#### SUMMARY

Final-year Computer Science student with experience in GenAI systems at EY (LLMs, LangChain, FAISS) and AWS deployment at Deloitte.  $3 \times$  published AI researcher with strong skills in Python, FastAPI, React, and full-stack AI product development.

#### SKILLS

**Programming** Python, C, SQL, JavaScript

AI/ML LangChain, LLMs, FAISS, TensorFlow, Keras, Scikit-learn

Data Tools Pandas, NumPy, Matplotlib, GARCH

Web & APIs FastAPI, React, Node.js, REST APIs, PostgreSQL Cloud & DevOps AWS (EC2, S3, Lambda), Git, Docker, Kubernetes

Other MongoDB, JIRA, NLTK, Chart.js

## **EDUCATION**

# Manipal University Jaipur

B. Tech in Computer Science and Engineering

- 2× Student Excellence Award — 3× Published Researcher

Jaipur, Rajasthan Sept 2022 – Present

## **WORK EXPERIENCE**

## Ernst & Young (EY)

AI Intern, Generative AI & RAG Systems

Delhi, India May 2025 — Present

- ullet Developed enterprise-grade RAG chatbot using LangChain, FAISS, and Gemini APIs, improving response accuracy by 30%
- Built scalable ingestion and chunking pipelines with embedding optimization for real-time queries
- Integrated prompt workflows with proprietary document stores to automate internal knowledge retrieval and compliance

# Deloitte Touche Tohmatsu LLP

Software Engineering Intern, Cloud Computing (AWS)

Gurugram, Haryana May 2024 — July 2024

- Completed hands-on training on AWS services including EC2, S3, Lambda, IAM, and CloudWatch
- Practiced real-world deployment scenarios involving cloud architecture, scalability, and security
- Engaged in knowledge-sharing sessions on cloud optimization, infrastructure design, and AWS tooling

## PROJECT WORK

# Unified Knowledge Platform-An Enterprise RAG Chatbot

May, 2025 - July, 2025

- Tech Stack : LangChain, FAISS, Gemini API, Python
- Built an internal enterprise chatbot using RAG (Retrieval-Augmented Generation) for document Q&A
- $\bullet$  Integrated vector search (FAISS) and prompt workflows to boost response accuracy by 30%
- $\bullet$  Optimized document chunking and embeddings for contextual precision

# CrisisReport-A Crowd-Sourced Disaster Reporter

May, 2025 - July, 2025

- Tech Stack : React.js, Flask, MUI, Leaflet.js, Axios, Framer Motion, REST APIs, flask-cors
- Built a full-stack disaster reporting platform for real-time incident uploads and emergency response
- ullet Developed Flask APIs with CORS and integrated React, MUI, and Leaflet for interactive reporting
- $\bullet$  Enabled map-based feeds, drag-drop uploads, and live donation/resource access

# Product Sentiment Analyzer (Full-Stack NLP App)

March, 2025

- $\bullet$  Tech Stack: FastAPI, React, NLTK, PostgreSQL
- $\bullet$  Developed a full-stack app to classify user reviews using custom NLP logic and real-time API calls
- $\bullet$  Designed a clean React UI with dynamic charts and visual sentiment indicators
- $\bullet$  Built preprocessing + storage pipeline with PostgreSQL backend

# Hybrid Stock Price Prediction Model

January, 2025

- Tech Stack: LSTM, GARCH, TensorFlow, Keras, Python
  Engineered a hybrid deep learning model combining LSTM (sequential) and GARCH (volatility) networks
- $\bullet$  Achieved  ${\bf R}^2=0.9901,\,{\rm RMSE}=0.0125$ on S&P 500 data using rigorous error analysis
- Submitted findings for publication in peer-reviewed research venues

# Railway Ticketing Chatbot (Rule-Based NLP)

May, 2025

- Tech Stack: Python, NLTK
- Created a rule-based chatbot for train ticket booking using keyword mapping and intent classification
- Simulated booking flow with text interface, input validation, and query classification logic

### **PUBLICATIONS**

CML 2025: Skin Disease Detection using CNN+GAN models on ISIC dataset (Accuracy: 96.3%, Grad-CAM used for interpretability)

ICAESRTA 2K25: Hybrid BiLSTM-GRU model for S&P 500 forecasting ( $R^2 = 0.9901$ , MAE = 0.0101)

Journal: Role of AI in Radiology and Medical Diagnostics – Published in Cuestiones de Fisioterapia (2025)

### **HONORS & AWARDS**

Student Excellence Award (×2): August 2024 and March 2025

HackX Finalist (2024): Reached final round of Manipal University's premier hackathon

Paper Presentations: Presented at CML 2025 (Skin Disease AI) and ICAESRTA 2K25 (Stock Forecasting)