# Devin Lehmacher

623 University Ave, Ithaca, NY 14850
djl329@cornell.edu • +1 (864) 722–3014 • github.com/lehmacdj

**EDUCATION**

**Cornell University**, Ithaca, NY — Aug 2015 — May 2019
- Bachelors of Arts in Computer Science
- Cumulative GPA: 3.624

**CLASSES**

Object Oriented Programming and Data Structures • Functional Programming and Data Structures
Introduction to Compilers & Practicum • Operating Systems & Practicum • Database Systems
Intro to Analysis of Algorithms • Intro to Theory of Computing • Discrete Structures
Advanced Programming Languages • Certified Software Systems • Computer System Organization
Category Theory for Computer Scientists • Constructive Type Theory • Kleene Algebra

**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

**Software Engineering Intern** at Microsoft in Redmond, WA — May 2018 — Aug 2018
- Designed a microservice architecture for a new cloud service
- Worked with team to determine what the service's critical features are
- Implemented a prototype of those features using Microsoft Service Fabric and Azure

**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**

**Xi Compiler**
- Worked with a group of 3 other students to write a compiler in Haskell
- Learned about and implemented lexical, syntactic and semantic analysis
- Added object oriented features while maintaining backwards compatibility

**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 and type checkers or many different languages
- a subset Scheme, System F, Calculus of Constructions, OCalf (a subset of OCaml)
- 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, C#, Haskell, git, C, Rust, OCaml, Vim, Linux
Familiar: SQL, shell scripting, Networking, C++, Python, Microsoft Azure