

Skills

- **Development:** C, Python, Clojure, Objective-C, UNIX / POSIX programming
- **Software Engineering:** GNU Autotools suite, LaTeX, Texinfo,
- **Development Tools:** Valgrind, lint, rats, vim, emacs
- I know how to do the other engineering involved with software projects, such as documentation, build system setup, and developing useful unit tests.
- I have a strong background in computer security, particularly the field of secure programming. Some of my security skills include penetration testing, reverse engineering, and proactive network defense.

Work Experience

- **EchoStar Technologies, L.L.C.** Englewood, CO
Software Security Engineer July 2010 - Present
 - Conduct code reviews and audits in C and C++.
 - Patch Linux kernel for embedded devices to address site-specific security requirements.
 - Write Python code to generate encrypted software updates for Linux-based set top boxes.

Selected Open Source Projects and Publications (kisom.github.com/)

- **Crypto Intro** Python
An introduction to Cryptography with PyCrypto June 2011
 - Available online at <http://www.kyleisom.net/blog/2011/06/17/intro-to-crypto/>
 - Introduces cryptography to developers who may not have a solid understanding of not only **what** cryptography is, but also **when** to use it.
 - Uses Python to clearly introduce how to properly integrate cryptography into projects.
 - Includes source code examples with tests.
- **Libdaemon** C
A lightweight POSIX daemon library. 2011
 - Home page: <http://www.tyrfingr.is/projects/libdaemon/>
 - Written to satisfy the need for a common API to daemonise programs written in C.
 - Satisfies requirement that programs using the library compile and run under OpenBSD, OS X, and Linux.
- **Woofs** Python
Share files easily from the commandline. 2011
 - Github page: <https://github.com/kisom/woofs/>
 - Designed to quickly share a file over HTTPS.
 - Addresses the fact that similar programs were not using TLS/SSL.
- **srvwd** C
Serve the working directory over HTTP. 2012
 - Home page: <http://www.tyrfingr.is/projects/srvwd/>
 - Minimal webserver written in ANSI C.
 - Forking webserver that can be chrooted for security.
 - Designed to specifically facilitate rapid testing of statically-generated sites.