

Oluwatobiloba Amos Williams

(+234) 901 929 1681 | tobiwilliams003@gmail.com | [LinkedIn](#) | [GitHub](#)

WORK EXPERIENCE

Product Engineer, Volunteer

Sep 2024 – Present

AFRICAN STUDENTS' NETWORK

Remote

- Led the evolution of African Students' Network from a landing page into a production platform supporting **12,000+ African students and young professionals**, owning architecture, implementation, deployment, and product iteration.
- Designed and implemented backend workflows supporting authentication, role-based access, administrative operations, applications, bookmarks, events, notifications, recommendations, and announcements.
- Designed offline-first and real-time capabilities for constrained-connectivity environments, reducing data usage by **40%**.
- Built intelligent opportunity-discovery capabilities using natural-language search and structured recommendations to help users discover relevant opportunities.

Software Engineer

Jun 2026 – Present

MILE-BACK LTD

Remote

- Designed and implemented financial backend systems supporting HMRC Self Assessment calculations, including Income Tax, Class 4 National Insurance, mileage relief, multiple tax years, and jurisdiction-specific rules.
- Identified and corrected a tax-calculation issue caused by incorrect handling of the personal allowance taper above £100,000, replacing hardcoded assumptions with HMRC-validated marginal-rate calculations.
- Designed an offline-first financial data workflow with durable local writes, idempotent synchronization, duplicate-safe retries, and compare-and-swap conflict resolution.
- Built data-validation and duplicate-detection workflows to prevent inconsistent financial records when users submit overlapping or repeated transactions.

Backend Engineer

Apr 2025 – Aug 2025

ENTERPRISE DATA CENTRE MANAGEMENT PLATFORM

Remote

- Hardened **30+ FastAPI endpoints** in a multi-tenant enterprise platform, eliminating tenant data leakage vulnerabilities across sensitive operational data.
- Designed layered authorization using **JWT authentication, role-based access control, and PostgreSQL Row-Level Security**, enforcing tenant isolation across application and database layers.
- Audited existing authorization and data-access flows to identify boundary failures where authenticated users could access data outside their tenant or permitted role.
- Containerized services with **Docker** and delivered production deployment on **GCP** through automated cloud pipelines.

EDUCATION

University of Medical Sciences, Ondo State

BSc Computer Science & Mathematics

SEO Africa · Global Markets & Quant Trading Training Programme

Apr – Aug 2025

LEADERSHIP & RECOGNITION

- Vice President, NACOS UNIMED — Student chapter of Nigeria's national computer science body.
- Rising Star Award, African Students' Network (2025).
- 3rd Place, TechXcellence 2.0 Hackathon.

TECHNICAL SKILLS

Languages: Python, Go, TypeScript, JavaScript, SQL

Backend & Data: Node.js, Express, FastAPI, Django REST, PostgreSQL, Redis

Cloud & Infrastructure: Docker, AWS, GCP, Azure, Git, CI/CD