Work Experience

Software Engineer | Arista Networks

July 2018 - present

- Led software development and validation of a new hardware product for Arista's modular network switch system, working together with Hardware, Software, Testing, and Management teams to quickly release the product with stable support of Arista's networking operating system
- ▶ Wrote Python and C++ programs to upgrade FPGA images through JTAG, connect hardware components together, support 400G traffic on switches, test LEDs, and more
- ▶ Rewrote a fan controller driver used on 11 different products in Arista's 7500 series of modular switches from Python to C++/TACC. This code integrates the ADT7462 fan controller with Arista's switch PID fan control algorithm
- Wrote and tested Python and Matplotlib tuning scripts to configure and debug switches' temperature and fan controls, ports, and transceivers which led to thousands of dollars saved in energy costs

Undergraduate Researcher | Berkeley Energy and Climate Institute

August 2017 - May 2018

- Contributed to inverter source code on Gridlab-d, an open-source power grid modeling software
- Created Python scripts and IPython notebooks to plot Gridlab-d's CSV and XML outputs for lab usage

Android Software Engineering Intern | Workday

June - August 2017

- Developed Racetrack, a Workday app feature that allows managers to track a team member's progress
- Implemented and tested models, data extraction, UI elements, and activities for Racetrack on Android

Backend Developer | LBNL Mobility, Vehicles, and Electricity System Research Lab *January - August 2016*

- ▶ Developed the backend of a mobile app called MyGreenCar, which records users' fuel/battery consumption and incentivizes more energy-efficient driving
- ▶ Used Docker to transform a Django/PostgreSQL server into a multi-machine system containing a database, web-framework, broker, and worker all running on LBNL's NERSC/Cori supercomputer
- Used Django logging, Unix process commands, and Redis to reduce deserializing inefficiencies

Education

UC Berkeley

Electrical Engineering and Computer Science GPA 3.5

August 2014 - May 2018

Skills

Proficient in:

Python, C++, Unix, Vim

Experience with:

C, Java, Docker, Django, Kotlin, rpm, HTML, CSS, JavaScript, Android Studio, Unity, Pandas, Spark, Xilinx, Broadcom SDK, Gridlab-d, SLURM, NGINX, Cadence, NERSC

Projects

RoomFinder | Workday Intern/GW Hackathon *July 2017*

 Implemented a Slack bot that found free rooms in Workday, handling API calls to Microsoft Office using Django

Sim Content Team | Virtual Reality at Berkeley October - December 2015

- Made a VR drunk-driving simulator for the Oculus Rift using Unity
- Created AI cars for the simulator by modifying Unity standard asset scripts

FudFud - free food app | CalHacks 2.0 *October 2015*

 Developed an Android app to find free food events, using Android Studio and Facebook's Graph API