

TUNGANA VINOD KUMAR

Python Backend & GenAI Developer

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LinkedIn | GitHub | Live Portfolio

PROFESSIONAL SUMMARY

Computer Science and Engineering graduate specializing in AI & ML with hands-on experience in Python backend development, REST APIs, Django, FastAPI, Flask, SQL, and Generative AI. Experienced in RAG, LLMs, OCR, document processing, and machine learning. Built practical backend systems and AI-powered applications using Python and relational databases with a focus on writing clean, modular code.

TECHNICAL SKILLS

- Languages:** Python, SQL, Java | **Backend:** FastAPI, Django, Flask, REST APIs, Django ORM
- GenAI & AI/ML:** RAG, LLMs, Llama 3.1, Gemini, Vector Retrieval, Machine Learning, Scikit-learn
- Document AI:** OCR, Tesseract, OCRmyPDF, PDF Processing, Text Extraction | **Data:** Pandas, NumPy
- Web:** HTML, CSS, React | **Databases:** MySQL, SQLite
- Tools:** Git, GitHub, VS Code, Google Colab | **Core:** OOP, Version Control, Debugging

PROFESSIONAL EXPERIENCE

Andhra Pradesh State Skill Development Corporation (APSSDC) | Web Development Intern — Django

Remote | Apr 2025 – Jun 2025

- Engineered database-driven web modules using Python, Django, SQLite, and REST APIs, including authentication and role-based access.
- Managed application data, media assets, and user accounts using Django Admin and Django ORM.

EduSkills Foundation | AI & Machine Learning Virtual Intern

Remote | Jul 2025 – Sep 2025

- Preprocessed datasets using Python, Pandas, and NumPy, including missing-value handling and data preparation.
- Built and evaluated classification models using Scikit-learn, applying accuracy, precision, and recall metrics.

PROJECTS

AI Examination Cell Chatbot & Document Intelligence System

FastAPI | Python | RAG | LLM | SQLite | React | OCR

- Built an AI chatbot with a FastAPI backend and React frontend, using Llama 3.1 and SQLite to answer student examination queries.
- Implemented an end-to-end RAG pipeline using Tesseract OCR, text chunking, and vector retrieval for accurate, grounded responses.

SoundWave — Python & Django Audio Streaming Application

Python | Django | SQLite | HTML | CSS | JavaScript

- Developed a music streaming web application using Python, Django, and SQLite with playlist management and audio playback.
- Designed relational database structures for users, tracks, and playlists using Django ORM.

Liver Disease Clinical Risk Predictor

Python | Flask | Scikit-learn | Pandas | NumPy

- Implemented a Flask-based machine learning application using Scikit-learn to predict liver disease risk from clinical test values.
- Performed data preprocessing using Pandas and NumPy and deployed the application on PythonAnywhere.

EDUCATION

Nadimpalli Satyanarayana Raju Institute of Technology (NSRIT Autonomous)

B.Tech — Computer Science & Engineering (AI & ML) | CGPA: 8.33/10 | Oct 2022 – Apr 2026

Sri Sampath Sai Junior College

Intermediate — Mathematics, Physics & Chemistry | 77.5% | Jul 2020 – Apr 2022

CERTIFICATIONS

- Google Cloud AI Foundations — LLMs & Generative AI** — Google Cloud
- 5-Day AI Agents Intensive Course** — Kaggle × Google
- Data Analysis with Python** — IBM / Coursera
- Machine Learning with Python** — IBM SkillsBuild