

ASOGWA SAMSON CHIAGOZIE

AI ENGINEER



EXPERIENCE

AI / ML Engineer

Freelance AI Engineer

Jan 2022 – Present

- Architected and deployed 8+ AI/ML projects covering NLP, computer vision, and predictive analytics
- Built RAG pipelines integrating vector databases with LLMs for improved retrieval accuracy
- Developed RESTful APIs with FastAPI to serve ML models for seamless front-end integration
- Implemented tokenization, attention mechanisms, and transformer architectures from scratch in PyTorch
- Created real-time data visualization systems using matplotlib with streaming animation

AI/ML Contributor

Open Source Community

Jun 2023 – Present

- Contributed code and documentation to AI/ML libraries, improving developer experience
- Resolved performance bottlenecks in ML pipelines, reducing inference latency
- Wrote comprehensive test suites and integration tests for code reliability



PROJECTS

QuantCoach2

AI-powered trading journal analysis platform evaluating trading behavior and providing data-driven insights. Integrates yfinance for historical market data.

Python AI Data Analysis

LLMs from Scratch

GPT-style LLM implementation from scratch using PyTorch. BPE tokenization, multi-head self-attention, positional encoding, and custom dataset training.

PyTorch NLP Deep Learning

Loan Qualification Program

ML system predicting loan eligibility using ensemble classifiers (Random Forest, SVM, Logistic Regression) with interpretability reports.

Scikit-learn Pandas NumPy

Spam Mail Predictor

Classifies emails/SMS as spam or ham using Logistic Regression with TF-IDF extraction. Dual GUI and CLI interfaces.

Scikit-learn NLP ML

Asymmetrical Analytical Dashboard

Professional multi-panel data dashboard using matplotlib GridSpec with asymmetric layout for heterogeneous data visualizations.

Matplotlib Data Viz

Real-Time Data Feed

High-performance animated data visualization engine using matplotlib animation module with streaming data sources.

Matplotlib Automation

Sentiment Analysis Classifier

Lightweight NLP pipeline classifying text into positive, negative, or neutral sentiments using TF-IDF and Naive Bayes.

Python NLP

NANO-LLM

Character-level Bigram Language Model built from scratch using PyTorch. Demonstrates core mechanics behind GPT-style models.

PyTorch Deep Learning



TECHNICAL SKILLS

LANGUAGES

Python SQL TypeScript Java

AI / ML FRAMEWORKS

LangChain PyTorch Scikit-learn TensorFlow

Hugging Face LangGraph

DEV TOOLS & PLATFORMS

FastAPI Docker Git GitHub Kubernetes

MLflow Jupyter

DATA SCIENCE

NumPy Pandas Matplotlib EDA Ollama

LM Studio



CORE COMPETENCIES

- Analytical Thinking**
Interpreting complex data patterns and deriving actionable insights
- Problem Solving**
Systematic approach to diagnosing and resolving AI system challenges
- Technical Communication**
Documenting workflows and presenting to technical and non-technical stakeholders
- Team Collaboration**
Cross-functional team experience and open-source contributions
- Research & Documentation**
Staying current with AI/ML advances and producing comprehensive docs
- Agile Methodology**
Iterative model development and rapid prototyping for AI apps