# **Devin Lehmacher**

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## **EDUCATION** Cornell University, Ithaca, NY

Graduating in 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 Intro to Analysis of Algorithms, CS 4820 Intro to Theory of Computing, CS 4810 Advanced Programming Languages, CS 6110

Operating Systems & Practicum, CS 4410 & CS 4411

Database Systems, CS 4320

**Computer System Organization**, CS 3410

Functional Programming and Data Structures, CS 3110

Discrete Structures, CS 2800

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

WORK EXPERIENCE

## **Teaching Assistant**, CS 2110 at Cornell University

Teach a section with about 25 students each week

- Hold weekly office hours to help students understand the course material
- Help test, create, and plan future assignments
- Grade assignments and exams, giving students helpful feedback

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

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

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, CS 4411

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

#### **OCalf Interpreter**, CS 3110

- Built an interpreter for a small subset of OCaml
- Learned how to evaluate an AST for a functional language using small step semantics
- Implemented Hindley-Milner type inference algorithm to type check OCalf programs

#### **Scheme Interpreter**, github.com/lehmacdj/haskell scheme

- Built an interpreter for a subset of Scheme
- Learned how to implement the semantics for dynamically typed programming languages
- Learned how to build a parser using Parsec

#### Heaplib, CS 3410

- 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, Vim, C, OCaml, Rust Familiar: SQL, shell scripting, C++, Python, Perl

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Aug 2015 — Present

Feb 2016 — Present

Jun 2017 — Aug 2016

Jun 2015 — Aug 2016