

# MANAN PANCHAL

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## Professional Summary

Aspiring AI Engineer and SSIP Grant recipient specializing in Machine Learning, RAG systems, and full-stack AI development with a focus on healthcare and automation solutions.

## Experience

### Perplexity

Campus Ambassador

Remote

2024 – Present

- Lead community engagement and knowledge-sharing initiatives to promote AI-driven research tools on campus.
- Collaborate with student developers to integrate advanced search and LLM capabilities into academic workflows.

### Google Developer Groups (GDG) - CHARUSAT

Active Member & AI/ML Core

Changa, Gujarat

2024 – Present

- Organize technical events and workshops focused on Google Cloud Skills and Artificial Intelligence implementations.
- Contribute to open-source projects and mentor peers in modern machine learning pipelines.

## Education

### Charotar University of Science & Technology (CHARUSAT)

Bachelor of Technology in Artificial Intelligence and Machine Learning

Changa, Gujarat

2024 – 2028

## Technical Skills

**AI & ML:** PyTorch, TensorFlow, LLM Integration, RAG Systems, Fine-tuning, Prompt Engineering, Model Optimization, Computer Vision, YOLO, OpenCV, Image Classification, OCR.

**Languages & Frameworks:** Python, C, Java, SQL, R, Flask, Streamlit.

**Tools & Data:** Pandas, NumPy, PowerBI, Google Cloud, Git, Docker, Hugging Face, Single Board Computers (Jetson Nano).

## Projects

### Multimodal RAG System

Nov 2025 – Dec 2025

- Engineered a production-ready RAG system supporting text, images, code files, and documents using vector embeddings.
- Integrated advanced LLMs with semantic search for intelligent retrieval and scalable deployment.

### Complete Blood Count (CBC) Analysis using AI

Sep 2025 – Oct 2025

- Developed a machine learning model for automated disease prediction from blood count data with clinical-grade accuracy.
- Implemented end-to-end preprocessing, feature engineering, and evaluation metrics for medical diagnosis.

### Scanix AI & SmartShift

2024 – 2025

- Developed an advanced brain tumor detection web application (Scanix AI) using medical imaging.
- Designed an AI-based automation system for MSMEs (SmartShift), recognized with an SSIP Grant from CHARUSAT.

## Certifications

- Getting Started with AI on Jetson Nano - NVIDIA
- Data Science Specialization - Google / Coursera
- Foundation of Data Structure and Algorithm Analysis - Coursera
- Google Workspace (G Suite) Admin - Udemy
- Problem Solving (C, Java, and Algorithms) - HackerRank / NPTEL
- Ranked 1644 on Leetcode Competitive Programming