

SRI NEERAJ REDDY PALAKOLANU

+91 8341677532 srineerajreddyp@gmail.com [Sri Neeraj Reddy](#) [Sri Neeraj Reddy](#) [Portfolio](#)

EDUCATION

•Vellore Institute of Technology

Computer Science and Engineering, B.Tech.

– CGPA: 8.8:

Aug. 2022 – Jun 2026

Amaravati, India

•Narayana Junior College

Science MPC

– 92%:

Aug. 2020 – May 2022

Vijayawada, AP, India

PROJECTS

•PolicyMind AI – Enterprise Policy Assistant

Aug 2026

Python, RAG, ChromaDB, Gemini, Streamlit, Sentence Transformers

[Project Repository](#)

- Built a multi-document RAG system that processes company policy PDFs, performs semantic and keyword-based retrieval, and generates grounded answers using Google Gemini.
- Implemented persistent ChromaDB vector storage with document metadata, page-level source citations, and automated PDF indexing.
- Improved retrieval quality using hybrid search with BM25 and semantic retrieval, followed by cross-encoder reranking, relevance filtering, and deduplication.
- Developed a Streamlit interface with conversation memory and follow-up question rewriting for context-aware document querying.

•Efficient ANPR – Automatic Number Plate Recognition

Jan 2026

Python, YOLOv8n, DeepSORT, PaddleOCR, OpenCV, Ultralytics, Google-Colab, Kaggle

[Project Repository](#)

- Trained two YOLOv8n models on Indian traffic datasets one for vehicle detection(21000+ images) and one for number plate(2000 + images) Recognition.
- Built an end-to-end video inference pipeline passing vehicle bounding boxes into the plate model, then cropping plate regions for OCR using PaddleOCR.
- Integrated DeepSORT tracking to assign persistent IDs to vehicles, ensuring each vehicle undergoes OCR only once, improving pipeline efficiency, computation.

•Prompt-to-Image Generator

Aug 2024

Python, Django, APIs

[Project Repository](#)

- Developed a full-stack web application using Django to generate images from user prompts by integrating the Stability ai API.
- Utilized Django's backend to handle API key, send user prompts to the API endpoint, and process the JSON response.
- Designed and implemented a user-friendly interface to allow users to input prompts and view the generated images.
- Successfully parsed the API's JSON output to display the resulting image to the user, creating a seamless prompt-to-image experience.

•PingDrop - Android to Mac Connectivity Application(In Development)

Mar 2026

Swift (macOS), Kotlin (Android), Bluetooth LE, Wi-Fi TCP, AES-256-GCM Encryption.

- Built a cross-platform desktop-mobile bridge enabling secure, cloud-free communication between Android and macOS over Bluetooth LE and Wi-Fi, with automatic transport handover and persistent reconnection.
- Delivered bi-directional features including native macOS notification mirroring with per-app filtering, clipboard sync, bi-directional file transfer, and live Android battery status in the Mac menu bar.

SKILLS

• **Programming Language:** Python, Java, SQL

• **Frameworks:** Django

• **Databases:** MySQL

• **Tools:** Git, Visual Studio Code, Jupyter Notebook, Github, Google colab

• **Courses:** Machine Learning, Deep Learning, Data Structures, OOPS, Computer Networks, DBMS

POSITIONS OF RESPONSIBILITY

•**Documentation Team Lead**, LEO Club, VIT - AP

Nov 2024 - May 2025

•**Core Team Member**, Machine Learning Club, VIT - AP

Aug 2023 - Dec 2023

•**Event Management Team Member**, NGC Club, VIT - AP

Jan 2024 - May 2024

LICENCES & CERTIFICATIONS

•**AWS Certified Cloud Practitioner**, Amazon Web Services

2025

•**PCAP – Programming Essentials in Python**, Python Institute

2024