Edwin Kirimi Kinuthia

Full-Stack Blockchain Developer — Solidity, Smart Contract Security & Next.js

Solidity smart contracts & secure state-transition logic for Web3 applications · $65/hr · Available

Nairobi, Kenya · edwin-kirimi-kinuthia.github.io/Edwin-Kirimi-Portfolio · www.linkedin.com/in/edwinkirimikinuthia

SKILLS

Solidity, Smart Contract Development, TypeScript, Next.js, Node.js, Hardhat, Ethers.js, Python, FastAPI, Tailwind CSS, PostgreSQL, Foundry, viem, wagmi

ABOUT

I build full-stack Web3 applications with a focus on getting the state machine right — where a bug doesn't just look wrong, it moves money or breaks trust. I started as a backend developer at Miksi (AI SaaS), building API key management, authentication, and authorization services, and shipping a published PyPI package end-to-end. I've also built a PHP e-commerce platform covering cart, checkout, and order-state logic — transactional flow that maps closely onto escrow state transitions.

More recently I built VeriVote Kenya solo: a verifiable voting platform with Solidity smart contracts (Soul-Bound Tokens, on-chain vote recording with supersede/replay protection), ElGamal encryption, Shamir's Secret Sharing, and a Next.js dashboard.

I come to this from a nursing background that trained me to think in protocols and fail-safes — exactly the mindset escrow logic demands. Deeply comfortable in Solidity/EVM fundamentals; actively building with Foundry and viem/wagmi.

EXPERIENCE

Junior Full Stack Developer · Miksi (AI Software as a Service)

Dec 2023 – Mar 2024

Remote · contract

Built backend services for AI agents, including API key management, authentication, and authorization. Managed the full project lifecycle from conception to deployment using Jira and GitHub Issues. Built and refined custom BI-focused AI agents from business descriptions and published and version-managed an AI library on PyPI with full documentation.

Stack: Python, Django, FastAPI, Azure, LangGraph, LangSmith, GitHub Actions.

NurseCare KE · Carebora

May 2026 – Present

Nairobi, Kenya · contract

A two-sided home-healthcare marketplace connecting patients with verified nurses and providers — booking by specialty, rate, and availability, with role-based dashboards for patients, providers, and admins, plus consultation-booking flows. Structurally close to a trust-first services marketplace: verified-provider badges, per-provider rates, and multi-role dashboards. Currently integrating M-Pesa (Daraja API) for in-app payments, built and tested against the sandbox pending live merchant credentials.

EDUCATION

University of Nairobi · Bsc., Nursing (with IT)

Sep 2019 – Dec 2023

Nairobi, Kenya

ohns Hopkins University (Coursera) · Certificate, Programming Languages (HTML, JavaScript, CSS, Python, SQL)

Mar 2023 – Dec 2024

Online

PROJECTS

VeriVote Kenya

github.com/Edwin-Kirimi-Kinuthia/verivote-kenya

Solidity · Hardhat · Ethers.js · Next.js 15 · TypeScript · Tailwind CSS · Node.js · Express · Prisma · PostgreSQL · Redis · Socket.IO · Python/FastAPI Description:

A cryptographically verifiable hybrid electronic voting system built for Kenya's constitutional electoral requirements. Solidity contracts handle Soul-Bound voter identity (non-transferable ERC-721, revocable on death) and immutable vote recording with replay-protected serial numbers and a supersede mechanism for revotes — the same "no unilateral state change, no double-counting" logic that escrow systems depend on. The vote pipeline layers ElGamal 2048-bit homomorphic encryption (individual ballots are never decrypted) with Shamir's Secret Sharing among commissioners, so no single party holds the decryption key. Full-stack: Next.js dashboards (public explorer, admin review, live WebSocket turnout), Node/Express/Prisma backend, and an on-premise AI fraud-detection service. Built solo, including the contract test suite and Docker-based local deployment flow.

Carebora-KE

app.carebora.co.ke

Next.js 16 · React 19 · TypeScript · Tailwind CSS · M-Pesa Daraja API

A two-sided home-healthcare marketplace connecting patients with verified nurses and providers — booking by specialty, rate, and availability, with role-based dashboards for patients, providers, and admins, plus consultation-booking flows. Structurally close to a trust-first services marketplace: verified-provider badges, per-provider rates, and multi-role dashboards. Currently integrating M-Pesa (Daraja API) for in-app payments, built and tested against the sandbox pending live merchant credentials.