Matthew Roberts

Software Engineer
matthew@roberts.pm

Experience

Fintech / Blockchain

Trading systems

Networking

Trusted computing

Software engineering

Research

Loves

Cheese pizza

Wolf Alice

Overwatch

Rain

June 2023 - Oct 2023
Enclave Engineer – Puffer.fi ↗
Intel SGX Enclaves, Solidity, Ethereum

- I implemented security fixes to smart contracts that let CPUs prove the software they run.

May 2021 - Mar 2022
Rust Engineer – Cypher.trade ↗
Solana, Anchor, SPL, Margin trading, Google

- I helped customers get funds into the Cypher trading system by developing a secure deposit system.

Feb 2018 - Jun 2018
Lead DEX Engineer – Exodus.io ↗
Ethereum, Truffle, Nodejs, ERC-20, Metamask

- I developed an experimental prototype for trading ERC-20 tokens without a trusted third-party.
- I was responsible for designing smart contracts and building the trading engine for matching orders.

Apr 2017 - Feb 2018
Lead Blockchain Engineer – Ambrosus ↗
Ethereum, Solidity, Truffle, JS, Nodejs, Python

- I developed experimental prototypes show-casing the benefits of supply chain integrity measures.
- I oversaw the development of a browser for financial contracts to cut-down on duplicate design efforts.

Oct 2015 - Mar 2016
Python Engineer – Storj.io ↗
Python, Twisted, Bitcoin, DHT, Kademlia

- I contributed to the design of peer-to-peer information storage and retrieval mechanisms.
- I developed client libraries for transferring files.

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Portfolio

- Coinbend whitepaper ↗
- Async networking ↗
- Events are arbitrary ↗
- Pay for private keys ↗
- Crossroads browser ↗
- Timechains ↗
- My Github ↗

Oct 2023 - Dec 2023

Decentralized key–value store on IRC ↗

P2PD, Consensus, VDFs, IRC

- I designed a system that enables one to utilize public IRC infrastructure as a byzantine key-value store.
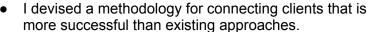- Such a system can be used as a free alternative to DNS and the Ethereum Name System.

Jan 2022 - Current

P2P Networking Library – P2PD ↗

Python, Asyncio, NAT, STUN, TURN, Sockets

- I devised a methodology for connecting clients that is more successful than existing approaches.
- I established infrastructure and processes for testing that significantly improved software quality.

Apr 2017 - Feb 2018

Contract Browser – Ambrosus ↗

Ethereum, Truffle, Nodejs, ERC-20, Metamask

- I undertook product development to create a prototype browser for displaying financial contracts.
- I designed contracts to highlight the company's main value offering for client demos.

Jan 2013 - Mar 2016

Decentralized Exchange – Coinbend ↗

Python, Bitcoin, Networking, Applied Cryptography

- I devised a better process for storing customer's crypto-assets that is more secure.
- I designed and built the interface, financial logic, and architecture necessary to reach MVP.

"I'm a senior software engineer with more than 10 years of experience working remotely. I have a background in FinTech where I specialize in trading systems. My skills are diverse and allow me to both design and implement systems.

Feel free to reach out if there's a mutual interest.

Matthew **Roberts**

Easter Egg

Most people know that PDFs are a format for documents. But probably not many know about the more advanced features of PDFs. A PDF document is capable of containing rich media content like sound and movies - but also: whole interactive experiences are possible.

I wanted to see if I could use these features to try make my resume stands out a little more. What I've come up with is a simple snake game that uses a grid of input fields as a pixel-based display. The game should work on Firefox and Adobe Reader (desktop). But not in Chrome or Edge (these browsers use an in-built PDF viewer with limited support for Javascript.)

Give it a go. Use ASDW for movement of the snake.

Your score   High score