VINCENT WAMBUGU WAMBUI

Full-Stack Software Engineer | Backend Specialist
SaaS Development | E-Commerce Platforms | Cloud Architecture
Nairobi, Kenya | Available for Remote Work | LinkedIn: vinnwambugu **| GitHub:** VINN5 **| Email:**
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PROFESSIONAL SUMMARY

Results-driven Full-Stack Software Engineer with demonstrated expertise in architecting and deploying scalable SaaS platforms that generate real revenue. Specialized in backend development, database optimization, and payment system integrations. Proven track record of building production-ready e-commerce solutions from concept to deployment, managing complex data models, and implementing secure authentication systems. Strong problem-solver with experience in rapid prototyping, API design, and cloud infrastructure management. Committed to writing clean, maintainable code and delivering innovative solutions that drive business value.

CORE COMPETENCIES

- **Backend Development:** Node.js, Express.js, FastAPI (Python), RESTful APIs, GraphQL (Learning), Microservices Architecture
- **Database Technologies:** PostgreSQL, MongoDB, Redis, Prisma ORM, Query Optimization, Schema Design, Data Modeling
- **Programming Languages:** JavaScript (ES6+), TypeScript, Python, Go (Learning), SQL
- **Frontend Technologies:** React.js, TypeScript, Tailwind CSS, Responsive Design, State Management
- **DevOps & Cloud:** Docker, Kubernetes (Familiar), Google Cloud Platform, Git/GitHub, CI/CD Pipelines, Linux Administration
- **E-Commerce & Payments:** Payment Gateway Integration, M-Pesa API, OAuth 2.0, Transaction Processing, Checkout Systems
- **Additional Skills:** JWT Authentication, WebSockets, Webhook Handling, API Documentation, Agile Development, Remote Collaboration

PROFESSIONAL EXPERIENCE

BACKEND ENGINEER & FOUNDER

Summit Wheels – Car Rental Commerce Platform

December 2024 – February 2025 | Remote

- Architected and deployed full-stack e-commerce platform enabling vehicle owners to monetize assets, processing bookings worth $10,000+ in initial launch phase with three distinct user interfaces (Owner, Renter, Admin).
- Designed RESTful API backend with FastAPI and Prisma ORM, implementing complex relational data models for multi-tenant architecture with role-based access control (RBAC) supporting three user types.
- Built robust booking engine with transaction management, conflict detection, automated pricing calculations, real-time availability tracking, and comprehensive status workflows.
- Implemented secure JWT-based authentication system, managing user sessions and permissions across multiple dashboard interfaces with encrypted password storage using bcrypt.
- Containerized application with Docker and deployed to production on Render with CI/CD automation, achieving 99.9% uptime and resolving complex Linux binary compatibility challenges.
- Optimized database queries and implemented caching strategies, reducing average API response time from 800ms to 200ms through indexing and query optimization.

- Developed TypeScript React frontend with Vite build tool, integrating seamlessly with backend APIs and implementing comprehensive error handling, loading states, and responsive design.

Technologies: *FastAPI • Python • TypeScript • React • MongoDB • Prisma ORM • Docker • JWT • REST APIs • Render*

FULL-STACK ENGINEER & FOUNDER

Fit Fusion – Fitness Services Marketplace

November 2024 – February 2025 | Remote

- Built two-sided marketplace connecting 50+ fitness trainers with clients, implementing discovery algorithms, ratings/reviews system, and comprehensive session booking engine.
- Integrated M-Pesa payment gateway with OAuth 2.0, STK Push flow, webhook handling, and automated invoice generation, successfully processing $15,000+ in transactions.
- Designed MongoDB schemas with embedded documents and references, optimizing for read-heavy workloads and implementing aggregation pipelines for real-time analytics dashboard.
- Built real-time availability system with conflict detection using FullCalendar.js, preventing double-bookings and managing complex scheduling logic for multiple trainers.
- Implemented file upload system with Multer for progress photos and trainer portfolios, including image compression, validation, and optimization for web delivery.

Technologies: *Node.js • Express • MongoDB • JavaScript • FullCalendar • Payment APIs • JWT • Multer*

BACKEND DEVELOPER

Smart Matching System – Beauty Services Platform

February 2025 – May 2025 | Remote

- Developed PostgreSQL-backed marketplace with advanced filtering system (location, price range, services, ratings, availability) using indexed queries and full-text search capabilities.
- Architected normalized relational database schema with foreign keys, constraints, and junction tables for many-to-many relationships between specialists and service offerings.
- Built booking engine with transaction isolation levels, preventing race conditions and ensuring data consistency across concurrent bookings through proper database locking mechanisms.
- Optimized PostgreSQL queries with proper indexing and query planning, achieving sub-100ms response times on tables with 10,000+ records through strategic index placement.

Technologies: *Node.js • Express • PostgreSQL • React • TypeScript • JWT • Git*

FULL-STACK DEVELOPER

MATSCHED – Transport Scheduling SaaS

August 2024 – November 2024 | Remote

- Built SaaS platform for matatu (public transport) 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 95% successful transaction rate and automated invoice generation for operators.
- Designed drag-and-drop calendar interface for route management with real-time updates using WebSocket connections for live operator collaboration.
- Delivered production-ready MVP in 3 months, demonstrating rapid development cycle and efficient project execution from concept to deployment.

Technologies: *React • Node.js • Express • MongoDB • Payment APIs • FullCalendar • JWT • WebSockets*

NETWORK TECHNICIAN & SALES REPRESENTATIVE

Ecospot Internet Ltd

November 2024 – February 2025 | Nairobi, Kenya

- Installed and configured internet infrastructure for 50+ residential and commercial clients, ensuring optimal network performance and reliability.
- Conducted comprehensive site surveys and designed optimized network layouts, considering building structure, signal strength, and client requirements.
- Installed and configured routers, switches, and wireless access points; diagnosed and resolved connectivity issues, achieving 95%+ customer satisfaction ratings.

EDUCATION

Bachelor of Science in Computer Science | Kirinyaga University, Kenya

September 2020 – September 2024

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

CONTINUOUS LEARNING & DEVELOPMENT

- Actively learning Go programming language through personal projects, building RESTful APIs and exploring goroutines for concurrent backend services.
- Studying GraphQL fundamentals and Apollo Server, with hands-on practice building type-safe schemas, resolvers, and implementing efficient data fetching patterns.
- Experimenting with Redis for caching strategies and session management in high-traffic e-commerce applications, studying cache invalidation patterns.
- Completed Google Cloud Platform fundamentals course; familiar with GCP Console, Cloud Storage, Compute Engine, and basic cloud architecture patterns.

PROFESSIONAL ATTRIBUTES

- Proven track record of building revenue-generating commerce platforms from scratch with measurable business impact
- Strong problem-solving abilities with systematic debugging approach and root cause analysis methodology
- Entrepreneurial mindset with ability to move fast, innovate rapidly, and execute on ambitious technical roadmaps
- Excellent written and verbal English communication skills, with experience collaborating in remote, distributed teams
- Self-motivated learner committed to staying current with emerging technologies and industry best practices

LANGUAGES & ADDITIONAL INFORMATION

Languages: English (Fluent – Professional Working Proficiency) | Swahili (Native)

Work Authorization: Available for remote work from Kenya; open to relocation for the right opportunity

Availability: Immediate start available; flexible schedule for international team collaboration across time zones

Professional Interests: E-commerce innovation, SaaS architecture, Open-source contributions, Backend systems design, Payment technology, Cloud infrastructure

PROFESSIONAL REFERENCES

Available upon request