

Skills

- Development: C, Python, Clojure, Objective-C, UNIX / POSIX programming, applied cryptography
- 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 softtware 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

- 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

A lightweight POSIX daemon library.

2011

- 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

- Designed to quickly share a file over HTTPS.
- Addresses the fact that similar programs were not using TLS/SSL.

Current Classes

Natural Language Processing Spring 2012

Stanford Online

Introduction to Machine Learning Spring 2012

Stanford Online

Programming a Robotic Car Spring 2012

Udacity