Dhirubhai Ambani
Institute of Information and Communication Technology

# SMIT GONDALIYA

**M.Sc. Agriculture Analytics**

## EDUCATION

### Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT)

**CPI: 7.98** **M.Sc. | AA**

July 2023 – Present Gandhinagar, Gujarat

### Junagadh Agricultural University (JAU)

**CPI: 7.51** **B.Tech | Agricultural Engineering**

2019 – 2023 Junagadh, Gujarat

### Class 12th School (GHSEB)

**Percentage: 70% %**

2018 – 2019 Dhoraji, Gujarat

### Class 10th School (GSEB)

**Percentage:85.33%**

2016 – 2017 Dhoraji, Gujarat

## SKILLS

**Area(s) of Interest :** Machine Learning, Data Analysis, Remote Sensing and GIS, Statistical Analysis, Data Modelling, Data Visualization

**Programming Languages :** Python, SQL

**Tools and Technologies :** ArcGIS, QGIS, ERDAS IMAGINE, ENVI, SNAP, PostgreSQL, Tableau, Power BI, SciKit-Learn

## EXPERIENCE

### Bhaskaracharya National Institute for Space Applications and Geo-informatics

June 2024- July 2024

• During a two-month internship at Bhaskaracharya National Institute for Space Applications and Geoinformatics, I focused on crop classification and identification of crop stages using Python. I also participated in building height detection using Python. By collaborating with a team to process satellite imagery, I contributed to enhancing precision agriculture practices. .

• **Guide:** Dr.Vijay Singh

## PROJECTS

### Crop Discrimination using Machine Learning and Google Engine (ML Algorithm, GEE, Streamlit):

April 2024

•In this project, We developed a robust framework for crop discrimination using machine learning techniques and Google Earth Engine, optimizing spectral-based classification methods and validating results through ground truth data to ensure reliability and accuracy.

• **Guide:** Dr. Kamal Pandey and Dr. Abhishek Danodiya(IIRS-ISRO)

### Agriculture Drought Analysis Using Time Series Satellite Data Using Python:

November 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)

### Data Visualization Tool Using Python and PostgreSQL:

November 2023

I've developed a web tool for analyzing crop production statistics across various states, crops, and years using Python . Users can select specific parameters like year, states, districts, seasons, and crops to retrieve data on crop area, production and crop yield. They have the flexibility to download the data in CSV and PDF formats for further analysis.

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

## INTERESTS

- Playing kabaddi
- Playing Cricket • Trekking

## ACHIEVEMENTS

- Received certificate for "Crop Yield Monitoring using Geospatial Data" by Amnex.
- Received certificate for "ArcGIS Pro:Essential Workflows" by ESRI.
- Received certificate for "Microwave Data Processing and Applications" by SAC, ISRO.
- Received certificate for "Advanced Excel, Power BI and Tableau" by Pioneer Tech.
- Received certificate for "National Tech Fest on Food Processing Technology" by College of Food Processing Technology and Bio Energy, Anand Agriculture University, Anand.