

KAYMIE SHIOZAWA

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Education	Massachusetts Institute of Technology (MIT) <i>Candidate for Bachelor of Science in Mechanical Engineering</i> GPA: 4.7/5.0 Relevant coursework: Manufacturing and Design I/II; Thermodynamics and Fluids I/II; Dynamics and Controls I/II; Materials and Mechanics; Differential Equations; Introduction to Robotics; Python; Microeconomics	Cambridge, MA June 2019
Relevant Experience	MIT D'Arbeloff Lab <i>Undergraduate Researcher</i> <ul style="list-style-type: none">• Design and implement a controls infrastructure for an autonomous excavation robot• Improve current excavation arm through 3D modeling and manufacturing methods• Perform experiments that register forces exerted on the arm during digging while tracking the soil's movement	Cambridge, MA Sep. 2016 - Present
	Haemonetics Corporation <i>Mechanical Design Engineer</i> <ul style="list-style-type: none">• Designed and developed 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• Worked closely with the product development team and gained hands-on experience in rapid prototyping• Collaborated with software, mechanical, and systems engineering teams to explore costs and manufacturability of various sensing techniques• Presented to managers of the project and executive members of the company	Braintree, MA June – Aug. 2017
	CEA-LETI: Embarked Micro Batteries Laboratory <i>Research Engineer</i> <ul style="list-style-type: none">• Determined the properties of micro battery electrolytes through electrical impedance characterization for the fabrication of more efficient batteries• Collaborated with team of five members and communicated in French• Presented findings to lab of 40 people	Grenoble, France June – Aug. 2016
	MIT Little Devices Laboratory <i>Undergraduate Researcher</i> <ul style="list-style-type: none">• Developed and ideated prototypes of mechanical modules for robots that deposit chemicals onto disease diagnostic paper in a cost-efficient, accessible manner	Cambridge, MA Feb. – May 2016
Skills	Languages: French, Japanese, English Software Experience: SolidWorks, MATLAB, Python, Arduino Hardware Experience: CNC Lathe and Mill, Welding, Laser Cutting, Water Jetting, 3D Printing	
Leadership	Undergraduate Practice Opportunities Program (UPOP) <ul style="list-style-type: none">• Participated in a professional development program preparing sophomores for success in the workplace• Completed an intensive one-week professional development workshop taught by MIT faculty and industry professionals, which explores topics such as effective communication, foundational decision-making, and teamwork	Oct. 2016 – Sept. 2017
	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 product design, ideation, prototyping, and CAD• Collaborated with MIT faculty to organize the entire program; Corresponded with design firms for tours• Trained mentors to create lectures and mentor the freshmen effectively	Aug. 2015 – 2017
MIT Activities/ Awards	MakerLodge <ul style="list-style-type: none">• Mentored freshmen on various manufacturing skills at the first student-run makerspace at MIT	Feb. 2017 – Present
	Japanese Society of Undergraduates <i>Treasurer</i>	Aug. 2016 – Present
	Japan Karate Association/MIT Shotokan Karate Club <i>President of MIT Club</i>	Aug. 2008 – Present
	Manufacturing and Design Robotics Competition <ul style="list-style-type: none">• Placed Top 32/160	Feb. – Apr. 2017
	Design for America <ul style="list-style-type: none">• Addressed problems on education and established relationships with professionals in the community	Oct. 2016 – Jun. 2017
	MIT Autonomous Robotics Competition <i>Mechanical Co-Lead</i> <ul style="list-style-type: none">• Designed mechanisms that consistently completed the task, while cooperating with software and electrical leads• Placed 2nd, Won the Two Sigma Prize	Jan. 2016