Lagos, Nigeria Linkedin

Ayomide Wilfred Adeyemi

(+234) 8143839812 Portfolio

I am a **back-end** software engineer with additional expertise in DevOps. With over 4 years of experience, I have worked with startups on diverse projects, ranging from web RESTful APIs to asynchronous microservices and modern cloud-native deployments. Proficient in Node.js development using various frameworks, I have also led and mentored multiple development teams, helping them deliver successful projects while enhancing their software engineering practices.

Work Experience

Software Engineer Luftsocial May 2025 – Present (Freelance)

Backend team Upwork

- Designed and implemented a real-time notification system using NestJS Gateway and WebSockets, supporting multi-channel delivery (In-App, Push, Email) via a strategy pattern.
- Built core messaging features including threaded replies, typing indicators, message reactions, read receipts, and content editing/deletion with live updates.
- Integrated Firebase Cloud Messaging (FCM) for mobile push notifications and implemented a queuing system using Bullmq for reliable delivery, even while offline.
- Ensured secure, high-performance communication by adding WebSocket auth middleware, rate limiting, content sanitization, and optimized database queries.
- Designed and implemented a robust SaaS subscription billing system using Stripe, supporting flexible plans and trials.
- Developed a comprehensive webhook system to handle critical Stripe events (e.g., subscription creation, updates, cancellations, payments) with strong validation and idempotency.
- Followed SOLID principles, wrote unit tests, and maintained detailed API documentation to support scalability and maintainability.

Software Engineer

Verify Your Customer

Feb 2025 – Present (Contract)

Backend team

Lagos, Nigeria

- Developed the Verify Your Customer (VYC) backend application, a document verification system for businesses, and deployed both the backend and frontend on Digital Ocean.
- Implemented role-based access control (RBAC) for different user permissions.
- Configured Multer for handling business registration documents uploads, and integrated DigitalOcean Spaces (S3)
 for secure, scalable storage. Implemented functions to upload, update, and delete images/documents in S3
 buckets efficiently.
- Implemented **Stripe payment processing** to enable users to purchase subscription plans, supporting multiple models (**PAY-AS-YOU-GO**, **PREMIUM**) with automated **billing cycles**, **plan upgrades**, **and cancellations**.
- Integrated **Nodemailer** for sending verification emails, OTPs, and notifications, utilizing the **Mustache templating** engine for dynamic and customizable email content.
- Developed an endpoint to receive NFC data captured by the Verify Your Customer NFC mobile app, process it using integrated AI, and deliver verified, authenticated data to users.

Backend team Lagos, Nigeria

- Developed a recommendation algorithm that matches solar packages to customers based on appliance choices, usage hours, and energy requirements, ensuring optimal solutions tailored to their specific needs.
- Designed and Built and optimized financing features, including loan history tracking, lender applications, and payment schedules, while integrating Paystack payment APIs with auto-populated email fields for seamless transactions.
- Implemented file upload functionality with **AWS S3** for secure and scalable media storage, ensuring compliance with access controls and automatically deleting old files before replacements to maintain storage efficiency.
- Created comprehensive reporting features, generating analytics for leads, installations, referrals, and packages by owner, location, lender, and source, to support statistical dashboards.
- Designed and developed the referral system API, enabling tracking of referrals, reward calculations, and token redemptions.
- Integrated backend services with **Flowise AI chatbots**, enabling automated support and sales recommendations.

Software Engineer

Sokozuri Africa

August 2023 - Present

Backend team

Lagos, Nigeria

- Designed database model for the Sokozuri e-commerce website, including customer, vendor, product, and admin features, ensuring efficient data management and scalability for a multi-role platform
- Developed a seamless payment processing system, integrating Paystack payment gateways to facilitate smooth and secure transactions, improving transaction success rates by 25% and reducing payment-related issues by 15%.
- Developed a chat application to facilitate seamless communication between customers and vendors, enabling
 efficient order management and resolving customer inquiries 30% faster, leading to a 20% improvement in overall
 customer satisfaction.
- Developed a robust image upload and management system for customer product images and vendor
 documents using S3 bucket for scalable storage. The system supports features such as image validation, resizing,
 and storage optimization, ensuring efficient upload, storage, and retrieval.
- Integrated the Kwik API to automate and manage delivery processes, enhancing logistics efficiency and reducing operational overhead by 20%, leading to faster delivery times and a 15% decrease in delivery-related costs.
- Implemented **Redis caching** to optimize API response times, reducing redundant database queries and improving performance.
- Collaborated closely with frontend developers to integrate RESTful APIs into the frontend, ensuring a cohesive
 and user-friendly experience.
- Deployed the frontend and backend applications on DigitalOcean, set up and managed the PostgreSQL database, and configured DigitalOcean Spaces for scalable storage.

Software Developer

Nupat Technologies

Sep 2022 – Feb 2023

Backend team

Lagos, Nigeria

- Contributed to the Nupat E-learning platform by designing the database schema and leading backend development, integrating third-party services such as payment gateways and authentication providers.
- Mentored interns at Nupat Technologies, guiding them in setting up codebases, managing databases, configuring cloud environments, implementing DevOps practices, and adhering to software development principles.

• Developed and integrated secure payment gateways using Vee-bank, enhancing user authentication and authorization systems, optimizing transaction processing, and implementing financial reporting tools, resulting in improved security and regulatory compliance.

Software Developer Qoinpal May 2021- July 2022

Backend team Remote

- Developed and maintained high-performance web applications, implemented robust backend functionalities and APIs.
- Led a cross-functional team to develop fiat-to-crypto transaction solutions and crypto payment acceptance, implementing robust rewards management, optimizing database schemas and queries, achieving a 20% reduction in response times and enhancing overall system performance.
- Spearheaded a cross-functional engineering team in developing innovative fiat-to-crypto transaction and crypto payment solutions. Optimized database schemas and queries to enhance performance and scalability while overseeing reward distribution through staking and meticulous database management.
- Designed and implemented a high-performance microservice for seamless generation and management of Bitcoin
 and Ethereum wallet addresses. Integrated robust security measures, including encrypted key storage and secure
 API endpoints, to ensure data integrity and compliance with industry standards. Optimized the service for
 scalability, enabling support for high transaction volumes and real-time address generation.

Technologies and Languages

• Languages: JavaScript, TypeScript, Node.js, Python.

• Storage: MySQL, Postgres, MongoDB, S3, Redis, Minio.

• Orms: Sequelize, TypeORM, Prisma, Mongoose, sqlalchemy.

• Platforms: Azure, Docker, Amazon Web Services (AWS), Digital Ocean, Vercel, Heroku, Notion.

• Frameworks: Express, Nest.js, FastAPI, Multer, Websocket.

Payments: Paystack & Stripe API integration.

• Tools: Postman, Git.

Education and Certifications

 B.Eng. Electrical and Electronics Engineering, Kwara State University, Nigeria. 	2018 – 2022
Quantium Software Engineering - Quantium	2024
AWS APAC Solutions Architecture	2024
Azure Kubernetes Service - KodeKloud	2024
Cisco Software Engineering - Cisco	2022
Accenture North America Virtual Coding Experience - Forage	2022

Projects and Blogs

- **IP-Analyzer** IP Analyzer is a tool that provides users with essential information about their public IP address and latency details, empowering them to make informed decisions. Designed with scalability in mind, the system's modular architecture enables seamless integration of new data points as needed, future-proofing its capabilities. See the source on **Github**.
- **USDC-to-Naira** Designed and developed a project on Stellar, a decentralized, public blockchain, to create seamless, cash-like transaction experiences. Harnessed Stellar's benefits, including rapid, cost-effective, and ecofriendly transactions, to drive tangible real-world impact. See the source on <u>Github</u>.
- How to build a QR code generator for Urls with Node.js, Next.js, and azure blob storage

- How to run a postgres database in azure kubernetes service and integrate it with a Node.js express application
- A guide to connecting to postgresql with supabase and sequelize orm.

Interests

- **Artificial Intelligence and Machine Learning** Passionate about building intelligent systems and exploring AI's transformative potential across industries.
- Microservices Architecture Advocating for modular, maintainable system designs for seamless deployment and scaling.
- **DevOps and CI/CD Pipelines** Committed to automating workflows and ensuring seamless development-to-production transitions.
- **Software Design Patterns** Leveraging proven design principles for building robust, maintainable software solutions.
- **Serverless Architectures** Exploring the potential of serverless technologies for cost-effective, event-driven solutions.
- **Exploring Blockchain Technology** Staying updated on the latest advancements and innovations in decentralized finance and blockchain ecosystems.
- **IoT and Smart Devices** Enthusiastically exploring the intersection of software and hardware in building connected systems for smarter living.