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, CS 2110 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
- Wrote safe, concurrent, robust C code

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)

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