SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, Tirupati - 517102

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

93rd IIRS Outreach Programme
on
"Geoinformatics For Biodiversity Conservation Planning"

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The Department of Electronics and Communication Engineering of Sree Vidyanikethan Engineering College (A Nodal Centre) has coordinated an outreach programme conducted by Indian Institute of Remote Sensing, Dehradun during 06.12.2021 to 17.12.2021 on "Geoinformatics for Biodiversity Conservation Planning". The target audience are the faculty and students of various disciplines of Sree Vidyanikethan Educational Trust, Tirupati.

Geoinformatics have pronounced role on assessing spatial biodiversity information for conservation assessment and planning. With advent of advanced remote sensing sensors and machine learning tools, it enabled a better understanding of the ecological systems for decision making. Remote sensing applications has been widely used as a source of environmental information for monitoring biodiversity elements. The temporal dimension of remote sensing is a valuable attribute for studies of biodiversity and habitats at landscape to global scales, providing a means to study the impacts of environmental change. Advance machine learning tools are efficient in analysing large volume of data for accurately mapping the biodiversity patterns and monitoring the changes. There has been considerable development in cloud computing with regard to handling large data set on free web platforms for visualization and geospatial analysis With the development of new active and passive sensors with improved spatial, spectral, radiometric, and temporal resolutions. Earth observation data along with better data integration approaches can contribute immensely to biodiversity change research.

Following topics will be covered in this course

- Applications of GIS in biodiversity c onservation planning
- Fine scale mapping of vegetation using machine learning
- 3D characterisation of forest biodiversity
- Functional biodiversity assessment using geoinformatics
- Wildlife habitat suitability assessment using geoinformatics
- Cloud computing for forest monitoring
- Biodiversity informatics and wildlife telemetry

Finally, the workshop ended with panel discussion with all the participants. Two participants have attended this programme.
Dr. V. V. Satyanarayana Tallapragada, Associate Professor, Department of ECE has coordinated this event under the guidance of Dr. N. Gireesh, Professor and Head, Department of Electronics and Communication Engineering.