



DIVYESH V JAWKHEDE

+91 7385726283

djdivyesh103@gmail.com

GitHub

LinkedIn: Divyesh Jawkhede

EDUCATION

Degree/Exam	Institute	Year
Dual Degree (5Y)	Indian Institute of Technology, Kharagpur	2027
HSC Board	Sarosh Junior College of Science	2021
CBSE Board	Podar International School, CBSE, Aurangabad	2019

INTERSHIPS

AI/ML Intern | VoiceUp Inc. | USA

May 2025 - Jul 2025

(Objective: Built AI hiring platform using multi-agent workflows to automate candidate matching by 75% and reduce interview coordination time)

- Built an AI hiring platform leveraging **OpenAI's text-embedding-3-large** to match resumes with JDs at **>75%** similarity using **cosine scoring**
- Developed a robust **multi-agent Streamlit app** integrated with **Gmail API** and **Zoom API**, cutting manual interview coordination time by **60%**
- Designed a scoring pipeline using prompt responses, keyword patterns, and resume alignment, improving shortlisting accuracy by **3 times**

AI Intern | MarkTechPost

Oct 2024 - Mar 2025

- Published **50+ technical articles** on **LLMs, Machine Learning, Computer Vision**, and **NLP**, analyzing research insights for a wide audience
- Researched state-of-the-art **AI** and **ML** model advancements, identifying emerging global industry trends through in-depth technical analysis
- Analyzed and summarized research papers from **DeepMind, Microsoft, NVIDIA, Apple, and Sony**, highlighting actionable, impactful insights

Data Science Intern | Siemens Ltd.

May 2024 - Jul 2024

(Objective: Developed and integrated a machine learning pipeline on real-time sensor data to enhance production efficiency and maximize FPY)

- Analyzed and preprocessed **Siemens PLC data** using statistical methods including **EDA, PCA, t-SNE, and UMAP** to extract key parameters
- Implemented the **XGBoost Classifier** with **GridSearchCV** optimization, achieving **96% accuracy** and a **6.5% FPY rise** for the M122 machine
- Integrated the optimized machine learning model into the real-time production workflow using **Node-RED**, automating machinery adjustments

PROJECTS

Charcha AI: Multi-Agent Voice AI Pipeline for Indic Podcast Generation | Self-Project

Mar 2026 - May 2026

(Objective: Built a Voice AI pipeline with ASR ingestion, multi-LLM agents, and Indic TTS for low-latency, human-like Hinglish two-host podcasts)

- Architected a **6-agent pipeline** (ingestion, outline, scripting, QA) on **Llama-3.3-70B, Mistral Large**, and **Llama-3.1-8B** for **Hinglish** dialogues
- Engineered dual-speaker **Sarvam Bulbul-v2 TTS** with **Devanagari transliteration**, dynamic **prosody control**, and timestamped audio stitching
- Parallelized **TTS** via **ThreadPoolExecutor** with **4 concurrent workers** & **retry-backoff** logic, cutting audio latency **5x** for **60-turn FastAPI** jobs

Lactara: Dairy Supply Chain Chatbot | Prof. Brijesh Kumar Panda, IIT Kharagpur

Jan 2026 - May 2026

(Objective: Built a domain-specialized RAG chatbot for the dairy supply chain using agentic hybrid retrieval and multi-LLM orchestration)

- Engineered a **hybrid RAG pipeline** with **bge-large embeddings, BM25 search**, and **cross-encoder reranking** across 9 specialist modules
- Integrated **Groq Llama-3.3-70B** and **Pixtral-12B vision** with **agentic Tavily web search**, a 3-tier safety classifier, and a follow-up rewriter
- Evaluated on **63** labeled queries across all **9** domains, achieving **78%** routing accuracy, **RAGAS faithfulness 0.81**, and answer relevancy **0.82**

Multi-Agent Travel Planning System | Self-Project

Dec 2025 - Feb 2026

(Objective: Built an end-to-end multi-agent travel orchestration platform utilizing 4 LLMs and real-time APIs to generate, data-driven itineraries)

- Built a **Next.js** and **FastAPI** platform using the **Agno** multi-agent framework to connect live travel APIs, saving up to **85-90%** of planning time
- Used **Exa** and **Firecrawl** to scrape real-time flight and hotel data across **50+ destinations**, improving overall itinerary accuracy by over **40%**
- Utilized **Docker** to deploy the **FastAPI** backend and added **Zod** validation, hitting a strong **94%** success rate processing JSON API requests

Personalized Career Guidance Chatbot for Students | Self-Project

Jan 2025 - Mar 2025

(Objective: Built a conversational RAG chatbot utilizing Gemini and LangChain to provide personalized, multilingual career guidance to students)

- Built a career guidance chatbot using **Gemini-powered Conversational RAG** and **LangChain** to deliver career advice based on students' goals
- Incorporated **FAISS** with **Sentence Transformer** embeddings to fetch most relevant content from user queries and generate contextual answers
- Implemented **Mem0** for session memory, enabling smooth **Hinglish** follow-up questions, user profiles, and chat logging for personalized chats

COMPETITION/CONFERENCE

Data Analytics | General Championship | Radhakrishnan Hall (Silver)

Feb 2025 - Mar 2025

(Objective: Design and implement a robust data-driven marketing pipeline to maximize revenue, minimize costs, and enable strategic insights)

- Trained and deployed **XGBoost** and **MIDAS-ARMA** models to optimize marketing, achieving a **13.6% revenue lift** and **11.7% cost reduction**
- Built robust data pipelines leveraging the **Chow-Lin** and **Bayesian hierarchical methods** for temporal disaggregation and precise forecasting
- Created **adstock decay** and **MCMC-based Bayesian models** to measure long-term channel effects and optimize ROAS across all segments
- Utilized **scikit-learn** and **PyMC** for predictive modeling, statistical testing, and SKU-level segmentation to drive more effective marketing plans

SKILLS AND EXPERTISE

Programming Languages: C, C++, Python, SQL | **Libraries & Frameworks:** NumPy, Pandas, Seaborn, TensorFlow, Scikit-Learn, NLTK, Keras, PyTorch, LangChain, Hugging Face, FastAPI, Streamlit, Selenium, Postman | **Tools & Platforms:** Git, Docker, REST APIs, Node-RED | **Data Science Skills:** Machine Learning, Deep Learning, Generative AI, NLP, Computer Vision, RAG, LLMs, Time Series Analysis, Statistical Modeling

AWARDS AND ACHIEVEMENTS

- Qualified the prestigious **JEE MAINS** and **JEE ADVANCED** exams with a rank in the **top 1%** among the total **10 Lakh** examinees across India
- Qualified the **MHT-CET** Engineering Exam, by securing a rank within the **top 0.01%** among the total **5 Lakh** examinees in Maharashtra state

EXTRA CURRICULAR ACTIVITIES

- Served as **Captain** and led a team of **20 members** to secure **Gold** in the **GC Photostory 2026** and **Silver** in **GC Advertisement Design 2026**
- Actively participated in the creation and production of **short film** and **illumination** event, collaboratively representing the **RK Hall of Residence**
- Secured **1st place** in Short Film-Making and a **silver medal** in the Stageplay event at the General Championship Social and Cultural 2022-23
- Volunteered with the **National Service Scheme (NSS)** at Hiradi Village School, organizing educational & arts activities for **100+ school children**