

ACADEMIC AND RESEARCH PROFILE

SREEDARH T M -Location (Kanhangad, Kerala, India)
Remote sensing | Satellite Image Processing
PhD Aspirant in GIS & RS



B.Sc. Geography
Kannur University



M.Sc. Geography
Mangalore University

- Academic Project -Coastal Vulnerability Assessment of Kasaragod and Kannur: Using Geospatial Techniques



M.Tech. Geoinformatics
Bharathidasan University

- Academic Project - Landslide susceptibility modeling using bivariate analysis and machine learning techniques in Kodaikanal and its environ: a multi-parameter GIS approach (M. Tech – Mini Project)

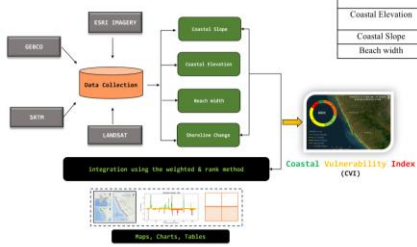
6 Months project/internship
NRSC ISRO

- Burned Area Extraction Using AI and ML (Deep Learning) (M. Tech -Major Project)



M.Sc. Project - Coastal Vulnerability Assessment of Kasaragod and Kannur: Using Geospatial Techniques

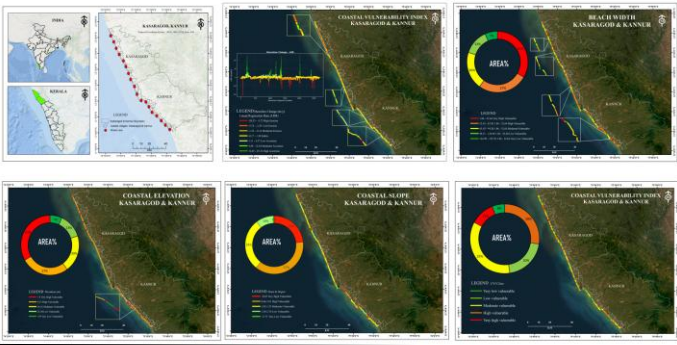
Adopted Methodology



| VARIABLES | SENSOR/SATELLITE | TIME PERIOD | SOURCE |
|-------------------|---------------------|------------------------|---------------------|
| Shoreline Change | TM, ETM+, OLI, TIRS | 1990, 2000, 2013, 2023 | USGS Earth Explorer |
| Coastal Elevation | SRTM | 2000 | USGS Earth Explorer |
| Coastal Slope | DEM | 2000 | GEBCO |
| Beach width | ERSI Imagery | 2000 | Am GIS |



"LRR, linear regression rate, which is most commonly used analysis long term shoreline change"

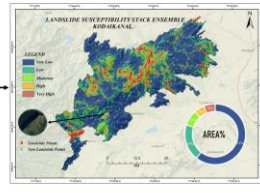
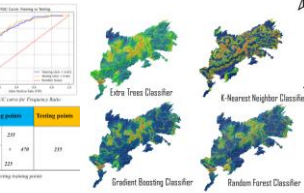
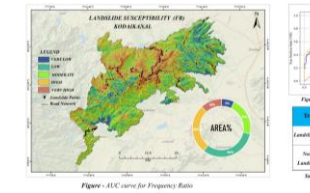
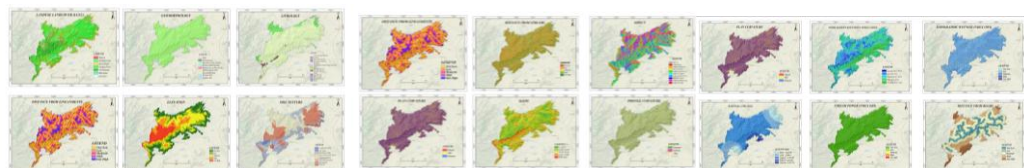
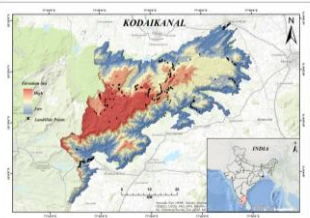
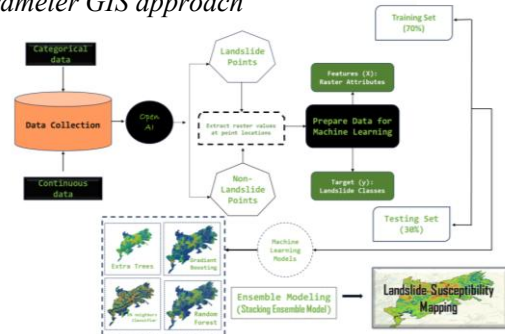


M. Tech – Mini Project - Landslide susceptibility modeling using bivariate analysis and machine learning techniques in Kodaikanal and its environ: a multi-parameter GIS approach

Adopted Methodology

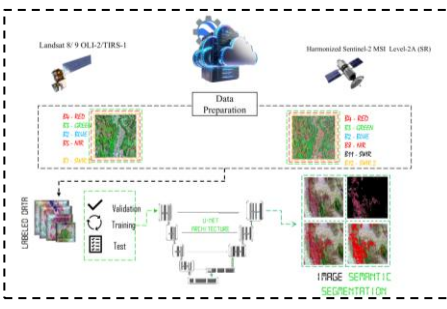
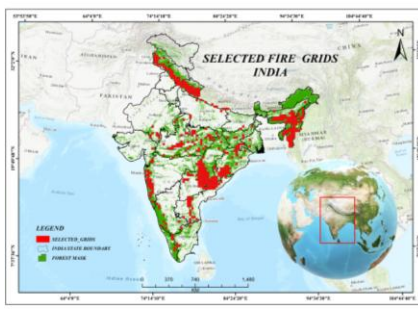


Software and tools used



| Susceptibility Zone | No. Of Training Landslide | Percentage Of Training Landslide | Area Percentage |
|---------------------|---------------------------|----------------------------------|-----------------|
| Very Low | 0 | 0.00 | 1.44 |
| Low | 4 | 1.76 | 21.25 |
| Medium | 16 | 6.92 | 34.51 |
| High | 24 | 10.40 | 27.05 |
| Very High | 56 | 24.92 | 15.36 |

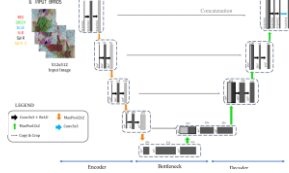
M. Tech – Major Project - BURNED AREA EXTRACTION USING AI AND ML (deep learning)



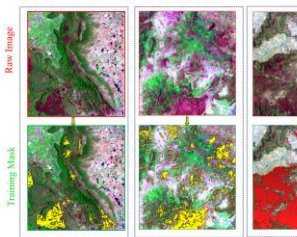
Software and tools used



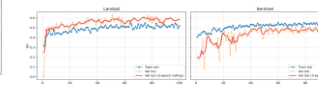
J NET ARCHITECTURE



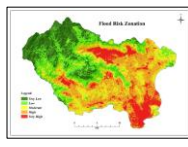
TRAINING MASKS (LABELED DATA)



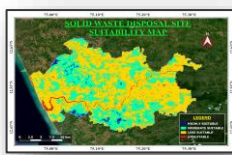
MODEL PERFORMANCE EVALUATION: LANDSAT VS. SENTINEL



Additional Works



Book Chapter Co-Author
Flood analysis of the Manjalar Watershed



Solid waste site suitability in
Kasaragod

Professional Activities & Achievements

- Invited as a Resource Person at Kannur University, Department of Geography
- Presented papers at Two International Conferences
- Attended Two Academic Workshops