NATHANIEL OLAWUYI BABALOLA
Senior Backend Software Engineer

SUMMARY

Senior Backend Software Engineer with over 5 years of experience in software development, specializing in system architecture and backend solutions across various industries. Holds a B.Sc in Computer Science and professional certifications such as Microsoft AZ 900 and an IBM mastery award. Expertise in developing asynchronous backend systems using NestJS, enhancing application performance with technologies like AWS SQS, Lambda, and implementing multi-queue architectures. Proficient in building scalable microservices with integrated payment and analytics features, utilizing Stripe API, and blockchain technology. Demonstrated capability in optimizing APIs, designing serverless architectures, enabling continuous integration/deployment, and ensuring system compliance and security. Strong proponent of best practices in software development lifecycle, possessing hands-on experience with Kafka, gRPC, Kubernetes, Elasticsearch, and CI/CD pipelines.

TECHNICAL SKILLS

Main Technical Skills	FDD, Unreal Engine, NestJS, AWS, Ant Design
JavaScript Frameworks	NestJS
Databases & Management Systems / ORM	AWS ElasticSearch, MongoDB, Prisma, Redis
UI Frameworks, Libraries, and Browsers	Ant Design, Socket.io
Cloud Platforms, Services & Computing	AWS, Azure, Heroku
Amazon Web Services	AWS API Gateway, AWS ElasticSearch, AWS Quicksight
SDK / API and Integrations	AWS API Gateway, SOAP API, Stripe
Message/Queue/Task Brokers	BullMQ, Kafka
Methodologies, Paradigms and Patterns	FDD
Mail / Network Protocols / Data transfer	GRPC
Virtualization, Containers and Orchestration	Kubernetes
Platforms	Quadient Inspire
Other Technical Skills	Visual Basic

WORK EXPERIENCE

Backend Software Engineer, Ad Campaign Management System

Duration: April 2025 – Present
Summary: Upgrading the backend system to provide a robust, asynchronous solution for managing ad campaigns, implementing a multi-queue architecture for scalability, transition toward serverless with AWS Lambda, and developing a subscription-based payment system with Stripe.
Responsibilities: Architected backend with NestJS, developed payment systems, designed wallet gating, and created a serverless architecture for ad platforms.
Technologies: NestJS, AWS SQS, IAM, AWS Lambda, Stripe API
Backend Software Engineer, Blockchain Backend Services

Duration: September 2024 – August 2025
Summary: Building a provider-agnostic blockchain service, enhancing workflow automation, creating high-performance balance monitoring, and implementing KYC integration for stable coin banking.
Responsibilities: Architected service layer, designed workflow automation engine, engineered blockchain monitoring, and implemented KYC integration.
Technologies: Redis, BullMQ, MongoDB, NOWNodes, Blockbook, LiFi DEX Aggregator, CoinMarketCap API, Kafka
Backend Software Developer, HRMS Application Development

Duration: February 2023 – August 2024
Summary: Implementing microservices applications for enhanced communication and scalability, developing an automated attendance reporting system, and building a project management module.
Responsibilities: Implemented microservices using Kafka and gRPC, handled application scalability with Kubernetes, and developed time management and reporting features.
Technologies: NestJS, Kafka, gRPC, Kubernetes, Istio Gateway, AWS S3, Grafana
Backend Software Developer, Financial Management Modules

Duration: April 2022 – January 2023
Summary: Enhancing user dashboard analytics, tool development for customer support and merchants, and automating account opening processes.
Responsibilities: Developed analytics for user transactions, created tooling for POS management, and automated banking account opening.
Technologies: Node.js, Elasticsearch, Kafka
Backend Software Developer, Web Platform Backend Development

Duration: June 2021 – March 2022
Summary: Leading the refactor of core codebase for maintainability, deploying a dynamic job board and CMS, and architecting the backend for a flight booking application.
Responsibilities: Led refactor to MVC architecture, architected scalable backends for web platforms, and built RESTful APIs for flight booking.
Technologies: Node.js, Prisma ORM, Redis, BullMQ, Bitbucket Pipelines, Heroku
Backend Software Developer, Partner Ecosystem and Notification Microservice

Duration: September 2020 – May 2021
Summary: Developing essential partner onboarding systems, real-time notification services, and a centralized API Gateway for microservices management.
Responsibilities: Engineered partner portal, real-time notifications, and API Gateway, and developed a configurable approval workflow engine.
Technologies: RESTful APIs, WebSockets, Socket.io, MongoDB
Backend Software Developer, Loan Scoring Application

Duration: October 2019 – August 2020
Summary: Implementing the backend for a Loan Scoring application using cloud technologies to determine user eligibility for loan access.
Responsibilities: Involvement in complete software development lifecycle and implementation of Loan Scoring application's backend.
Technologies: Node.js, MongoDB, Azure App Service
System Analyst, CRM Software Development

DURATION: 2014
SUMMARY: WORKING AS A SYSTEM ANALYST ON A CRM SOFTWARE, GATHERING AND IMPLEMENTING USER AND BUSINESS SYSTEM REQUIREMENTS.
RESPONSIBILITIES: ANALYZED USER REQUIREMENTS AND IMPLEMENTED CRM SOFTWARE SOLUTIONS.
TECHNOLOGIES: VISUAL BASIC

EDUCATION

- **Bachelor of Science (B. Sc) in Computer Science**

CERTIFICATION

- **Microsoft Certified: AZ 900**
- **Application Security Analyst Mastery Award, IBM**