

# SUMMARY

As a penultimate-year student studying AI and machine learning, I have a strong interest in creating reliable, comprehensive solutions. Building scalable RESTful APIs for high-availability services and implementing high-accuracy machine learning models for real-time classification and natural language processing are two examples of my experience. I am excited to use my expertise in model deployment and system design to tackle challenging problems.

# **EDUCATION**

#### **Vellore Institute of Technology**

Bhopal, India

B. Tech, Computer Science and Engineering (AI and ML) — CGPA: 9.08/10.0

2023 - 2027

Relevant Coursework: Data Structures and Algorithms, Database Management Systems, Software Engineering

### **PROJECTS**

AyushSetu

Sep 2025 - Present

FHIR-Compliant Medical Terminology Plugin

Python, Flask, Hugging Face, Docker

Developed a Flask-based RESTful API with **10+** endpoints to serve real-time translations of clinical terms to FHIR-compliant codes, handling JSON payloads from electronic health records (EHR) systems.

Integrated a pre-trained BERT model from Hugging Face for Named Entity Recognition (NER), achieving a **25% increase** in mapping accuracy for complex medical terminologies over baseline methods.

Containerized the full application using Docker and deployed it, ensuring compliance with government norms for scalability and achieving **99.5% service uptime** during load testing of **200 requests/sec**.

Ascraa (Co-founder)

Jan 2025 - Present

Al-Powered Internship Matching Platform

Python, FastAPI, OpenCV, PyTorch

Co-founded a platform to connect students with internships, projected to reduce hiring costs for small IT firms by up to **60**% and accelerate the time-to-hire through a verified talent pool.

Architected a novel video-resume verification system using \*\*OpenCV\*\* for identity checks and a custom CNN model for deepfake detection, projected to reduce recruiter screening time by **50**%.

Engineered the core backend and ML pipeline, including a scalable job-matching algorithm and a multi-factor scoring system to automatically rank candidate video submissions.

SentinelX

Jan 2025 - Present

Social Media Intelligence Platform

Python, NextJS, ReactJS, Gemini API

Engineered a real-time analytics dashboard using ReactJS and Chart.js to visualize **7+** key metrics from high-velocity Twitter/X API data streams, enabling continuous monitoring of online campaigns.

Fine-tuned and deployed a Gemini-based model for multi-label text classification to automatically categorize posts into labels like 'Disinformation,' 'Threat,' or 'Spam,' achieving **92% F1-score**.

Designed and implemented an automated data pipeline that correlated new posts to known campaigns, reducing the required manual analysis time for threat identification by **40**%.

### TECHNICAL SKILLS

Programming Languages: Python, C++, SQL, MATLAB

Al and Machine Learning: TensorFlow, PyTorch, Keras, Scikit-learn, OpenCV, NLTK, NumPy, Pandas

Developer Tools: Git, Docker, Hugging Face, REST APIs, CI/CD

# **CERTIFICATIONS**

Full Stack Web Development With MERN STACK & GenAl (Udemy, 2025)

Applied Machine Learning in Python (University of Michigan, Coursera)