sup> , 2025	
Registration and camera ready submission	May 10 <sup>th</sup> , 2025	
Announcement of Final Program	May 15 <sup>th</sup> , 2025	

## **Registration Fee**

Category	Early Bird	Late Registration
Authors- Academia/Industry Professionals	4000	4500
Students/Research Scholars	1500	2000
Delegates from Academia/Industry/ Second Authors	2000	2500
Preconference Tutorials(Exclusive of Registration)- for Single event	150	200