

Experience

Research Intern	Bhaskaracharya Institute of Space-Applications and Geoinformatics(BISAG-N),Gandhinagar	May 2024 - Aug 2024
<ul style="list-style-type: none">Developed and implemented AI-powered precision support systems for Agriculture, Forestry, and Fire Management.Technologies Used: Python, TensorFlow, Keras, Roboflow, QGIS, Google Earth Engine.Improved data accuracy by 40% and reduced analysis time by 30%.Built and fine-tuned Deep Learning models (Unet, DeepLabV3, Detectron2, YOLOv8/v9) for object detection, classification, segmentation, and measurement in Geospatial imagery.Orchestrated Python-based workflows for data preprocessing, model training, and evaluation, handling large-scale TIFF image datasets.Leveraged Roboflow for annotating datasets, SAM geospatial for predictive models, and QGIS and Google Earth Engine for geospatial analysis.		

Technological Skills

PROGRAMMING LANGUAGE:	Java(DSA), Python(AI/ML)
Web Technologies:	HTML, CSS, Bootstrap, JavaScript
DevOps & Cloud Technologies:	AWS (EC2, S3, LAMBDA, CloudFormation), Docker(Basic)
MACHINE LEARNING:	TensorFlow, Keras, Scikit-learn, Numpy, Pandas
DATABASES:	MySQL, Hadoop Framework
DATA STRUCTURES:	Array, Linked-List, String, Tree, Graph, Trie, Disjoint-Set Forest, Stack, Queue, Map, Set
TOOLS & Concepts:	OOPs, Unit Testing(JUnit), RESTful API, Linux

Projects

BookWise : Comprehensive Library Management System (Github Link)	
Flask, Bootstrap, SQLite, Bcrypt, Google Books API	
<ul style="list-style-type: none">Developed a comprehensive Library Management System using Flask, Bootstrap, SQLite, and Google Authentication to streamline book inventory management, user interactions, and transaction processes..Streamlined book inventory management, user interactions, and transaction processes.Created RESTful APIs for updation of book details and user profile details.Implemented secure user authentication and authorization using Google Authentication and Bcrypt.Designed a user-friendly interface for seamless book searching, borrowing, returning, and browsing recommendations.Incorporated a robust notification system for due dates, new arrivals, and overdue books.Generated insightful reports on book usage, overdue items, and user activity.	
Leetcode Code Extractor: Web Scraping Tool (Github Link)	
<ul style="list-style-type: none">Engineered a web scraping tool using Selenium and BeautifulSoup to automate code extraction from LeetCode submissions.Automated the extraction of code from LeetCode submissions.Implemented login automation and HTML parsing to retrieve user solutions efficiently.Developed a file management system to store extracted code in appropriate file formats (.java, .cpp, .py).Improved efficiency in managing and reviewing coding solutions.	
AI QUIZ Backend: Microservice (Github Link)	
Python, Flask, Flask-JWT, Flask-SQLAlchemy, MySQL, Google Generative AI, Docker	
<ul style="list-style-type: none">Implemented JWT-based authentication for secure user access.Integrated Google Generative AI for dynamic quiz generation.Designed REST API endpoints for real-time scoring, quiz retries, and history retrieval.Deployed using Docker for scalable and efficient deployment.	

Education

Pandit Deendayal Energy University	Gandhinagar,Gujarat
B.Tech in Information and Communication Technology , CGPA:9.62	October 2021-May 2025

Achievements

- **Finalist** in **Odoo Combat 2024 Hackathon** (Top project among **600+** submissions) [Diet Recommendation System](#).
- Leetcode (Max. Rating 1613) Solved **250+** DSA problems, **Top 26.64%** globally.

Co-Curricular

Campus Placement Student Coordinator	April 2023-Present
CDC Cell, PDEU	