# Abraham Elijah

GitHub: <a href="https://github.com/cgrade">https://github.com/cgrade</a> | LinkedIn: <a href="https://github.com/in/mrgrade3">www.linkedin.com/in/mrgrade3</a> | Email: <a href="mailto:gradeisageek@gmail.com">gradeisageek@gmail.com</a> | Portfolio Website: <a href="https://mrgrade.vercel.app">https://mrgrade.vercel.app</a>

# **Summary**

Blockchain developer with experience in software engineering and blockchain technology. Proven expertise in developing, testing, and deploying web-based and decentralized applications using Solidity, Rust, JavaScript, TypeScript, and modern frameworks like Next.js and React. Skilled in smart contract development, full-stack web solutions, and integrating AI with blockchain for innovative DeFi applications. Strong problem-solving abilities, with a track record of delivering end-to-end projects.

Passionate about building scalable, user-centric solutions in the web3 ecosystem.

# <u>Skills</u>

- Blockchain Development: Solidity, Rust, Smart Contracts, Ethereum Virtual Machine (EVM), Solana,
  Aptos SDK, Hardhat, Foundry, Ethers.js, Web3.js, Wagmi, WalletConnect, Alchemy SDK, Helius API
- **Web Development**: JavaScript, TypeScript, Python, HTML, CSS, React, Next.js, Node.js, Express.js, Tailwind CSS, DaisyUI
- Al & Automation: Eliza Framework, GOAT Framework, Claude (Anthropic)
- Databases: PostgreSQL, MySQL, Supabase (with Row Level Security)
- **DevOps & Tools:** Git, Docker, Vercel, Vite, Flutterwave API, Postman
- State Management: Zustand
- **Soft Skills:** Problem-solving, Analytical Thinking, Attention to Detail, Team player and effective communication.

## **Education And Certifications**

#### **Education**

- Cyfrin Updraft
  - Focus: Advanced Solidity, Smart Contracts, Foundry
- Alchemy University Ethereum Developer Bootcamp
  - Focus: Ethereum blockchain, smart contract development
- ALX Africa Software Engineering Bootcamp
  - O **Duration**: 2022 2023 (12 months)
  - Specialization: Backend Software Engineering
  - O Affiliation: Holberton School, San Francisco, CA

## **Certifications**

- Software Engineer Certificate ALX Africa, 2023
- Ethereum Developer Certificate Alchemy University, 2024

# **Projects**

## 1. Yozoon Token Ecosystem (Smart Contract)

**Description:** Engineered a comprehensive DeFi platform on Solana featuring bonding curve token distribution, referral incentives, and Raydium AMM migration. Architected smart contracts using Anchor framework (v0.29.0) to implement exponential bonding curves, milestone-based airdrops, and a tiered staking system. Designed a two-phase token creation process with strict validation and security measures. Integrated with Raydium for automated liquidity provisioning and permanent liquidity locking. The system handles complex financial operations including dynamic fee calculation, referral rewards distribution, and secure admin controls.

**Technologies:** Solana, Anchor Framework, Rust, TypeScript, Raydium SDK, SPL Token, Web3.js **Github:** Private repo for client's confidentiality.

## 2. Elvix Clothing: Full-Stack E-Commerce Platform

**Description:** Developed a modern e-commerce marketplace for branded wear using Next.js 15, React 19, TypeScript, and Supabase. Implemented product browsing with search/filter capabilities, shopping cart, secure user authentication with role-based access control, and checkout with Flutterwave payment integration. Created an admin interface for product and inventory management, with direct image uploads to Supabase Storage using custom Row Level Security policies. Designed responsively with Tailwind CSS and DaisyUI, leveraging Zustand for state management and server-side rendering for optimal performance and SEO.

**Technologies:** Next.js 15, React 19, TypeScript, Supabase, PostgreSQL, Tailwind CSS, DaisyUI, Zustand, Flutterwave API

Github: https://github.com/cgrade/ecommerce\_website

Live: https://elvixclothings.com

### 3. Joule Finance Al Agent

**Description:** Created an Al-powered platform during the Move Al Hackathon hosted by Aptos and Joule Finance. Built for the Joule Finance DeFi protocol on the Aptos blockchain, it features a web-based chat interface using React and Next.js, an automated X agent with TypeScript, LangGraph, and LangChain to generate and share DeFi metrics (e.g., lending rates, yields), and an API backend powered by Anthropic Claude Al for natural language processing. Managed the entire project lifecycle, from concept to deployment, integrating Aptos SDK for blockchain data retrieval.

**Technologies:** TypeScript, LangGraph, LangChain, Claude (Anthropic), X API v2, Aptos SDK, React, Next.js

Link: https://github.com/cgrade/joule finance agent

Chat: https://joule-finance-chat-1e739e4de37b.herokuapp.com/

#### 4. Solana Wallet Tracker

**Description:** Developed a real-time monitoring tool for Solana whale wallets, delivering notifications via Discord. Built the system using the Solana SDK and Helius API to track wallet activities, integrated a Discord bot for user updates, and optimized data processing for efficiency. Handled all aspects of development, from design to deployment, ensuring reliable performance for blockchain enthusiasts.

Technologies: Solana SDK, Helius API, Discord Bot API, JavaScript, Node.js

Link: <a href="https://discord.gg/EVJRmjPQ">https://discord.gg/EVJRmjPQ</a>

Github: https://github.com/cgrade/twitter\_tracker

## 5. Ostake: DeFi Staking dApp

**Description:** Built a fully functional DeFi staking protocol on Ethereum's Holesky testnet, enabling users to stake cryptocurrency tokens and earn rewards. Designed and deployed Solidity smart contracts for staking logic and reward algorithms. Developed a responsive frontend with React and Tailwind CSS, integrating Wagmi and Ethers.js for seamless blockchain interactions. Managed the entire project lifecycle, from concept to documentation.

**Technologies:** Solidity, Hardhat, Ethers.js, Wagmi, React, JavaScript, Node.js, Tailwind CSS, Ethereum

Live: <a href="https://ostake.vercel.app">https://ostake.vercel.app</a>

GitHub: https://github.com/cgrade/ostake

#### 6. Account Abstraction

**Description:** Designed and implemented an account abstraction system to enhance Ethereum user experience by simplifying wallet interactions. Developed smart contracts using Solidity and Foundry, enabling features like gasless transactions and batched operations. Integrated Ethers.js for frontend connectivity and tested extensively to ensure security and functionality. Managed the entire project, from conceptualization to testing, advancing blockchain accessibility.

**Technologies:** Solidity, Foundry, Ethers.js, Ethereum

**Github:** <a href="https://github.com/cgrade/foundry-account-abstraction">https://github.com/cgrade/foundry-account-abstraction</a>

#### 7. Decentralized Stablecoin System

**Description:** Built an algorithmic stablecoin system pegged to the USD on Ethereum, featuring stabilization mechanisms for value retention. Coded Solidity smart contracts for minting, burning, and transferring tokens, using Foundry for rigorous testing and deployment. Integrated Ethers.js for blockchain interactions and optimized algorithms for efficiency. Solely responsible for the project's end-to-end development and documentation.

**Technologies:** Solidity, Foundry, Ethers.js, Ethereum

Github: https://github.com/cgrade/foundry-defi-stablecoin

#### 8. Bizly API: Business Management Backend

**Description:** Created a backend API for a business management app tailored to small-scale businesses and sole proprietorships. Enabled tracking of income, expenses, and profit/loss with customizable reporting and printable account statements. Developed RESTful APIs with Express.js, designed data models, and connected to PostgreSQL for CRUD operations. Implemented JWT authentication for secure access and tested endpoints with Postman.

Technologies: Node.js, Express.js, PostgreSQL, JavaScript, JWT, Git, Postman

Github: https://github.com/cgrade/bizly