

KYLE ISOM

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LINKS

- Homepage - <http://www.kyleisom.net/>
- Github - <https://github.com/kisom/>
- Go code on Github - <https://github.com/gokyle/>

EXPERIENCE

Security Engineer

Echostar Technologies
Englewood, CO

July 2010-August 2013

Conduct code audits, primarily in C; implement security systems in Linux kernel, including adding mandatory access control; write Python scripts to support encrypted software updates for Linux-based set top boxes; manage keys and software cryptographic systems for an embedded Linux platform.

Security Engineer

Calyptix Security Corporation
Aurora, CO

Fall 2012

Develop OpenSSL-based extended-validation system for firewall systems in C.

Web Developer

Conformal Software, LLC
Aurora, CO

August 2013-January 2014

Web developer using Go. Front- and back-end work on the coinvoice.com site.

SELECTED PROJECTS

Practical Cryptography with Go

- Book is being published on Leanpub as it's written.
- Homepage: <https://www.leanpub.com/gocrypto>
- Example code: <https://github.com/kisom/gocrypto>
- Introduces cryptography to developers who may not have a solid understanding of not only cryptography, but also when to use it and how to safely use it to improve the security of systems.

CryptoBox

- Project underway to provide FIPS-compliant NaCL-like modules and cryptographic tools for developers.
- Goal is to provide cryptographic "right answers" for developers to relieve the burden of cipher or tool choice.
- Reference Go package,
- Python and C libraries are in-progress.
- Homepage is <http://cryptobox.tyrfingr.is/>

Fortuna

- Go implementation of the Fortuna PRNG.
- Github page: <https://github.com/gokyle/gofortuna>
- Provides interfaces for adding entropy from bytes slices and io.Reader values.
- Includes AES-256/SHA-256 and Twofish-256/Keccak-256 variants.

catena

- Homepage: <https://github.com/kisom/catena>
- Go implementation of the Catena memory-consuming password scrambler.
- Led to blog entry on writing bit-reversal permutations in Go: <http://kyleisom.net/blog/2013/11/29/bit-reversal-permutations/>