JOHN ALEDARE

AI Engineer | Machine Learning Engineer | Applied AI

aledareoluwaseunjohn@gmail.com | aledare.me | github.com/Jaykay73

SUMMARY

AI/ML Engineer focused on building production-oriented AI systems that connect LLMs and machine learning models to real-world workflows. Experienced with Python, FastAPI, NLP, computer vision, RAG, AI agents, tool calling, model evaluation, and human-in-the-loop systems. Built systems spanning multimodal verification, operational intelligence, document and knowledge retrieval, and AI-powered workflow automation. Particularly interested in reliable AI systems where model outputs are grounded in evidence, constrained by deterministic rules, and integrated with existing business processes.

EXPERIENCE

Queryfier LLC **2026**

Machine Learning Engineer

- Built and worked on machine learning and AI systems with an emphasis on practical deployment, data processing, model evaluation, and production-oriented workflows.
- Worked across Python-based ML pipelines, NLP, generative AI, retrieval, and AI-assisted automation.
- Applied machine learning and data analysis techniques to translate business requirements into working AI solutions.
- Contributed to AI engineering workflows involving model integration, experimentation, evaluation, and API-oriented system development.

CAMLDS **2025**

Machine Learning / AI Intern *6-month SIWES*

- Developed and evaluated NLP and computer vision solutions, including preprocessing, model training, inference, and deployment-oriented pipelines.
- Worked with Python, Pandas, NumPy, scikit-learn, computer vision, and machine learning workflows to transform raw data into usable ML systems.
- Evaluated model performance and iterated on preprocessing, training, and system design based on technical and business requirements.
- Built practical knowledge of data analysis and visualization, including Power BI, while supporting AI/ML learning and experimentation.
- Taught Python, Pandas, NumPy, scikit-learn, AI, and emerging generative AI concepts while mentoring interns.

SELECTED AI ENGINEERING PROJECTS

SupplyPilot — AI Operations Copilot GitHub

- Designed and built a production-oriented AI operations platform for pharmaceutical and chemical supply-chain workflows, connecting operational data, LLM reasoning, deterministic business rules, and human approval.
- Implemented an agent workflow capable of retrieving orders, checking inventory and production capacity, calculating material shortages, evaluating suppliers, applying procurement policies, and producing an actionable recommendation.
- Combined LLM-based reasoning with tool calling, RAG, deterministic rules, policy enforcement, and human-in-the-loop approvals to reduce the risk of unsupported or unauthorized actions.
- Designed explicit execution traces, evidence, policy citations, approval states, and audit records so operational decisions can be inspected rather than treated as opaque model outputs.
- Built a simulated operational environment using PostgreSQL, Qdrant, FastAPI, and API-based LLM infrastructure, with a live frontend demonstrating end-to-end operational workflows.

BitCheck — Multimodal AI Verification System GitHub

- Built a multimodal verification system for identifying potentially AI-generated or manipulated images using machine learning, metadata, and content-provenance signals.
- Trained a convolutional neural network on a dataset containing more than 140,000 images and exposed inference through a FastAPI backend.
- Combined visual classification with metadata and C2PA-related provenance signals to produce a broader verification workflow rather than relying on a single model prediction.

LockedIn — AI Career Architect GitHub

- Built an AI-assisted career research and planning system combining web search, information retrieval, LLM reasoning, and structured outputs.
- Designed an agent workflow around search, filtering, reasoning, and structured recommendations, with external information used as evidence rather than relying solely on model memory.

AI Research Assistant — Retrieval-Augmented Research GitHub

- Built a research assistant using Hugging Face models and FAISS-based vector retrieval to ground answers in retrieved research content.
- Designed retrieval and context-processing workflows for interacting with technical papers and extracting relevant information.

Nigerian Pidgin NLP API Hugging Face

- Built and deployed an NLP API focused on Nigerian Pidgin language processing, demonstrating practical model serving and API deployment for a lower-resource language.

TECHNICAL SKILLS

Languages: Python, C++, SQL, Bash

AI / Machine Learning: Machine Learning, Deep Learning, NLP, Computer Vision, LLMs, Generative AI, RAG, AI Agents, Tool Calling, Model Evaluation, Embeddings, Vector Search, Human-in-the-Loop AI

Frameworks / Libraries: PyTorch, TensorFlow, Keras, scikit-learn, Hugging Face, FastAPI, Pandas, NumPy, OpenCV, FAISS

AI Infrastructure: PostgreSQL, Qdrant, Docker, Kubernetes, AWS, GCP, Linux, Git

AI Engineering: Agent Workflows, API Integration, Retrieval Pipelines, Model Serving, Evaluation Pipelines, Deterministic Rules, Workflow Automation, Auditability, Production-Oriented ML Systems

EDUCATION

University of Ilorin **2026**
B.Eng. Computer Engineering *Ilorin, Nigeria*

CERTIFICATIONS

- **Oracle Cloud Infrastructure Generative AI Professional** — Oracle, 2025
- **Oracle AI Foundations Associate** — Oracle, 2025
- **Machine Learning Specialization** — Stanford University / DeepLearning.AI, 2025

ADDITIONAL

Focus Areas: Production AI Systems, AI Agents, LLM Applications, Machine Learning Engineering, RAG, NLP, Computer Vision, AI Reliability, Workflow Automation

Open Source / Portfolio: github.com/Jaykay73 | aledare.me