

DHRUMIL PRAJAPATI

6351655885 |prajapatidhrumil3103@gmail.com |<https://www.linkedin.com/in/dhrumil-prajapati003>
Targeting **AI/ML Engineer roles** with an organization of high reputation with a scope of improving knowledge and further career growth.

EDUCATION

Gujarat Technological University

Bachelor of Engineering in Computer Engineering

Aug 2021 – May 2025

EXPERIENCE

AI/ML Engineer | Clicode (Current) | Ahmedabad, India

Jan 2026 - Present

- Building production-grade Generative AI applications using LLMs, LangChain, LangGraph, RAG, Vector Databases, and APIs.
- Developing AI assistants, agentic workflows, document intelligence systems, and enterprise AI solutions.
- Working with FastAPI, Docker, databases, and cloud-based deployments for scalable AI applications.
- Integrating multiple LLM providers and optimizing retrieval pipelines for accuracy, latency, and cost.

AI/ML Developer | Tuvoc Technologies | Ahmedabad, India

July 2025 – Dec 2025

- Developed a complete Retrieval-Augmented Generation (RAG) pipeline using Whisper for transcription, text preprocessing, embedding generation, and vector database indexing.
- Enhanced search precision by benchmarking multiple embedding models (OpenAI, Instructor, MiniLM) and tuning vector DB parameters (top-k, distance metrics).

Research Internship | Space Application Centre, ISRO | Ahmedabad, India

Jan 2025 – May 2025

Mentor: Smt. Meenakshi Sarkar (HEAD – ODPD/ODPG/SIPA/SAC)

- Developed a deep learning pipeline utilizing a U-Net architecture with a ResNet-34 backbone for semantic segmentation tasks aimed at detecting land cover changes.
- The model was trained on the OSCD dataset and later adapted to custom-labeled Sentinel-2 Level-1C satellite imagery, focusing on the Ahmedabad region. Preprocessing involved handling RGB bands, converting data to GeoTIFF format, and normalizing inputs.
- Implemented inference procedures to generate change masks, facilitating the monitoring of environmental and Urban transformations over time.

Hackathons & other Experience:

- Secured Top 12 position in **NASA Space Apps 2023** (among 95 teams) and achieved **Top 10 finalist position nationally** at the **Cognavi Ascend Hackathon by IISc Bangalore**.
- Participated in the **IASC (International Astronomical Search Collaboration)** in partnership with NASA, contributing to a month-long **Asteroid Search Campaign** as a citizen scientist.
- Selected as a member of the prestigious **NASA Space Apps Collective Cohort 2024-2025**, a global initiative focused on leveraging NASA's Earth Science data to address global and local challenges. Collaborated with an international cohort of 30 members to shape programming, participate in workshops, contribute to community-focused solutions, and attend the **Collective Genius Summit**.

PROJECTS

RoofTop Solar Panel Detection using Deep Learning | Python, CNN, EDA

- Developed a deep learning model to detect rooftop solar panels from satellite imagery, contributing to sustainable energy initiatives and Utilized convolutional neural networks (CNNs) for image classification and segmentation tasks.

Medical Diagnosis RAG System | LangChain, Pinecone, FastAPI

- Developed an end-to-end modular Medical Diagnosis RAG system using LangChain, Pinecone, and FastAPI for efficient medical information retrieval and LLM-based reasoning.

TECHNICAL SKILLS

Programming: Python, C, SQL

Machine Learning: ML Algorithms, NumPy, Pandas, Matplotlib, Scikit-Learn, Computer Vision, NLP

Deep Learning & Gen AI: ANN, CNN, RNN & Variants, GANs, Transformers, LLMs, RAG, FineTuning, VectorDBs, Langchain, MCP

Tools & Frameworks: TensorFlow, Keras, Langchain, Langgraph, Hugging Face Transformers, MongoDB, MySQL, PostgreSQL, ChromaDB, FAISS, Pinecone, PyTorch, Streamlit, Gradio, FastAPI, Supabase

Core Competencies: Model Optimization, HyperparameterTuning, Version Control(Git), Problem Solving, Docker, Redis, AWS(basic)