

# Curtis W. Fenner

Resume: [curtisfenner.com/resume](http://curtisfenner.com/resume)

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## Education

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### University of Michigan College of Engineering

Ann Arbor, Michigan. 2014 – 2018

- » Senior Pursuing Computer Science B.S.E.
- » 4.0 GPA — Dean's List
- » **Selected Coursework**
  - » Compiler Construction (Winter 2017)
  - » Distributed Systems (Winter 2017)
  - » 2017 ACM International Collegiate Programming Contest World Finalist
  - » Instructional Aide for Distributed Systems (current)
  - » Advanced Programming Languages (Current)
  - » Intro. Operating Systems (Fall 2016)

## Experience

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### 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 reclamation 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

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### Computer Programming

Programmed for 10+ years on many various team and personal projects and three software engineering internships

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

### WeBWorK Proof Checker

- » Designed and built an interface that verifies simple natural deduction proofs for students learning logic  
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, generics, and interfaces.