Adu, Ayomide Oluwanifesimi

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PROFESSIONAL SUMMARY

AI/ML Engineer with hands-on experience building LLM-powered applications using LangChain, Hugging Face, and Groq. Skilled in deploying and fine-tuning models for real-world tasks like translation, semantic matching, and intelligent retrieval. Actively applying these skills across multiple projects while continuously learning modern NLP and LLM integration technologies. Comfortable with RAG pipelines, vector databases, and embedding LLMs into production-ready web apps.

EDUCATION

Federal University of Technology, Akure (FUTA)

- M.Eng. in Civil Engineering (Awaiting result)
- B.Eng. in Civil Engineering (2016-2021)

Robotics and Artificial Intelligence Nigeria (RAIN), Ibadan

AI & Deep Learning Trainee (June 2024 – Feb 2025)

- Developed• Specialized in supervised learning, NLP, deep learning, transformers, and model deployment using Python and cloud tools.
- Built and deployed projects using LangChain, Hugging Face models, and vector databases.

TECHNICAL SKILLS

- **Programming:** Python
- Natural Language Processing: Transformers, LLMs, RAGs, LangChain, Hugging Face (e.g. BERT, LLaMA, Falcon)
- Web Development: Flask (Backend), HTML, CSS, JavaScript
- **Databases:** MySQL, SQLite, PostgreSQL
- Vector Stores: FAISS, Pinecone
- Version Control: Git, GitHub
- Visualization: Tableau, Matplotlib, Seaborn
- Model Deployment: PythonAnywhere, Vercel, basic AWS knowledge
- Other Tools: Hugging Face Hub (pulling/preloading models locally or via API)

PROFESSIONAL PROJECTS

SLLM-Powered Chatbot with LangChain and Multi-Model Support

- Built a smart chatbot using LangChain, integrating GPT-4o-mini, Claude, Mixtral, and LLaMA.
- Connected it to external tools like Wikipedia and DuckDuckGo for factual and real-time info retrieval.
- Designed prompt templates, memory management, and routing between models.

Healthcare Translator Using Generative AI

• Developed a voice-based medical translator that enables doctor-patient conversations across languages.

- Used Groq's LLaMA 70B for multilingual translation and integrated speech-to-text and text-to-speech tools.
- Built with Flask (backend) and deployed using Vercel.

Job Matching Website using Local LLM (Ongoing)

- Currently developing a web app that scrapes job listings from various sites.
- Uses Ollama (local LLM) to deeply understand job descriptions beyond surface-level keywords.
- Compares parsed job content with a user's skills and experience (also passed to the model) to determine suitability.

School Management System with Voice Input

- Created a web-based school platform for managing students, teachers, and academic records.
- Process commands with an LLM at the backend with strict instructions as to the structure of response to return
- Integrated speech-to-text input using Web Speech API and built a backend with Flask and MySQL.

SOFT SKILLS

- Fast learner, adaptable, and eager to contribute
- Excellent problem-solving and analytical thinking
- Strong written and spoken English
- Good communication and teamwork
- Able to work independently or collaboratively
- Organized and able to multitask effectively

REFERENCES

Available on request.