

GABRIEL EFFANGHA

AI Engineer

gabrielnoah129@gmail.com | linkedin.com/in/gabriel-effangha-567828354 | github.com/Geff115 | Lagos, Nigeria

SUMMARY

AI Engineer and Data Science student who builds production AI systems: retrieval-augmented generation and agent orchestration with LangGraph, LLM application backends, and the evaluation harnesses that keep them honest. Backed by a software-engineering foundation and applied ML experience (model selection, feature engineering, deep learning). I own systems end-to-end, from architecture to deployment, and measure before I optimize. Stanford-certified in AI/ML, with a strong foundation in Python and PyTorch.

EXPERIENCE

AnalystLab Africa — Machine Learning Intern

August 2026 – Present

Remote

- Trained and compared seven classifiers (Logistic Regression, Decision Tree, Random Forest, Gradient Boosting, SVM, KNN, Naive Bayes) on a 7,000-customer telecom churn dataset, selecting on cross-validated F2 and reaching 77% recall at a tuned decision threshold, cutting expected losses 74.7% against no intervention.
- Demonstrated that accuracy selected the worst-performing model for the business case: the highest-accuracy classifier missed 128 of 374 churners against the recommended model's 75, a \$63,600 difference on a 1,407-customer test set, and established recall, F2 and PR-AUC as the evaluation standard instead.
- Diagnosed 11 missing values that standard null checks failed to detect, tracing them to whitespace-encoded blanks in zero-tenure customers, and determined that median imputation would have fabricated \$1,397 of billing history per affected record.
- Engineered a composite risk feature isolating a 1,307-customer segment churning at 60.4% against an 18.9% baseline, then revised the finding when permutation importance ranked it 27th of 28, identifying redundancy against its parent columns as the cause.

NoLimit Health Labs (formerly Ascend Peptides) — Backend Engineer, Contract

June 2026 – August 2026

Remote www.nolimithealthlabs.com

- Sole engineer for a production e-commerce backend, staff admin dashboard, and automated pharmacy-fulfillment pipeline for a peptide research supplier.
- Built a FastAPI backend (Render, Supabase PostgreSQL, Upstash Redis) and a React/TypeScript admin dashboard with JWT-protected staff routes and full CRUD for products and orders.
- Shipped an automated fulfillment pipeline pushing paid orders to the GoMyDocs pharmacy API through doctor review, compounding, and shipping; all 15 R&D products validated end-to-end to Shipped status.
- Implemented idempotent order sync with a first-paid-event guard, preventing duplicate pharmacy submissions on webhook retries.
- Diagnosed and fixed a catalog-sync bug that keyed upserts on mutable SKU instead of a stable variant ID, silently corrupting data on every product rename.

PROJECTS

LangGraph Corrective RAG — Study Assistant over a Linear Algebra Textbook

August 2026

Python, LangChain, LangGraph, Pinecone, Groq github.com/Geff115/linalg-rag

- Built a retrieval-augmented QA system over a 154-page textbook with section- and page-level citations.
- Diagnosed that the naive RAG chain fabricated numeric answers on ~80% of computational questions (equation text degrades on PDF extraction), and built a 30-question evaluation harness to measure it before fixing.
- Designed a LangGraph pipeline (similarity gate, LLM relevance grader, computational router with a deterministic anti-fabrication guard) that cut fabrication from ~80% to 0% while holding conceptual accuracy at 94%.

Partial Cross-Entropy Loss for Remote Sensing Segmentation

May 2026

PyTorch, U-Net, LoveDA www.kaggle.com/code/gabe115/cross-entropy-loss-for-remote-sensing-segmentation

- Implemented a partial cross-entropy loss to train a semantic segmentation model from sparse point annotations on the LoveDA aerial dataset (7 land-cover classes).
- Built a U-Net from scratch in PyTorch with a point-label sampling strategy simulating real-world weak supervision, and ran controlled experiments on annotation density and Mean Teacher consistency.
- Achieved ~0.54 mIoU with as few as 200 random point labels per image (~0.3% of pixels).

Repo Ranger — Autonomous GitHub Issue Intelligence Agent

December 2025

Python, LLM agents github.com/Geff115/repo-ranger

- Built an autonomous agent for GitHub issue triage, with semantic duplicate detection across 90 days of issue history that reduced duplicate noise by 60–80%.
- Delivered weekly strategic intelligence reports and a real-time analytics dashboard.

Steady Edge — Algorithmic Trading Bot

March 2026

Python, MetaTrader 5 github.com/Geff115/steady-edge

- Built a Python MT5 bot executing EMA-crossover trades through a 6-layer validation system with S/R confluence, per-symbol management, and Telegram alerts.
- Backtested session timing across symbols to a profit factor of 1.8, and built a Support/Resistance confluence filter plus a per-symbol trailing mechanism to lock profit before reversals.

EDUCATION

IU International University of Applied Sciences — B.Sc. in Data Science <i>Online</i>	Jan 2026 – Expected 2029
Stanford Medicine — Precision Medicine, AI/ML <i>Remote</i>	May 2025 – Nov 2025
ALX Africa — Certificate in Software Engineering <i>Nairobi, Kenya</i>	Nov 2023 – Jan 2025

CERTIFICATIONS

- Fundamentals of AI/ML in Precision Medicine — Stanford University: supervised/unsupervised learning, neural networks, deep learning, LLMs, CNNs; applied K-means, KNN on time-series, image normalization.
- Fundamentals of Data Science in Precision Medicine and Cloud Computing — Stanford University: omics data, querying health data in R and Python, CNN and linear regression models.

SKILLS

Languages: Python, SQL, C, TypeScript

AI / ML: LangChain, LangGraph, RAG, Pinecone, LLMs, Prompt Engineering, AI Agents, NLP, Embeddings, PyTorch, TensorFlow, Scikit-learn, CNNs, Transformers, NumPy, Pandas

Backend / Tools: FastAPI, Flask, Django, Node.js, React, Supabase, Redis, Docker, Git, Vercel, Render, Cloudflare Workers, Google Colab, Kaggle

Data: Data Cleaning, Visualization, Statistical Analysis, Feature Engineering