Abhijeet Mishra

Nagpur, Maharashtra 440007

Education

VIT Bhopal University 2022 - Present

Bachelor of Technology in Computer Science - 8.41/10

Bhopal

Narayna Junior College

2021 - 2022

Intermediate 93.4

Hyderabad

Air Force School

2019 - 2020

Secondary 92.6

Hyderabad

Experience

Motherson Technology Service Limited

Nov 2024 - Jan 2025

Project Trainee — GenAI and NLP

• Developed and evaluated three approaches for building an **Excel-based query response model** to extract relevant data from input files, **achieving 85%** + **accuracy in retrieval**.

• Designed preprocessing workflows to remove irrelevant noise, ensuring cleaner data for model input.

• Implemented the best-performing solution using the **Transformers library and the all-MiniLM** model for embedding parsed values.

• Created a similarity score comparison function, improving query matching accuracy.

• Gained hands-on experience in GenAI, NLP, Pandas, regex, and advanced data processing techniques.

Projects

1. Multi-Modal Query Response System | Python, , Gemini , SpeechRecognition GitHub Dec 2024 - Feb 2025

• Developed a Multi-Modal Query Response Model that processes PDFs of up to many pages and allows users to interact via text or voice queries, delivering 90%+ accurate responses extracted from document content.

• Implemented Optical Character Recognition (OCR) and Natural Language Processing (NLP) using Google Gemini AI, achieving 90%+ character recognition accuracy.

• Leveraged Retrieval-Augmented Generation (RAG) architecture to enhance query responses with contextually relevant information, ensuring high accuracy in extracted answers.

• Built a user-friendly web interface using Streamlit, enabling real-time PDF uploads, voice-based queries, and dynamic response generation, reducing response latency by 50%.

• Optimized performance with rate-limiting mechanisms and efficient data embeddings, improving the system's response time and reliability for large documents.

2. AI-Powered Virtual Assistant | Python, RAG, Gemini, Speech Recognition, NLP, Transformers Feb2025 - Mar2025

• Developed an AI-driven virtual assistant with PDF document processing, voice interaction, and intelligent query handling, achieving 85%+ accuracy in document comprehension.

• Implemented Retrieval-Augmented Generation (RAG) using Gemini API to extract and retrieve insights from PDFs.

• Integrated speech recognition and text-to-speech for seamless voice-based interactions, reducing user friction.

• Enhanced assistant functionality with Wikipedia search, weather updates, YouTube automation, email handling, and finding IP, increasing engagement.

• Built a context-aware intent recognition system using NLP and Sentence Embeddings to understand user queries with 90% precision.

Technical Skills

Languages: C++, Python, HTML, SQL

Databases: MySQL Course Work: DBMS, OS

Networking & System Concepts: : Routing, TCP/UDP, REST, Bash

Machine Learning & AI: Scikit-Learn, Hugging Face, LangChain, spaCy, LLM Fine-tuning, Prompt Engineering

Frameworks: Tensorflow, Keras

Developer Tools: : VS Code, Jupyter Notebook

Certifications

- Bits and Bytes of Computer Networking Coursera
- Foundations of Cyber Physical Systems NPTEL