KEVIN KIARIE

Elixir / Phoenix Developer • Fullstack Engineer

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PROFESSIONAL SUMMARY

Results-driven Elixir/Phoenix developer with 2+ years of hands-on experience building fault-tolerant, high-performance distributed systems on the BEAM VM. Demonstrated expertise in OTP behaviours (GenServer, Supervisor, Application), Phoenix LiveView for real-time server-rendered interfaces, Ecto for schema design and optimised query composition, and Phoenix Channels for WebSocket-driven communication. Proven, quantifiable track record: 25% reduction in maintenance costs post-Elixir migration, 15% improvement in system performance, and 50% enhancement in code maintainability through functional programming principles. Experienced integrating Elixir back-ends with React, LiveView, and enterprise ERP systems. Committed to immutability, pattern matching, and the OTP design philosophy as first-class engineering disciplines.

CORE TECHNICAL SKILLS

Elixir & OTP	Elixir, OTP (GenServer, Supervisor, Application, Task, Agent), Phoenix Framework, Phoenix LiveView, Phoenix Channels, Ecto ORM, ExUnit, Mix, Hex, BEAM VM, Fault Tolerance, Pattern Matching, Processes & Message Passing
Frontend	React (Hooks, Context), JavaScript ES6+, HTML5, CSS3, Tailwind CSS, Phoenix LiveView, DOM manipulation, responsive design, UI/UX
Backend	Python (Django, FastAPI), NestJS, REST APIs, authentication & authorisation, server-side logic, Sage 200 ERP integration
Databases	PostgreSQL, MS SQL, Ecto (Elixir), Prisma, TypeORM, schema design, relational modelling, query optimisation, migrations
DevOps & Tools	GitHub, GitLab, Linux (Ubuntu), Bash scripting, Agile (Scrum / Kanban), Netlify, Vercel, TanStack Query, browser DevTools

PROFESSIONAL EXPERIENCE

Fullstack Developer — Elixir / Phoenix Focus Jan 2025 – Present

Virgil Africa • Nairobi, Kenya

- Engineered migration of legacy application modules to Elixir/Phoenix, leveraging OTP supervision trees and GenServer processes for fault-tolerant concurrency; achieved a 25% reduction in maintenance costs and 15% improvement in system performance.
- Designed and deployed Phoenix LiveView components for real-time stakeholder dashboards, eliminating client-side JavaScript complexity while delivering a 10% boost in operational efficiency.
- Architected Phoenix Channels integration between a ticketing system and existing ERP, enabling real-time WebSocket communication; cut ticket resolution time by 25% and raised customer satisfaction scores by 15%.
- Refactored a legacy codebase using functional programming principles — immutability, pure functions, pattern matching — improving code maintainability by 50% and reducing bug reports by 20%.
- Authored comprehensive Elixir/Phoenix technical documentation and delivered structured training to 50+ employees, reducing post-implementation support requests by 30%.

Frontend Developer Jun 2024 – Jan 2025

Virgil Africa • Nairobi, Kenya

- Built a responsive React/JavaScript front-end consuming Phoenix REST APIs; optimised page load times by 40% and reduced bounce rate by 25% through targeted performance engineering.
- Integrated a headless CMS enabling content editors to publish updates 50% faster and cutting content-related support tickets by 35%.
- Diagnosed and resolved 100+ critical frontend bugs, maintaining 99.9% system uptime and measurably improving user experience across all major browsers.
- Leveraged Google Analytics performance data to identify and implement targeted optimisations, driving a 15% increase in user engagement within the first quarter.

Cyber Security InternJun 2023 – Oct 2023

Patrick Muthukia • Syokimau, Kenya

- Identified and analysed 20+ security vulnerabilities in CCTV and network systems, enhancing network resilience by 15% through proactive risk mitigation strategies.
- Conducted comprehensive security audits across 50+ systems, achieving 100% remediation of identified vulnerabilities in line with industry best-practice standards.
- Reduced average bug resolution time by 25% by designing and implementing a streamlined incident reporting and triage workflow.

NOTABLE PROJECTS

Production Cache Optimisation — TanStack Query | *Jun 2025*

Diagnosed and resolved critical caching bottlenecks in a production system using TanStack Query. Restructured query invalidation strategies and stale-time configurations, reducing redundant API round-trips and measurably improving perceived UI responsiveness under concurrent load.

Scalability & Server Optimisation Initiative

Collaborated across Virgil Africa, Computer Pride, and EngageXpress engineering teams on horizontal scalability improvements and server-side performance tuning, enhancing system throughput and stability under high-concurrency workloads.

Multi-Client SME Web Platform

Designed and delivered production-grade landing pages for EngageXpress, Kraft, and ByteBuilders using React front-ends backed by Phoenix APIs, ensuring cross-browser compatibility and full mobile responsiveness.

EDUCATION

Bachelor of ScienceNov 2020 – Expected Nov 2025

The Cooperative University of Kenya • Karen, Nairobi

CERTIFICATION

Software Development CertificateAug 2023

Zindua School • Kilimani, Nairobi

REFERENCES

Available upon request.