Leadership & Excellence

Sri Eshwar College of Engineering

An Autonomous Institution

Affiliated to Anna University, Chennai

NAAC NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

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WORKSHOP ON

REMOTE SENSING IMAGE ANALYSIS

Department of Electronics and Communication Engineering

20 March 2023 to 25 March 2023

Supported & Sponsored by

भारतीय प्रौद्योगिकी संस्थान तिरुपति
IIT TIRUPATI

DST@ 1971-2021 विज्ञान एवं प्रौद्योगिकी विभाग DEPARTMENT OF SCIENCE & TECHNOLOGY

IIT Tirupati Navavishkār I-Hub Foundation

Venue:
Sri Eshwar College of Engineering, Coimbatore, Tamil Nadu.

About the workshop

Satellite Image Processing is a prominent field of research and development which has become a keen interest of researchers in past few decades. There are various applications where satellite imaging is the only tool to produce the effective results, e.g., mapping of land cover, deforestation maps, growth of urban area, flood mapping etc. Since a large geographical area can be monitored with the help of satellite imaging. India has a vast history of satellite missions which were successfully operated in past and continued with a greater number of satellites every year. This shows the strength of our country in satellite missions and thus satellite imaging system which is as rich as of any other country. Accordingly, a variety of satellite data is now available in our country for research purpose. The digital image processing and analysis techniques applied to the satellite images produce very useful information which can be utilized for various land cover applications.

Hyperspectral remote sensing is one of the newly developed space technologies used for identification of the different earth resources using its spectral signatures mainly in the visible and infrared portion of the electromagnetic spectrum. This technique is being used in the developed countries using the aerial vehicle but after the launch of the first hyperspectral sensor “Hyperion” which is onboard on EO-1 spacecraft by NASA (National Aeronautics and Space Administration). This technology and data so generated are being used worldwide for different purposes. After the huge success of the Hyperion mission, this technology was also implemented in the other planetary mission such as Moon, Mars and Saturn by ISRO (Indian Space Research Organization), NASA (National Aeronautics and Space Administration) and ESA (European Space Agency). The application of hyperspectral sensor in the other planetary bodies increased the demand of the competent human resources for processing huge data sent by the sensors. Currently, in India, we have limited numbers of competency to make use of the data from this technique. So there is a need to encourage young researchers and academicians to get acquainted with the technology for better utilization of such hyperspectral remote sensing data available in India and abroad.

This workshop aims to provide a hands-on training to the scientist/researcher/academicians in utilizing the potential of hyperspectral data as a tool to aid detailed mapping for different mineral deposits. The participants of workshop will learn not only the cutting-edge technology but also its processing steps and the exposure with the hardware and software being deployed in the specialization of hyperspectral remote sensing. This technical workshop will enable the scientist/researcher/academicians and private companies to improve the mineral search techniques.

Objectives of the workshop

- To provide exposure of satellite image processing and analysis to naive users
- To teach the satellite imaging tools to beginners.
- To provide a hands-on experience of satellite image processing and analysis tools
- To discuss research ideas and topics in satellite image processing applications.
- To discuss more about the hyperspectral images like Hyperion/PRISMA hyperspectral analysis.
- To understand the Hyperspectral image classification techniques.
- To build capacity and confidence amongst the participants in terms of hyperspectral data handling, image processing and interpretation and uses of the data.

Expected Participants

- Ph.D & M.S Scholars
- UG & PG Students (Science & Technology)
- Faculty Members from Academic Institutions
- Engineers and Researchers from Industry

Registration Link

https://iittnif.com/initiatives/skill-development

Important Dates

Last Date of Registration: March 05th 2023.

Registration Fees

UG & PG Students - Rs. 2000/-

Research Scholars - Rs. 3000/-

Faculty Members from Academic Institutions - Rs. 4000/-

Engineers and Researchers from Industry - Rs. 5000/-

Organizing Committee

Chief Patron - Dr. Sudha Mohanram, Principal

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About Sri Eshwar College of Engineering

The Eshwar trust was founded with a mission to redefine the system of education; it is a professionally managed, multidisciplinary and multi-faceted oasis. Recognizing the need for high quality education in the field of engineering and technology, Sri Eshwar College of Engineering was established in the year 2008. With the view to provide holistic approach to education, the institution endeavours with a single minded focus to impart quality education. Sri Eshwar College of Engineering is an Autonomous Institution, Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai. Sri Eshwar is located in a tranquil and conducive ambience creating an ideal learning environment to stimulate intellectual and personal growth. It is housed near Kinathukadavu at a distance of 25km from Coimbatore Railway station. Sri Eshwar is committed to attain rigorous academic study and the excitement of discovery with the support and intellectual stimulation. Sri Eshwar stands for spiritual and material elements in life, thirst for knowledge and virtue. Sri Eshwar has an enduring commitment to develop and maintain its courses on par with outstanding premier institutions.

About IIT Tirupati Navavishkar I-Hub Foundation (IITTNiF)

IIT Tirupati Navavishkar I-Hub Foundation (IITTNiF) is set up to host the Technology Innovation Hub (TIH) in Positioning and Precision Technologies (PPT). The project is funded by the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS), Department of Science and Technology (DST), India.

IIT Tirupati Navavishkar I-Hub Foundation (IITTNiF), a not-for-profit Section-8 company, is set up to host the TIH in Positioning and Precision Technology (PPT) with a funding of INR 100 crores over five years.