

Mark L. Hill

Email	mark64@berkeley.edu	OS	Linux, OpenBSD, iOS
Mobile Phone	+1 (714) 788 0882	Languages	Rust, C, C++, Python, Java
Github	github.com/mark64	Tools	docker, git, make, cmake, vim, bash, buildroot

Education

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

Dec 2019 3.92 GPA - Relevant Coursework

2017 F - [CS61A](#) *Structure of Computer Programs*

2018 S - [CS61B](#) *Data Structures*, [CS61C](#) *Computer Architecture*, [CS70](#) *Discrete Math and Probability*, [EE16A](#) *Linear Algebra and Circuits*

2018 F - [CS161](#) *Computer Security*, [CS162](#) *Operating Systems and System Programming*, [CS170](#) *Efficient Algorithms*, [EE16B](#) *Designing Information Devices and Systems II*

Employment History

May 2018 - [Astranis](#)

Dec 2018 *Embedded Software Intern*

Implemented a hardware abstraction layer, Python client, firmware updates, and threading API for satellite microcontrollers.

Wrote testing automation software for EE equipment and satellite operations.

Technologies: Linux, C, C++, Rust, Python, FreeRTOS, Docker, LDAP, Protobuf, git

Projects

Sept 2017 - [Computer Science Undergraduate Association \(CSUA\)](#)

July 2018 *VP of Technology*

Setup a GPU cluster donated by Nvidia for use by Berkeley students.

Maintained web, LDAP, email, DNS, and ssh servers.

Technologies: Linux, git, bash, docker, python, LDAP

Jan 2016 - [Irvine CubeSat](#)

July 2017 *Avionics Team Leader (Alumni mentor since 2017)*

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, kbuild, make, git, bash, EagleCAD

Github Projects: [Peripherals Kernel Module](#), [IR01 Root System](#), [IR01 Software](#)

June 2017 - Personal Project

present *Quadcopter*

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

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

Github Projects: [Drone](#)

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^{°F} heat, water, shade