



Dhirubhai Ambani
Institute of Information and Communication Technology

JATIN SATANI

M.Sc. Agriculture Analytics

EDUCATION

Dhirubhai Ambani Institute of Information and Communication Technology (M.Sc | AA)

CPI: 7.47

📅 July 2023 – Present 📍 Gandhinagar, Gujarat

Junagadh Agricultural University (B.tech)

CPI: 7.576

📅 2019 – 2023 📍 Junagadh, Gujarat

P. P. Savani Vidyabhavan (GHSEB)

Percentage: 78 %

📅 2018 – 2019 📍 Surat, Gujarat

P. P. Savani Vidyabhavan (GSEB)

Percentage: 85 %

📅 2016 – 2017 📍 Surat, Gujarat

SKILLS

Area(s) of Interest : Remote Sensing and GIS, Data Analysis, Statistical Analysis, Geo-spatial Analysis, Machine Learning, Data Visualization

Programming Languages : Python, SQL, R

Tools and Technologies : ArcGIS, QGIS, ERDAS IMAGINE, Envi, Google Earth Engine, PostgreSQL, Power BI, SciKit-Learn, TensorFlow

EXPERIENCE

SatLeo Labs :

📅 May 2024 - June 2024 📍 Ahmedabad, Gujarat

• At SatLeo Labs, I worked on a project titled "Impact of Spatial Resolution of Temperature Data on Yield Estimation" using Google Earth Engine and QGIS. Throughout this project, I learned how to manage a project from its problem definition phase through to completion.

PROJECTS

Agriculture Drought Analysis Using Time Series Satellite Data Using Python:

📅 October 2023 - December 2023

- This project aims to analyze agricultural drought in the Kachchh District of Gujarat using Python, ArcGIS, and QGIS. It involves analyzing time series satellite data to enhance skills in remote sensing analysis and data processing. By extracting vegetation, temperature, precipitation indices, and the Drought Severity Index, consistent severe drought areas have been identified.

- **Guide:** Dr. Ranendu Ghosh (DA-IICT)

Soil Moisture Prediction:

📅 February 2024

- Executed a soil moisture prediction project utilizing **Machine learning** techniques, tackling a regression problem. Leveraged advanced algorithms to forecast soil moisture levels, facilitating informed decision-making in agriculture and environmental management.

- **Guide:** Dr. Kamal Panday (IIRS-ISRO)

NPK Detection and Inventory Management:

📅 March 2021 - April 2021

- Developed a **Python** project for nutrient detection in agricultural fields, providing insights into the optimal requirements for three key nutrients. Incorporated inventory management functionality to streamline fertilizer sales operations, enhancing efficiency and profitability in the agricultural sector.

- **Guide:** Dr. Amit Mankodi (DA-IICT)

POSITIONS OF RESPONSIBILITY

National Service Scheme (NSS)

📅 February 2020

📍 Junagadh, Gujarat

• During NSS, I actively participated in initiatives such as cleanliness drives, awareness campaigns and educational programs as well as organizing a health camp in a rural village.

ACHIEVEMENTS

- Received certificate for Spatial Analysis with ArcGIS Pro by **ESRI, India**
- Received certificate for Application of Advanced Geospatial Technologies in Agriculture with special reference to Crop Yield Modelling and Agromet Parameter Retrieval by **Amnex**
- Received certificate for Microwave Data Processing and Applications by **Space Application Centre, ISRO**
- Received certificate for Application of Geoinformatics in Ecological Studies by **IIRS, ISRO**
- Received certificate for Advance Excel, Power BI and Tableau by **The Pioneer Tech**