Kerrie Wu

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EDUCATION

Massachusetts Institute of Technology — **Cambridge, MA**
B.S. Engineering w/ concentration in Control, Instrumentation, & Robotics, GPA: 4.9/5.0 — Jun 2018

PROFESSIONAL EXPERIENCE

Waymo — **Mountain View, CA**
Systems Engineer — Sept 2020-present
- Autonomous driving performance analyses.
- Vehicle dynamics model verification.

Systems Test Engineer — Nov 2018-Sept 2020
- Test automation, coordination, and execution for ensuring safety and performance of autonomous vehicles.

MIT CSAIL — **Cambridge, MA**
Undergraduate Research Assistant — Feb-May 2018
- Build an annotated roadgraph in Python for autonomous driving simulation to demonstrate road rules compliance.

Cruise Automation — **San Francisco, CA**
Controls Software Engineering Intern — Jun-Aug 2017
- Prototyped algorithms for improving control performance. Wrote bulk data processing scripts for autonomous cars.

NASA Jet Propulsion Lab — **Pasadena, CA**
Summer Intern — Jun-Aug 2016
- Designed, built, operated an automated imaging testbed for evaluating an image registration algorithm's performance for the Mars 2020 Rover, collecting more than 1600 images. Analyzed algorithm performance using the dataset.
- Authored abstract for submission to International Workshop on Instrumentation for Planetary Missions. (link)

MIT Little Devices Lab — **Cambridge, MA**
Undergraduate Research Assistant — Oct 2015-Jan 2016
- Designed and programmed a do-it-yourself usage-tracking/alarmed pill bottle construction set.
- Taught youth in a New York City STEM outreach program how to build the DIY pill bottle at a workshop.

Harvard Biodesign Lab — **Cambridge, MA**
Undergraduate Research Intern — Jun-Aug 2015
- Implemented and evaluated accuracy of an algorithm for calculating human rehabilitation-relevant gait parameters from inertial measurement units, compared to motion capture data.

Sandia National Laboratories — **Livermore, CA**
Research Intern — Apr 2013-Jul 2014
- Contributed to research utilizing microfluidic devices to investigate protein behavior at nanoconstrictions.
- Research was published in ACS Applied Materials and Interfaces. (link)

LEADERSHIP and COMMUNITY

Boston Cares: Serviceworks Volunteer — March 2017
- Volunteered with Boston Cares: Serviceworks to run outreach activities with Boston public high school students as part of MIT's Alternative Spring Break program.

MIT Dorm Freshman Orientation Week Co-Chair — Feb-Sept 2016
- Supported dozens of events and several large construction projects for my dorm's freshman welcome week, including $20k+ budget, in a team of three students.
- Acted as liaison between offices (such as MIT EHS, Professional Engineer, City of Cambridge) and student design teams for construction projects such as a three-story tall wood structure, a swing carousel ride, and more.

Construction Project Lead — Jun 2015-Sept 2017
- Coordinated construction and operation of various wood construction projects, such as a rollercoaster, for freshmen welcome weeks and prospective student weekends in teams of undergraduate students. Involved freshmen and prospective students in construction, ensured safety.

ESP Summer High School Studies Program (HSSP) Co-Director — May-Aug 2015
- 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.

SKILLS

Python, SQL, C++, SolidWorks, rapid prototyping