

BRANDON OGOLA

Software Engineer

Email: edogola4@gmail.com
Phone: +254-717-248673
Location: Nairobi, Kenya (*open to remote & hybrid*)
LinkedIn: linkedin.com/in/brandon-ogola-b77063232
GitHub: github.com/edogola4

PROFESSIONAL SUMMARY

Software Engineer with 2+ years of hands-on experience delivering full-stack applications across fintech, healthcare, and SaaS domains. Proven ability to ship production-grade systems end-to-end from RESTful API design and database optimisation to cloud deployment and CI/CD automation. Built and integrated real-world payment systems (M-Pesa, Pesapal), AI-powered features (Anthropic Claude, OpenAI embeddings), and scalable infrastructure on Azure and AWS. Comfortable working independently or inside collaborative teams, with a track record of measurable impact: 35% faster API response times, 40% reduction in manual processing, and consistently high test coverage. Currently based in Nairobi; open to on-site, hybrid, and remote-first opportunities globally.

TECHNICAL SKILLS

Languages: C#, TypeScript, JavaScript (ES6+), Python, SQL, C
Backend: ASP.NET Core (.NET 10+), Node.js, Fastify, Express.js, Flask, Entity Framework Core, Prisma ORM, RESTful APIs, SignalR
Frontend: Next.js 14 (App Router), React.js, Angular, Blazor (Server & WebAssembly), Tailwind CSS, Zustand, Redux Toolkit, Framer Motion, HTML5, CSS3
Databases: PostgreSQL (pgvector), SQL Server, MySQL, MongoDB, Redis
Cloud & DevOps: Azure (App Services, SQL Database, Redis Cache, Service Bus, Key Vault), AWS, Railway, Vercel, Docker, Kubernetes, Terraform, GitHub Actions, Azure DevOps, CI/CD Pipelines
AI & Integrations: Anthropic Claude API, OpenAI Embeddings, Semantic Search (pgvector), M-Pesa Daraja API, Pesapal, Shopify API, WhatsApp Business API, Africa's Talking SMS, SendGrid, Turborepo (Monorepo)
Testing & Quality: TDD, xUnit, Jest, pytest, SonarQube, Unit & Integration Testing
Practices: Clean Architecture, SOLID, Microservices, CQRS, Dependency Injection, JWT Authentication, Agile/Scrum, Peer Code Review, Technical Documentation

PROFESSIONAL EXPERIENCE

Software Engineer **November 2025 — January 2026**
Cognativ Technology Limited — Nairobi, Kenya

- Designed and shipped RESTful APIs for the SmartSaaS™ enterprise cloud platform using ASP.NET Core and C#, serving clients across multiple industries
- Cut API response times by **35%** by restructuring SQL Server queries, adding targeted indexes, and implementing Entity Framework Core migrations
- Built real-time frontend components in Blazor Server with SignalR-powered live data synchronisation, reducing client-reported latency complaints to near zero
- Drove test coverage to **80%** via xUnit unit and integration tests; contributed to CI/CD pipeline setup and participated in architectural design reviews

Freelance Full-Stack Developer

May 2025 — October 2025

Self-Employed — Remote

- Architected SmartSchedule Healthcare an AI-powered SaaS platform on .NET 10+ and Azure using microservices, CQRS/Event Sourcing, and Terraform Infrastructure as Code
- Delivered a Blazor CRUD application with SignalR real-time notifications and **85% unit test coverage**, following clean layered architecture throughout
- Contributed to open source projects on GitHub, shipping pull requests that improved code quality across distributed developer communities

Operations Intern

November 2024 — April 2025

Alliance Bioversity CIAT — Nairobi, Kenya

- Built Python/Flask RESTful APIs that automated data workflows, cutting operational processing time by **20%**
- Designed and deployed internal web applications used by a cross-functional team of 12, eliminating **40%** of recurring manual tasks through process automation
- Integrated PostgreSQL with Python services, writing optimised queries and data validation pipelines to ensure accuracy across all operational reports
- Authored API specifications and system architecture diagrams that became the team's primary technical reference, reducing onboarding time for new staff

Freelance Full-Stack Developer

October 2023 — October 2024

Self-Employed — Remote

- Built a mobile-first e-commerce platform (Riggs London Kenya) as a solo monorepo using Next.js 14, Fastify, PostgreSQL with pgvector, and Redis, integrated with M-Pesa STK Push and Pesapal for payments and an Anthropic Claude chatbot for AI-powered purchase guidance
- Implemented semantic product search using OpenAI text-embedding-3-small and pgvector, and delivered real-time order notifications via WhatsApp Business API, Africa's Talking, and SendGrid syncing Shopify as the inventory source of truth
- Built a real-time collaborative coding platform using TypeScript, Node.js, Socket.io, and Redis with WebSocket-powered multi-user synchronisation
- Deployed all projects on AWS/Railway/Vercel with GitHub Actions CI/CD pipelines for automated testing and zero-downtime releases

Software Developer Intern

June 2023 — September 2023

REAL BIZ Digital — Nairobi, Kenya

- Delivered responsive web applications in React.js, TypeScript, and Node.js across 3 client projects, lifting user engagement by **25%** through UX improvements and new feature development
- Designed Express.js REST APIs that reduced data processing time by **30%** through backend optimisation and efficient query design
- Built reusable React component library with Redux Toolkit state management, adopted across all active client projects
- Achieved **75% test coverage** with Jest unit and integration tests across all 3 projects, establishing a testing baseline for the team

EDUCATION

Bachelor of Science in Computer Science

2021 — 2025

University of Nairobi — Nairobi, Kenya

Relevant coursework: Data Structures & Algorithms, Database Management Systems, Software Engineering, Operating Systems, Computer Networks & Security, Distributed Systems

ALX Software Engineering Program

2023 — 2024

ALX Africa — Remote

Intensive programme covering CS fundamentals, low-level programming in C, system design, and software architecture. Built 15+ projects spanning RESTful APIs, full-stack applications, and system utilities; completed daily algorithmic problem-solving focused on data structures and computational complexity.

Software Development Bootcamp

June 2022 — December 2022

Moringa School — Nairobi, Kenya

24-week full-stack programme covering JavaScript, TypeScript, React, Node.js, Python, and database management. Delivered 8+ production-ready applications using agile methodologies, TDD, and pair programming.

KEY PROJECTS

SmartSchedule Healthcare — Enterprise AI-Powered Healthcare SaaS

.NET 10, C#, ASP.NET Core, Blazor WebAssembly, Azure, Terraform

MVP Q2 2026

github.com/edogola4/smartschedule-healthcare

- Designing an appointment scheduling SaaS targeting **40% no-show reduction** and **50% administrative efficiency gains** for healthcare providers
- Cloud-native architecture: microservices, CQRS/Event Sourcing, Azure (App Services, SQL Database, Service Bus, Redis Cache, Key Vault), documented in a 50+ page spec
- Full HIPAA-compliant Terraform IaC across dev, staging, and production environments; Azure DevOps CI/CD with SonarQube code quality gates and containerised Docker deployments

Riggs London Kenya — Mobile-First Premium E-Commerce Platform

Next.js 14, Fastify, PostgreSQL (pgvector), Redis, Prisma, Tailwind CSS, Turborepo

In Progress

github.com/edogola4

- Solo monorepo build bringing Riggs London fragrances to the Kenyan market; M-Pesa STK Push (primary) and Pesapal (card fallback) as payment methods
- AI-powered Scent Advisor chatbot (Anthropic Claude 3.5 Haiku) and semantic search via OpenAI text-embedding-3-small + pgvector for context-aware product discovery
- Real-time order notifications via WhatsApp Business API, Africa's Talking SMS, and SendGrid; Shopify synced as inventory source of truth into PostgreSQL
- Deployed on Railway + Vercel at ~\$108/month — a deliberate cost-efficiency decision made as part of the infrastructure design

Microservices Platform with Full CI/CD

Docker, Kubernetes, GitHub Actions, AWS

github.com/edogola4

- Containerised microservices application on AWS, orchestrated with Kubernetes for horizontal scalability and high availability
- GitHub Actions CI/CD pipeline with multi-stage testing, code quality checks, and zero-downtime rolling deployments; centralised logging and monitoring for production reliability

AI-Powered Customer Support Chatbot

Python, TensorFlow, NLP, REST APIs

github.com/edogola4

- Achieved **95% intent recognition accuracy** using NLP and TensorFlow; reduced customer support response time by **40%** through automated query handling
- Exposed as a RESTful API for plug-and-play integration with existing e-commerce platforms

CERTIFICATIONS & CONTINUOUS LEARNING

- **ALX Software Engineering Program** — Full-stack development, algorithms, system design (2023–2024)
- **Moringa School Software Development Bootcamp** — Full-stack development (2022)
- **Ongoing:** Technical webinars, online courses, and open source contributions — currently deepening expertise in AI/LLM integrations and cloud-native architecture

REFERENCES

Available upon request.