Curriculum Vitae

Patrick Mbugua Kaveke
Kikuyu, Kenya | +254713226748 | pkaveks2@gmail.com
Portfolio / GitHub / LinkedIn

Professional summary

Results-driven Software Engineer with 3+ years of experience designing and building scalable backend systems across fintech, payments, and e-commerce platforms. Strong expertise in Python-based backend development using Django, Django REST Framework, and FastAPI, with experience building distributed systems using Celery, Redis, and RabbitMQ. Proven experience integrating core banking infrastructure, implementing secure authentication systems with Keycloak and OAuth providers, and developing high-reliability APIs for financial services. Skilled in cloud-native deployment, database optimization, and designing resilient microservice integrations.

Technical Skills

- **Programming Languages:** Python, TypeScript, JavaScript, Kotlin, HTML5, CSS3
- **Backend:** Django, Django REST Framework, FastAPI, Next.js API Routes
- **Frontend:** React, Next.js, TailwindCSS, Bootstrap, Material UI
- **Databases:** PostgreSQL, MySQL, MongoDB, Supabase, Prisma ORM
- **ORM / Data Layer**: Prisma ORM, Django ORM
- **Cloud & DevOps:** AWS, GCP, DigitalOcean, Vercel, Docker,Kubernetes, RailwayApps
- **Messaging & Distributed Systems:** Celery, Redis, RabbitMQ
- **Authentication & Security:** Keycloak, OAuth (Google/Facebook), OTP (Firebase/Twilio)
- **Collaboration & Engineering Tools:** GitHub, Slack, Postman,Mattermost
- **Project Management & Documentation:** Jira,Linear, Outline,Notion

Work Experience

March 2025 – Present **Backend Engineer - Syndicated Payment ltd**

Core Banking Integration Middleware
Tech: FastAPI | Apache Fineract | Redis | RabbitMQ | PostgreSQL

- Designed and implemented a middleware service integrating external banking partners with Apache Fineract core banking infrastructure.
- Implemented real-time workflows for account creation, deposits, withdrawals, and ledger synchronization between banking partners and internal financial systems.
- Built event-driven processing pipelines to handle webhook events and maintain consistent transaction states across distributed systems.
- Implemented validation and error-handling mechanisms ensuring financial transaction integrity and system reliability.

Payment Gateway & Settlement System
Tech: Django | Django REST Framework | Celery | Redis | RabbitMQ

- Developed a backend payment orchestration system responsible for processing collections and distributing settlement payments to merchant accounts.
- Designed asynchronous job processing for settlement, reconciliation, and background payment processing tasks.
- Implemented idempotent transaction handling to prevent duplicate financial operations during retries or network failures.

- Built secure APIs supporting payment workflows and transaction monitoring.

Authentication & Identity Infrastructure
Tech: Django | Keycloak | OAuth2 | Redis

- Implemented centralized identity and authentication infrastructure using Keycloak for web and mobile applications.
- Designed role-based access control (RBAC) integrated with Django REST Framework APIs.
- Implemented secure OAuth login workflows and token-based authentication.
- Built Redis-backed token caching to improve authentication performance and reduce authentication service load.

March 2025 – June 2025 **Python Backend Team Lead - Witz-Africa**

- Led backend engineering for an e-commerce platform serving Kenya's fishing market ecosystem.
- Designed and implemented a secure authentication system supporting OAuth providers (Google, Facebook) and OTP verification using Firebase and Twilio.
- Architected asynchronous task processing using Celery, Redis, and RabbitMQ to support background workflows and scalable operations.
- Implemented Redis-based caching to improve system performance and reduce PostgreSQL query load.
- Collaborated closely with frontend and mobile teams to design stable API contracts and ensure seamless integration.

Nov 2024 – April 2025 **Frontend Developer- Buntu Labs Technologies**

- Led frontend development for scalable web applications using Next.js, TypeScript, and TailwindCSS.
- Conducted code reviews and enforced engineering best practices across the development team.
- Implemented development workflow automation using Husky for pre-commit checks and code quality enforcement.
- Coordinated team collaboration and task tracking using GitHub and Jira.

March 2021- Nov 2024 **Full Stack Developer - PM codes**

- Developed and maintained full-stack applications using React, Next.js, Django, and Django REST Framework.
- Designed and implemented RESTful APIs supporting web and mobile client applications.
- Integrated third-party payment systems including PayPal and Stripe.
- Managed relational and cloud databases including PostgreSQL and Supabase.
- Optimized database queries and application performance, reducing system downtime by approximately 30%.
- Collaborated in cross-functional development teams using GitHub and Jira.

Other Experience

Aug 2022- Sept 2022 **Election Official - IEBC**

- Performed electronic voter identification using KIEMS kits during national elections.
- Assisted in vote tallying and results verification processes.
- Ensured compliance with election integrity procedures.

Aug 2019 – Sep 2019 **Enumerator - Kenya National Bureau of Statistics**

- Conducted household mapping and geo-tagging to configure digital census zones.
- Collected demographic and socio-economic data using tablet-based census tools
- Performed structured digital interviews to support national statistical data collection

Education

Bachelor of Science in Applied Statistics With Programming
University: **Murang'a University Of Technology**
Graduated: **2020**

Certifications & Training

Python for Data Science – DataCamp (2020)

STATA, SPSS & R Certification – Kesap Research Centre (2020)

Leadership & Achievements

- Class Representative – B.Sc Applied Statistics with Programming (2017–2020).
- Founder & Secretary – Kinoo Self-Help Darts Club.
- Introduced a **Welfare Loan Program** at Shira Ltd, increasing annual revenue.

Referees

1. Francis Mwangi Muraya – Senior Software Engineer, Microsoft Kenya
   Email: francismwangi152@gmail.com | **Phone**: +254702729654
2. Ms. Caroline Githinji – Accounting/HR Manager, Shira Limited
   Email: msoncarol@gmail.com | **Phone**: +254724237979