

ANKITA SINGH

Bengaluru, India

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SKILLS

Languages: Java, Python, TypeScript, JavaScript

Frameworks & Libraries: ReactJS, FastAPI, Selenium, Cucumber, Playwright, Cypress, LangGraph, Transformers, scikit-learn, TensorFlow, PyTorch

Databases & Messaging: PostgreSQL, MongoDB, Pinecone, ChromaDB, VectorDB, Kafka, WebSockets

Tools & AI: Git, Postman API Testing, LLM-Powered Test Analysis, Groq LLM, LLaMA 3.1/3.2, Prompt Engineering, JWT, pandas, NumPy

WORK EXPERIENCE

Proeffico Solutions Pvt Ltd.

May 2025 – July 2025

Software Engineer

- Built a medical health chatbot using **LLaMA 3.2** and **LangGraph**, applying **supervised learning** for disease classification and **feature engineering** on 1mg.com data to deliver structured treatment recommendations.
- Fine-tuned **LLaMA 3.2 1B** with **custom embeddings** and **LoRA adapters**, improving medicine-mapping accuracy by **75%**, tracked via **F1-score, precision, recall**, while mitigating overfitting with **cross-validation**.
- Designed an **LLM-driven Email Agent** with **Transformers, ChromaDB, and Pinecone**, enabling **semantic classification** and **automated follow-up triggers** across 1K+ school emails.
- Developed **async FastAPI pipelines** with **JWT auth** and **Redis checkpointing**, powering **secure, real-time AI apps** with **context-aware orchestration**.

Xenonstack, Mohali

Jan 2024 – April 2025

Associate Software Engineer

- **Developed Agent QA**, an AI-powered QA automation platform using **FastAPI, PostgreSQL, Redis, WebSockets, Playwright, and Groq LLM**; automated **500+ test cases**, reduced manual testing by **70%**, and improved bug resolution time by **60%**.
- Built **scalable microservices** for **real-time test orchestration** and **100+ concurrent multi-browser executions (Chromium, Firefox, WebKit)**, boosting infrastructure efficiency by **40%**.
- Created a **React.js dashboard** with **20+ reusable components** and integrated a **multi-agent AI system**, increasing **test visibility by 80%** with features like file uploads, video/HTML reports, and session-aware chat history.
- Automated **cloud-scale metadata and infrastructure validation** across **400+ AWS accounts** with **Python (Boto3), Cloud Grazer, and shell scripts**, cutting manual effort by **70%** and enhancing audit readiness.
- **Contributed to GenAI and Akira AI internal projects** by designing and deploying **RESTful APIs with FastAPI & PostgreSQL**, delivering reliable backend services and improving scalability and performance.

PROJECTS

AI-Directed Prototype Generator – Vibe Coding Studio

Tech Stack: FastAPI, React (TypeScript), PostgreSQL, Celery, Docker, Langraph, LangChain, LLaMA 3.2, Hugging Face, AWS S3, Kafka

- Built an **AI-driven coding assistant** that turns **natural language prompts** into **deployable full-stack applications**, streamlining rapid prototyping
- Designed a **scalable backend** using **FastAPI, PostgreSQL, and Redis + Celery** for **asynchronous task handling, workflow automation, and microservice orchestration**.
- Developed a **React + TypeScript frontend** with **Monaco Editor**, supporting **real-time code preview, live editing, and iterative refinement workflows**.
- Integrated **LLaMA 3.2** and **OpenAI models** through **LangChain + LangGraph** to generate **structured project architectures and modular code templates**.

EDUCATION

Lovely Professional University

Aug 2020 - Jun 2024

Bachelor of Technology, Computer Science Engineering

AWARDS AND CERTIFICATES

- Solved **200+ DSA problems** across platforms like **LeetCode** and **HackerRank**.
- Azure Administrator Associate
- **Generative AI Course** With **Langchain** and **Huggingface**