VINCENT WAMBUGU

Full-Stack Developer · Backend Specialist · SaaS & E-Commerce
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PROFESSIONAL SUMMARY

Backend-focused Full-Stack Developer specializing in scalable SaaS systems, authentication architecture, and payment integrations. Experienced in designing multi-tenant platforms with measurable performance improvements.

SKILLS & COMPETENCIES

Frontend: React.js, TypeScript, Tailwind CSS, Jinja Templates, Bootstrap, Responsive Design
Backend: Node.js, Express.js, FastAPI, Flask (Python), RESTful APIs, Microservices Architecture
Languages: JavaScript (ES6+), TypeScript, Python, SQL
Databases: MongoDB, PostgreSQL, Redis, Prisma ORM, Query Optimization, Schema Design
Cloud & DevOps: Docker, Google Cloud Platform, CI/CD Pipelines, Render, Git/GitHub, Linux Administration
Auth & Payments: JWT, Bcrypt, OAuth 2.0, M-Pesa API, Role-Based Access Control, WebSockets
Tools & Libraries: Multer, FullCalendar.js, Font Awesome, Postman, Agile/Scrum, API Documentation

PROFESSIONAL EXPERIENCE

Full-Stack Developer & Founder · StockFlow – POS & Inventory Management SaaS   *Jan 2026 – Present*
Live: https://stockflow-to60.onrender.com

- Architected a multi-branch SaaS platform with RBAC for super admins, branch admins, and cashiers, enabling secure data isolation and role-specific workflows across businesses.
- Designed scalable RESTful APIs handling product catalog, supplier tracking, purchase/sales processing (cash & credit), client management, and full user administration.
- Implemented an advanced analytics dashboard with real-time sales summaries (daily/weekly/monthly/yearly) and profit calculations using MongoDB aggregation pipelines.
- Built secure authentication with bcrypt password hashing and JWT session controls, including admin-only user creation with business assignment and strict access boundaries.
- Optimized MongoDB schemas achieving sub-200ms response times across all core operations; developed printable receipt generation with enriched product and client data.

Tech: *Flask (Python) · MongoDB · Bcrypt · Jinja Templates · Bootstrap · Font Awesome · Render · REST APIs · RBAC*

Full-Stack Developer & Founder · SwiftMall – E-Commerce Marketplace Platform   *Jul 2025 – Oct 2025*
Live: https://swiftmall.onrender.com

- Built a full-stack e-commerce marketplace with three role-specific dashboards (Buyer, Seller, Admin) supporting product listing, discovery, cart management, and order lifecycle tracking.
- Engineered a Seller Portal with complete product management (CRUD, image uploads via base64, stock control, active/inactive toggling), revenue analytics, review monitoring, and payout history.
- Implemented a Buyer Portal with real-time product search, auto-suggestions, category filtering, wishlist management, cart with quantity controls, and live order status tracking.
- Integrated M-Pesa STK Push with polling-based payment confirmation, automated stock decrement on success, and M-Pesa receipt delivery via in-app notifications.
- Secured all endpoints with JWT-based RBAC and bcrypt; built an Admin Panel for seller onboarding, suspension workflows, product moderation, and a full audit log.

Tech: *React · TypeScript · Flask (Python) · MongoDB · M-Pesa API · JWT · Bcrypt · REST APIs · Render*

Full-Stack Developer & Founder · Summit Wheels – Car Rental Commerce Platform   *Mar 2025 – Aug 2025*

Live: https://summit-wheels.onrender.com

- Architected a full-stack car rental platform with three role-specific interfaces (Owner, Renter, Admin) supporting the full booking lifecycle from listing to payment.
- Designed RESTful API backend with FastAPI and Prisma ORM, implementing relational data models for a multi-tenant architecture with RBAC across all three user types.
- Built a robust booking engine with conflict detection, automated pricing calculations, real-time availability tracking, and comprehensive booking status workflows.
- Implemented JWT-based authentication with bcrypt encryption, managing sessions and enforcing permissions across multiple dashboards for different user roles.
- Reduced API response time from 800ms to 200ms via query optimization; containerized with Docker and deployed on Render with CI/CD automation at 99.9% uptime.

Tech: *FastAPI · Python · TypeScript · React · MongoDB · Prisma ORM · Docker · JWT · REST APIs · Render*

Full-Stack Developer & Founder · Fit Fusion – Fitness Services Marketplace   *Nov 2024 – Feb 2025*

Live: https://fitfusion-41ee.onrender.com

- Built a two-sided marketplace connecting 50+ fitness trainers with clients, featuring trainer discovery algorithms, ratings/reviews, and a comprehensive session booking engine.
- Integrated M-Pesa payment gateway with OAuth 2.0, STK Push, webhook handling, and automated invoice generation — processing $15,000+ in transactions.
- Designed MongoDB schemas with embedded documents and references, optimized for read-heavy workloads using aggregation pipelines for a real-time analytics dashboard.
- Built real-time availability system with conflict detection using FullCalendar.js, preventing double-bookings across multiple trainers with varied availability windows.
- Implemented Multer file upload system for trainer portfolios with image compression, server-side validation, and web-optimized delivery for fast load times.

Tech: *Node.js · Express · MongoDB · JavaScript · FullCalendar · M-Pesa API · OAuth 2.0 · JWT · Multer*

Full-Stack Developer & Founder · SkillSync – Contractor & Client Matching Platform   *Oct 2025 – present*

Live: https://skillsync-1-ywfs.onrender.com

- Built a platform matching skilled contractors with clients using smart algorithms based on skill sets, location, and availability, with role-specific dashboards for the full project lifecycle.
- Developed a job marketplace with advanced filtering by category, budget, timeline, and skills; implemented proposal submission and bid management workflows.
- Built secure authentication with profile management, contractor portfolio showcasing, and a verified reviews system to establish trust between contractors and clients.
- Implemented real-time messaging and notifications to facilitate seamless communication throughout the hiring and project delivery process, improving completion rates.
- Designed scalable backend APIs supporting concurrent job listings, contractor search, and status tracking; deployed on Render with automated CI/CD pipelines.

Tech: *Node.js · Express · MongoDB · React · JWT · REST APIs · Render*

Full-Stack Developer · MatSched – Transport Scheduling SaaS   *Aug 2024 – Nov 2024*

Live: https://matsched-frontend.onrender.com

- Built a SaaS platform for matatu operators managing 100+ vehicles with automated route scheduling, fare collection, and driver assignment workflows.
- Integrated M-Pesa payment processing with callback handling and reconciliation logic, achieving a 95% successful transaction rate and automated invoice generation.
- Designed a drag-and-drop calendar interface using FullCalendar.js with real-time WebSocket updates for live operator collaboration on route and shift management.
- Implemented fleet analytics reporting on route profitability and driver performance, giving operators actionable insights to reduce costs and optimize scheduling.
- Delivered a production-ready MVP in 3 months from concept to deployment, demonstrating rapid execution from architecture design through to live cloud deployment.

Tech: *React · Node.js · Express · MongoDB · M-Pesa API · FullCalendar · JWT · WebSockets*

EDUCATION & CERTIFICATIONS

Bachelor of Science in Computer Science   *Sep 2020 – Sep 2024*

Kirinyaga University · Nairobi, Kenya

Coursework: Distributed Systems, Database Management, Software Engineering, Computer Networks, Algorithm Design, Cloud Computing, System Administration

CONTINUOUS LEARNING

- Learning Go for concurrent backend services and studying GraphQL with Apollo Server for type-safe, efficient data fetching patterns.
- Experimenting with Redis for caching and session management; completed Google Cloud Platform fundamentals covering GCP Console, Cloud Storage, and Compute Engine.