

James Karanja

Software Engineer | AI & IoT Enthusiast

karanjaymo44@gmail.com | +254 114 858 561 | Nairobi, Kenya | LinkedIn | GitHub

PROFESSIONAL SUMMARY

Backend-focused Software Engineer skilled in Node.js, Django, TypeScript, and database design. Built and shipped products from Shutterly (SaaS photography platform) to Smart Nyuki (IoT beekeeping system), taking projects from idea to production, designing APIs, working with real datasets, and solving complex technical challenges at scale.

TECHNICAL SKILLS

- **Languages:** JavaScript/TypeScript, Python, HTML/CSS
- **Frontend:** React, Next.js
- **Backend:** Django, Node.js
- **AI & Automation:** Zapier, n8n, Activepieces
- **Databases:** MySQL, PostgreSQL, Convex, TimescaleDB
- **IoT & Embedded:** Sensor Integration, Real-time Monitoring, ESP32, LoRaWAN
- **Cloud & DevOps:** Git, GitHub

PROFESSIONAL EXPERIENCE

Full Stack Engineer

Apelisoltech LTD | 2026, Present

- Developed the Sawake Boardrooms Management System, a full-stack platform for bookings, scheduling, and resource allocation with role-based access for admins and staff.
- Designed backend architecture handling reservations and real-time availability, and integrated automated email/SMS notifications for booking confirmations and reminders.

Full Stack Developer (Web & IoT)

JHUB Africa | May 2024, Present

- Built Smart Nyuki, an IoT-based apiary management platform with real-time environmental monitoring, predictive analytics, and WebSocket-powered React dashboards.
- Designed non-intrusive IoT sensors and collaborated with cross-functional teams through standups and code reviews; platform secured recognition from the Ministry of ICT.

Full Stack Developer

Future Interns | Oct 2025, Nov 2025

- Delivered production-ready applications, including an e-commerce platform, portfolio site, and blog system, implementing secure auth, payment integrations, and responsive UI/UX across multiple stacks.
- Optimised performance through efficient database queries and caching strategies, maintaining code quality and documentation under tight deadlines.

KEY PROJECTS

Sawake Boardrooms Management System

<https://brs.indomiekenya.co.ke>

- Boardroom booking platform for Indomie Kenya with real-time availability, RBAC for admins/staff/guests, and an intuitive scheduling dashboard.
- Automated email/SMS notifications for confirmations, reminders, and cancellations, streamlining facility operations end-to-end.

Technologies: Next.js, Node.js, PostgreSQL

Shutterly, Professional Photography Gallery Platform

shutterly.pics

- Full-stack photography platform for photographers to create, manage, and share client galleries with secure role-based access and shareable links.
- High-performance media pipeline with optimised Cloudflare R2 storage delivering fast image delivery and reliable asset management at scale.

Technologies: Next.js, Elysia.js, Convex Backend, Cloudflare R2

Smart Nyuki, AI-Powered Apiary Management System | Founder & CTO | 2024, Present

<https://smartryuki.tech>

- Founded under JHUB Africa at JKUAT, agri-tech platform combating colony collapse disorder with non-intrusive IoT hive sensors and real-time data reliability.
- React dashboards with WebSocket integration deliver Bee-Alert threat notifications and harvest recommendations; recognised by the Ministry of ICT for national scalability.

Technologies: React, Django, TimescaleDB

Kitas, E-Commerce Platform

kitas.co.ke

- Full-featured e-commerce platform with product listings, cart, secure checkout, order management, and admin inventory dashboard.
- Integrated M-Pesa and local payment gateways; built a mobile-first responsive UI for seamless browsing and purchasing across all devices.

Technologies: [Next.js](#), [Node.js](#), [PostgreSQL](#), [M-Pesa APIs](#)

CBC Exam & Results Management System

<https://acakoro.kraitech.co.ke>

- School results platform for Acakoro School with structured CBC exam entry, automated grade computation, and Admin/Teacher RBAC for secure scoped access.
- Admin dashboard for managing subjects, classes, and exam cycles with exportable reports; teacher interface reduces manual grading effort significantly.

Technologies: [Next.js](#), [TypeScript](#), [TanStack Router](#), [TanStack Query](#), [PostgreSQL](#), [Shadcn/ui](#)

Booch Kombucha, E-Commerce Shop

<https://ecommerce.booch.co.ke>

- Branded e-commerce storefront for BOOCH (Kenyan kombucha brand) with product discovery, cart management, checkout, and an admin panel for inventory and orders.
- Custom Tailwind design system with flavor-scoped color tokens and M-Pesa integration for a distinctive brand experience and seamless local transactions.

Technologies: [Next.js](#), [TypeScript](#), [PostgreSQL](#), [Tailwind CSS](#), [M-Pesa APIs](#)

JKUATCU Portal, Membership & Event Management

jkuatcu.org

- TypeScript/Next.js platform managing memberships, events, blog, gallery, and payments for JKUAT Christian Union with RBAC and M-Pesa integration.
- Handles thousands of monthly transactions at 99.9% uptime with scalable architecture supporting a large and growing user base.

Technologies: [Next.js](#), [PostgreSQL](#), [M-Pesa APIs](#)

Apify API, YouTube Video Details + Transcript API

apify.com/sculptured_yard/youtube-video-details-transcript--fast

- Backend Apify actor aggregating YouTube video metadata and transcripts into a unified API response for automation, analytics, and content processing workflows.

DylanPage

dylanpage.vercel.app

- Platform tracking and organising NewsDaddy (Dylan Page) content with structured access to news history and record-breaking posts.

Technologies: [Next.js](#), [SQLite](#), [Vercel Cron Jobs](#)

EDUCATION

BSc Electronics and Computer Engineering

JKUAT | 2022, Present | Expected: 2027 | Specialisations: Full-Stack Dev, IoT & Automation, AI

Kenya Certificate of Secondary Education (KCSE)

Njabini Boys High School | 2021 | Mean Grade: A- (77/84) | GPA: 3.7/4.0

CERTIFICATIONS & TRAINING

- | | |
|---|--|
| • JavaScript in Detail, Educative.io / Dec 2025 | • Gemini Academy, Google / 2025 |
| • Data Fundamentals, IBM SkillsBuild / Jul 2024 | • NASA Space Apps Hackathon, NASA / 2025 |
| • Internship Certificate, Future Interns / Nov 2025 | • Zoho Creator Training, Zoho / 2025 |