

# Victor Chinekezi

Full-stack Engineer · Backend Architecture · Systems Programming · Modern Web

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## // EXPERIENCE

### Backend Engineer — HireusLogistic

TypeScript · MongoDB · Redis · OAuth 2.0 · Docker · Kubernetes

- › Scaled real-time rider tracking and dispatch using WebSockets and Redis pub/sub
- › Implemented OAuth 2.0 authentication and role-based access control across all API surfaces
- › Designed MongoDB schemas optimized for geospatial queries and high-throughput rider matching
- › Containerized services with Docker and orchestrated deployments with Kubernetes

### Frontend Engineer — Uniskill Hackathon

React · Next.js · TypeScript · Solana

- › Built decentralized e-learning platform with blockchain-based certificate storage
- › Integrated Solana smart contracts to securely store and verify course certificates on-chain
- › Implemented Next.js App Router for SSR and static generation, optimizing performance
- › Ensured WCAG 2.1 accessibility compliance and responsive cross-browser functionality

### Backend Engineer — ITSA Hackathon

TypeScript · Node.js · Backend Development · Testing

- › Competed in IT Services Desk Africa hackathon, enhancing device health management system
- › Collaborated with a cross-functional team to improve system performance
- › Wrote, reviewed, and validated backend code and tests to ensure reliability

### Backend Developer — UNITE Hackathon

IPFS · Decentralized Storage · Node.js · TypeScript

- › Designed and integrated IPFS-based storage for secure, distributed file management
- › Developed backend APIs for seamless file upload, retrieval, and indexing
- › Collaborated to optimize data consistency and storage efficiency

## // EDUCATION

### B.Sc. Computer Science — Federal University of Technology Owerri (FUTO) · Ongoing

Data Structures · Operating Systems · Computer Architecture · Compiler Design · Distributed Systems · Linear Algebra

## // SELECTED PROJECTS

### Bat — Interpreter from Scratch Go

Complete interpreted language — lexer, Pratt parser, AST evaluator, closures, and interactive REPL. First-class functions with closures via environment capture.

### Synap — Autograd / ML Framework C++ · Python · pybind11

Minimal ML framework implementing tensors, reverse-mode autodiff, and MLP primitives from scratch. C++ core with Python bindings via pybind11. Zero-copy tensor views through shared storage.

### 3D Model Renderer — OpenGL C++ · OpenGL · GLSL

Real-time renderer with OBJ loading, multi-texture support, custom GLSL shaders, and first-person camera. Full MVP transform pipeline, delta-time movement, no game engine.

### GitHub Code Analyzer Go · Python · tree-sitter

Clones any public GitHub repo and performs static analysis using ASTs across 25+ languages — extracting complexity metrics, structure, and dependencies.

### Mini-Fig — Vector Graphic Editor C++ · TypeScript · Emscripten

Lightweight 2D drawing engine built with C++ and WebAssembly, backed by a React frontend.

## // HACKATHONS

### 🏆 ITSA — Grand Prize · Best Fintech Hack

Node.js · TypeScript · MongoDB

Competed with 15 teams to identify issues and propose improvements on a live production codebase.

### 🏆 Hack4Futo 2023 — 5th Place (25+ teams)

Python · TypeScript · React · OpenAI API · Rust · Solana

Built an AI-powered education platform that tracks learning progress and stores user certificates on-chain.