Tafadzwa Wilson Sedze

Full-Stack Software Engineer | Systems Developer | Robotics & IoT

+263 78 720 9882 | tafadzwawilsonsedze@gmail.com | Harare, Zimbabwe – open to relocating to Australia
LinkedIn: shorturl.fm/linkedin-wilson | GitHub: github.com/wilson3centaurus | Portfolio: wilsonsedze.vercel.app

CAREER SUMMARY

Full-stack software engineer and First Class Honours Computer Science graduate with hands-on industry experience since 2024. Designs and maintains RoboKorda Africa's internal ERP (RoboCore), builds real-time IoT systems that connect ESP32 hardware to live web dashboards, and rebuilt an Android OS with a custom in-house MDM integrated into it. Delivered 10+ freelance client projects across web, mobile and desktop domains using Python, Next.js, MySQL, Flutter and React Native, including Move, a two-sided delivery marketplace with real-time courier bidding, secure payments and an Android app. Administers self-hosted Supabase infrastructure on Linux VPS, and has coached student robotics teams from national titles to international competitions in Switzerland, India and China. Seeking a software engineering, systems development or IoT role in Australia.

KEY SKILLS

Front end & mobile	Next.js, React, TypeScript, JavaScript, Tailwind CSS, React Native, Flutter, Progressive Web Apps (PWAs)
Back end & data	Supabase, PostgreSQL, Node.js, Python, Flask, PHP, Prisma, Firebase, SQLite, Supabase Realtime
Cloud & infrastructure	Linux VPS administration, self-hosted Supabase, Vercel, Git and GitHub, GitHub-to-Vercel deployments
IoT & embedded	ESP32, Arduino C/C++, Raspberry Pi, MicroPython, sensor integration, Web Serial, LoRa, RFID
AI	LLM APIs, prompt engineering
Professional	Agile delivery (Scrum, Kanban), stakeholder reporting, technical training, curriculum design, team coaching

PROFESSIONAL EXPERIENCE

Systems Developer and Robotics & Coding Instructor
Jul 2026 – Present

RoboKorda Africa (placed at Rusununguko ZIMFEP High School), Zimbabwe

Key responsibilities

- Own the design, database schema, admin workflows, deployment and ongoing maintenance of RoboCore, the organisation's internal ERP built on Next.js and Supabase.
- Build enterprise systems for schools and live telemetry dashboards and control consoles for competition robots.
- Teach robotics and coding, and develop curriculum content for RoboKorda's school programs.

Key achievements

- Took RoboCore into production in March 2026; the system remains live with ongoing maintenance and enhancements.
- Delivered an RFID staff attendance system in which ESP32 readers post check-ins to Supabase and a Next.js dashboard updates live through Supabase Realtime.
- Built telemetry consoles for a mining rover with gas and climate sensing, and for two underwater drones streaming pH, temperature, turbidity and live camera video.
- Coached student robotics teams to national wins in Zimbabwe and on to international competitions in Switzerland (2025), India (2025) and China (2026).

Software Engineer and Robotics Instructor (Internship)
Jun 2024 – Jun 2025

RoboKorda Africa, Zimbabwe

- Built and maintained web platforms with Next.js, React, TypeScript, Tailwind CSS and Supabase, deployed on Vercel.
- Delivered dashboards, admin flows and database-driven features, and designed a PWA architecture so key tools kept working offline.
- Supported robotics and coding classes with lesson content, device prototyping and competition preparation.
- Wrote end-of-term system performance reports for stakeholders.

Freelance Full-Stack Developer
2024 – Present

Self-employed, various clients, Zimbabwe

- Delivered 10+ client projects spanning websites, mobile apps and desktop/database systems across different domains.
- Worked across a broad stack as each project required: Python, Next.js, MySQL/XAMPP, Flutter and React Native.
- Managed client requirements, timelines and delivery independently from scoping through to deployment.

KEY PROJECTS

PrimeOS Rebuild with PrimeSecure MDM — RoboKorda Africa product

Android 11 (PrimeOS), Android Device Owner and device policy APIs, ADB, APK provisioning, self-hosted Supabase

- Rebuilt PrimeOS, the Android-based operating system on the Primebook student laptops, and integrated PrimeSecure, a custom mobile device management (MDM) system built in-house, into the OS.
- PrimeSecure runs as Device Owner and lets administrators lock wallpaper, hide Settings, block unapproved app installs, push apps, files and media, send messages to all devices, locate devices, and view or delete files remotely.
- Designed as a multi-school product on a self-hosted Supabase back end, for fleets such as the roughly 300 Primebooks at Rusununguko ZIMFEP High School.

Kiosk+ Patient Robot Kiosk — Next.js 14, Prisma, Web Speech API

Final-year capstone project and Cimas Healthathon 3.0 entry

- Digital receptionist kiosk for Zimbabwe's public hospitals, designed around Mutare Provincial Hospital, with symptom triage, appointment booking, queue management and doctor dashboards.
- Voice interaction in 16 Zimbabwean languages to make the service accessible to patients regardless of language.

Carbon Capture Power Station Model — ESP32, Web Serial

- Scale model of Hwange Power Station with a carbon-capture stage monitored by MQ-9, MQ-135 and DHT11 sensors; a browser dashboard reads the sensors directly over Web Serial with no back end.

Move – Goods Transport & Parcel Delivery App — Next.js, Supabase (Postgres, RLS), Android (Bubblewrap), Google Maps API

- Two-sided delivery marketplace for Harare goods transport and small parcels, with negotiated fares between customers and couriers.
- Built real-time courier bidding and counteroffers, private in-app chat, secure delivery-code confirmation, and an administrator-approved courier onboarding flow.
- Enforced access control with row-level security and server-side validation, integrated live GPS courier tracking and Paynow/EcoCash payments, and shipped as a web app and a packaged Android APK.

EDUCATION

Bachelor of Science (Honours) in Computer Science – First Class Honours — 2022 – 2026

Manicaland State University of Applied Sciences (MSUAS), Zimbabwe

Relevant subjects: Software Engineering, Database Systems, Data Structures and Algorithms, Computer Security, AI, Parallel and Distributed Computing, Embedded Systems.

ZIMSEC Advanced Level – A grades in Computer Science, Physics and Pure Mathematics — 2021

St Francis and St Clare Secondary School, Zimbabwe

ZIMSEC Ordinary Level – eight subjects at C or better, including Mathematics and English Language — 2019

St Francis and St Clare Secondary School, Zimbabwe

National Foundation Certificate in Computer Operations and Packages — 2019

Ministry of Higher and Tertiary Education, Science and Technology Development, Zimbabwe

CERTIFICATIONS

- **Software Engineering Program, Back-end Specialisation (12 months)** – ALX Africa / Holberton School, Feb 2025
- **ICDL Robotics** – ICDL Africa, May 2025
- **HP LIFE:** AI for Beginners (Sep 2025); Data Science and Analytics, Agile Project Management, Business Email (Jun 2025)

REFERENCES

Available upon request.