

Cassandra Fox

Seeking full-time employment starting in January 2019.

Education

Senior at Rensselaer Polytechnic Institute, pursuing a B.S. in CompSci, with a focus in Information Security

Graduation Date: December 2018; 7 semesters total.

In-Major GPA: 3.40, Overall GPA: 3.23

Relevant Coursework: Computer Organization (C, LLVM, MIPS), Principles of Software (Java), Web Systems Development (PHP, MySQL), Web Science Systems Development (NodeJS, Angular, MongoDB), Modern Binary Exploitation (C, x86 ASM), Operating Systems (C, Linux) Networking in the Linux Kernel, Distributed Systems & Algorithms Graph Theory, Advanced Algorithms, Principles of Program Analysis, Prog. Languages

Work Experience

Facebook, Production Engineering Intern (Summer 2018)

- Wrote tests and built reusable testing infrastructure for previously untested business critical infra.
- End-to-end tested large-scale infrastructure and efficiently scaled large test volumes.

Tripadvisor, Full-Stack Software Engineering Intern (Summer 2017)

- Worked with the Hotels ("RevOps") team with a large codebase. Used Java, CSS, Javascript, & SVN.
- Used Jira and an Agile workflow for refactoring, fixing bugs, A/B testing features, and more.

Dept. of Computer Science at RPI, Undergraduate Teaching Assistant (Fall 2016 —December 2018)

- Helped Graduate TAs oversee lab sections and office hours for the C++ Data Structures class.
- 1:1 tutoring, exam grading, weekly meetings, answering questions on the course discussion board.

Qualifications

- Programming experience
 - Java, Ruby, Python, C++, C, LLVM, x86 ASM; JQuery/AngularJS, Less, Ruby on Rails, PHP.
 - Reverse Engineering x86 ASM compiled with GCC/Clang, proficiency with various Linux utils.
 - Version Control with Git, Mercurial, and Subversion.
- Linux experience
 - System management (partitioning, managing block devices, RAID, user management)
 - Security (disk encryption, securing ssh, SSL/TLS, PGP, LUKS, LVM)

Activities, Interests, and Awards

- RPISEC Member; participated in several CTFs and hackathons.
- Hobby programming with compilers, lexers, languages, kernels, and emulators.
- Treasurer of the Rensselaer Pride Association, and Genericon, Rensselaer's student-run convention
- Eagle Scout (2014) and member of Upsilon Pi Epsilon, RPI's CS Honor Society (2016-Present).

Relevant Projects and Hobbies

<i>rgb</i>	Low-level userspace daemon for controlling WS2812 RGB LED strips from a Raspberry Pi. Features reloading, config swapping, dbus messaging, systemd unit files, and extensibility.
<i>i3lock-color</i>	The most popular fork of i3lock, from the i3 window manager. Entirely in C; demonstrates patching upstream code, maintaining forks, resolving merge conflicts, and other VCS skills.
<i>QuipBot</i>	A bot used for playing various games by Jackbox Games. I helped add support for Drawful 2, which uses Bing API integrations, as well as imageboard searching. Entirely written in Ruby.
<i>Misc</i>	I enjoy tinkering with Linux installs and I have a high level of familiarity with linux systems as a result, from partitioning to kernel patching to across-the-board customizations and tweaks.