

HOPE TUYISHIME WILBERFORCE

Backend Software Engineer | Python · FastAPI · PostgreSQL

Kigali, Rwanda | tuyishimehope01@gmail.com | +250 786 125 117 | [linkedin.com](#) | [github.com](#)

Rwandan citizen | Relocation-ready; familiar with the EU Blue Card and Dutch Highly Skilled Migrant processes

SUMMARY

Backend Software Engineer with hands-on experience building production services using Python, FastAPI, PostgreSQL, Java/Spring Boot, and TypeScript/Node.js. At IFAD, developed asynchronous document-processing systems using message queues and background workers, with a focus on reliability, fault tolerance, database performance, and long-running distributed workflows.

TECHNICAL SKILLS

Languages: Python, SQL, Java, TypeScript, JavaScript

Backend: FastAPI, SQLAlchemy, Celery, REST API design, Spring Boot, Node.js

Data & messaging: PostgreSQL, Redis, Azure Service Bus, data modelling, query optimisation, ETL pipelines

Infrastructure: Docker, Linux, Git, GitHub Actions, CI/CD, Azure, Aws, S3, EC2, GCP

AI & testing: OCR processing, information extraction, RAG, Pytest , Playwright, Selenium

EXPERIENCE

Trustplot

Founder

Kigali, Rwanda

May 2026 – Present

- Founded and engineered a full-stack land and property intelligence platform for Rwanda, supporting parcel search by UPI, interactive mapping, zoning and risk screening, reference valuation, and automated report generation.
- Integrated ArcGIS REST services and geospatial datasets for parcel-level analysis, using PostGIS to store spatial property data.

IFAD – International Fund for Agricultural Development (UN specialised agency)

Rome, Italy

Full Stack Software Engineer (Internship)

Mar 2025 – Apr 2026

- Built Python FastAPI and PostgreSQL services for enterprise document ingestion, OCR, information extraction, human review and archival workflows, handling 100 documents per day.
- Designed asynchronous processing pipelines with Azure Service Bus and distributed background workers, keeping API responses under 200 ms while long-running document analysis ran outside the request cycle.
- Implemented retry, recovery and failure-handling mechanisms for asynchronous workflows, improving fault tolerance across distributed services and reducing failed jobs by 60%.
- Designed PostgreSQL schemas and optimised SQL queries for storing and querying AI-extracted document data.
- Built responsive React, Next.js, TypeScript and Redux interfaces with reusable components, focused on performance and maintainability.

AUCA Innovation Center (Mastercard Program)

Kigali, Rwanda

Software Engineer Apprentice

Aug 2024 – Feb 2025

- Developed REST APIs with Java, Spring Boot, Spring Data JPA and PostgreSQL for academic and financial management systems.
- Designed relational data models and optimised SQL queries for transactional applications and reliable data access.

NetFella

Kigali, Rwanda

Software Engineer Intern

Jul 2024 – Dec 2024

- Built backend services and event-driven pipelines with Node.js, TypeScript and PostgreSQL for real-time telemetry collection and analytics.
- Designed secure REST APIs and access-control mechanisms for data exchange between distributed components.

Andela

Remote

Software Engineer Apprentice part-time

Nov 2023 – Dec 2024

- Developed REST APIs with Node.js, TypeScript and PostgreSQL for authentication, authorisation and tenant-isolated multi-tenant workflows.
- Improved database performance through indexing and SQL optimisation; contributed GitHub Actions CI/CD pipelines and deployment automation.

PROJECTS

DocFlow – Distributed AI Document Processing Platform

[github.com](#)

- Built asynchronous document-processing workflows with Celery workers on Redis, keeping long-running analysis outside the request-response cycle; containerised all services with Docker.

EDUCATION

Adventist University of Central Africa (AUCA) Kigali, Rwanda | Oct 2025

Bachelor of Science (Honours) in Software Engineering, Distinction