

KAYMIE SHIOZAWA

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Education	Massachusetts Institute of Technology (MIT) <i>Candidate for Bachelor of Science in Mechanical Engineering</i> GPA: 4.8/5.0 Relevant coursework: 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)	Cambridge, MA June 2019
Relevant Experience	<u>MIT D'Arbeloff Lab</u> <i>Undergraduate Researcher</i> <ul style="list-style-type: none">• Designing and implementing a controls infrastructure for an autonomous excavation robot• Improved current excavation arm model through 3D modeling and manufacturing methods• Selected as a scholar for SuperUROP, a competitive yearlong advanced research program <u>ISEE, Inc.</u> <i>Mechanical Design Engineer</i> <ul style="list-style-type: none">• Designing hardware components for sensors to be mounted on autonomous vehicles• Developing PID steering and speed control of unconventional autonomous vehicles <u>Lockheed Martin Advanced Technology Center</u> <i>Mechanical Structural/Robotics Engineer</i> <ul style="list-style-type: none">• Developed and modified payload electronics' structural design to ensure successful launch into space• Supported both software and mechanical teams to validate the use of drones and ground robots on a mission• Presented findings to 30+ executives and coworkers <u>Haemonetics Corporation</u> <i>Mechanical Design Engineer</i> <ul style="list-style-type: none">• Devised optical sensor components to improve blood separation; worked in the blood-lab to test & characterize• Collaborated with software, mechanical, and systems engineering teams to explore costs and manufacturability of various sensing techniques, while gaining hands-on experience in rapid prototyping• Presented to managers of the project and executive members of the company <u>CEA-LETI: Embarked Micro Batteries Laboratory</u> <i>Research Engineer</i> <ul style="list-style-type: none">• Determined properties of battery electrolytes using electrical impedance characterization for efficient batteries• Presented findings to lab of 40 people; cooperated and communicated with team of 5 members in French	Cambridge, MA Sept. 2017 - Present Cambridge, MA Sept. 2018 - Present Palo Alto, CA June – Aug. 2018 Braintree, MA June – Aug. 2017 Grenoble, France June – Aug. 2016
Skills	Languages: French, Japanese, English Software Experience: SolidWorks, MATLAB, Python, Arduino, C++ Hardware Experience: Lathe and Mill, Welding, Laser Cutting, Water Jetting, 3D Printing	
Leadership	Pi Tau Sigma: National Mechanical Engineering Honor Society <i>Professional Development Coordinator</i> <ul style="list-style-type: none">• Top 25% of class eligible for membership• Organized info sessions and student-faculty lunches using a budget of \$10,000+ Japanese Society of Undergraduates <i>Treasurer</i> Japan Karate Association/MIT Shotokan Karate Club <i>President of MIT Club</i> Undergraduate Practice Opportunities Program (UPOP) <ul style="list-style-type: none">• 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 Freshman Pre-Orientation Program: Discover Product Design at MIT <i>Co-coordinator & Mentor</i> <ul style="list-style-type: none">• Mentored incoming students in a weeklong program introducing them to ideation, prototyping, and CAD• Managed a budget of \$7,000; Collaborated with MIT faculty to organize the entire program	Mar. 2018 – Present Aug. 2016 – Present Aug. 2008 – Present Oct. 2016 – Sept. 2017 Aug. 2015 – 2018
MIT Activities/Awards	2.12 Introduction to Robotics <ul style="list-style-type: none">• Designed, fabricated, and controlled a robotic arm and serial elastic actuator to aid hemiplegic patients• Awarded Most Valuable Engineer of the team by peers and professors; Team placed 2nd Manufacturing and Design Robotics Competition <ul style="list-style-type: none">• Placed Top 32/160 MIT Autonomous Robotics Competition <i>Mechanical Co-Lead</i> <ul style="list-style-type: none">• Designed mechanisms that consistently completed the task and cooperated with software and electrical leads• Placed 2nd, Won the Two Sigma Prize	Sept. – Dec. 2017 Feb. – Apr. 2017 Jan. 2016