Abhijeet Mishra

Nagpur, Maharashtra 441122
+91-9001711916 abhijeetmishra2550@gmail.com LinkedIn Portfolio GitHub

Education

VIT Bhopal University **Bhopal**
Bachelor of Technology in Computer Science and Engineering - CGPA: ***8.39/10*** ***2022 - Present***

Narayna Junior College **Hyderabad**
Intermediate - ***93.4%*** ***2021 - 2022***

Air Force School **Hyderabad**
Secondary - ***92.6%*** ***2019 - 2020***

Experience

Motherson Technology Services 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 up to 30% 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 NLP, Pandas, regex, and advanced data preprocessing techniques.

Projects

1. Multi-Modal Query Response System **GitHub**

- 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 **GitHub**

- Developed a modular AI Voice Assistant in Python enabling hands-free interaction through Speech Recognition and Text-to-Speech, handling over 20+ common user commands efficiently.
- Implemented context-aware intent recognition using spaCy and Sentence Transformers, achieving an average classification accuracy of 90% across varied test cases.
- Enabled multitasking support by handling diverse functionalities such as real-time information retrieval, entertainment queries, and knowledge lookups, improving user experience by covering multiple daily use scenarios.
- Integrated 5+ third-party APIs (weather, Wikipedia, jokes, IP lookup, advice, etc.) to deliver real-time responses with an average latency of less than 2 seconds.
- Designed an extensible architecture that supports seamless addition of new modules, ensuring maintainability and future scalability of the assistant.

Technical Skills

Languages: C++, Python, SQL, HTML
AI/ML & NLP : Machine Learning, Generative AI, Natural Language Processing, RAG, Sentence Transformers, Hugging Face, LangChain, LLM Fine-Tuning, Prompt Engineering
Libraries and Frameworks: : Pandas, NumPy, Scikit-learn, Matplotlib, Plotly, n8n, Streamlit
APIs and Cloud: : REST APIs, Basic AWS exposure
Developer Tools: : VS Code, Jupyter Notebook, HubSpot
Soft Skills: : Problem Solving, Collaboration, Communication, Critical Thinking, Quick Learning

Certifications

- Bits and Bytes of Computer Networking - Coursera Certificate
- AI Fundamentals with IBM SkillsBuild - Cisco Networking Academy Certificate