

Anupam Verma

Engineer 1



Chennai, Tamil Nadu, India

anupam215769@gmail.com

Github

Tableau Public

LinkedIn

Portfolio Website

SKILLS

Generative AI

RAG, Finetuning, LangChain, LlamaIndex, LangGraph

Deep Learning

TensorFlow, PyTorch, Keras, Scikit-learn

Data Analysis & Visualization

Tableau, Power BI

Programming

Python, C++, C

Web Automation

Selenium

Databases

MySQL

EDUCATION

Post Graduate Diploma in Data Science (PGDDS), Symbiosis Centre for Distance Learning
Jul 2023 – present

B. Tech, CSE, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology
2019 – 2023
Passed with 9.08 CGPA

12th, Kendriya Vidyalaya Sangathan
2018 – 2019
Passed with 83.2%

10th, Kendriya Vidyalaya Sangathan
2016 – 2017
Passed with 9.2 CGPA

EXPERIENCE

Comcast, Engineer 1

Jul 2023 – present

Generative AI

- Engineered a Retrieval-Augmented Generation (RAG) system with LangChain and LangGraph to efficiently query extensive codebases, comprising millions of lines to suggest code improvements, detect bugs, generate test cases, and document new RDK contributions efficiently.
- Developed an interactive web application using Streamlit, incorporating multiple agents to facilitate querying of RDK documentation and codebase, thereby enhancing accessibility and user engagement.
- Implemented intelligent query routing to direct user inquiries toward RDK documentation, codebase, or patch analysis based on the query's intent, optimizing information retrieval.
- For codebase-related queries targeting specific RDK functions, integrated function dependency retrieval and impact analysis, providing comprehensive insights into code modifications and their potential effects.
- Employed Web Scraping and Selenium automation to extract relevant information about contributions like Test Procedures, Reason for Change and download Patches from the website.
- Offered insightful suggestions for code enhancement and bug detection pre-merger, enhancing code quality and minimizing potential errors.
- Generated thorough documentation of the codebase by meticulously analyzing the program's structure and functionality.
- Subsequently, the results of this analysis were seamlessly updated in Jira tickets via the Jira API, facilitating streamlined communication and tracking of code changes and their impact.

Tableau

- Developed and designed interactive RDK dashboards, including clone metrics portal, code metrics portal, contribution metrics portal, and others, using Tableau, significantly improving data accessibility and efficiency for the stakeholders.
- Leveraged advanced data visualization techniques within Tableau to create visually appealing charts, graphs, and maps that effectively represented complex data, resulting in increased data comprehension among stakeholders.
- Implemented innovative data integration strategies using Tableau Prep Builder for cleansing and transformation of data, leading to enhanced efficiency in loading data into MySQL databases and ensuring a streamlined workflow.

Comcast, Intern

Jan 2023 – Jun 2023

- Gained hands-on experience in creating impactful Tableau dashboards by incorporating essential elements such as filters, parameters, bins, and groups to enhance data exploration and interactivity.
- Utilized the acquired knowledge to develop visually appealing visualizations that effectively communicated insights, enabling stakeholders to make data-driven decisions.

PERSONAL PROJECTS

Movie Recommendation System, [Numpy | Pandas | Scikit-learn]

- Created a content-based movie recommender system employing cosine similarity to effectively suggest movies aligned with users' preferences.

Image Recognition using CNN [Tensorflow | Keras]

- Developed and trained a CNN for high-accuracy by preprocessing the dataset with image transformations to mitigate overfitting.

Multimodal Chatbot [OpenAI | Streamlit | LangChain | Chroma]

- Created chatbot with Text, Vision, Image, Audio and Prompt generation capabilities using the OpenAI models

CERTIFICATES

- Fundamentals of Deep Learning by NVIDIA
- AWS Academy Machine Learning Foundations