

Preston Harrison

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USA CITIZEN SEEKING FULL TIME OR CONTRACTING WORK

SKILLS

Languages - Javascript, Typescript, Node JS, Python, Java, C#, Rust, Solidity, CSS, HTML, Bash

Libraries/Frameworks - React, Express, Mocha, Chai, Jest, Hardhat, Truffle, Tokio, Ethers JS & RS, TradingView Charts

Tech - Git, Github, AWS, SQL, noSQL, Docker, Nginx, Digital Ocean, Serverless, Servers, Linux, REST, Api, CI/CD

Blockchain - Ethereum, EVM, OpenZeppelin, Chainlink, Oracles, Zero Knowledge Proofs, Cryptography, Smart Contracts

Decentralised Finance (DeFi) - Tokens (ERC20), NFTs (ERC721), Liquidity Pools, Market Making, Arbitrage, Derivatives

WORK EXPERIENCE

WEB3 DEVELOPER; HANDLE FINANCE – 2022-PRESENT

- Used **Hardhat & Solidity** to write cryptocurrency routing software that handles \$30K+ daily volume. Deployed liquidity pool **smart contracts** containing \$1.6M+ customer funds. Unit & end-to-end tested all contracts with Mocha & Chai.
- Wrote smart contract that gives users **ERC20 token rewards** for trading activities based on oracle pricing models. Since implementing this, volume has increased by over 2.5x.
- Created **React** trading frontend that interacted with the **Ethereum blockchain**, allowing users to trade derivatives against the liquidity pool.
- Created React **data dashboard** to keep track of market, fund, and **user metrics**. The dashboard interacts with 6 different APIs to ensure data availability & reliability.
- Supported open source SDK that allows other protocols to integrate Handle Finance's protocol into their own.
- Wrote **Rust server** using tokio that aggregated price data and **digitally signed** it to set the oracle pricing. Digitally signing prices ended up being 6x cheaper than traditional oracle solutions.
- **Managed fund movement** between many of liquidity pools to keep customer funds safe from arbitrage & oracle manipulation attacks.

WEB & BLOCKCHAIN DEVELOPER; DLTx – 2021-2022

- Wrote React frontend for greenfield cryptocurrency charity donation platform for an external client. Implemented **MySQL** database with **Node JS Express backend API**.
- Managed client expectations in **agile sprint planning** meetings by setting clear goals and deliverables, and discussing tasks and priorities for the next sprint.
- Setup **Linux Nginx** server with **Github self hosted runners** to allow for CI/CD during development. Used **Docker** containers to ensure environment consistency and development ease.

DEVOPS CONSULTANT AT RAMMP – 6 MONTH CONTRACT

- Worked directly with founders to migrate **Azure hosting to AWS**. Setup small business relationship with AWS and consulted AWS experts to architect a system that met design & cost requirements.
- Used AWS Copilot to deploy **EC2 load balancer** instance and setup **CI/CD from Github to AWS**.
- Setup API testing environment to ensure minimum code duplication, and full code coverage prior to production deployment.

PROJECTS

TWOX BINARY OPTIONS EXCHANGE

- Created a binary options protocol that is currently deployed on an Ethereum Testnet. It connects to the Binance API to fetch prices, & represents options as NFTs (ERC721).

WEB3 DIGITAL SIGNATURE VALIDATION LIBRARY

- This is an open source **NPM library**. It signs data with an Ethereum address, and verifies the identity of the signer on the blockchain.

EDUCATION

The University of Queensland – Bachelor of Computer Science, 2021-2025 (Part time study, available to work full time)