

About the Workshop

The confluence of advanced artificial intelligence (AI) / machine learning (ML) with signal processing involved in wireless communication is paving the way for 6G networks. Compared to existing 5G networks, the signal processing in 6G networks is built on the data; thus, the network will learn and adapt from the data so as to have better spectral and energy efficiency, improve user experience and also reduce operational cost. Thus, this workshop focuses on recent AI applied signal processing trends in 6G networks and its potential use-cases.

Highlights of the Event

- Understanding data-driven and model driven ML applied to wireless networks
- Application of ML in channel estimation
- Application of ML in resource allocation
- ML applied to Radio Cartography
- Application of ML in improving Age of Information
- Application of ML in cognitive radio
- Application of ML in MIMO, NOMA.

Key Speakers

Academicians from premier institutions like IITs, NITs, State/Centrally Funded universities, foreign universities, and scientists from ISRO and DRDO having expertise and experience in relevant domain knowledge.

Organizing Committee

Chief Patron

Prof. N. V. Ramana Rao

Director, NIT Raipur

Patron

Prof. Shrish Verma

Dean (AA), NIT Raipur

Prof. Prabhat Diwan

Dean (R&C), NIT Raipur

&

Prof. Subhojit Ghosh

Chairman CEC, NIT Raipur

Chariman

Dr. Toshnall Meenpal

Head

Department of Electronics and Communication
Engineering, NIT Raipur

Faculty Coordinators

Dr. Siddharth Deshmukh

Dr. Saikat Majumder

Student Coordinators

Ms. Manidipa Sarkar

Ms. Divya Yadav

Ms. Rasika Deshpande

Department of Electronics and
Communication Engineering, NIT Raipur



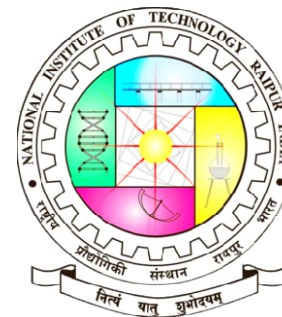
KARYASHALA

A one-week High-End Workshop
On
Reinventing Wireless Communication

Data Driven Signal Processing

For 6G Networks

24th - 30th July 2024



Organized by

Department of Electronics Communication
Engineering

National Institute of Technology Raipur
Raipur-492010 Chhattisgarh

Sponsored by

Science & Engineering Research Board (SERB)
Government of India under Accelerate
Vigyan Scheme

About the Institute

National Institute of Technology (NIT) Raipur, formerly known as Government Engineering College (GEC) Raipur, was established in 1956. The institute has established its unique identity for the development of high-quality human and knowledge resources. It was declared as 'National Institute of Technology' by the Government of India on 1st December 2005 and then an 'Institute of National Importance' in May 2007 vide the National Institute of Technology Act 2007. NIT Raipur now offers 12 UG and 16 PG programs. In addition to the UG and PG programs, NIT Raipur also offers Ph.D. in 18 disciplines of science and technology. For details about the institute please visit us at www.nitr.ac.in

About the Department

The Department of Electronics and Communication Engineering was started in the year 1985 and it offers undergraduate, post-graduate and Ph.D. program. The department has well-equipped laboratories including the communications lab, microwave lab, DSP lab, computer vision lab, VLSI and micro-electronics Lab, Embedded systems lab, to enable the students and the scholars to pursue research in

house.

About the KARYASHALA

The KARYASHALA scheme by SERB Government of India is meant for skill development training on topics required for scientific research work. It is an effort to improve the research productivity of promising PG and Ph.D. students from universities and colleges. This program aims to provide opportunities to acquire specialized research skills. For more details about the program please visit <https://acceleratevigyan.gov.in/programs/abhyas/karyashala>.

Eligibility

Applications are invited from **Undergraduate (Final Year) Postgraduates, and Ph. D scholars.**

Important details

- ✓ **No registration fee** is applicable.
- ✓ Travel allowance train 3rd AC/Sleeper/Bus fare (as per the GOI rules) will be provided.
- ✓ Shared accommodation will be provided.
- ✓ **Only 25 candidates** will be selected on **First-come, First-serve** basis or some criteria determined by the committee to participate in the workshop.
- ✓ Participant has to upload **No Objection certificate** while registering for this workshop as per the format given.
- ✓ Certificate of participation would be issued to all participants.

Format of No-Objection Certificate

Date: _____

To Whom It May Concern,

This letter is to certify that *[Student's Full Name]*, a *[UG/PG/PhD]* student of Dept. of *[Name of the Department]* from *[School/Institution Name]*, has sought permission to attend a workshop titled "Re-inventing Wireless Communication: Data Driven Signal Processing for 6G Networks", which is scheduled to take place from 24th July, 2024 to 30th July, 2024 at NIT Raipur. We hereby confirm that we have no objection to the student attending the workshop and encourage their participation in such educational events that can further enhance their knowledge and skills.

Signature of the applicant

Date and place: _____

Recommended / forwarded

Signature of the Head of the

Dept. / Institution with seal

Registration

[Click Here/](#)

Scan the QR code to register.

Last date of

registration:

30.06.2024

Contact: +91-8251009194

Email id: cosine.rnd@gmail.com

