TYLER NGUYEN about •résumé contact

Education

University of California, Berkeley

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

2014–2018 GPA: 3.537

- 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
- Statistics 155: Game Theory

Experience

• Software Engineer at Google

June 2018—present

As a developer for Cloud Apigee Integration, I implemented core backend functionality, improved test quality and coverage, and led the initiative to integrate with a platform providing numerous connectors between first- and third-party services.

• 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.

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
- LTFX typesetting system
- REAPER Digital Audio Workstation

Notable Projects

• Scheme (Python)

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

Gitlet (lava)

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

• Horse (Python)

Leveraged randomized graph traversals with a heuristic, dynamic programming, and post-processing to approximate solutions to an NP-hard problem.

Pintos Operating System (C)

Implemented multiple process schedulers (priority donation, MLFQS), system calls for loading user programs, and a filesystem with directories.