Mark L. Hill

Email	mark64@berkeley.edu	**OS**	Linux, FreeBSD, OpenBSD, macOS, Android, iOS
Mobile Phone	+1 (714) 788 0882	**Languages**	C, C++, Java, Python, Swift, Makefile
Github	github.com/mark64	**Tools**	git, make, vim, bash, Buildroot

Education

Aug 2017 - Dec 2019 Pursuing B.S. in Electrical Engineering & Computer Science - *University of California, Berkeley*

3.83 GPA - Relevant Coursework
2017 F - CS61A *Structure of Computer Programs*
2018 S - CS61B *Data Structures*
2018 S - CS61C *Computer Architecture*
2018 S - CS70 *Discrete Math and Probability*
2018 S - EE16A *Linear Algebra and Circuits*

Projects

Sept 2017 - present Space Technologies at Cal
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 - July 2017 Irvine CubeSat
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 - present Personal Autonomous Quadcopter

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 - Aug 2016 Freelance Work
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