

### Date: 4<sup>th</sup> September 2023,

**DETAILS:** IEEE-GRSS Student Chapter of Thakur College of Engineering and Technology organized a webinar on Introduction to Remote Sensing and Data Science on 1<sup>st</sup> of September, 2023. The main aim was to make students aware about the implementation and future scope of Remote Sensing and Data Science in Today's World

PARTICIPANTS: Second , Third and Final Year students of the college

### **OBJECTIVES:**

- Learn about Remote Sensing and Data Science
- To make students understand its implementation and future scope

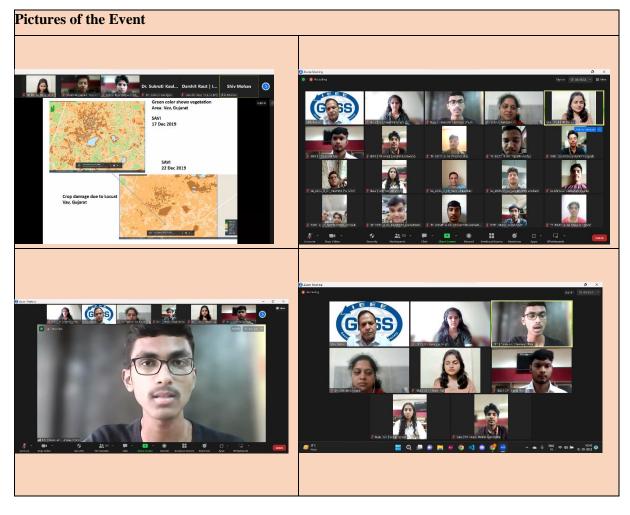
### FACULTIES INVOLVED:

Dr. Sukruti Kaulgud - Chapter Advisor IEEE-GRSS, TCET.

### **EVENT DETAILS:**

On September 1st, 2023, the IEEE Geoscience and Remote Sensing Society (GRSS) TCET Student Chapter organized an enlightening webinar titled "Introduction to Remote Sensing and Data Science." The event, held at 3:30 p.m., brought together a diverse group of students interested in the field of remote sensing and data science. The webinar commenced with Mr. Vivek Prajapati, Secretary of IEEE GRSS TCET, extending a warm welcome to all participants and introducing the esteemed guest speaker, Dr. Shiv Mohan, a renowned expert in Microwave Remote Sensing and He played pivotal roles in India's Chandrayaan 1 and Chandrayaan 2 missions, served in numerous ISRO technical committees, and received the Indian National Remote Sensing Award in 1995. Dr. Shiv Mohan commenced his presentation by providing an insightful overview of IEEE GRSS, emphasizing its role in understanding Earth's ecosystems, monitoring environments, oceans, ice caps, and assessing potential risks. He highlighted the presence of nine chapters across India and the chapter's support for students participating in IGARSS. Dr. Mohan discussed remote sensing's essence, applications in inaccessible terrains, and the electromagnetic spectrum. He explained data acquisition techniques, categorized remote sensing into types (e.g., black and white, color, multispectral, hyperspectral), and highlighted its diverse benefits, including vegetation analysis, drought detection, disaster management, and microwave remote sensing's significance in cloudy or rainy weather, for detecting moisture zones and monitoring irrigation. Dr. Mohan explained how constructive and destructive interference aids in obtaining digital elevation models (DEMs) of the Earth's surface. Dr. Mohan categorized remote sensing into thermal, optical, and microwave types, then highlighted GIS's role in managing data with temporal, spatial, and geospatial dimensions. He also drew parallels between data science and remote sensing, stressing the importance of digital image processing in data analysis. He cited historical examples and stressed the critical necessity of Geographic Information Systems (GIS) in the modern world. A lively question and answer session allowed participants to engage with Dr. Shiv Mohan, seeking clarifications and further insights into the topics discussed. The webinar concluded with closing remarks from Mr. Tanmay Dhuri, the Treasurer of IEEE TCET GRSS, who expressed gratitude to Dr. Shiv Mohan for sharing his expertise and knowledge. The event was an informative and enriching experience, enhancing attendees' understanding of remote sensing, data science, and their real-world applications.

## IEEE-TCET Student Branch EEE TCET Student Branch code : 41490581 www.ieee-tcet.net

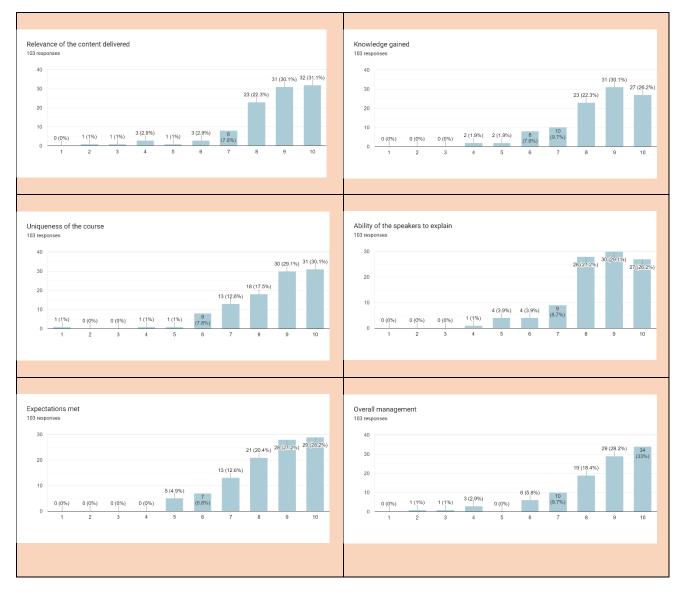


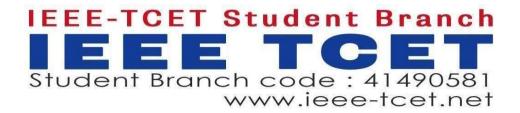
### PARTICIPATION ANALYSIS:

Class	Number of Students	
SE E&TC A	21	
SE E&TC B	25	
TE E&TC A	26	
TE E&TC B	14	
BE E&TC A	3	
BE E&TC B	2	
Others	13	
Total	104	

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### **STUDENT FEEDBACK :**





### SWOT ANALYSIS:

SR NO	STRENGTH	WEAKNESS	OPPORTUNITY	THREAT
1.	High amount of	Technical issues may	Provided valuable	There is potential
	participation	delay the flow of the	knowledge and skills to	competition from
	observed.		participants interested	
			in the intersection of	_
			remote sensing and	
				which could draw
				away potential
				participants
2.	Students were	The webinar was	Allows access to	The short video could
	delighted with the	organized in short	resources and	not be played due to
	content and the	duration; hence the	information for	technical issue
	resources provided by	speaker got insufficient	potential career	
	the speaker were	time to deliver the	opportunities in the	
	extremely helpful.	session.	field	

Mr. Vivek Prajapati Secretary IEEE-GRSS, TCET 2023-24 Mr. Suraj Maji Chairperson, IEEE-GRSS, TCET 2023-24 Dr. Sukruti Kaulgud Chapter Advisor, IEEE-GRSS, TCET

Dr. Lochan Jolly Branch Counsellor IEEE-TCET