

ROHIT MOTWANI

Bhopal, Madhya Pradesh . 9669681137 . motwani.rohit2510@gmail.com . LinkedIn . GitHub . LeetCode

EDUCATION

Indian Institute of Information Technology, Bhopal

GPA: 8.74

Bachelor of Technology in Information Technology

Nov. 2022 – May. 2026

Relevant Coursework: **Data Structure and Algorithms** , **Object Oriented Programming**, **Database Management System** , **Computer Networks**, **Operating System**, **Computer Organization and Architecture**

EXPERIENCE

GSSoC-Ext Contributor

Oct 2024 – Nov 2024

GirlScript Summer of Code (Remote)

- Contributed to open-source AI projects using Python, OpenCV, and MediaPipe for real-time vision-based applications.
- Certificate: **View Certificate**

PROJECTS

MediSense-AI – (Medical + Sense = AI with reasoning ability)

GitHub

LangGraph , PyPDF , gemini-2.0-flash-001 , Pinecone

- Built an **Agentic AI** for medical knowledge retrieval using **LangGraph**, integrating vector databases and web services with **Adaptive RAG** to dynamically route queries based on complexity.
- Implemented **Corrective-RAG** and **Self-RAG**, enabling self-grading, web-search fallback, and iterative refinement to **eliminate hallucinations** and ensure factual accuracy.
- Designed an **autonomous reasoning and decision-making loop**, optimizing fact verification, response structuring, and self-improvement for **precise medical knowledge synthesis**.

SkillMiner – LLaMA 3 Fine-Tuning for Job Skill Extraction

GitHub

Unsloth, Hugging Face, LoRA, 4-bit Quantization, SFTTrainer

- Fine-tuned the **LLaMA 3 (8B)** model with **LoRA and 4-bit quantization** using the **Unsloth** library, **reducing VRAM usage by 30%** and enabling long-sequence training on limited hardware.
- Leveraged the **aicinema69/Resume-Job** dataset to train the model for structured extraction of required skills, suggested projects, and learning goals from job descriptions, enabling dynamic resume tailoring and career planning.
- Compared the **fine-tuned model** with the original **LLaMA 3** and showed clear **improvements** in understanding job descriptions and predicting accurate skills and projects using **SFTTrainer and PEFT techniques**.

SKILLS

- Machine Learning & LLM Fine-Tuning:** Hugging Face Transformers, PyTorch, TensorFlow, PEFT, LoRA, Unsloth, Quantization (bitsandbytes), Scikit-Learn, NLTK, LangChain, LangGraph
- Deployment & Backend:** Flask API, Streamlit, Docker, Git & GitHub
- Programming & Frontend:** Python, Java, HTML, CSS, JavaScript
- Databases & Cloud:** MongoDB, MySQL, BigQuery, GCP, AWS
- Visualization Tools:** Matplotlib, Seaborn, Looker
- Soft Skills & Languages:** Time Management, Teamwork, English, Hindi

CERTIFICATES

• Data Structures and Algorithms with Java

Issued by: Apna College

Certificate

• Machine Learning Specialization

Issued by: Coursera (Stanford University) , **Number of Courses:** 3 ,

Certificate