

Jeremy Brown

EDUCATION

GEORGIA TECH

BS, COMPUTER SCIENCE
Atlanta, Georgia | May 2015

SKILLS

LANGUAGES

OVER 5000 LINES:

Bash • Python

OVER 1000 LINES:

Java • \LaTeX

FAMILIAR:

C • CSS • Groovy • HTML
SQL

SKILL AREAS

STRONG:

Computer Security
Systems Administration
Network Administration

TOOLS AND FRAMEWORKS

STRONG:

Git • GitHub • Hypothesis
pytest

INTERMEDIATE:

Flask • Jenkins • Make • MySQL

OK:

Android • Gradle • Maven

AWARDS

ANIME WEEKEND ATLANTA

STAFFER OF THE YEAR

Technical/Main Events | Sept 2015

CONTACT



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[mischif](#)

EXPERIENCE

PINDROP | Atlanta, Georgia

SOFTWARE ENGINEER

February 2016 — August 2019

- Led efforts to update on-premise appliance codebase to Python 3.
- Updated entire call analysis pipeline to Python 3.6.
- Rewrote libraries shared with other teams for cross-version compatibility.
- Designed and wrote initial telemetry package to monitor SLA adherence.
- Migrated call analysis pipeline to local identifiers, solving multiple system-breaking issues at major customers.

MICROSOFT | Redmond, Washington

SOFTWARE DEVELOPMENT ENGINEER INTERN

May 2014 — August 2014

- Designed protocol to use mobile devices as secure access control tokens.
- Created reference implementation to test viability in real-world situations.

PRESENTATIONS

GEORGIA INSTITUTE OF TECHNOLOGY | Atlanta, Georgia

AN INTRODUCTION TO WEB SECURITY

October 23, 2013

- A lighthearted exposure to select vulnerability classes from the OWASP Top 10 with potential mitigations.
- Delivered as part of web security module created by me for introductory graduate information security course.

PROJECTS

PORTALOFPI

- Isolating Tor proxy based on Raspberry Pi and Alpine Linux.
- Transparently tunnels TCP and DNS traffic over Tor, and exposes SOCKS proxy for tunneling UDP.

PY-FAST-TRIE

- Python 2/3-compatible X-fast trie and Y-fast trie implementations.
- Searches are log-logarithmic in the size of the defined universe.
- Insertions/deletions are amortized logarithmic or log-logarithmic depending on structure.

PY-HOPSCOTCH-DICT

- Python 2/3-compatible full-featured replacement for standard Python dict that implements hopscotch hashing.
- Additions, deletions and lookups have an expected $O(1)$ runtime.

ID3AUTOSORT

- Python 2/3-compatible utility for organizing music files based on metadata.
- Supports most common audio metadata formats.

WORMYSHARPYLOGGY

- Android pattern-matching game with a focus on casual play.
- Refactored senior design project to support additional game mode and include greater test coverage.

BUZZPRINT

- Flask webapp providing access to Georgia Tech print queues via the Internet.
- Supports printing Google Docs and valid linked/uploaded document types.
- Enables mobile devices and Linux computers to use Georgia Tech print queues.