

# KAYMIE SHIOZAWA

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Portfolio: [kaymie.com](http://kaymie.com)

Education	<b>Massachusetts Institute of Technology (MIT)</b> <i>Candidate for Bachelor of Science in Mechanical Engineering</i> <b>GPA:</b> 4.8/5.0 <b>Relevant coursework:</b> Manufacturing and Design I/II; Thermodynamics and Fluids I/II; Dynamics and Controls I/II; Materials and Mechanics I/II; Differential Equations; Introduction to Robotics; Product Design (Grad Level)	<b>Cambridge, MA</b> June 2019
Relevant Experience	<b>Lockheed Martin Advanced Technology Center</b> <i>Mechanical/Robotics Intern</i> <ul style="list-style-type: none"><li>• Conducting structural analysis on electronic components to be used in spacecraft</li><li>• Supporting both software and mechanical teams to prepare a demo with drones and ground robots</li></ul>	<b>Palo Alto, CA</b> June 2018 - Present
	<b>MIT D'Arbelloff Lab</b> <i>Undergraduate Researcher</i> <ul style="list-style-type: none"><li>• Designing and implementing a controls infrastructure for an autonomous excavation robot</li><li>• Improve current excavation arm through 3D modeling and manufacturing methods</li><li>• Perform experiments that register forces exerted on the arm during digging while tracking the soil's movement</li></ul>	<b>Cambridge, MA</b> Sep. 2016 - Present
	<b>Haemonetics Corporation</b> <i>Mechanical Design Engineer</i> <ul style="list-style-type: none"><li>• Developed and designed optical and circuit board components for sensors in an effort to improve blood component separation, while working in the blood-lab for testing and characterization</li><li>• Worked closely with the product development team and gained hands-on experience in rapid prototyping</li><li>• Collaborated with software, mechanical, and systems engineering teams to explore costs and manufacturability of various sensing techniques</li><li>• Presented to managers of the project and executive members of the company</li></ul>	<b>Braintree, MA</b> June – Aug. 2017
	<b>CEA-LETI: Embarked Micro Batteries Laboratory</b> <i>Research Engineer</i> <ul style="list-style-type: none"><li>• Determined the properties of micro battery electrolytes through electrical impedance characterization for the fabrication of more efficient batteries</li><li>• Cooperated with team of five members and communicated in French</li><li>• Presented findings to lab of 40 people</li></ul>	<b>Grenoble, France</b> June – Aug. 2016
Skills	<b>Languages:</b> French, Japanese, English <b>Software Experience:</b> SolidWorks, MATLAB, Python, Arduino <b>Hardware Experience:</b> Lathe and Mill, Welding, Laser Cutting, Water Jetting, 3D Printing	
Leadership	<b>Pi Tau Sigma: National Mechanical Engineering Honor Society</b> <i>Professional Development Coordinator</i> <ul style="list-style-type: none"><li>• Top 25% of class eligible for membership</li></ul>	Mar. 2018 – Present
	<b>Undergraduate Practice Opportunities Program (UPOP)</b> <ul style="list-style-type: none"><li>• Participated in a professional development program preparing sophomores for success in the workplace</li><li>• Completed a one-week professional development workshop taught by MIT faculty and industry professionals, which explores topics such as effective communication, foundational decision-making, and teamwork</li></ul>	Oct. 2016 – Sept. 2017
	<b>Japanese Society of Undergraduates</b> <i>Treasurer</i>	Aug. 2016 – Present
	<b>Freshman Pre-Orientation Program: Discover Product Design at MIT</b> <i>Co-coordinator &amp; Mentor</i> <ul style="list-style-type: none"><li>• Mentored incoming students in a weeklong program introducing them to ideation, prototyping, and CAD</li><li>• Collaborated with MIT faculty to organize the entire program; Corresponded with design firms for tours</li></ul>	Aug. 2015 – 2017
	<b>Japan Karate Association/MIT Shotokan Karate Club</b> <i>President of MIT Club</i>	Aug. 2008 – Present
MIT Activities/ Awards	<b>2.12 Introduction to Robotics</b> <ul style="list-style-type: none"><li>• Designed, fabricated, and controlled a robotic arm and serial elastic actuator to aid hemiplegic patients</li><li>• Team placed 2<sup>nd</sup>; Awarded Most Valuable Engineer of the team by peers and professors</li></ul>	Sept. – Dec. 2017
	<b>Manufacturing and Design Robotics Competition</b> <ul style="list-style-type: none"><li>• Placed Top 32/160</li></ul>	Feb. – Apr. 2017
	<b>MIT Autonomous Robotics Competition</b> <i>Mechanical Co-Lead</i> <ul style="list-style-type: none"><li>• Designed mechanisms that consistently completed the task and cooperated with software and electrical leads</li><li>• Placed 2<sup>nd</sup>, Won the Two Sigma Prize</li></ul>	Jan. 2016