Olisemeka Nmarkwe

+1 (985) 305 7628 | olisemekanmarkwe@gmail.com | linkedin.com/in/olisemekanmarkwe-ds | olisemeka.dev

EDUCATION

Southeastern Louisiana University

Hammond, LA

Bachelor of Science in Computer Science, Concentration: Data Science

May 2026

- Honors Scholarship, EXCEL Scholarship, President's List (2022–Present)
- Student leader of International Student Union (2023 2025), Member of Colorstack
- Mentor for new international students through university's buddy program (2023 2025)

EXPERIENCE

AI Intern - Dialysis Care Center (Remote)

May 2025 – August 2025

Remote

Dialysis Care Center

- Built LLM-powered tools including RAG systems, vector search, and AI agents for healthcare support
- Developed semantic search with LangChain, FAISS, and Flask; integrated Hugging Face models
- Designed prompt libraries to handle complex medical queries using OpenAI APIs

Research Assistant – EEG Data Collection (MindPrint)

Aug 2024 – Dec 2024

Southeastern Louisiana University

Hammond, LA

- Assisted in collecting high-quality EEG data from 10+ participants for machine learning research
- Supported preparation of data acquisition setups, electrode placement, and participant coordination
- Contributed to dataset creation for ML model training focused on biometric pattern recognition
- Collaborated with lead researchers to ensure data consistency and experiment validity

PROJECTS

PragBase | Flask, Supabase, LangChain, Voyage AI, Docker

August 2025

- Created and deployed blazing-fast assistant at www.pragbase.app for businesses to build AI chatbots from their own knowledge bases
- Implemented strict per-user data isolation so only a user's private knowledge base can be accessed
- Built backend with Flask and Supabase (auth + database); deployed via Docker with OpenRouter integration
- Used LangChain for document chunking; engineered prompts to improve LLM accuracy and relevance
- Enabled users to embed their AI assistant directly into their business websites via a simple JS snippet
- App supports PDF, markdown, text, and website URLs; responds to queries in 3s 8s during beta testing

Inferno | YOLO, OpenCV, Flask, MediaPipe

May 2025

- Team leader on an open source project on Inferno which is a fire, smoke and intruder detection system
- Solely trained a YOLOv5 model on 160k+ images; achieved 80.4 mAP @ IoU 0.5 for fire/smoke detection
- Deployed real-time alerts with Flask, Telegram API, and native alarms; integrated with Raspberry Pi
- Added intruder detection via motion-based differencing and MediaPipe face mesh
- Used multithreading and NCNN for edge optimization; processed 200+ frames/min under 250ms latency
- Authored 100% of the projects codebase as seen in the GitHub's Contribution Page

MealCraft | React, ASP.NET Core, SQL, Python, Openrouter API

May 2025

- Built full-stack AI recipe app using React frontend and .NET Core REST API with SQL + EF Core backend
- Designed tag/allergy-aware recommendation engine and integrated AI recipe generator
- Collaborated in Agile team of 5 using GitHub, CI/CD, code reviews, and iterative development
- Implemented state management, authentication, and form validation with Mantine UI and Axios

TECHNICAL SKILLS

- Languages: Python, JavaScript, C#, SQL
- AI/ML: PyTorch, TensorFlow, scikit-learn, YOLOv5/v8, Hugging Face, LangChain, MediaPipe, OpenCV
- Web/Infra: Flask, React, ASP.NET Core, Supabase, REST APIs, Docker, Git, CI/CD
- Tools: VS Code, Cursor, Colab, FAISS, Entity Framework, MNE, Linux, SEO