## Mark L. Hill

Email mark64@berkeley.edu OS

Mobile Phone +1 (714) 788 0882 Languages
Linkedin Mark Hill Tools
Github github.com/mark64

Linux, FreeBSD, OpenBSD, macOS, Android, iOS C, C++, Java, Python, Swift, Objective C, Bash, Makefile git, make, Xcode, vim, bash, iptables, EagleCAD, Buildroot

### **Education**

Aug 2017 - Pursuing B.S. in Electrical Engineering & Computer Science - University of California, Berkeley

May 2020 Relevant Coursework

2017 F - CS61A Structure and Interpretation of Computer Programs

2018 S - CS61B Data Structures

2018 S - EE16A Designing Information Devices and Systems I

## **Projects**

Sept 2017 - Space Technologies at Cal

present Electrical and Computer Engineer

Designed electrical systems and flight software for a 3U CubeSat

Worked on developing laser communication system and control system for small PCBSats

Technologies: Linux, C, C++, GPS, IMU, signal processing, Buildroot, git, bash, EagleCAD

Jan 2016 - Irvine CubeSat

July 2017 Avionics Team Leader

Led a team of 18 in assembling, testing, and documenting Irvine's first CubeSat: IRVINE01 Used EagleCAD to update the design of an expansion card for connecting solar arrays and

propulsion systems

Created a Linux kernel module to control the expansion card and peripherals

Technologies: Linux, C, C++, Buildroot, make, git, bash, EagleCAD

Github Projects: Peripherals Kernel Module, IR01 Root System, IR01 Software

June 2017 - Personal Autonomous Quadcopter

present

Developed drone hardware and software from scratch to learn systems development and control theory

Technologies: C, C++, make, kbuild, git, bash, EagleCAD

**Github Projects: Drone** 

# **Employment History**

Jul 2014 - Freelance Work

**Aug 2016** *iOS Software Developer* 

Created mobile medical applications to aid the process of diagnosis and generating visit reports

Technologies: Xcode, Swift, Objective C

#### **Awards**

Oct 2016 Eagle Scout Rank

Planned, organized, and led a team of 20 in a service project to rebuild and repaint an unsafe

wooden handball wall for an elementary school

**Technologies:**  $100^{\circ F}$  heat, water, shade