



SCTR's PICT, Pune

organizes

2 Day Workshop on

"Design of Machine Learning- Based MIMO Antennas for 5G and 6G Networks"

Part of ICEI - 2026



About Workshop

The workshop aims to provide participants with a practical and conceptual understanding of machine learning techniques applied to MIMO antenna design for next-generation 5G and emerging 6G wireless networks. It focuses on improving antenna performance, design efficiency, and adaptability using intelligent algorithms.

This workshop introduces the integration of machine learning (ML) with MIMO antenna systems to address key challenges in high-frequency wireless communication. Participants gain insights into ML-assisted antenna modelling, performance prediction, optimization, and beamforming, enabling faster and more accurate design compared to conventional trial-and-error approaches. Emphasis is placed on applications in massive MIMO, mmWave, and future 6G systems.

Registration fees

Rs. 500/-

Registration Starts

01/09/2025

Registration Ends

31/12/2025

Mode of conduction

Online
(MS Teams)

Coordinators

Mrs. Ashwini Bundele
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Ms. Rajani Jadhav
9922555458

10th-11th
January 2026

Time: 10.00AM to 04.30PM

Speakers

Dr. Siddalingappagouda Biradar

Associate Professor

Dr. Shishi Ranjan

Associate Professor

Key Topics Covered

- Fundamentals of MIMO antenna systems for 5G/6G
- Challenges in conventional antenna design and optimization
- Introduction to machine learning algorithms for antenna applications
- ML-based antenna parameter prediction and optimization
- Case studies on ML-enabled MIMO antennas
- Future research directions in 6G antenna systems

Participants will be able to:

- Understand the role of machine learning in modern antenna design
- Apply ML concepts to optimize MIMO antenna performance
- Analyze design challenges in high-frequency 5G/6G systems
- Explore research opportunities in ML-driven antenna technologies

Registration Link:



(020) 24371101, 24378063



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