

DENNIS MUCHAI MUNIU

Full-Stack Engineer | Fintech & Business Solutions Specialist | Nairobi, Kenya

 +254 710 583121 |  dmmuchai@gmail.com |  [Portfolio](#) |  [GitHub](#) |  [LinkedIn](#)

PROFILE SUMMARY

Full-stack Software Engineer leveraging 14 years of experience in Banking Operations and Risk Analysis to build secure, scalable business solutions. Specialized in developing financial technology (fintech), property technology (PropTech), ecommerce, logistics and automated workflow systems. Expert in merging complex business logic with modern tech stacks (React, Supabase, Python, and AI integrations) to solve real-world operational problems.

CORE TECHNICAL SKILLS

- Frontend: React 19, TypeScript, Next.js, Tailwind CSS, Shadcn/ui, Vite.
- Backend: Node.js, Express.js, Python (Flask), PHP 8.3.
- Cloud & Database: Supabase (PostgreSQL, Auth, Edge Functions), MySQL, Vercel, Docker.
- Business Logic: Payment Gateway Integration (Pesapal/M-Pesa), JWT Auth, Row Level Security (RLS), Google Maps API, OpenAI/Gemini AI Integration.

FEATURED PROJECTS

Denncathy Fresh Basket | <https://denncathy.co.ke> | An e-commerce platform simplifying fresh produce logistics.

- **Payments:** Integrated **Pesapal API** to process secure M-Pesa and card transactions with real-time status callbacks.
- **Backend:** Developed a RESTful API using **Python (Flask)** and **SQLAlchemy** to manage inventory states and order processing.
- **Cart Logic:** Engineered session-based cart persistence using Flask-Session and UUIDs to recover lost sales from guest users.

KejaLink Real Estate Platform | <https://kejalink.co.ke> | A high-performance listing platform serving the Kenyan real estate market.

- **AI Integration:** Integrated **Google Gemini AI (Flash Model)** to automatically generate SEO-optimized property descriptions from raw agent data.
- **Geospatial Tech:** Implemented **Google Maps API with Places Library** restricted to Kenya for accurate location pinning and geocoding.
- **Performance:** utilized **PHP 8.3** and **MySQL** backend with Vite frontend, achieving optimized bundle sizes and fast load times via lazy loading.
- **Role-Based Access:** Designed distinct dashboards for Agents (analytics, listing management) and Tenants (favorites, search) using stateless JWT authentication.

MoveLink Moving Planner | <https://moving-planner-ke.vercel.app> | An AI-powered logistics calculator providing instant moving quotes.

- **Logic Engine:** Developed serverless **Supabase Edge Functions** to calculate moving costs in real-time based on volume, distance, and floor access.
- **Algorithms:** Integrated **Google Distance Matrix API** to automate mileage calculations between pickup and drop-off coordinates.
- **User Experience:** Built a multi-step reactive form with **React 18** and **TanStack Query** for seamless state management during the quoting process.
- **Communication:** Automated instant client communication via WhatsApp API integration upon quote generation.

KejaLink Rent Management System | <https://property-manager-ke.vercel.app> | A secure, full-stack ERP for property managers to track leases, tenants, and payments.

- **Architecture:** Built with **React**, **Express.js**, and **Supabase** (PostgreSQL) for robust data handling.
- **Financial Security:** Implemented **Row Level Security (RLS)** policies in PostgreSQL to ensure strict data privacy between landlords and tenants.
- **Core Logic:** Engineered complex relationships for managing **leases, payment history, and maintenance requests**, mirroring enterprise banking standards.
- **Security:** Deployed JWT-based authentication with Zod schema validation to prevent SQL injection and ensure data integrity.

PROFESSIONAL EXPERIENCE (RELEVANT)

Freelance Full-Stack Developer (2023–Present)

Built complete applications for clients, implemented API integrations, migrated systems, and delivered React/Supabase solutions.

OTHER EXPERIENCE

Family Bank Ltd — Senior Relationship Officer / Operations Supervisor (2009–2023)

Leadership, client management, risk evaluation, compliance oversight, and digital process improvement.

EDUCATION

ALX Software Engineering Plus Program (2024–2025): Full-stack engineering, cloud systems, backend API design, and team projects.

University of Nairobi- B.Com (Finance) (2010–2014)

CPA Part I & II

ACHIEVEMENTS

- Built 4 production-grade full-stack platforms in one year
- Completed ALX SE+ with distinction in project execution
- Recognized for leadership and operational excellence at Family Bank

HOBBIES & INTERESTS

Tech innovation, travel, open-source learning, soccer, chess