

SAMWEL ETEMESI

Full Stack Developer | Nairobi, Kenya

+254 759 880 788 | samweletemesi2@gmail.com | codesbyetemesi.dev | github.com/CodesByEtemesi | LinkedIn

PROFESSIONAL SUMMARY

Full Stack Developer with 3+ years of experience designing and shipping production web applications on the Next.js, Express.js, and MongoDB stack. Sole developer of the complete digital platform for Mwelu Foundation, a Nairobi-based NGO, including a JWT-protected CMS, media gallery, and blog system — and the developer who diagnosed and fixed a legacy architecture bug causing a 95.7% error rate in production. Comfortable across the full stack: REST API design, database modelling, admin dashboards, decoupled Vercel/Render deployments, and methodical debugging under real production pressure. Currently pursuing a BSc in Information Technology at KCA University.

TECHNICAL SKILLS

Languages: JavaScript (ES6+), TypeScript, Python, Dart, SQL, HTML5, CSS3

Frontend: Next.js 14, React.js, React Context, React Router, Tailwind CSS, Vite, Swiper.js, AOS Animations

Backend: Express.js (4 & 5), Node.js, REST API Design, JWT Auth, bcrypt, Mongoose, Multer

Databases: MongoDB Atlas, PostgreSQL, Firebase Firestore

DevOps & Tools: Vercel, Render, Cloudinary, Git, GitHub, Docker (basic), Swagger UI, Postman

Mobile: Flutter, Android Development, Firebase Integration

Other: Chart.js, react-sortablejs, react-markdown, VS Code, Figma, Linux

WORK EXPERIENCE

Full Stack Developer | Mwelu Foundation — Nairobi, Kenya

September 2025 – Present

- Sole developer for the Mwelu Foundation digital platform, a production MERN-stack application serving as the NGO's primary point of contact for international donors and partner organisations.
- Built a JWT-protected admin CMS covering 24 admin pages with full CRUD for blogs, projects, gallery, shop, contacts, and a 'Friends of Mwelu' partner network — all gated behind a reusable withAdminAuth higher-order component.
- Diagnosed a legacy architecture flaw causing a 95.7% error rate on the live Vercel deployment, tracing it to 43 frontend API calls bypassing the backend and connecting directly to MongoDB; migrated all calls through the Express API to restore full functionality.
- Audited the Express backend and resolved 10+ production-breaking bugs, including Mongoose variable shadowing causing runtime crashes, an incorrect update option, a duplicate model file causing registration conflicts, and a unique-constraint bug silently rejecting repeat contact form submissions.
- Designed a custom Amazon-style media gallery viewer unifying images, uploaded MP4/WebM video, and embedded YouTube content in one component with a Swiper.js thumbnail strip — replacing the cost of a third-party CMS plugin.
- Replaced session-based NextAuth with stateless JWT authentication to support the fully decoupled Vercel (frontend) and Render (backend) deployment with no shared session storage.
- Implemented a keep-alive pinger on the Render-hosted API to prevent free-tier cold starts, and guided the complete local development setup on Windows (PowerShell policy, MongoDB Atlas IP whitelisting, dual-terminal workflow).

Full Stack Developer Intern | AA Kenya — Nairobi, Kenya

January 2025 – August 2025

- Developed and maintained internal web applications using Angular.js and Node.js within agile sprint cycles.
- Collaborated with cross-functional teams to scope, build, and ship features on schedule.
- Implemented REST API integrations and improved frontend performance through targeted code optimisation.

Frontend Web Developer | Sultana Baby shop & Cosmetics — Nairobi, Kenya

2023 – 2025

- Built and maintained the company's e-commerce frontend using React.js and Bootstrap.
- Improved mobile responsiveness and page load speed, contributing to increased customer engagement.
- Integrated the product catalogue with backend inventory APIs.

IT Technical Support Intern | USIU Africa — *Nairobi, Kenya*

January 2023 – April 2023

- Installed and configured Ubuntu and Windows 11 across multiple computer labs serving hundreds of students.
- Conducted hardware/software maintenance, antivirus deployment, and lab coordination with lecturers.

Call Centre Agent | CCI Kenya (Metro by T-Mobile) — *Nairobi, Kenya*

May 2023 – December 2023

- Handled 45+ customer calls daily for a US-based telecommunications client, maintaining high satisfaction scores.
- Operated multiple CRM tools simultaneously in a remote, international work environment.

KEY PROJECTS

Mwelu Foundation Digital Platform — *mwelufoundation.org*

September 2025 – August 2026 | Freelance / Employer Project

- Full-stack NGO platform (Next.js 14, Express.js 5, MongoDB Atlas, Cloudinary) with 7 Mongoose models across blogs, projects, gallery, shop, contacts, comments, and a partner network.
- Public site: animated stat counters, category-filtered project grid, partner logo carousel, live blog feed with nested comments, and a structured contact/inquiry system.
- Admin panel: JWT auth via a dedicated verify endpoint, Multer memoryStorage streaming uploads directly to Cloudinary with zero temp files, and a live-stats dashboard powered by Chart.js.

Stack: Next.js, Express.js, MongoDB, Mongoose, Cloudinary, JWT, Swiper.js, Chart.js, Vercel, Render

CodesByEtemesi Portfolio — *codesbyetemesi.dev*

January 2026 – Present | Personal Project

- Personal full-stack portfolio and business site with a decoupled Next.js frontend (Vercel) and Express.js backend (Render), fully managed through a custom admin dashboard — no code changes needed for content updates.
- Built a CSS-variable-driven dark/light theme system with an inline `_document.js` script that applies the saved theme before React hydrates, eliminating flash-of-wrong-theme on load.
- Solved a cross-origin auth failure between the separately hosted frontend and backend by explicitly configuring CORS, and fixed a Mongoose validation bug caused by a drag-and-drop library wrapping image URLs in proxy objects instead of plain strings.

Stack: Next.js, Express.js, MongoDB, Cloudinary, JWT + bcrypt, Chart.js, react-sortablejs, Vercel, Render

Motangi Glasses and Mirrors — *Freelance Client Project*

March 2026 – May 2026 | Freelance — Frontend Complete

- Solo-built a fully responsive React + Tailwind CSS storefront for a Nairobi glass and mirror retailer, structured for a clean handoff to a live backend in its next phase.
- Implemented category/sub-category filtering, search, price sorting, and cart management entirely through React Context, mirroring how the app will later consume a live API.
- Diagnosed a case-sensitive import path that built locally on Windows but broke Vercel's Linux production build, and traced a React key-collision warning to duplicate product IDs from a copy-paste error in the dataset.

Stack: React (Vite), React Router, Tailwind CSS, React Context, Vercel

Store Centre — *github.com/CodesByEtemesi/store_centre_front*

June 2024 – August 2024 | Capstone Project

- Frontend application for secure storage-unit browsing and booking with user authentication and separate client/employee dashboards, backed by a Python Flask + SQLAlchemy API.

Sifa Theatre — *github.com/CodesByEtemesi/sifa_theatre*

February 2024 – April 2024 | Capstone Project

- Web application for browsing and purchasing theatre show tickets, with secure authentication on a Flask/SQLAlchemy backend.

EDUCATION

BSc Information Technology | KCA University, Nairobi, Kenya

2024 – Present (Final Year)

- Relevant coursework: Software Engineering, Database Systems, Network Security, Cloud Computing.

Full Stack Web Development | Moringa School, Nairobi, Kenya

November 2023 – August 2024

- Intensive programme covering Python/Flask, JavaScript, React.js, and software engineering best practices.

Diploma in Business Information Technology | KCA University, Nairobi, Kenya

2021 – 2023

Certificate in Business Information Technology | KCA University, Nairobi, Kenya

2021 – 2022

ADDITIONAL INFORMATION

Languages: English (Fluent), Swahili (Native), Sheng

Interests: Open-source development, technical blogging, content creation, swimming, camping, hiking.