



PIYUSHKUMAR PANDYA

M.Sc, Agriculture Analytics

EDUCATION

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

CPI:6.53

📅 July 2023 – Present 📍 Gandhinagar, Gujarat

B.Sc(hons) Agriculture, Anand Agriculture University (AAU)

CPI:6.96

📅 July 2015 – May 2019 📍 Anand, Gujarat

Class 12th School (GHSEB)

Percentage: 70%

📅 2013 – 2015 📍 Gandhinagar, Gujarat

Class 10th School (GSEB)

Percentage: 84.5%

📅 2012 – 2013 📍 Gandhinagar, Gujarat

SKILLS

Area(s) of Interest : Remote Sensing, Machine Learning, Geospatial Analysis, Database Management, Bigdata analytics

Programming Languages : Python, SQL, R, NoSQL etc.

Tools and Technologies : Q-GIS, ArcGIS, R studio, Tableau, Power BI, PostgreSQL, Google Earth Engine, MongoDB

EXPERIENCE

GSFC Agrotech Limited:

Sales Intern

📅 Novembber 2018 - December 2018

- Assisted over 100 farmers in reducing input costs by providing suggestions on government subsidies.
- Increased sales by 30 Percent by recommending 12+ products of GSFC.
- Guide: Ms. T.S.Darji

Agrostar:

Agriculture Advisor

📅 May 2019 - Aug 2021

- Worked in sales and advisory department, where i provided **agronomical and agrochemical advisory** to farmers including sales of various related products.
- Completed **100 Percent target for 6+ months** by recommending various products of Agrostar

Future Agriculture Leaders of India :

Agriculture Educator

📅 Sept 2021 - May 2023

- Successfully managed 3 schools in Banaskantha district, Gujarat where I provided theoretical and practical knowledge of agriculture to students
- It also included managing green house in every school and organizing various field and industrial visits.

PROJECTS

Crop yield prediction of Cumin in Gujarat using Machine learning:

📅 Feb 2024 - March 2024

- Study used MODIS satellite data and ERA5 dataset for ML models (DNN, RandomForest, Linear,Polynomial,Ridge, Lasso and Elasticnet regression) to predict yield. Datasets were collected, preprocessed and trained with vegetation indices and weather variables. Model performance evaluated with MSE, RMSE, R-squared.
- Guide: Prof. Kamal Pandey

Land Cover Change Detection (Deforestation):

📅 Oct 2023 - Dec 2023

- Implemented deforestation visualization project in **Arunachal Pradesh** using Landsat satellite imagery (2000, 2010, 2022) and Machine learning Algorithms. Proficiently utilized **Erdas, ArcGIS, and QGIS** to analyze and visualize land cover changes(Deforestation).

- **Guide:** Dr. Ranendu Ghosh

Crop recommendation and cost prediction system:

📅 Nov 2023 - April 2023

- Developed a **Python** project for recommending crop based on Soil type and various weather parameters of that region. it also included providing insights into the optimal requirements of various input and operational costs.

- **Guide:** Dr. Amit Mankodi

Yield prediction of Maize and Wheat in Himachal Pradesh using machine learning

📅 Nov 2023 - April 2023

- Study used **MODIS** satellite data and **ERA5** dataset for ML models (**RandomForest, support vector regressor,multiple linear regression , Xtreme Gradient boost(XGB)**) to predict yield. Datasets were collected, preprocessed and trained with several vegetation indices and weather variables. Model performance evaluated with **RMSE,MSE, Goodness of Fit**.

- **Guide:** Dr. N.R. Patel, Head, ASD, IIRS(ISRO)

INTERESTS

- Writing
- Travelling
- Music

POSITIONS OF RESPONSIBILITY

Focus Group Moderator

Successfully supervised 80 students and effectively organized and conducted over 15 farmer's meetings with agriculture officers and district higher officials.

📅 Sept 2021 – May 2023

Member: Mess Committee, BACA

- **Successfully created a balanced menu for over 150 students by incorporating biweekly feedback, providing daily support and additionally we managed to reduce food wastage by 10 percentage**

📅 July 2017 – May 2019

ACHIEVEMENTS

- Certificate of Completion: **Spatial Analysis with ArcGIS Pro by ESRI, India.**
- Certificate of Completion: **Application of advanced Geospatial Technologies in agriculture with special reference to Crop Yield Modelling and Agromet Parameter Retrieval by Amnex.**
- Certificate of Completion: **Microwave Data Processing and Applications by Space Application Centre, ISRO**
- Certificate of Completion:**Advance Excel, Power BI and Tableau by The Pioneer Tech.**