Stephen Shelton

github.com/notlesh

linkedin.com/in/notlesh/

steve@brewcraft.org

214.535.5783

Remote / Denver

Languages

Rust
C++
TypeScript/JS
Python
Solidity

Technologies

Blockchain
Linux
Git
Cryptography
P2P Networking

Techniques

Documentation
Optimization
Debugging

Overview

Blockchain expert with diverse background and over 15 years of professional software development experience. Thorough and dependable with a preference for thoughtful and maintainable code.

Professional Experience

July 2023 - Present:

Moonsong Labs - Sr. Blockchain Engineer

- *Moonsong Labs is a Web3 engineering services and venture studios company where I currently work on Starknet, a ZK-rollup scaling solution*
- Ported the Starknet OS from Python to Rust, bringing a partially implemented project to completion with support for 100% of public testnet blocks
- Debugged many issues with the OS, including its Merkle Patricia Trie implementation
- Contributed to many adjacent projects in the Starknet ecosystem with bug fixes and new features
- Grew our team from two to six by consistently delivering quality to our client
- Taught Solidity development at the UC Berkeley Polkadot Blockchain Academy

December 2020 - July 2023:

PureStake - Sr. Blockchain Engineer

- *Moonbeam is an Ethereum-compatible Polkadot parachain. PureStake built Moonbeam, one of the first Polkadot Parachains to launch.*
- Developed many core Moonbeam functionalities, including a Rust implementation of the EVM, cross-chain messaging and bridging, txpool, staking, system upgrades, and more
- Coordinated security audits of multiple codebases
- Designed and tuned Moonbeam's congestion-based fee algorithm
- Contributed to upstream codebases such as Substrate (now polkadot-sdk)
- Implemented Moonbeam's General-Purpose Messaging system, which forwarded messages between EVM-based bridges and Polkadot-based ones

September 2019 - August 2020:

Loki Network - Software Engineer

- *Lokinet is an onion-routing privacy network which rewards network operators via blockchain-based incentives.*
- Contributed to multi-layer P2P onion-routing protocol stack
- Devised key-blinding scheme which allows for public DHT storage of semi-private routing information
- Optimized DHT recursion technique for efficiency and privacy
- Designed incentive models for adversarial environments
- Wrote technical portions of white and yellow papers
- Maintained control panel GUI project / github repository
- Collaborated on Python-based loopback testnet which can simulate hundreds of network actors simultaneously
- *Lokinet is entirely open source, find it at https://github.com/loki-project/loki-network.*

Stephen Shelton

github.com/notlesh

linkedin.com/in/notlesh/

steve@brewcraft.org

214.535.5783

Remote / Denver

Languages

- Rust
- C++
- TypeScript/JS
- Python
- Solidity

Technologies

- Blockchain
- Linux
- Git
- Cryptography
- P2P Networking

Techniques

- Documentation
- Optimization
- Debugging

January 2010 - Present:

Brewcraft Software - President

- Created an open source electric beer-brewing system complete with a backend server, RPC API, and web UI
- Developed full 3D game engine from scratch, capable of running on multiple platforms (Android, Linux, Windows)
- Implemented algorithms for shape recognition to track live objects and optimized to run at video framerate
- Created custom, multi-platform UI framework to take advantage of OpenGL hardware acceleration

January 2018 - April 2019:

Arrow Electronics - IoT Software Engineer

- Implemented cellular modem driver for MBED OS
- Used REST API to publish IoT device telemetry on multiple technology stacks
- Assisted in project planning and estimations, development scheduling, and system architecture
- Acted as mentor to junior staff

March 2015 - January 2018:

Netscout - Lead Software Engineer

- Led development team in design, implementation, and support of NetScout's AirCheck G2, a handheld WiFi diagnostic tool which provides detailed information about WiFi networks and basic RF measurements
- Designed automated tests to detect assembly failures in the manufacturing process
- Maintained specialized Linux kernel, U-Boot, and WiFi driver forks

January 2012 - March 2015:

Solmirus - Systems Engineer

- Developed the ASIVA (All Sky Infrared & Visible Analyzer), an imaging and analysis instrument capable of running autonomously and reliably in all weather conditions while processing gigabytes of image data per hour
- Implemented high performance async TCP message bus with guaranteed message delivery
- Created REST API for 3rd parties to extract acquisition data

February 2011 - January 2012:

Group Systems - Sr. Software Engineer

- Built the next-gen version of ThinkTank, a collaboration tool used around the globe by successful businesses and governments such as NASA, Raytheon, Procter & Gamble, and IBM
- Designed and implemented browser-based message bus to create a robust User Interface with "installed-app" feel

August 2006 - December 2010:

Intrameta Corporation - Software Engineer

- Developed BOSS, a hosted operations support systems (OSS). BOSS was used by many regional telecoms, ISPs, and service centers to provide device management (DHCP, RADIUS), trouble ticketing, provisioning, and customer data hosting (e-mail, website, and FTP).
- Implemented client and server software for protocols based on RFCs including HTTP, DHCP, SMTP, FTP, POP and IMAP
- Led design of an end-to-end encrypted email server to meet emerging industry encryption requirements

Stephen Shelton

github.com/notlesh

linkedin.com/in/notlesh/

steve@brewcraft.org

214.535.5783

Remote / Denver

Languages

Rust
C++
TypeScript/JS
Python
Solidity

Technologies

Blockchain
Linux
Git
Cryptography
P2P Networking

Techniques

Documentation
Optimization
Debugging

Education

2005 - 2006:
Internship at Intrameta Corporation

2004 - 2005:
Studied Computer Science (University of North Texas)

Note about this resume

This resume was created with ReactJS (Javascript/HTML/CSS). See the related github repo at https://github.com/notlesh/stephen-shelton-resume for more info.

Stephen Shelton

github.com/notlesh

linkedin.com/in/notlesh/

steve@brewcraft.org

214.535.5783

Remote / Denver

Languages

- Rust
- C++
- TypeScript/JS
- Python
- Solidity

Technologies

- Blockchain
- Linux
- Git
- Cryptography
- P2P Networking

Techniques

- Documentation
- Optimization
- Debugging