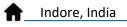
Rohit Mukati











PROFESSIONAL SUMMARY

AI/ML Enthusiast and Emerging AI Engineer with hands-on experience in building machine learning pipelines, LLM-based chatbots, and Generative AI applications. Proficient in Python, SQL, LangChain, OpenAI, and opensource transformer models. Skilled in NLP, STT/TTS, OCR, multimodal AI, automation, and deploying scalable, real-world AI solutions.

Technical Skills

Languages and Tools : Python, SQL(MySQL), Java, Git/GitHub.

ML & DL Libraries : Numpy, Pandas, Matplotlib, Seaborn, Nltk, Sk-Learn, TensorFlow, PyTorch, Flask.

Speech & OCR : Speech-to-Text (Whisper), TTS (Parler TTS), OCR (OpenCV/Tesseract, TrOcr).

Generative Ai & Agentic Ai : LangChain, LlamaIndex, Retrieval-Augmented Generation (RAG), Crew Ai,

Hugging Face (Transformers), Fine-tuning, Vector Databases. Multi-Models.

Vision AI & Computer Vision : Object Detection, Face Recognition, Action Recognition using frameworks like Mediapipe,

MMACTION (open-source), YOLO models, OpenCV

: Data Collection, Data Preprocessing, Data Visualization, Linear and Logistic ML & DL Techniques:

regression, KNN, Decision Tree, Random forest, SVM and K Means, Neural Networks,

Natural Language Processing, words embeddings.

Professional Experience

• NeevCloud / AI & ML Intern

Dec 2024 - present

Project:	1: Ch	anakya	a AI –	AI-pov	wered Ed	ucation	al As	ssistan	t-	
		- 1								

- □ Worked on Chanakya AI, an AI-powered education solution for CBSE NCERT curriculum support.
- ☐ Fine-tuned OCR models for improved handwritten character recognition
- □ Collected and processed CBSE NCERT data across all subjects and classes, and pre-processed it into JSONL format.
- ☐ Fine-tuned Meta's LLaMA 4 Scout model to generate structured Json responses from textbook data (images + text).
- ☐ Improved generative model output to align closely with curriculum-based inputs.

Project 2: End-to-End Speech-to-Speech AI Pipeline-

- ☐ Designed a three-stage voice interaction system for real-time multilingual voice responses.
- ☐ Implemented OpenAI Whisper for converting diverse audio inputs into language-specific transcriptions.
- ☐ Used ai4bharat/indic-bert model or natural language processing and translation of intermediate transcribed text.
- ☐ Integrated Parler TTS model to convert processed text outputs into high-quality speech responses.
- ☐ Built the pipeline to support multiple Indian languages with seamless audio input and output flow.

VRadicals Pvt. Ltd / AI Intern

Oct 2024 - Dec 2024

- □ Developed and integrated a custom chatbot using OpenAI API.
- □ Applied prompt engineering strategies to create and refine custom prompts for enhanced conversational responses.
- ☐ Integrated Speech-to-Text capabilities using OpenAI's Whisper model for real-time voice input.
- ☐ Explored and implemented Meta's LLaMA models for building domain-specific chatbot workflows.
- ☐ Built the pipeline to Enabled seamless voice-to-response functionality in AI systems through advanced LLM

Education

Vikrant Institute of Technology and Management Bachelor of Technology, Information Technology and Engineering Specialization in **AIML**

Indore, MP 2021 - 2025

Projects

Automateu mining Process Sys	stein 🖫										
 Developed end-to-end a Integrated Gmail API an manual uploads from ext 	d Google Drive API to	automatically uploa		<u> </u>							
☐ Parsed and processed re			ctured data like n	ame, email, experience, a	and skills.						
☐ Utilized Gemini API to c	• .	•		· · · · · · · · · · · · · · · · · · ·							
				_	Drive.						
	Automated structured data insertion into Google Sheets, and organized files by moving processed resumes to Drive. Built a comprehensive dashboard for recruiters to view real-time candidate insights and resume analysis.										
•											
•											
•	☐ Automated email and SMS notifications for interview scheduling, updates, and feedback using relevant APIs.										
Text Summarization NLP		ا رک	•	5							
☐ Developed an end-to-end Samsum dataset											
 Conducted experiments Performed Word Embedden to generate accurate, con 	dings during model bui	•	•	•	cesses.						
☐ Built a prediction pipelin	e and a user-friendly a	pp for seamless inte	raction and summ	ary generation.							
Medical ChatBot 🍙											
☐ Built an AI-powered med accurate healthcare resp		angChain and a RAC	G (Retrieval-Augm	ented Generation) pipeli	ne for						
 Parsed medical documer embeddings with Huggir 		PyPDF Loader, conv	erted them into ch	nunks, and generated vec	tor:						
☐ Integrated Pinecone vect	tor database to store, r	nanage, and retrieve	e embeddings effic	iently for real-time respo	inses.						
\square Combined embedding re	trieval with OpenAI's l	LLM, enabling contex	kt-aware and dyna	mic medical query resolu	ıtions.						
Strength											
Problem-solving	Adaptability	Analytical	Curious	Fast Learner							
Achievements & Certificatio	ons										
□ Famod a Dades of assemb	ation fouths Once Ass	and Data Caianas Vi	tual Evansianas D	reduces BCC							
☐ Earned a Badge of comple	·		•	ogram - <u>BCG</u>							
 Data Science Virtual Expension 	rience Programme Cei	rtification - <u>British Ai</u>	<u>rways</u>								