

Varshith Pilli

📍 Chennai, India 📩 varshith6946@gmail.com ☎ +91 89789 30678 💼 varshith-pilli 💬 varshithpilli

SUMMARY

Generative AI and Backend developer skilled in Python, FastAPI, and cloud deployment. Led a 13-member AI research team at VIT. Actively conducting independent research in applied encryption.

SKILLS

Programming: Python, C/C++, Java, Go, JS

Libraries: Huggingface, Langchain, PyTorch, Scikit-learn

Technologies: PostgreSQL, MongoDB, FastAPI, Flask

Tools: Docker, Linux, Git/Github, VSCode

EXPERIENCE

Research Intern Jun 2025 – Aug 2025

VIT Chennai, IN

- Led a 13-member team in developing an AI research solution, resolving key challenges in data scraping and model fine-tuning.
- Engineered the knowledge pipeline using entity-relationship triplets to efficiently represent and utilize information for AI model knowledge retrieval.

PROJECTS

Text Media - Text Based Socializing App

github ↗

- Developed a secure FastAPI backend with JWT authentication and PostgreSQL storage, ensuring robust user data management.
- Built scalable RESTful APIs supporting full CRUD operations for a social post management system.

Constitutioner – Generative AI Legal Assistant

github ↗

- Engineered a RAG-based legal retrieval system by processing, chunking, and vectorizing the Indian Constitution with Pinecone, cutting query response time by 30%.
- Integrated OpenRouter API with a custom GUI/CLI to stream real-time, context-aware LLM responses, enhancing user accessibility.
- Implemented advanced prompt engineering to minimize LLM hallucinations, improving answer reliability.

Linear Algebra Toolkit

github ↗

- Architected a Flask backend with 10+ linear algebra APIs, reducing calculation time by 40% for end-users.
- Delivered well-documented, modular REST endpoints that provide step-by-step solutions, enabling easy third-party integration.

EDUCATION

Vellore Institute of Technology, Chennai

Aug 2023 – Present

Chennai, IN

Bachelor of Technology in CSE (spl. CPS) - 8.97

Bhashyam College of Education

Jun 2021 – May 2023

Guntur, IN

Secondary Education - 95.1

CERTIFICATIONS

Supervised Machine Learning: Regression and Classification - Stanford University - Issued Jun 2025

Generative AI with Large Language Models - DeepLearning.AI - Expected Dec 2025

Advanced Learning Algorithms - DeepLearning.AI - Expected Dec 2025