Mitesh Singh

Open to Relocation

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Experience

Software Engineer — **November 2025 – Present**
Fouress Synergy Trading • Cary, NC
- Shipped a **multi-model AI chatbot** integrating **OpenAI** and **xAI Grok** APIs with session-based user routing
- Deployed **MCP (Model Context Protocol) servers** enabling AI chatbot to automate tasks across Zoho platform
- Integrated **LINE Business Messaging** with Zoho ecosystem using **Cliq widgets** and **Catalyst serverless functions**

Forward Deployed Engineer — **July 2025 – August 2025**
Postman • San Francisco, CA
- Shipped an AI agent in **Postman Flows**, automating candidate screening for **500 candidates/week** as a Slackbot
- Developed **Node.js/Express.js** microservices with **Cursor**, hosted on **ArgoCD**, featuring PDF/Word resume parsing
- Devised a data pipeline connecting **Airtable** for store data to track usage analytics across different AI agents
- Wrote test scripts in **Postman** for validation, data transformation, and error handling across multiple API endpoints

Machine Learning Engineer — **February 2025 – July 2025**
Humanitarians AI • Remote
- Created an AI-powered travel assistant with deployed **Model Context Protocols** servers, for travel-specific APIs
- Developed a **CrewAI** multi-agent marketing researcher with **RAG** over documents and ingesting web/blog data
- Constructed a QA dataset generator using **Groq** APIs and **Llamaindex**, implementing **RAG** for domain-specific outputs

Data Scientist — **February 2024 – August 2024**
Takachar • San Francisco Bay Area, CA
- Devised **Standard Operating Procedures (SOPs)** across production sites, optimizing data collection by **30%**
- Managed, cleaned, and processed production data from **4** countries using **Git**, increasing efficiency by **10%**
- Automated business reports using **Python, R, and Excel** reducing reporting time and enhancing decision-making
- Analyzed time-series data to identify faulty components, leading to an **18%** reduction in equipment downtime
- Contributed to the team's recognition as a **top-20 finalist** in the **$50 million XPrize Carbon Removal contest**

Skills

Programming:	Python, SQL, JavaScript
Frameworks:	PyTorch, LangChain, React, Node, Express, OpenAI, HuggingFace, Groq, AI SDK, OAuth2, Model Context Protocol
Cloud:	AWS, GCP, Snowflake, Azure, Zoho Catalyst
Databases:	PostgreSQL, Snowflake, Supabase, Pinecone, ChromaDB, Neo4j
Technologies:	Airflow, dbt, Streamlit, Postman, Cursor, VS Code, Windsurf, CrewAI, Netlify, Vercel, Lovable, Claude Code, Jupyter

Projects

Optimus ↗ — **May 2025 – June 2025**
Techstack :- React, JavaScript, Supabase (Postgres, Auth, Storage, Edge Functions), OpenAI, Netlify
- Built a trade tracking website letting user enter trade details with interactive dashboards to analyze user trade performances
- Integrated an AI Insights section in the website as a chatbot utilizing trade comments for Q&A about trade patterns
- Implemented the backend on **Supabase** and deployed the **React.js** frontend on **Netlify** ensuring real-time updates

GraphRAG powered Travel Itinerary Recommender ↗ — **October 2024 – December 2024**
Techstack :- Python, Airflow, Snowflake, dbt, Neo4j, LangChain, OpenAI
- Designed a hybrid **GraphRAG** based AI chatbot generating multi-day itineraries based on user preferences
- Architected an ETL data pipeline using **Airflow, Snowflake, dbt, Neo4j AuraDB** and **Pinecone** for storing vectors
- Orchestrated the chatbot using **Langgraph** and **Langchain** to enable **GPT-4o** for natural language conversations

AI-Powered Fashion Image Retrieval System — **October-November 2023**
Techstack :- Python, CLIP model, Pinecone, Amazon S3, FastAPI, Streamlit
- Deployed a fashion image retrieval system using **CLIP model**, **Pinecone**, **Amazon S3** for multimodal retrieval.
- Built a **database** to map picture IDs with text tags and vector embeddings, optimizing search and retrieval processes.
- Designed the frontend using Streamlit, where users can upload an image and find similar clothing

Education

Northeastern University — **December 2024**
MS in Computer Software Engineering

University of Mumbai — **June 2021**
BE in Information Technology