Education

University of California, Berkeley

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

2014–2018 GPA: 3.526

- 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/B: 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
- CS 168: Introduction to the Internet
- CS 161: Computer Security
 Spring 2017
- Statistics 155: Game Theory

 Spring 2017

Experience

• Software Engineering Intern at Cisco Systems

May–August 2017

On an identity management 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)

2015-2017

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

• Tutoring 2012–present

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

Interests

Programming, audio engineering, retro gaming

Honors and Awards

- National Merit Finalist
- LSI Chairman's Scholarship