

Haben Eyasu Akelom

Senior Software Engineer | Java/Spring Boot | Fintech Specialist

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Professional Summary

Senior Software Engineer specializing in high-availability financial systems and AI-driven optimization. Proven expertise in architecting and scaling Java/Spring Boot microservices platforms that process **50M+ transactions with 99.8% uptime**. Successfully leverages AI/ML for predictive scaling and intelligent error handling, resulting in a **60% performance improvement** and a **42% reduction in critical system errors**.

Skills

Languages

- Java 8+, Python, JavaScript, SQL

Architecture

- Microservices, REST APIs, SOAP APIs, Event-driven design

Communication

- Stakeholder Communication, Technical Documentation, Presentation Skills

Frameworks

- Spring Boot, Spring Security, Spring Cloud, FastAPI, React, Angular

Security

- OAuth2, JWT, RBAC, AES-256 encryption

Problem-Solving

Databases

- PostgreSQL, MySQL, MongoDB, Redis

Monitoring

- ELK Stack, Prometheus, Grafana

Problem-Solving

- Analytical Thinking, System Design, Performance Optimization

DevOps

- Docker, Jenkins, GitLab CI/CD

Leadership & Collaboration

- Team Leadership, Technical Mentoring, Cross-functional Collaboration

Project Management

- Agile Methodologies, CI/CD Implementation, Project Planning

Work Experience

Analytics Engineer | MoonLight Energy Solutions, Kifiya AIM

11/2025 – 11/2025 | Addis Ababa, Ethiopia

- Engineered solar data analysis system processing 10M+ environmental measurements across 3 countries
- Developed automated EDA pipelines reducing analysis time by 60% through statistical profiling
- Built interactive Streamlit dashboard enabling real-time solar potential ranking and decision support
- Implemented CI/CD workflows ensuring code quality and automated testing

Senior Software Engineer, Kacha Digital Financial Service S.C

12/2023 – Present | Addis Ababa, Ethiopia

- Built enterprise USSD platform serving 27+ financial institutions processing 8M+ transactions monthly
- Architected multi-tenant microservices with OAuth2/JWT supporting 4 languages and thousands of concurrent sessions
- Optimized performance reducing API response times by 60% through Redis caching and connection pooling
- Implemented security framework with PIN validation, API key management, and encrypted communications.
- Architected and delivered an end-to-end data pipeline for KYC and transaction processing, featuring secure ETL workflows and scalable user management.

Full-Stack Engineer, AELAF Engineering

02/2022 – 12/2023 | Addis Ababa, Ethiopia

- Architected payment platform supporting 5 telecom providers with real-time ledger tracking
- Developed secure REST/SOAP APIs with JWT authentication and role-based access control
- Built React-based enterprise dashboard with comprehensive monitoring and reporting capabilities
- Optimized MySQL database architecture reducing system latency for high-volume transactions

Software Engineer-IV, AELAF Engineering

12/2020 – 01/2022 | Addis Ababa, Ethiopia

- Designed bulk voucher upload system supporting 10,000+ daily telecom voucher issuances
- Automated reporting processes using PostgreSQL materialized views and scheduled jobs
- Integrated CI/CD pipelines with Jenkins and implemented Kafka-based event-driven features

Software Engineer | Defense University College of Engineering | 2018-2019

- Designed and developed a full-stack **clinic management system** to digitize patient records and appointment scheduling, improving administrative efficiency.
- Engineered the backend using **Java** and **Spring Boot** with a **MySQL** database, creating secure RESTful APIs for data management.
- Built a responsive frontend interface using **JavaScript** and **React**, enhancing user experience for medical staff and patients.

Software Developer | Defense University College of Engineering | 2017-2018

- Contributed to the development of a university **registrar system** to manage student enrollment, courses, and grades, serving thousands of users.
- Implemented key features using **Java** and **Spring MVC**, focusing on robust data validation and transaction integrity with **PostgreSQL**.

- Assisted in debugging, testing, and deploying the system, gaining foundational experience in the software development lifecycle.

Projects

E-commerce Micro-service Platform (Personal Project)

- Architected 4 core microservices using Spring Boot 3.2.7 and Domain-Driven Design
- Implemented service discovery with Spring Cloud Eureka and reactive programming (WebFlux)
- Dockerized services with multi-stage builds and custom Docker networks

Real-Time Log File Processing Microservice (Personal Project)

- Built Next.js + Node.js microservice processing 1GB+ log files in <5 minutes
- Created React dashboard with WebSocket integration providing <50ms latency updates
- Implemented RESTful API with Supabase integration and JWT authentication

Personal Finance Tracker API | FastAPI, PostgreSQL, Docker, CI/CD, FastAPI, PostgreSQL

- Developed production-grade RESTful API using FastAPI and PostgreSQL with JWT authentication and multi-currency support
- Implemented secure authentication with OAuth2 password flow, Argon2 password hashing, and JWT token management
- Built scalable database architecture using SQLAlchemy 2.0 ORM with async operations and Alembic migrations
- Established CI/CD pipeline with Jenkins automation, Docker containerization, and Kubernetes deployment
- Designed comprehensive API documentation with Pydantic schema validation and 90% test coverage

Education

Defense University, College of Engineering, M.Tech. in Computer Engineering	09/2019 – 12/2021 Bishoftu, Ethiopia
Mekelle University, B.Sc. in Information Technology (Engineering)	09/2011 – 07/2016 Mekelle, Ethiopia