



Department of Computer Science & Engineering
Tezpur University

Remotely Sensed Image Processing Laboratory

This lab was established in 2016. The focus of this lab is to develop robust machine learning models for effective analysis of multispectral, hyperspectral and Polarimetric SAR images. This lab runs under the supervision of Dr. S. Patra.

(a) Equipment(s)

Sl. No.	Equipment (with specification) and Year of Purchase	Quantity
1	PCs - Lenovo-V530S-071CB	4
2	PCs - HP Pro Desk 600 G2 MT	2
3	PCs - HP OptiPlex 5080	2
4	Workstations - HP Z440	1
5	Workstations - Lenovo-ThinkStation	2
6	Printer - HP Laserjet Pro 400 M401DN	1
7	Printer - Brother-HL-L5100DN	1

(b) Types of Practical(s) Conducted

Sl. No.	Experiments Conducted/Performed
1	Development of band selection models for hyperspectral image classification
2	Development of an active learning model for classification of remote sensing images using limited available labeled samples.
3	Development of semi-supervised model for classification of remote sensing images using limited available labeled samples.
4	Development of robust model for incorporating better spatial information for classification of remote sensing images
5	Exploitation of different classifiers for designing robust classification models



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(c) Open-source tools/software used:

Name of tool/software	Utility
PolSARPro	Polarimetric SAR data processing
SNAP	Polarimetric SAR data processing
Jupyter Notebook	Deep Learning

(d) Licensed tools/software used:

Name of tool/software	Utility	License validity
MATLAB, ENVI, ecognition	For remotely sensed data processing and image processing	Lifetime

(e) People working in the Laboratory:

Research scholars and project students are working in the lab.