

## Work Experience

**Red Hat, Inc.** — Westford, MA, Remote, and Boston, MA (current) *Summer 2014 – present*

- Software Engineer (tier 2) in Security Engineering team; previously, Software Engineer (tier 1).
- Mentor to five interns so far, as well as three newer employees.
- Upstream developer of MIT Kerberos and related technology, including Apache mod\_auth\_gssapi, pam\_krb5, and FreeIPA.
- Maintainer of Kerberos and related components in RHEL/CentOS and Fedora.
- Upstream maintainer for GSS-Proxy, a privilege separation protocol and daemon.
- Author of python-gssapi, the python 2&3 GSSAPI interface.
- Maintainer in Debian of python-gssapi and GSS-Proxy.
- Wrote GSSAPI authentication and encryption support for PostgreSQL and MariaDB.

**Carnegie Mellon University** — Pittsburgh, PA *Fall 2013*

- Teaching assistant for the Compiler Design course.
- Author of course reference compiler, with additional obfuscation features.

**Red Hat, Inc.** — Westford, MA *Summer 2013*

- Software Engineering Intern in Security Engineering team.
- Reverse-engineered and implemented MS-KKDCP (an encrypted transport protocol) for Kerberos.

**Civic Counsel, Inc.** — Boston, MA *Summer 2012*

- Intern for nonprofit working on secure computing environments.

**Web Reply, Inc.** — Natick, MA *Summer 2011*

- Intern working on efficient classification of large volumes of email.

**Research at Boston University** — Boston, MA *Fall 2010*

- With Professor Hongwei Xi, worked on development of ATS, a dependently-typed systems language.

## Publications and Presentations

- Author on forthcoming RFC “SPAKE Pre-Authentication” (currently undergoing review in the IETF Kitten working group), and author on reference implementation in MIT Kerberos.
- Presenter at Flock 2015 for “Conquering the World with Kerberos”; I will also be presenting this as a cluedump for MIT SIPB later this year.

## Education

**Carnegie Mellon University** — Pittsburgh, PA *Fall 2011 – Spring 2014*

- B.S. in Computer Science with minor in Ethics.

## More Information

- **Code:** <https://github.com/frozencemetery>
- **Languages (by frequency of use):** C, Python, Rust, Haskell, Standard ML, C++, Lisp, assembly (various).
- **Interests:** Software systems, types, interoperability and reverse engineering, security (CTFs), music.