Nehan Tanwar

9119362169 | Mail | Github.com | Linkedin.com

EDUCATION

Indian Institute of Information Technology Nagpur

Bachelor of Technology in Electronics and Communication Engineering

St. Anslem's Sr. Sec. School

High School

Nagpur, India *July 2021 – June 2025* Jaipur, India *2008 – 2021*

TECHNICAL SKILLS

Languages: C/C++, Python, SQL, Linux, Bash, Java.

Machine Learning: Tensorflow, Hugging Face, NLTK, TextBlob, Spacy, Pytorch, NLP, LLM, LangChain, Llama2.

MLOPS: CI/CD, Tox, Pytest, Packaging, Kubernetes, Jenkins, MLFlow, Docker, Streamlit, Whylogs, AWS.

Data Structures and Algorithms: Dynamic programing, BFS/DFS, Recursion, Hash-Maps, Sliding Window etc.

EXPERIENCE

AI Intern

June 2024 – Ongoing

Volare Technologies Pvt. Ltd.

 $Hybrid\ Mode$

- * Developing an AI assistant from scratch using RAG (Retrieval-Augmented Generation).
- * Creating a vector database from a postgresql database using searching and retrieving algorithms like cosine-search and KNN.
- * Fine-tuning model parameters, including chunk size, chunk overlap, and temperature.

Machine Learning Intern

May 2023 - July 2023

Orbo

 $Remote\ Mode$

- * Developed a solution using a pre-trained CNN to apply customizable makeup effects to various facial regions, including lips, eyes, and cheeks, based on user-selected shades and styles.
- * Engineered a process to isolate specific facial features using landmark detection, ensuring accurate and realistic application of makeup effects.
- * Implemented blending techniques to integrate modified facial regions seamlessly back into the original photograph, enhancing the overall visual quality and realism.

PROJECTS

Legal Document Simplification | Python, Langehain, LLM, GPT-3 API, Streamlit

- · Integrated OpenAI's GPT-3 to simplify legal documents, automating the generation of plain language explanations.
- · Utilized Langchain for document processing tasks, such as loading PDF files, splitting documents into chunks, and creating embeddings using FAISS.
- · Employed the Constitution of India as the dataset for training and testing the model.
- · Planning to utilize MLOps (CI/CD), including tools like Kubeflow and techniques like automated model deployment, to enhance the model's functionality and user-friendliness in the future

Subtheme Sentiment Analysis | Python, Spacy, NLTK, Text Preprocessing

- · Developed a robust sentiment analysis pipeline to extract subthemes from customer reviews and determine their associated sentiments.
- · Executed extensive text preprocessing steps including tokenization, stopword removal, and lemmatization to standardize and prepare text data for accurate sentiment and subtheme analysis.
- · Created an algorithm to handle pronoun resolution within the context of subtheme sentiments, ensuring accurate sentiment assignment even when pronouns are used in place of specific subthemes.
- Engineered a system to output unique subtheme sentiments, effectively removing duplicates and providing clear, actionable insights for each subtheme mentioned in the reviews.