

# Devin Lehmacher

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## EDUCATION

**Cornell University**, Ithaca, NY

Aug 2015 — May 2019

- Bachelors of Arts in Computer Science
- Cumulative GPA: 3.52, Major GPA: 3.95

## CLASSES

**Introduction to Compilers & Practicum**, CS 4120 & CS 4121

**Certified Software Systems**, CS 6115

**Constructive Type Theory**, CS 6180

**Advanced Programming Languages**, CS 6110

**Functional Programming and Data Structures**, CS 3110

**Object Oriented Programming and Data Structures**, CS 2110

**Database Systems**, CS 4320

**Operating Systems & Practicum**, CS 4410 & CS 4411

**Computer System Organization**, CS 3410

**Intro to Analysis of Algorithms**, CS 4820

**Intro to Theory of Computing**, CS 4810

**Discrete Structures**, CS 2800

## WORK

### EXPERIENCE

**Teaching Assistant**, at Cornell University

Feb 2016 — Present

- Teach a section with about 25 students each week
- Hold weekly office hours to help students understand the course material
- Answer student's questions on Piazza, during office hours, and after class
- Help test, create, and plan future assignments
- Grade assignments and exams, giving students helpful feedback

**Intern** at Itron Inc. in Oconee, SC

Jun 2017 — Aug 2017

- Created a dashboard to visualize available space for testing meters
- Utilized Transact-SQL to collect data for the dashboard
- Built and deployed reports to Sharepoint using Microsoft Reporting Services

**Research Assistant** at Clemson University

Jun 2015 — Aug 2016

- Tested the performance of MedusaLoop, a program that models protein loops
- Analyzed test results to visualize performance
- Wrote a daemon to dispatch jobs from a database to a server instance
- Wrote back end code that interacted with a database to fetch and write new jobs

## PROJECTS

### PortOS

- Implemented multithreading with preemption, and TCP and UDP analogs
- Learned how to navigate and write a large (10,000 lines) C code base

### Open Source

- Made git credential daemon conform to the XDG directory specification
- Discussed details of how the patch should be implemented with the git community
- Wrote tests to ensure that behavior of the daemon was correct post patch

### Interpreters

- Built interpreters for many different languages
- Also built type checkers and/or inference algorithms for many of these languages
- a subset Scheme, System F, Calculus of Constructions, OCalf (a subset of OCaml)
- Learned how to efficiently manipulate tree data structures (e.g. ASTs)
- Wrote a library to abstract common tasks that arose when implementing interpreters

### Heaplib

- Implemented and tested malloc, free, and resize in C
- Learned how to use raw pointers and the trade-offs involved with building an allocator
- Wrote a large number of tests to ensure that pointer arithmetic was correct

## SKILLS

Fluent: Java, Haskell, git, C, Rust, OCaml, Vim, Linux

Familiar: SQL, shell scripting, Networking, C++, Python, Perl