

NFTALEM AREGA

Full-Stack Software Engineer

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PROFESSIONAL SUMMARY

Results-driven Full-Stack Software Engineer with 3+ years of experience delivering enterprise-grade fintech and banking applications. Core expertise in Spring Boot, Next.js, and Node.js — specializing in secure payment systems, USSD/mobile banking, API integrations, identity/KYC platforms, and high-availability microservices. Adept at bridging product requirements with robust Spring Boot-powered backend implementations in fast-paced financial environments.

PROFESSIONAL EXPERIENCE

Full-Stack Software Engineer — **ZamZam Bank S.C** Sep 2024 – Present

Core banking fintech solutions for one of Ethiopia's leading Islamic banks.

- > Architected and delivered a USSD Push Payment platform with full Merchant Management, enabling secure mobile-initiated transactions across the bank's customer base.
- > Built a Developer Portal to expose internal APIs to third-party fintech partners, accelerating integration onboarding and reducing support overhead.
- > Implemented a Single Sign-On (SSO) solution across multiple internal applications, improving security posture and user experience.
- > Led the Fayda national ID harmonization initiative, deeply integrating biometric identity data with the bank's KYC workflows to ensure regulatory compliance.
- > Developed a secure Remittance Mobile Application with end-to-end encryption and multi-factor authentication, supporting international money transfer services.
- > Built the USSD Push Payment platform and full-stack banking modules using Next.js and Spring Boot, with RESTful API integration for real-time transaction processing.
- > Implemented RabbitMQ message queues for asynchronous processing, improving system reliability and decoupling microservice communication.

Full-Stack Developer (Part-Time) — **Blackrock Solution PLC** Feb 2023 – Jul 2024

Software consultancy delivering custom web and automation solutions for enterprise clients.

- > Developed and maintained scalable web applications using React, Node.js, and PostgreSQL, ensuring high availability and performance.
- > Designed and deployed Telegram bots to automate client workflows and enhance user engagement on digital platforms.
- > Integrated SMS notification functionality with Monday.com, enabling automated project status alerts and reducing manual follow-up overhead.

> Collaborated with cross-functional teams across the full SDLC — from requirements gathering and design reviews to deployment and post-launch monitoring.

Backend Developer (Part-Time) — Trust ICT Solution *Jul 2023 – Oct 2023*

Contract role focused on backend systems and database-driven application development.

- > Developed RESTful backend services using Flask and Node.js for data-intensive applications.
- > Designed and implemented efficient, scalable data models based on cross-functional requirements, optimizing database architecture for application performance.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Java, Python, C

Domain Knowledge: Fintech / Banking Systems, USSD Payments, KYC/AML, SSO/OAuth2, Remittance, API Gateway Design

Frontend: Next.js, React.js, Tailwind CSS

Backend: Node.js, Spring Boot, NestJS, Flask, Django

Databases: PostgreSQL, MongoDB, MySQL, Oracle DB

Tools & Platforms: RabbitMQ, Docker, Git, Jest, REST APIs

EDUCATION

Bachelor of Engineering — Electrical and Computer Engineering *Sep 2019 – Jun 2024*

Addis Ababa Science and Technology University

Specialization — Software Engineering *May 2022 – Jun 2023*

ALX Holberton Software Engineering

CERTIFICATIONS

ALX Software Engineering Certificate — ALX / Holberton School | Jun 2023