## Curtis W. Fenner

Resume: curtisfenner.com/resume GitHub: github.com/CurtisFenner **Email:** cwfenner@umich.edu

#### **EDUCATION**

## University of Michigan College of Engineering Ann Arbor, Michigan. 2014 – 2018

- Computer Science B.S.E. with minor in Mathematics. 4.0 GPA Dean's List
- **Selected Coursework** 
  - Distributed Systems (Winter 2017)
  - Graduate Programming Languages (Fall 2017)
- Instructional Aide for Distributed Systems (Fall 2017)
- 2017 ACM ICPC World Finalist

#### EXPERIENCE

### **Square — Software Engineer** Atlanta, Georgia. 2018–present

Writing Java code for a service in Square's public API to accept and manage orders that appear in Square POS and dashboard.

# Qualtrics — Software Engineering Intern

Seattle, Washington. Summer 2017

- Wrote Scala code and used Elasticsearch as member of data platform team
- Redesigned a data aggregation feature after discovering failure conditions in existing implementation
- Investigated the use of Elasticsearch for log management and indexing additional response information

## **Qumulo — Software Engineer Intern** Seattle, Washington. Summer 2016

- Wrote C and Python code for distributed filesystem as member of performance team
- Developed sharding of deleted file space reclamation to double reclaimation rate
- Eliminated lock contention in a multithreaded cache to reduce file operation latency
- Implemented allocation changes to allow significantly faster metadata operations

## **Square — Software Engineer Intern** San Francisco, California. Summer 2015

- Wrote Go and JavaScript as member of public API team
- Optimized and refactored public API server to halve latency
- Wrote backend code in Go for the second version of Square's public API

#### PROJECTS & SKILLS

# Computer Programming

Have programmed for 10+ years with a variety of technologies

Scala » Lua » Python C » HTML + CSS Go C++ Java » JavaScript

#### **WeBWork Proof Checker**

Designed and built an interface that verifies simple natural deduction proofs for students learning

The checker manipulates symbolic representations of mathematical statements and verifies the steps taken in a formal, two-column proof.

http://curtisfenner.com/prove

# Smol Programming Language & Compiler

Designing and implementing a toy programming language and compiler that includes statically checked types and functional correctness assertions.