

Olivier Karera

Principal Backend Engineer (4 years) architecting scalable systems for 1M+ users in fintech, healthcare, and climate tech. Specialized in Python/TypeScript with expertise in both microservices and modular monoliths. Delivered 90% infrastructure cost reduction while boosting performance 60%, and achieved 99.95% payment success through Stripe integration. Reduced technical debt 30% while accelerating feature delivery 40% through modular standards and technical leadership.

WORK EXPERIENCE

Nordic Loop (Climate Tech)

Sweden, Goteborg (Remote, Part time)

Principal Engineer

April/2025 - PRESENT

- Establish development standards and best practices for clean architecture, security, and performance optimization
- Architected modular monolithic backend for Nordic Loop marketplace, reducing inter-module coupling by 70%.
- Integrated Stripe payment system with idempotency controls and transactional integrity, achieving 99% payment success rate
- Established modular development standards for security and performance, reducing technical debt by 30% and accelerating feature delivery by 40%
- Implemented multi-tenant RBAC within the monolithic structure

Comprehensive Staffing Resources ltd (BPO)

Rwanda, Kigali (On site, Full Time)

Backend Lead

Jan/2023 - PRESENT

- Architected scalable microservices architecture (1M+ users) incorporating caching and async programming, boosting API response times by 40% and overall performance by 60%
- Reduced deployment costs by 90% by migrating from PAAS to IAAS; trained team on IAAS utilization, achieving significant savings (45%) and performance gains.
- Cut deployment time by 50% by introducing and implementing Docker containerization across the team.
- Optimized PostgreSQL databases, accelerating hospital report data delivery by 20%.
- Led architectural strategy, evaluating performance/ maintainability/ scalability trade-offs for critical system components.
- Mentored 5 developers in TDD and code quality, reducing production bugs by 35% and enhancing system reliability.
- Collaborated with front-end teams to integrate back-end systems, ensuring a seamless user experience.

Freelancing

(Remote)

Full Stack Engineer

Jan/2022 - Dec/2024

- Reduced API response times by 60% through database optimization and caching implementation
- Built comprehensive test suites achieving 90%+ code coverage using TDD practices
- Developed Intelligent Customer service chatbot powered by OpenAI API, automatically handling 60% of customer inquiries.

Contact Details

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[Linkedin](#)

[Portfolio](#)

[Github](#)

Kigali, Rwanda (open to relocate)

Skills

Backend

Languages: Python, Typescript

Frameworks: Django, FastAPI, Nodejs

Database & Caching: Postgres, MongoDB, Redis, SQLAlchemy, Prisma

DevOps: Docker, Kubernetes, CI/CD, Terraform, Github Actions

Cloud: AWS (Lambda, S3, Cloudwatch, EC2, API Gateway, IAM)

Practices: TDD, Microservices, Event Driven Architecture

AI Integration: OpenAI, Gemini, Claude, Deepseek

Frontend

Languages: Javascript, Typescript

Framework & Libraries Next.js, Tailwind

Certification

- PCAP: Python Essentials (Cisco Networking Academy, 2023)
- Build REST APIs with Django & REST Framework and Python (Udemy, 2024)
- Test-Driven Development in Python (LinkedIn, 2023)
- Practical GitHub Actions (LinkedIn, 2024)
- DevOps Foundations: Infrastructure as Code (LinkedIn, 2025)
- Linux Essentials (Cisco Networking Academy, 2022)
- Agile Project Management (LinkedIn, 2024)
- React.js Certificate (Solvit Africa, 2023)

Education

Carnegie Mellon University, M.S., Information Technology

Rwanda, Kigali, Sep 2023 - May 2025

Adventist University Of Central Africa - B.S., Information Technology

Rwanda, Kigali, Sep 2019 - Nov 2023

Languages

- English (Professional)
- Kinyarwanda (Native)
- French (Elementary)
- German (Beginner)

Projects

- **Nordic Loop Climate Marketplace** (2025-Present). Principal/Fullstack Engineer, Next.js, Django REST Framework, Kubernetes, Docker, Redis, Firebase, Stripe, Google Maps API, Postgres, Websockets.
- **KPI Hospital Data Management Tool** (2024-2025). Fullstack Engineer, React.js, Django REST Framework, TDD, Redis, Postgres, Microservices architecture.
- **Plush Furniture Store (E-commerce)** (2025). Fullstack Engineer, Next.js, FastAPI, Docker, Redis, S3, Grafana, Postgres, TDD, Local Payment Gateway.
- **Quin AI** (2025). Backend Lead, Django Restframework, Paypal API, OpenAI API, Postgres