#### Education

## University of California, Berkeley

B.S. Electrical Engineering and Computer Sciences (CSE)

- CS 61A: Structure and Interpretation of Computer Programs
- CS 61B: Data Structures and Advanced Programming
- CS 61C: Machine Structures
- · Physics 7B: Heat, Electricity, and Magnetism
- Math 54: Linear Algebra and Differential Equations
- EE 16A: Designing Information Devices and Systems
- CS 70: Discrete Mathematics and Probability Theory

- CS 170: Efficient Algorithms and Intractable Problems
- CS 188: Introduction to Artificial Intelligence
- CS 189: Introduction to Machine Learning
- EE 127: Optimization Models and Applications
- CS 162: Operating Systems and Systems Programming Fall 2017
- CS 168: Introduction to the Internet

# Experience

• Software Engineering Intern at Cisco Systems

May-August 2017

2014 - 2018

GPA: 3.485

On the OneIdentity project, I helped complete the frontend for tenancy administration and integrated it with the backend server. In addition, I created a configurable logging and capping system for email and SMS notifications, accessible via a REST API.

• Developer at Medium One

May-August 2016

Medium One is a platform for gathering and processing data from IoT devices. I contributed to a Wi-Fi module driver for a microcontroller along with the software that allowed it to securely access the platform. I also created a preliminary implementation of a connector between the platform and a third-party service and created workflows to process sensor data.

• Staff Member at UC Berkeley Open Computing Facility (OCF)

2015-present

The OCF provides free services to students, faculty, and staff, including printing, web hosting, and UNIX shell and email accounts. As a staff member, I provide on-site computer lab support and maintenance of the infrastructure required for the facility's services.

## Skills

#### **Programming Languages**

- · Proficient in: Python, Java, C
- Experience with: Bash, Scheme, MIPS ASM, React.js

#### Other Software

- Microsoft Office (Word, PowerPoint, Excel)
- Adobe CS6 (Photoshop, Illustrator, InDesign)
- · Git version control system
- Docker/Kubernetes containerization system
- LATEX typesetting system
- REAPER Digital Audio Workstation

### **Notable Projects**

• Scheme (Python)

Developed a Scheme interpreter to demonstrate understanding of recursion, scoping, and parsing.

Gitlet (Java)

Designed and implemented a simplified version of the Git version control system based on serialization.

MIPS Assembler (C and MIPS Assembly)

Implemented an assembler and linker that handles a subset of the MIPS instruction set.

PageRank on Spark and Amazon EC2 (Python)

Implemented a radically simplified version of the PageRank algorithm using a Python MapReduce framework.

#### Extracurriculars

• Computer Science Undergraduate Association (CSUA) Member

2015 - present

Tutoring

High school essay writing, math, biology, physics, and SAT/ACT preparation

CSUA supports computer science students by facilitating industry events, hackathons, and workshops.

2012 - present

Programming, audio engineering, retro gaming

#### Honors and Awards

- · National Merit Finalist
- LSI Chairman's Scholarship