isis agora lovecruft

résumé

personal details

Github	https://github.com/isislovecruft
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Pronouns	they/them

professional experience hilights

Please request my full curriculum vitae for more expansive details.

Cryptographer
2018 – present

Private Funder, Research Grant

Custom elliptic-curve cryptographic signature research, design, development, and optimisation.

Applied Cryptographer
2018

Signal Foundation, Contractor

Custom zero-knowledge proof design and multi-architecture cryptographic development targeting numerous mobile devices and a web assembly API for a browser extension.

Senior Software Developer & Security Engineer
2010 – 2018

The Tor Project, Staff

Reverse engineering, software design, and development for the Open Observatory of Network Interference (OONI), a platform for building distributed, global censorship detection and measurement systems, partnered with MLabs and PlanetLab. Lead developer and maintainer of systems and components for Tor bridge distribution. Development in C and Rust on the core Tor network daemon, including cryptographic, asychronous network protocol, and parser components, as well as security-focused audits and code review, and bug fixes.

Software Developer and Security Consultant
2011 – 2012

LEAP Encryption Access Project, Part-time

Development of several asynchronous servers, including a transparently encrypting remailer, conduction of security audits for components and dependencies, and consulting with respect to systems architecture and cryptographic engineering.

Cryptographer & Security Consultant
2007 – present

Patterns In The Void, Contractor/Consultant

Security auditing and cryptographic design consulting to various OSS projects, including cryptographic libraries used by the Bitcoin community. Research on elliptic curve cryptography, zero-knowledge protocol design, and anonymous credentials. Co-authored what is currently the fastest cryptographic library, curve25519-dalek.

Various Contributions
2006 – present

Volunteer

Volunteer contributions to numerous Open Source Software (OSS) projects, including Open Whispersystems, March-Hare Communications Collective, LEAP Encryption Access Project, Briar Project, Tahoe-LAFS, The Tor Project, the Electronic Frontier Foundation, and others.

references

Available upon request