


Ryan Liu

5816 San Carlos Way | Pleasanton, CA, 94566
2700 Hearst Avenue, FH 6B32E, Berkeley, CA 94720
(925)-399-8248 | <https://ryanliu.aerobatic.io>

✉ rliu4439@berkeley.edu

 [linkedin.com/in/rliu4439](https://www.linkedin.com/in/rliu4439)

 Github/Bitbucket: rliu4439

Work Experience:

Infinera Corporation Firmware Engineering Intern

- Sunnyvale, CA
June 2016-Aug. 2016
- Designed software in C to convert binary data from optical data transmission products into readable text to expedite debugging efforts
 - Collaborated with team to automate script creation from excel data using VBA to reduce errors from manually creating script
 - Presented projects to Director of Firmware Engineering.

Amador Valley High School STEM Tutor

- Pleasanton, CA
(Sept. 2015- June 2016)
- Tutored students in STEM subjects and time management skills resulting in improved grades and performance in classes

Leadership

IEEE- UC Berkeley Student Branch IEEE HOPE Teaching Assistant (Hands on Practical Electronics)

- (August 2016- Present)
- Lectured and helped guide students through confusing electrical engineering topics
 - Redesigned course material to increase focus on practical uses of electrical engineering

Amador Valley VEX Robotics Team Head of Software Division

- (August 2014- June 2016)
- Spearheaded coordination and planning efforts with other divisions to design and build a robot on schedule.
 - Guided software division members and divided responsibilities among members to improve efficiency

Projects

- Yelp Restaurant Maps** (2016)
- Predicted user's preferences from past reviews using supervised and unsupervised machine learning, implemented in Python.

- Android Flashlight** (2016)
- Android app to control a phone's flash for use as a flashlight and flashes SOS in Morse code.

- Pokémon Dungeon Explorer** (2015)
- Developed in Java with a team of three. I designed the random map generation and enemy artificial intelligence. Based on Pokémon mystery dungeon.

- Asteroids** (2014)
- Variant of Asteroids developed in Java.
 - Implemented collision detection and keyboard input to control spacecraft.

Education

University of California, Berkeley

May 2020 GPA: 3.80

Electrical Engineering and
Computer Science B.S.

Coursework:

- Data Structures
- Discrete Math and Probability Theory
- Linear Algebra and Differential Equations
- Physics for Scientists and Engineers

Amador Valley High School

June 2016

- Weighted GPA: 4.40/4.00
- Unweighted: 4.0/4.0

Awards/Accomplishments

• IEEE Joe Wujek Memorial Scholarship (May 2016)

Awarded for dedication and potential in engineering

• VEX Robotics Judges Award (January 2016)

Awarded for excellence in STEM outreach, community service and web design

• President's Award for Educational Excellence (June 2016)

Awarded for an unweighted GPA of 4.0

• National Merit Finalist

(February 2016)

Awarded to the top 1.25% of PSAT test takers

Skills

Proficient: • Java • Python

Familiar: Git/Github • C

• Android Studio • Linux

Interests

- Badminton, Table Tennis
- Robotics
- Artificial Intelligence