

# Kerrie Wu

wukerrie[at]gmail[dot]com | <http://kerriewu.github.io#portfolio>

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## EDUCATION

### Massachusetts Institute of Technology

B.S. Mechanical Engineering w/ Control, Instrumentation, & Robotics, GPA: 4.9/5.0

Cambridge, MA

Jun 2018

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## PROFESSIONAL EXPERIENCE

### Waymo

Systems Engineer

- Simulation and analysis tools for autonomous vehicle safety and performance, focusing on motion control.

Systems Test Engineer

- Validation and test process/infrastructure for autonomous vehicle safety and performance.

Mountain View, CA

Sept 2020-present

Nov 2018-Sept 2020

### MIT CSAIL

Undergraduate Research Assistant

- Create an annotated roadmap for self-driving path planning simulation to demonstrate road compliance.

Boston, MA

Feb-May 2018

### Cruise Automation

Controls Software Engineering Intern

- Prototyped algorithms and bulk data processing scripts for self-driving cars. Fleet metrics for control performance.

San Francisco, CA

Jun-Aug 2017

### NASA Jet Propulsion Lab

Summer Intern

- Designed, built, operated an automated imaging testbed for evaluating an image registration algorithm's performance for the Mars 2020 Rover, collecting more than 2000 images.
- Co-authored abstract for submission to International Workshop on Instrumentation for Planetary Missions.

Pasadena, CA

Jun-Aug 2016

### Little Devices Lab

Undergraduate Researcher

- Prototyped and documented a do-it-yourself usage-tracking/alarmed pill bottle construction set.
- Assisted with teaching a hands-on high school workshop on DIY medical technologies, including the DIY pill bottle.

Boston, MA

Oct 2015-Jan 2016

### Harvard BioDesign Lab

Undergraduate Research Intern

- Implemented and evaluated accuracy of algorithms for calculating rehabilitation-relevant gait parameters from inertial measurement unit and motion capture data for humans.

Cambridge, MA

Jun-Aug 2015

### Applied Biosciences Laboratory, Sandia National Laboratories

Research Intern

- Contributed to research utilizing microfluidic devices to investigate protein behavior at nanoconstrictions.

Livermore, CA

Apr 2013-Jul 2014

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## LEADERSHIP and COMMUNITY

### Construction Project Lead

- Designed, built, and operated various large wood construction projects such as a rollercoaster cart, 28-foot tall trebuchet, and floats for dorm activities.

Jun 2015-Sept 2017

### Boston Serviceworks Volunteer

- Worked with Boston Cares: Serviceworks to run outreach activities with Boston public high school students as part of MIT's Alternative Spring Break program.

March 2017

### MIT Dorm Residential Exploration Chair

- Managed events and large construction projects for a dorm's freshman welcome week, including \$20k+ budget allocations and funding, in a team of three students.
- Acted as liaison between offices (such as EHS, Professional Engineer, City of Cambridge) and student design teams for construction projects such as a three-story tall wooden fort, swing carousel ride, and more.

Feb-Sept 2016

### Summer High School Studies Program (HSSP) Co-Director

- Recruited/interviewed teachers, coordinated student registration, and managed logistics for annual six-weekend summer program, serving over 800 middle and high school students from the local Boston Area.

May-Aug 2015

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## SKILLS

Python (proficient), C++ (beginner), SQL (beginner), SolidWorks, 3D printing, rapid prototyping, EE lab, hand/power tools