Kerrie Wu

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EDUCATION

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

PROFESSIONAL EXPERIENCE

Waymo — **Mountain View, CA**
Systems Engineer — Sept 2020-present
- Simulation and analysis tools for autonomous vehicle safety and performance, focusing on motion control.

Systems Test Engineer — Nov 2018-Sept 2020
- Validation and test process/infrastructure for autonomous vehicle safety and performance.

MIT CSAIL — **Boston, MA**
Undergraduate Research Assistant — Feb-May 2018
- Create an annotated roadmap for self-driving path planning simulation to demonstrate road compliance.

Cruise Automation — **San Francisco, CA**
Controls Intern — Jun-Aug 2017
- Prototyped algorithms and bulk data processing scripts for self-driving cars. Fleet metrics for control performance.

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 2000 images.
- Co-authored abstract for submission to International Workshop on Instrumentation for Planetary Missions (link).

Little Devices Lab — **Boston, MA**
Undergraduate Researcher — Oct 2015-Jan 2016
- 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.

Harvard BioDesign Lab — **Cambridge, MA**
Undergraduate Research Intern — Jun-Aug 2015
- Implemented and evaluated accuracy of algorithms for calculating rehabilitation-relevant gait parameters from inertial measurement unit and motion capture data for humans.

Applied Biosciences Laboratory, Sandia National Laboratories — **Livermore, CA**
Research Intern — Apr 2013-Jul 2014
- Contributed to research utilizing microfluidic devices to investigate protein behavior at nanoconstrictions.
- Published at ACS Applied Materials and Interfaces (https://pubs.acs.org/doi/pdf/10.1021/acsami.8b01871)

LEADERSHIP and COMMUNITY

Construction Project Lead — Jun 2015-Sept 2017
- Designed, built, and operated various large wood construction projects such as a rollercoaster cart, 28-foot tall trebuchet, and floats for dorm activities.

Boston Serviceworks Volunteer — March 2017
- Worked 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 Residential Exploration Chair — Feb-Sept 2016
- 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.

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, C++, SQL**,** SolidWorks, 3D printing, rapid prototyping, EE lab, hand/power tools