AUGUSTINE IGWE

Software Engineer | Product Engineer | Fullstack Engineer
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PROFILE SUMMARY

Experienced Engineer with 5+ years of experience designing, building, and maintaining scalable cloud-native applications, distributed systems, and AI-powered solutions. Experienced in delivering high-quality software across the full development lifecycle, from architecture and implementation to testing, deployment, and production support. Proven track record of modernising legacy platforms, developing serverless and event-driven systems on AWS, integrating AI and Large Language Model (LLM) capabilities into products, and building internal tools that improve developer productivity and operational efficiency. Passionate about solving complex technical challenges, leveraging emerging AI technologies, collaborating within cross-functional teams, and delivering reliable solutions that create measurable business and user impact.

EDUCATION

- MSc. Management and Artificial Intelligence *(September 2023 – September 2024)* Swansea University, Swansea, Wales, United Kingdom.
- B.Eng Electrical/Electronic engineering *(Second class Hons November 2014 – December 2019)* Federal University of Technology, Owerri.

SKILLS AND TECHNICAL PROFICIENCIES

- Programming languages: JavaScript, TypeScript, Go, Python, Ruby, SQL
- Frontend Technologies: React, Next.js, React Native, Redux, Context API, HTML5, CSS3, SCSS, Tailwind CSS
- Backend Technologies: Node.js, Express.js, NestJS, GraphQL, REST APIs, gRPC, WebSockets, Server-Sent Events (SSE)
- AI & Machine Learning: OpenAI API, LangGraph, LangChain, Agentic AI Systems, Retrieval-Augmented Generation (RAG), LLM Integration, Prompt Engineering, MLflow
- Cloud & DevOps: AWS (Lambda, Step Functions, S3, EventBridge, SQS, DynamoDB, RDS), Google Cloud Platform (GCP), Firebase, DigitalOcean, Docker, Kubernetes, GitHub Actions, CI/CD
- Databases & Caching: PostgreSQL, MySQL, MongoDB, Redis, Prisma ORM, Mongoose
- Architecture & Engineering Practices: Serverless Architecture, Event-Driven Systems, Distributed Systems, Microservices, System Design, API Design, Agile Development, Test-Driven Development (TDD), SDLC
- Testing & Developer Tools: Jest, Vitest, Puppeteer, Postman, Swagger/OpenAPI, Git, Linux

EXPERIENCE

Senior Software Engineer

MadeTech (Client: DVLA), London, United Kingdom (October 2024 - present), Full-time

- Developed and maintained digital public services used by millions of UK citizens.
- Led the re-architecture of DVLA image processing from a monolithic AWS Lambda architecture to distributed serverless solution orchestrated with AWS step functions enabling parallel processing increasing the speed of customer's uploaded images by 65%.
- Delivered an AI-powered identity verification solution using AWS Rekognition, allowing clerks to compare user-uploaded images against trusted government-held records to support secure and accurate citizen verification processes.
- Contributed to the development of internal testing tools using Ruby that generated driving licence applications at various review stages (Supervisor, Clerk, and Fraud), significantly improving developers' ability to test features, reproduce scenarios, and accelerate delivery.
- Delivered a Post Office integration enabling customers to submit driving licence applications offline, building an event-driven serverless architecture using AWS step functions, DynamoDB streams, EventBridge pipes, and SQS to automate application processing and task routing for operational review teams.

Founding Engineer

LightWork, London, United Kingdom *(October 2023 - September 2024),* Contract

- Designed responsive web pages for the entire user journey, including landing, onboarding, dashboard, and feature interfaces, optimized for performance and user engagement.
- Improved page load times by 95% through code splitting, lazy loading, efficient data fetching, image compression without quality loss, and caching with service workers.
- Developed a microservice architecture utilizing Kafka for asynchronous communication, resulting in a 30% increase in system resilience and reducing message processing time by 40%.

Senior Fullstack Engineer

Buynomics, Cologne, Germany *(May 2022 – August 2023),* Full-time

- Spearheaded the adoption of Storybook within the development team, significantly enhancing component visualization and boosting development speed by 45%.
- Optimised database performance by implementing caching and indexing strategies reducing query response times by 30%.
- Managed backend services leveraging NodeJS, PostgreSQL, and Elasticsearch to efficiently handle and optimize complex search queries.

Senior Frontend Engineer

OneUptime, Boston, United State *(January 2020 – April 2022),* Full-time

- Led the redesign of the user interface for the main product dashboard, improving user satisfaction scores by 35% and increasing daily active users by 20%.
- Developed production-ready applications using React and Redux and implemented comprehensive end-to-end tests with Puppeteer, reducing bugs in production by 40%.
- Implemented real-time data updates using WebSockets, enhancing the user experience with live data, which increased user engagement by 15%.

Frontend Engineer

Genesystechhub, Enugu, Nigeria *(April 2018 – December 2019),* Full-time

- Implemented Figma designs into responsive web platforms using ReactJS, and TypeScript.
- Integrated RESTful APIs to fetch and display dynamic data, improving the interactivity of web applications.
- Ensured web accessibility standards were met by adhering to WCAG guidelines, promoting inclusivity for all users.

PROJECTS

Backpage FC, TypeScript, Python, LangGraph, Distributed Systems, AWS *(July 2025 - present)*

- Architected and delivered a production-grade AI video generation platform orchestrating multi-stage workflows across prompt generation, image synthesis, text-to-speech, and cloud-based video rendering.
- Designed a scalable orchestration layer leveraging webhook-driven pipelines, asynchronous workers, and modular tool execution to enable reliable, observable content generation at scale.
- Scaled the platform to over **2,000 users** and **500,000+ content views** through continuous architecture optimisation, performance tuning, and production reliability improvements.