KAYMIE SHIOZAWA

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Massachusetts Institute of Technology (MIT) Cambridge, MA **Education** Candidate for Master of Science in Mechanical Engineering (PhD Track) June 2021 Bachelor of Science in Mechanical Engineering, GPA: 4.8/5.0 June 2019 **Microsoft Corporation** Seattle, WA Relevant Program Manager June – Aug. 2019 • Drove adoption for anomaly detection in Azure (Cloud Service) access management product **Experience** Organized meetings with key users to create a specification for the product tailored to the users' needs • Presented to senior leadership and won best presentation display MIT D'Arbeloff Lab Cambridge, MA Undergraduate Researcher Sept. 2017 – May 2019 • Employed gaze tracking to distinguish a human operator's focus points; using Neural Networks to find trends • Designed a base, adding a degree of freedom, for current excavation arm model through 3D modeling (CAD), material selection, and manufacturing methods such as water jetting and milling • Selected as a scholar for SuperUROP, a competitive yearlong advanced research program, writing a paper Pacific Northwest National Laboratory (National Laboratory of DOE) Seattle, WA Data Scientist Jan. 2019 • Contributed to the development of software tool (in Python) sizing microgrids to facilitate off the grid operation • Publishing a paper on the analysis in the next coming months **Lockheed Martin Advanced Technology Center** Palo Alto, CA Mechanical Structural/Robotics Engineer June – Aug. 2018 • Conducted vibration analysis verifying the integrity of 3 high value PCBs to withstand spacecraft launch • Implemented code to remotely control waypoint-navigating robots; designed 3D printed processor board mounts consisting of a clip, removing the need for fasteners • Presented findings to 30+ executives and coworkers **Haemonetics Corporation** (Medical Devices) Braintree, MA Mechanical Design Engineer June – Aug. 2017 • 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, as well as 15 coworkers Spoken Languages: English, Japanese, French **Skills Programming:** Python, MATLAB, Swift, Arduino, C++ Hardware Prototyping: SolidWorks, Fusion 360, Lathe, Mill, Welding, Laser Cutting, Water Jetting, 3D Printing Japan Karate Association/MIT Shotokan Karate Club Feb. 2016 - Present Leadership President of MIT Club Pi Tau Sigma: National Mechanical Engineering Honor Society Mar. 2018 – May 2019 Professional Development Coordinator • Top 25% of class eligible for membership • Organizing info sessions and student-faculty lunches using a budget of \$10,000+ Japanese Society of Undergraduates Aug. 2016 - May 2019 Treasurer • Organizing cultural activities using a budget of \$700 every semester to involve entire campus with club Freshman Pre-Orientation Program: Discover Product Design at MIT Aug. 2015 - 2018Co-coordinator & Mentor 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 John and Miyoko Davey Foundation Merit Scholarship 2018 - 2019Awards/ • One of 3 awardees for partial tuition coverage of \$20,000

MIT Autonomous Robotics Competition

Manufacturing and Design Robotics Competition

• Placed Top 32/160

• 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

Sept. – Dec. 2017

Feb. – Apr. 2017

Jan. 2016

Scholarship

Mechanical Co-Lead • Placed 2nd, Won the Two Sigma Prize

2.12 Introduction to Robotics