# **UPASHAK GAYEN**

↑ Af-139 Krishnapur , Kolkata City • \$\square\$9330714672 • upashak1817@gmail.com GitHub: GITHUB •LinkedIn : Link



### **OBJECTIVE:**

Al/ML Engineer specializing in Generative AI, RAG pipelines, and Agentic AI with hands-on experience building end-to-end machine learning solutions, from data ingestion to deployment. Skilled in LLM applications, NLP, and multi-agent systems, with a proven track record of developing scalable, production-ready AI solutions. Passionate about applying AI to solve real-world problems and driving measurable business impact.

#### **SKILLS**

- Programming & Data: Python ,JavaScript ,C ,SQL ,NoSQL (MongoDB, MySQL)
- Machine Learning & Deep Learning: PyTorch ,TensorFlow ,Keras ,Scikit-learn ,OpenAl API ,Hugging Face Transformers ,Diffusion
- Generative AI & Agentic AI: Knowledge of LLMs, RAG, multi-agent orchestration, prompt engineering, diffusion models, CrewAI, Pinecone, Weaviate, Fine-tunning an LLM, AutoGen, LangChain, LangGraph, Haystack
- Data Processing & Visualization: Pandas, NumPy, Matplotlib, Seaborn, NLTK, WordCloud
- Deployment: Docker ,Kubernetes ,Azure(Basic) ,FastAPI , MLflow
- Frameworks & Tools: Git, GitHub, Visual Studio Code, Next.js, Node.js, React.js
- Soft Skills: Problem-solving, leadership, communication, cross-functional collaboration
- MCP: knowledge of MCP

# **PROFESSIONAL EXPERIENCE**

### AI/ML INTERN - INTERNSELITE

- AI/ML Intern InternsElite | Jan 2025 Mar 2025
- Developed NLP-based sentiment analysis models using NLTK, WordNetLemmatizer, and SentimentIntensityAnalyzer, achieving 85% classification accuracy.
- ·Built recommendation systems leveraging collaborative filtering and hybrid approaches.
- Automated preprocessing workflows using Python scripts, reducing pipeline time by 30%.

# FULLSTACK INTERN - CODEALPHA (NOV 2024 - DEC 2024)

Developed full-stack web apps using MERN stack using Socket I.O. and all.Collaborated on a team project

## **PROJECTS**

### **GENAI:**

- **VECTOR DB and RAG**: Built a vector database system integrated with GenAl for similarity search.I have used Pinecone.(**GitHub**: https://github.com/Upashak653/vectorDB\_GenAl)
- **IMDB Sentiment Analysis with Fine-tuned DistilBERT**: Fine-tuned DistilBERT model on IMDB subset for sentiment classification, achieving 69% validation accuracy with resource-optimized 3-epoch training. Implemented efficient training pipeline using Hugging Face Transformers.
  - (GitHub: https://github.com/Upashak653/FineTune\_using\_HuggingFace\_models)
- AI\_CREATOR (March(2024) April(2024)): A full-stack GenAl-powered SaaS platform for content and code
  generation using Gemini API. Next JS, Express JS, Node JS, Tailwind CSS | API used | GenAl | (GitHub:
  https://github.com/Upashak653/ai-content-generator)

#### **AGENTIC AI:**

- Autonomous Web Agent for Real-Time Research: Developed LLM-powered agent for browsing, extracting, and summarizing live web content with context-aware prompt engineering.
   (GitHub: https://github.com/Upashak653/Autonomous\_Web\_Agent\_and\_Real\_Time\_Research)
- **Agentic\_Al**:Developed an Al-based stock recommendation system using CrewAl with four specialized agents for market analysis, company insights. The system intelligently suggests buy, hold, or sell actions based on real-time data and financial indicators. (**GitHub**: https://github.com/Upashak653/Agentic\_Al)

## AI/ML(MACHINE LEARNING):

• Mental Health Chatbot (DEEP LEARNING): (GitHub: https://github.com/Upashak653/Mental\_health\_chatbot)

## **EDUCATION**

BACHELOR OF COMPUTER SCIENCE AND ENGINEERING:
 Government College of Engineering and Leather Technology. (CGPA:8/10)

(2022-Present)

### **CERTIFICATES AND INTERNSHIPS**