Olivier Karera

Full-Stack Software Engineer with 4 years architecting scalable microservices and high performance systems for fintech, healthcare, and Climate Tech. Specialized in Python (Django/FastAPI) and TypeScript (Next.js) with experience in microservices architecture, Docker optimization (83% image reduction), and Stripe connect payment integration (99%+ success rate). Proven track record delivering infrastructure cost reduction (90%) while improving performance (40%) through PostgreSQL optimization, caching strategies, and observability implementation (Prometheus/Grafana).

WORK EXPERIENCE

Nordic Loop (Climate Tech)   Software Engineer
Sweden, Goteborg (Remote, Part time)   **April/2025 - PRESENT**

- Architected microservices platform with Django 5.2 (29K+ lines, 130+ endpoints, 23 models), FastAPI (1,653 lines), Next.js 15 (56K+ lines), Kong API Gateway, and Redis for caching
- Integrated Stripe Connect with platform-hold model, webhook confirmation,and automated payouts, achieving 99%+ success rate with idempotency
- Implemented RS256 JWT authentication with 15-minute tokens, blacklist support, and 11 custom claims, reducing payload by 40% (1,200→720 bytes)
- Deployed hybrid storage (Firebase, Cloudflare R2, local) with multi-credential support and automatic failover for 99.9% uptime
- Optimized Docker deployment by 83% (1.2GB→200MB) via multi-stage builds and layer caching, reducing deployment time to ~10 seconds
- Built Prometheus/Grafana monitoring with custom metrics, HTTP latency tracking, and real-time dashboards for system observability

Comprehensive Staffing Resources ltd (BPO)   Backend Lead
Rwanda, Kigali (On site, Full Time)   **Jan/2023 - PRESENT**

- Architected scalable microservices architecture serving 10K+ concurrent users with load balancing, horizontal scaling, and containerized deployment
- 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.
- Improved API performance by 40% via Redis caching, async Python, connection pooling, and PostgreSQL indexing and Query optimization
- Led architectural design, 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.
- Built enterprise authentication infrastructure with JWT token rotation, OAuth 2.0 social login (Google, Twitter, Microsoft), multi-factor authentication, RBAC, and API key authentication with audit logging

Contact Details

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(+250) 780 732 171
Linkedin
Portfolio
Github
Kigali, Rwanda (open to relocate)

Skills

Backend

Languages: Python, Typescript

Frameworks: Django, FastAPI, Nodejs

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

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

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

Practices: TDD,Microservices, Event Driven Architecture, Monolith

AI Integration: OpenAI, Gemini

Frontend

*Languages:*Javascript, Typescript

Framework & Libraries Next.js, Tailwind

Certification

- Build REST APIs with Django & REST Framework and Python (Udemy, 2024)
- Test-Driven Development in Python (LinkedIn, 2023)
- Practical GitHub Actions (LinkedIn, 2024)
- Linux Essentials (Cisco Networking Academy, 2022)
- Agile Project Management (LinkedIn, 2024)

Education

Carnegie Mellon University, M.S., Information Technology
Rwanda, Kigali, Sep 2023 - May 2025

Adventist University Of Central Africa - B.S.,InformationTechnology
Rwanda, Kigali, Sep 2019 - Nov 2023

Languages

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

Projects

- **Nordic Loop Climate Marketplace** (2025-Present). Principal/Fullstack Engineer, Django 5.2, FastAPI, Pytest, Next.js 15, PostgreSQL 17, MongoDB, WebSockets, Docker, Prometheus/Grafana, Stripe Connect, Cloudflare R2, Firebase Storage, Mailjet API, JWT (RS256), Redis, Celery, Kong API Gateway.

- **KPI Hospital Data Management Tool** (2024-2025). Fullstack Engineer, Django 5.2, Django REST Framework 3.16, React.js, PostgreSQL 17, Redis 7, Django Channels 4.2, WebSockets, JWT, Microsoft OAuth, Pandas, openpyxl, Docker, Gunicorn, GitHub Actions, CI/CD, OpenAPI 3.0, Swagger, Python 3.12, WhiteNoise, uv

- **House Rental Management Platform** (2024). Full Stack Developer Django 5.0+, Django Ninja, Next.js 14, Flutter, PostgreSQL, Stripe API, JWT, OAuth 2.0 (Google, Twitter), Redis, Docker, React Query, TailwindCSS, Google Maps, Pytest