

CHARLES MWANGI

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SUMMARY

Performance-driven **Software Engineer** with 2+ years of experience in **designing system architecture**, **building RESTful APIs**, and **backend development**. Skilled in **Node.js**, **Express**, **Python (Django)**, and **AWS cloud environments**. Adept at delivering scalable backend systems, implementing **API security standards**, and leading cross-functional teams from concept to deployment. Certified by **MIT (Node.js & Express)** and **APISEC University (API Security)**. Passionate about building secure, efficient, and globally scalable applications.

EXPERIENCE

Software Engineer | iTechart Group

Jan 2023 – Oct 2025 | London, (Remote)

- **Designed** and **implemented** cloud-based solutions using AWS (EC2, S3, Lambda, DynamoDB), resulting in a 30% reduction in infrastructure costs.
- **Led** cross-functional teams of engineers, designers, and data scientists, delivering 10+ high-quality software products on time and under budget.
- **Developed** proof-of-concept applications to validate new product ideas, contributing to the successful launch of multiple new features.
- **Mentored** 20+ junior software engineers and interns, achieving 95%+ satisfaction scores in onboarding surveys.

Associate Software Engineer | Studio Graphine

Oct 2022 – Dec 2022 | Leeds ,(Remote)

- Developed real-time multiplayer API backend using Express.js and WebSocket, supporting 10K+ concurrent users.
- Integrated secure authentication flows and implemented OAuth2.0 and JWT authorization.
- Automated build & deployment using GitLab CI/CD pipelines, improving speed by 20%.
- Partnered with frontend teams to deliver seamless user experiences across mobile and web.

PROJECTS

1. FinEdge – API-Driven Fintech Platform

Tech Stack: Node.js, Express, MongoDB, AWS Lambda, APISEC

- Designed a secure REST API for digital wallets and real-time transactions.
- Integrated API threat detection and OWASP-compliant authentication using APISEC best practices.
- Scaled API requests to handle 100K+ concurrent operations using AWS autoscaling.

2. SmartFarm 360 – IoT & AI Farm Management System

Tech Stack: Django, Flutter, Firebase, Docker

- Built a Django backend to manage IoT sensor data for livestock tracking and crop monitoring.
- Integrated real-time notifications with Firebase Cloud Messaging, reducing response time by 50%.
- Deployed with Docker and CI/CD pipelines for continuous updates and monitoring.

3. DevScan – AI-Powered Code Quality Analyzer

Tech Stack: Node.js, Python, Flask, React, OpenAI API

- Created an AI-assisted platform that provides automated code review and optimization tips.
- Enabled developers to detect bugs and vulnerabilities in seconds, improving review efficiency by 40%.
- Implemented containerized microservices for scalable deployment.

EDUCATION

B.S. (Hons) in Information Technology | Karatina University 2022 – 2026 | Nyeri, Kenya

Certificate in Node.js & Express | Massachusetts Institute of Technology (MIT) | 2025

Certification in API Security | APISEC University | 2024

Certification in Project Management | Simplilearn | 2023

TECHNICAL SKILLS

Languages & Frameworks: Node.js, Express.js, Python (Django, Flask), JavaScript (ES6+), TypeScript

Databases: MongoDB, PostgreSQL, DynamoDB, MySQL

Cloud & DevOps: AWS (EC2, Lambda, S3), Docker, Jenkins, GitLab CI/CD

API Security: OAuth 2.0, JWT, OWASP, APISEC best practices

Microservices Architecture

API Gateway Management

Serverless Backend Design

Container Orchestration (Docker, Kubernetes)

Scalable System Design

Soft Skills:

Leadership, Mentorship, Problem Solving, Cross-Team Collaboration

PROFESSIONAL DEVELOPMENT:

- ✓ Active contributor to open-source backend projects.
- ✓ Regular learner on MIT OpenCourseWare and APISEC Labs.
- ✓ Engaged in backend architecture discussions on Stack Overflow and GitHub.
- ✓ Constant improvement in Tech Skills