Abhishek Rawat









Work Experience

IFFCO-Tokio GIC PVT. LTD. — Senior Executive

Nov 2023 - Aug 2025

- Led GIS and remote sensing workflows for state-level crop insurance operations under PMFBY and RWBCIS.
- Generated and interpreted satellite-based crop condition layers (SAR, multi-spectral) to map crop stress and loss patterns.
- Evaluated results of state crop yield using Semi-physical models and machine learning models. Also, built weather-based risk assessments to support RWBCIS decision-making in Karnataka.
- Participated in YES-TECH reviews and government workshops.

FOSSEE GIS Summer Fellow-IIT Bombay — Intern

Oct. 2023 - Mar 2024

- Contributed to open GIS learning resources, developed image super-resolution project using Google Earth Engine, Python and Keras for Deep Learning.

EDUCATION

M.Sc. Geo-informatics at University of Twente, EU 2021 - 2023 (CGPA: 7.63/10.0)2017 - 2021 Bachelors in Urban and Regional Planning at Amity University, IN (CGPA: 8.76/10.0)

Projects

EO-Web - Satellite Imagery Retrieval Platform

Link to Demo

Web tool to search, preview, and download open satellite imagery (via STAC) without writing code, for analysis and decision-making.

AutoClassify – Google Earth Engine App

Link to Demo

Interactive Google Earth Engine app that lets users generate quick land-use / land-cover classifications directly in the browser.

Built-up Fractional Mapping with Deep Learning (M.Sc. Thesis)

Trained U-Net / ResU-Net / Attention U-Net on multispectral imagery to estimate fractional built-up area and benchmarked against GHSL; achieved 0.83 overall accuracy using IoU and standard RS metrics.

Urban Heat Island & Energy – Kolkata Metropolitan Area (2022)

Mapped land use/land surface temperature in Google Earth Engine, linked LST patterns with annual energy consumption, and identified priority wards for heat mitigation and energy planning.

SKILLS

Programming Python, JavaScript

ΑI LLMs, Machine Learning, Deep Learning, GeoAI

Software's Visual Studio, ArcGIS, QGIS, ERDAS, Google Earth Engine

Data Visualization Power-BI, Matplotlib, Folium

Soft Skills Problem Solving, Critical and Analytical Thinking

Honors and Awards

2023 - 2nd Place (Student Category) - GISCI Map Contest (Columbia)

2023 - Winner - IIT Bombay FOSSEE Mapathon

Last updated: October 29, 2025