## Ayodele David Ayooluwa

DevOps & AI Engineer | Cloud Infrastructure | Scalable Microservices
Full-stack AI & DevOps Engineer and founder with hands-on experience in backend
architecture, AI systems, and developer platforms. I build production grade tools using
FastAPI, microservices, and CI/CD automation including SchemaSage, an AI-powered
schema and API generator, and EduNerve, an LMS transforming WAEC learning currently
being built for over 1000 students. My work spans intelligent automation, data-driven
systems, scalable infrastructure, and AI powered products that solve real-world problems.

#### Core Skills

#### Languages

• Python, Bash, SQL

### DevOps & Cloud

 Docker, Kubernetes, Terraform, AWS, Azure, DigitalOcean, CI/CD, GitHub Actions, Ansible, Prometheus, Grafana, Nginx

#### AI/ML

scikit-learn, PyTorch, TensorFlow, OpenCV, LLMs, MLOps, Prompt Engineering

#### **Backend Tools**

• FastAPI, PostgreSQL, RESTful APIs, Agile, System Design, Linux, Shell Scripting

#### Other Skills

 Infrastructure as Code (IaC), Monitoring, Logging, Security, Load Balancing, Version Control

# Certifications (In Progress)

• AWS Cloud Practitioner

### **Project Highlights**

SchemaSage – Live 7-Microservice Backend

FastAPI | Docker | GitHub Actions | PostgreSQL

- Designed and implemented 7 containerized microservices using FastAPI and Docker, built to support over 10,000 monthly active users with 99.9% uptime.
- Automated deployment pipeline via GitHub Actions, reducing deployment time by 60% and increasing release frequency.

EduNerve LMS – Learning Platform for 1,000+ Students

## GPT-4 API | Microservices | Real-time Analytics

- Engineered an offline-first Learning Management System serving 1,000+ students across West Africa.
- Integrated GPT-4 for personalized learning recommendations, resulting in a 40% improvement in engagement.

• Built using a scalable microservices architecture with real-time analytics for learning insights.

SoliVolt - AI Smart Contract Rewriter

Solidity | Al Analysis | Security Auditing

- Created an Al-driven tool that analyzes and rewrites Solidity smart contracts, improving documentation and audit readiness.
- Implemented a risk flagging system to detect vulnerabilities and enhance smart contract security.

Al Stock Predictor - LSTM + Sentiment Engine

LSTM | Sentiment Analysis | Financial ML

- Developed an Al model using LSTM neural networks and financial sentiment embeddings to forecast market movement with 85% directional accuracy.
- Visualized buy/sell signals and volatility zones to assist in trading decisions.

FashionLens – Al Fashion Analysis Engine

Computer Vision | Fashion AI | Recommendation Systems

- Developed a computer vision tool that detects clothing types, trends, and textures to deliver personalized outfit suggestions.
- Powered by machine learning and fashion datasets to analyze user-submitted images and recommend styles.

Email Spam Classifier - ML Text Classification System

NLP | Text Classification | Machine Learning

- Designed a high-accuracy (95%) email and SMS spam classifier using NLP techniques and machine learning models like Naive Bayes and SVM.
- Included advanced feature extraction and preprocessing pipelines for robust spam detection.

Customer Churn Predictor – Predictive Analytics Platform

Predictive Analytics | Ensemble Learning | Business Intelligence

- Built a churn prediction platform using ensemble learning algorithms to identify high-risk customers.
- Delivered actionable insights to optimize customer retention strategies, including model interpretability and feature engineering.

# Experience

HNG Internship – DevOps Intern (Stage 3)

### Remote

Automated CI/CD pipelines for 6+ microservices using GitHub Actions, reducing deployment time by 60% and increasing release frequency from weekly to daily.

- Provisioned and managed cloud infrastructure on Azure, implementing infrastructure as code and containerization using Docker.
- Contributed to Agile workflows using Jira and Git for ticketing and version control, and actively participated in stand-ups and sprint reviews.
- Ensured seamless deployment with Nginx and implemented monitoring practices using Prometheus and Grafana.

# **Education & Training**

BSc. Computer Science

Covenant University (Expected 2027)

Relevant Coursework: Software Engineering, Al Fundamentals, Databases, Data Structures & Algorithms, Operating Systems, Cloud Computing, Distributed Systems

Certifications (In Progress)

• AWS Cloud Practitioner

### Real-time Remote Collaboration

- Collaborated cross-functionally using Slack and Microsoft Teams to manage tasks and share knowledge during development and debugging.
- Documented solutions in shared repositories and created documentation to improve team transparency and knowledge transfer.

# Agile Methodology

- Participated in Agile practices including daily stand-ups, sprint planning, and retrospectives during HNG internship and group projects.
- Used Jira and GitHub Projects to track tasks and measure sprint progress.

## **Contact Information**

Email: <u>davidayo2603@gmail.com</u>

• LinkedIn: www.linkedin.com/in/david-ayodele-ayo

• GitHub: github.com/davidx345

• Portfolio: ayodeledavid.vercel.app