Aditya Arya

+91 79036 04458 | arya050411@gmail.com | LinkedIn | GitHub

Education

Rajiv Gandhi Institute of Petroleum Technology — Jais, UP
*Bachelor of Technology in Computer Science and Engineering, CPI: 8.42** — *Aug. '23 – May '27*

D.A.V. Kapil Dev Public School — Ranchi, Jharkhand
Intermediate, 2023: 92.8% & Matriculation, 2021: 96.4% — *April '11 – March '23*

Projects

Travel Itinerary Planner | *Python, LangChain, Llama, Streamlit* — January '25

- Developed a full-stack travel itinerary planner with an interactive Streamlit frontend and a LangChain-powered backend integrating LLaMA 3.1 for personalized itinerary generation.
- Fine-tuned LLaMA 3.1 on a custom travel itinerary dataset to improve response personalization and accuracy for AI-generated trip plans.
- Built a dynamic prompt system for LLaMA 3.1 to generate day-by-day travel plans based on user preferences such as destination, duration, budget, and activities.
- Designed and optimized the Streamlit UI, enabling real-time user interaction with AI-generated itineraries and enhancing the overall UX.
- Managed a local deployment of LLaMA 3.1, ensuring cost-effective execution without external API dependencies.
- Implemented rigorous testing using pytest for itinerary generation and API integration, ensuring reliability and robustness.

RAG Model for QA Bot | *Python, LangChain, Llama, PineconeDB, Django, RestAPI* — December "24

- Developed a full-stack web application using with Django serving a RAG model in the backend.
- Used the Pinecone's Databases for Vectorizing the datas for RAG model using Sentence-Transformers such as Bert
- Fetched various Business related APIs to the Database and fed to locally installed Llama3.1 LLM for prompt Generation.

Electricity Load Curve Prediction Model(SIH Project) | *LSTM, Django* — September '24- November '24

- Based on prior dataset from the SLDC, Delhi website, datas are fetched.
- Implemented Long-Short term Memory(LSTM) on the datas of the previous two years of the loads.
- Using Django framework, RestAPI a fully functional Backend made for the website.
- HTML/CSS and Javascript was used for the basic frontend.

Diabetes Prediction Model | *Python, Jupyter, Scikit- learn, panda* — June '24

- Developed a Diabetes Prediction model using various ML oriented Libraries of Python.
- Using Pandas, Numpy and Keras data was processed and based on the pre-existed Data of the diabetes from Kaggle Community.
- My First Machine learning Project with the accuracy score of 78%.

Technical Skills

Languages: Python, C, C++, C#, GOLang
Frameworks: Django, Flask, ASP.NET, Gin, GORM
Tools: Git, Github, Blender, Unity, Unreal Engine, VS Code, Visual Studio, PyCharm
Libraries: pandas, NumPy, Matplotlib, Tensorflow, Selenium, Ollama, LangChain, Streamlit
Areas of Interest: Game Development, WebD, Cyber Security, Linux, AI&ML, VFX, System Design, Data Structure and Algorithm, Cross-platform, Designing

Achievements

- Awarded Merit-Cum-Means Scholarship for the top 10%* students in the batch.
- Among Top 2% of JEE Advanced 2023.
- Top 0.8% in the WBJEE 2023.

Coding Profile

- Codeforces
- LeetCode
- GeeksforGeeks

Other Activities

- Designing Executive and Event Management PoC in the Annual Techfest Urjotsav'24.
- Teaching Volunteer in the Arpan and GyanArpan Project Amethi.
- Designing volunteer in Annual Sports Fest Energia'23.
- Completed Machine Learning course from 1Stop.ai in collaboration with E-Cell, IIT Roorkee.
- Member in IEEE student Chapter RGIPT.
- Hobbies: Gaming, Cricket, Badminton, Animation, Drawing.