Ayush Laware

Nagpur, India
+91-7620089340 | ayushlaware@gmail.com | Linkedin | Github

EDUCATION

Indian Institute of Technology Kharagpur **NOV 2022 – May 2026**
Biotechnology and Biochemical - ***CGPA - 7.15*** *Kharagpur, India*

PROJECTS

RAG Based Multisource Engine | Langchain, OpenAI **Mar 2023**

- Created a multisource **RAG** engine by developing **wrappers** for **wikipedia, ArXiv, Langsmith** resources
- Integrated toolkit with **OpenAI LLM** using langchain tool to create an efficient retrieval based search engine
- Applied **langchain hub** for prompt management and the **agent executor** for calling the retrieval queries

Cybersecurity Attack Classification | Tensorflow **Dec 2022**

- Successfully implemented a binary classification to a predict **DDoS** attack types using **100k+** sample points
- Encoded the categorical data using the **one-hot, original encoding** methods, and used the **MinMaxScaler**
- Explored **Logistic Regression, Random forest, Neural Networks**, choosing on the basis of **recall score**
- Achieved a **recall score** of **0.99** on the validation dataset, and **0.81** on the test dataset showing **overfitting**

Vehicle Routing Problem | Python **Nov 2024**

- Developed an optimized solution for the Vehicle Routing Problem using the **genetic algorithms** using **NSP**
- Utilized the **DEAP** library for evolutionary computation, exploring it to solve the maze solver pre-application
- Crafted the **fitness evaluation function** for the vehicle routing problem, showcasing my **analytical-skillset**

HACKATHON

Rubik's Cube Solver | Algozenith Hackathon **Mar 2023**

- Modeled a virtual **Rubik's Cube(3x3)** in 3 different models using standard data structures present in **cpp**
- Achieved a solving time under **3** seconds for a Rubik's cube jumbled 3 times using **BFS, DFS, and IDDFS**
- Implemented **Korf's IDA*** algorithm, achieving solving time under **10** seconds for a cube jumbled **13** times

AI-Powered Coding Assistant |Algozenith Hackathon **Dec 2024**

- Launched a **Context-Aware Chrome Extension**, Integrated AI-powered assistance using **OpenAI LLM**
- Created and streamlined the **UI|UX** using **HTML, CSS, JS, Canva** for the 'AI Help' button in the **SPA**
- Optimized **AI prompts** to deliver highly accurate responses and added advanced features like **chat history**

DSA Based Search Engine |Algozenith Hackathon **Nov 2023**

- Spearheaded a web app using **nodejs** for users to search and retrieve relevant questions from leetcode website
- Scraped questions from the LeetCode web application using **Selenium Webdriver and Beautiful Soup**
- Designed the **TFIDF** (Term Frequency-Inverse Document Frequency) algorithm for efficient search response

Collaborative Canvas |Algozenith Hackathon **Apr 2025**

- Built a collaborative whiteboard app using **React**, **HTML5 Canvas, Tailwind CSS** with the drawing tools
- Revamped the **Context API**, **undo/redo**, and **real-time** multi-user collaboration using the **Socket.IO**
- Developed secure **RESTful** APIs with Node.js, Express, and MongoDB, optimizing queries further by **30%**
- Established the **JWT authentication** and deployed the frontend on **Vercel** and backend on the **Render**

COMPETITION

AI-ChatBot | Delloite **March 2025 – APR 2025**
First Position

- Developed an AI system using OpenAI APIs and LLM-based **RAG** to analyze employee-bot conversations
- Built admin and employee panels using **NextJs** and **FastAPI** to monitor employee well-being and flag them
- Designed a **MongoDB**-based system to manage sessions, chats and flagging workflows for the employee & HR

TECHNICAL SKILLS

Languages: Python, Java, C, C++, Dart, JavaScript, TypeScript, SQL, NoSQL, R, XML, Go, HTML, CSS
Developer Tools: VS Code, Android Studio, DataGrip, Goland, IntelliJ Idea Ultimate, Github, Vim Editor
Technologies/Frameworks: Linux, GitHub, ReactJS, Redux, NextJS, NodeJS, ExpressJS, Git, Mongo, Flutter