

Om Raghuvanshi

New Delhi | omraghuvanshi1010@gmail.com | 7838 700 999 |
linkedin.com/in/omraghuvanshi4061/ | github.com/omraghuvanshi

Education

Gautam Buddha University, BTech in Information Technology

Sept 2021 – June 2025

- GPA: 8.4/10

Experience

AI/ML Trainee, Samsung Innovation Campus – Noida, India

June 2024 – Aug 2024

- Constructed a **house pricing model**, trained on a dataset of **10,000+ property records**, achieving an **R2 score of 89.21**, while building a **data pipeline** for seamless data updates.
- Engineered a **diabetes prediction model** using **XGBoost** and **Scikit-Learn**, attaining **81% accuracy** across **768 patient records** and diminishing **false negatives by 15%**.
- Collaborated with a **4-member team** to build an **NLP-based text summarization system** using **Python** libraries like **NLTK**, **SpaCy**, and **Gensim**. Processed **1GB+ of textual data** to generate concise summaries, reducing text sizes by **60%** without compromising critical information.

Project Intern, LinuxWorld Informatics – Jaipur, India

June 2023 – Sept 2023

- Engineered an **NLP-powered chatbot** by integrating **GPT-3** and **GPT-4**, enhancing conversational AI capabilities.
- Automated **AWS EC2 and S3 operations** using **Boto3**, deploying **AWS Lambda** triggers for real-time monitoring via **AWS SNS**.
- Developed an **AI-driven hand gesture recognition system** using **OpenCV** and **MediaPipe**, enabling real-time volume control via webcam.
- Implemented **LangChain** and **SerpAPI** for intelligent search automation and **OpenWeather API** for real-time weather analysis.

Projects

Gesture-Controlled OS Launch Tool

- Engineered an AI-powered system integrating **hand gesture recognition** with **AWS Boto3** to automate the deployment of **EC2 instances**, streamlining cloud resource management.
- Developed a **computer vision pipeline** to enhance system responsiveness, reducing execution time for launching virtual machines.
- Architected a scalable and interactive control interface leveraging **Python**, **AWS SDK**, and **Machine Learning**.

Intelligent Multifunction Application

- Designed an AI-driven **multi-functional application** integrating **cloud computing**, **image processing**, **voice assistance**, and **real-time data retrieval**.
- Implemented **AWS Cloud**, **OpenCV**, and **SERP API** to enable automated cloud operations, intelligent search capabilities, and dynamic GUI elements.
- Optimized system efficiency by deploying **Generative AI**, **Weather APIs**, and **SEO-based API queries** to generate real-time, data-driven insights.

DocAI, AI-Powered Medical Chatbot

- Designed and implemented a medical chatbot leveraging **LangChain**, **FAISS**, and **Hugging Face** models, enabling contextual medical query handling and precise responses based on stored knowledge.
- Integrated a fine-tuned **"Mistral-7B-Instruct"** LLM endpoint to handle up to **512-token** user queries with a latency of under **2 seconds**.
- Employed a **sentence-transformer model ("all-MiniLM-L6-v2")** for embeddings, facilitating efficient document chunking and similarity-based retrieval from a **FAISS** vector database.

Technologies

Languages: Python, Java, Linux, SQL

Skills: Regression, Classification, Dimensionality Reduction, Anomaly Detection, Deep Learning, Image Classification, Object Detection, NLP, OpenAI Integration, scikit-learn, numpy, pandas, tensorflow, matplotlib, Generative AI, SQL, OpenCV, MediaPipe, Boto3, AWS, SERPAPI, Pinecone, FlutterFlow, Prompt Engineering, Cloud Event Triggers

Accomplishments

- Led a team of 5 to design and develop an MVP, establishing a scalable business model and delivering a successful investor pitch at a public event.
- Co-organized a **24-hour** hackathon with **1200+** participants, leading promotion, securing sponsorships, and driving engagement across **20+ colleges**, resulting in **250+** innovative tech solutions and a **INR 2 lakhs** prize pool.