

Five Days Summer School On New Horizons in Remote Sensing: Basics and Beyond

Online Mode

08th – 12th Aug 2023



BANGALORE CHAPTER



Jointly Organised By

**IEEE GRSS Bangalore Section and
NIE IEEE Student Branch (NISB),
Department of Civil Engineering
The National Institute of
Engineering, Mysuru - 570008**

About Summer School:

The Summer School on Remote Sensing focuses on gathering data about objects from a distance using mechanical devices called remote sensors. These sensors use advanced technology to accurately and efficiently collect information without physical contact. The field of remote sensing is employed by geographers to monitor and measure phenomena in the lithosphere, biosphere, hydrosphere, and atmosphere of Earth. Remote sensing imagery finds diverse applications in mapping land-use, agriculture, forestry, city planning, archaeology, military observation, and more. Advanced methods of AI and ML are utilized to handle the challenges of big data in remote sensing images, particularly for efficient classification. The proposed online summer school aims to teach participants the application in remote sensing data analysis, even for those with limited background knowledge in the field. It aims to equip attendees with practical software tools to tackle remote sensing challenges effectively.

Key objectives:

The primary objectives of the course are as follows:

- Introducing participants to the fundamentals of remote sensing image processing and analysis.
- Building confidence and capability amongst the participants in the application of remote sensing, image processing and analysis using AI and ML methods.
- Providing exposure to practical problems and their solutions, through case studies in the remote sensing applications.
- Enhancing the capability of the participants to identify new applications of remote sensing involving image processing.

Teaching Faculty for the Summer School:



Prof. B. S. Daya Sagar, Indian Statistical Institute - Bangalore Centre.



Prof. T. V. Ramachandra, IISc, Bengaluru.



Dr. Shyam Lal, NITK Surathkal.



Dr. Indu J., IIT Bombay.



Dr. Vinod Kumar Sharma, National Remote Sensing Centre (NRSC), ISRO



Dr. Bharath H. Aithal, IIT Kharagpur.



Dr. Shwetha H. R., NITK Surathkal.



Dr. Nimish Gupta, Centre for Science and Environment, New Delhi.



Mr. Santhosh M., Blue Sky Analytics.

About IEEE GRSS:

The Bangalore Section IEEE GRSS Chapter, established on 24 December 2012, unites like-minded IEEE members interested in satellite remote sensing and geographical information science (GISci). It aims to raise awareness among existing IEEE members and scientists/engineers at institutions like ISRO about GRSS activities and encourage GRSS memberships. The chapter conducts one-day workshops on geoscience and remote sensing topics, promotes contributions to IEEE GRSS journals, and organizes short courses for postgraduates, scholars, researchers, faculty, and industry professionals.

About The National Institute of Engineering and Department of Civil Engineering:

The National Institute of Engineering (NIE), established in the year 1946, today stands 196th place among top engineering colleges in the country that include IITs and NITs as per (NIRF-2021) announced by MHRD. Currently, NIE offers 7 UG and 12 PG Programmes. The Department of Civil Engineering has been in the forefront in giving quality engineers to the society. The Program is affiliated to VTU and Recognized by AICTE. The Civil Engineering Department programs are accredited by NAAC and NBA.

Who can attend:

- Students at all levels (Ph.D/M.Tech/MSc/B.E./B.Tech)
- Faculty members from academic institutions.
- Engineers and researchers from Industry organizations including R&D laboratories

Registration Fee: NIL

Important Note:

1. Preferences will be given to IEEE GRSS, and IEEE members.
2. E-certificate will be issued to those participants whose attendance is minimum 80%

Link for Registration:

<https://forms.gle/cAyGz5t1iCLUZ9ybA>



Important dates:

- Last date for registration: **Aug 06, 2023**
- Notification of selected participants: Aug 07, 2023
- Pre-summer school meeting with selected participants: Aug 07, 2023 at 5:30pm IST

Course Coordinators:



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