

Department: ECE | Date: 27<sup>th</sup> January, 2020 to 07<sup>th</sup> February, 2019

## **IIRS Outreach Programme**

**on**

### **“Geoprocessing and Visualization in Web Platforms”**

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Indian Institute of Remote Sensing, Dehradun**

The Department of Electronics and Communication Engineering, Sree Vidyanikethan Engineering College organized an outreach programme in association with Indian Institute of Remote Sensing for faculty of Sree Vidyanikethan Engineering College during 27-01-2020 to 07-02-2020.

Large amount of satellite imagery and geospatial data is collected from different sources that are available at free of cost. Satellite imagery is combined with the power of Geographic information System which can be a great tool for supporting environmental management, disasters, global climate change, natural resources, wildlife, land cover and many other applications. Processing this vast amount of data in time and space efficiently and deriving useful information and knowledge from data is one of the most challenging aspects of geospatial technology.

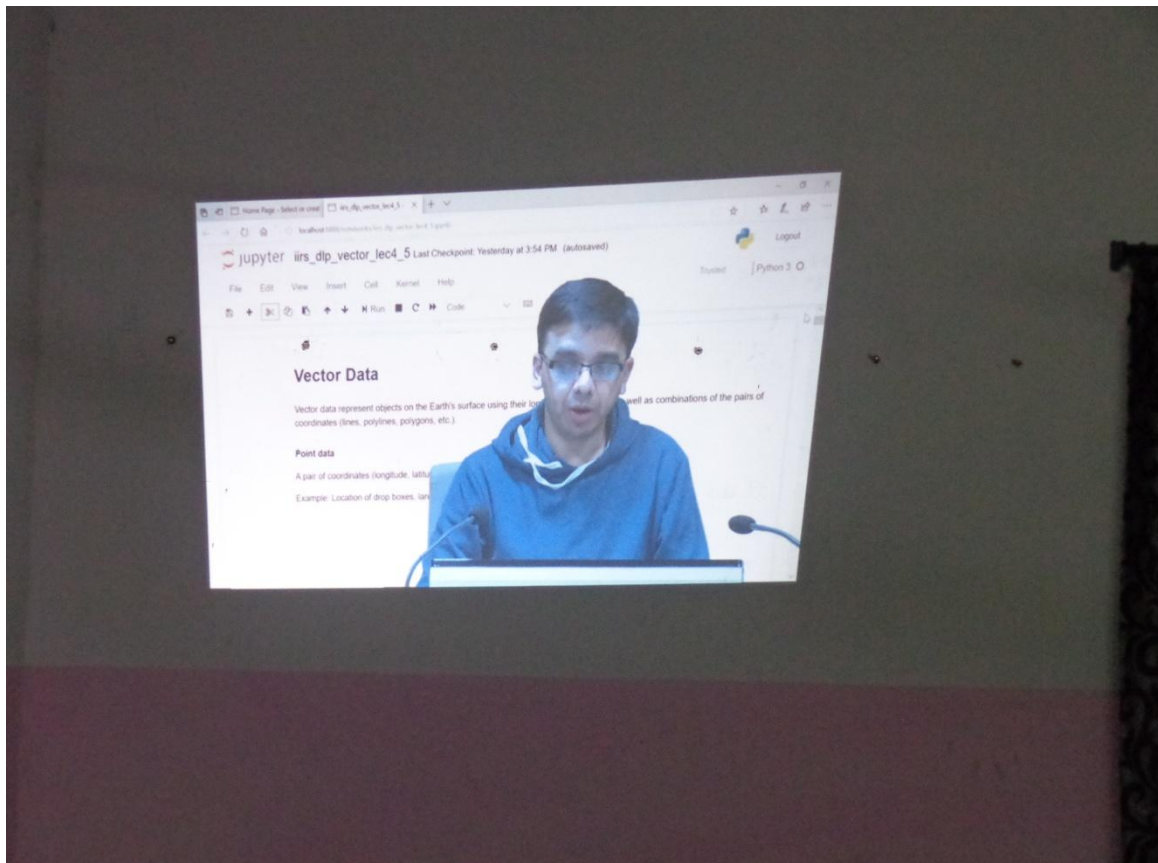
The following topics are discussed in this outreach programme:

Overview of GIS and different geospatial data types

- Overview to Python programming using
- Introduction anaconda and Jupyter notebook
- Raster data processing, resampling and analysis
- Vector data processing and analysis
- Geo spatial data visualization on web
- Familiarization to various open source geospatial data processing libraries e.g., GDAL, Geopandas etc.

Finally, a group discussion was conducted among all online users and expert panel. This program has enabled interaction among professionals from Central / State Govt. / Private Organizations / NGO engaged in geospatial data collection and analysis based regional and national projects; students and researchers aligned to research in participatory Geographic Information System (GIS). It has also enabled faculty members and students to further promote their research using python and the open source libraries.

The resource persons were experienced Scientists from Indian Institute of Remote Sensing, Dehradun. A total of 06 members from different departments participated in this programme. Dr. V. V. Satyanarayana Tallapragada, Associate Professor organized this event under the guidance of Dr. P. V. Ramana, Professor and Head, Department of Electronics and Communication Engineering.



Mentors from IIRS Dehradun delivering online lecture.