

KEALEBOGA EUGENE RATSHIPA

// THE DON CIPHER : SYSTEMS ARCHITECT

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ROOT_ORIGIN:

Serowe / Gaborone
Botswana

STRATEGIC FOCUS

- ▶ Digital Public Infrastructure
- ▶ Economic Coordination
- ▶ Sovereign Data Hosting
- ▶ Identity & Trust Frameworks
- ▶ Blockchain Coordination
- ▶ Fintech Pipelines

TECH STACK

- ▶ NextJS / React
- ▶ Node.js / Python
- ▶ Solidity
- ▶ Firebase / GCP
- ▶ Thirdweb / IPFS
- ▶ Docker

ARCHITECTURE

- ▶ Distributed Systems
- ▶ Scalable API Design
- ▶ UML & System Modeling
- ▶ Architecture Mapping

TRUST & SECURITY

- ▶ Cryptographic Fundamentals
- ▶ Verified Identity (DID)
- ▶ Cybersecurity

DATA & INFRA

- ▶ Database Design
- ▶ Query Optimization
- ▶ Cloud Deployment
- ▶ API Integration

PROFESSIONAL SUMMARY

Software Engineer specialising in **Digital Public Infrastructure** and **Economic Coordination**. Works across technology and business to turn complex, real-world problems into strong, lasting systems in identity, finance, and public infrastructure.

PROFESSIONAL EXPERIENCE

Lead Developer — Ingenuity Earth

2022 – 2025

- ▶ **Architectural Leadership:** Spearheaded the transition from legacy workflows to a centralised digital infrastructure, improving cross-service coordination and operational efficiency.
- ▶ **System Design:** Engineered secure API layers and data pipelines bridging business operations with technical scalability, enabling seamless integration across services.
- ▶ **Product Strategy:** Directed the full technical lifecycle for key products — translating high-level business objectives into resilient backend architectures from concept to deployment.

KEY PROJECTS

Authentico | Document Verification Platform

- ▶ Developed a document verification platform using NextJS and Thirdweb to solve identity fraud in regional administrative processes.
- ▶ Implemented on-chain credential anchoring for tamper-proof, verifiable document authentication.

High School v3 (Digital Kgotla) | Civic Infrastructure

- ▶ Architected a digital civic infrastructure platform designed to facilitate local governance, commerce, and community coordination in Botswana.
- ▶ Production-ready infrastructure bridging traditional governance models with digital-first participation systems.

EDUCATION

BSc Computer Science & Software Engineering

2013 – 2024

Botswana International University of Science and Technology (BIUST)

- ▶ Specialisation: Software Engineering, Distributed Systems & Cryptography
- ▶ Focus areas: Distributed Systems, Computer Networks, Cryptography & Security, Mobile Computing, Entrepreneurship & Business Strategy

Capstone: Decentralised Governance Protocol

- ▶ Engineered a blockchain-based capital allocation system to solve inefficiencies in centralised funding models through trustless coordination between participants.
- ▶ Implemented transparent governance mechanisms enabling decentralised decision-making and crowdfunding at scale.