KAYMIE SHIOZAWA

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Education

Massachusetts Institute of Technology (MIT) — **Cambridge, MA**
Candidate for Master of Science in Mechanical Engineering (PhD Track) GPA: 5.0/5.0 — June 2021
Bachelor of Science in Mechanical Engineering, GPA: 4.8/5.0 — June 2019

Work & Research Experience

MIT Newman Lab — **Cambridge, MA**
Research Assistant — Sept. 2019 – Present
- Designing an adaptive cane that will improve balance in patients; studying human control in balance

Microsoft Corporation — **Seattle, WA**
Program Manager — June – Aug. 2019
- Drove adoption for anomaly detection in Azure (Cloud Service) access management product
- 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 and machine learning to determine an excavator operator's focus points
- Designed and manufactured a base, adding a degree of freedom to a robotic excavator
- Selected as a scholar for SuperUROP, a competitive, yearlong advanced research program

Pacific Northwest National Laboratory (PNNL) (National Laboratory of DOE) — **Seattle, WA**
Data Scientist — Jan. 2019
- Contributed to the development of software tool (Python) sizing microgrids to facilitate off the grid operation
- Submitted paper for publishing

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
- Presented findings to 30+ executives and coworkers

Haemonetics Corporation (Medical Devices) — **Braintree, MA**
Mechanical Design Engineer — June – Aug. 2017
- Collaborated with software, mechanical, and systems engineering teams to explore costs and manufacturability of different optical sensors to improve blood separation in plasma collection
- Presented to managers of the project and executive members of the company, as well as 15 coworkers

Publications

- Newman, S., Shiozawa, K., Follum, J., Barrett, E., Douville, T., Hardy, T., and Solana, A., 2020, "A Comparison of PV Resource Modeling for Sizing Microgrid Components," Renew. Energy. (PNNL)
- 1 first-author manuscript in preparation (MIT Newman Lab)

Leadership/ Mentorship

Institute Committee: Community Service Fund Board — Aug. 2020 – Present
- Nominated by the Graduate Student Council; selects charitable organizations that MIT supports financially

MIT Mechanical Engineering Diversity, Equity, and Inclusion Working Group — June 2020 – Present

Japan Karate Association/MIT Shotokan Karate Club — Feb. 2016 – Present
President of MIT Club

2.00b Toy Product Design *Mentor* — Feb. – May 2019

Pi Tau Sigma: National Mechanical Engineering Honor Society — Mar. 2018 – May 2019
Professional Development Coordinator
- Top 25% of class eligible for membership
- Organized info sessions and student-faculty lunches using a budget of $10,000+

Freshman Pre-Orientation Program: Discover Product Design at MIT — Aug. 2015 – 2018
Co-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

Awards/ Scholarship

John and Miyoko Davey Foundation Merit Scholarship — 2018 – 2019
- One of 3 awardees for partial tuition coverage of $20,000

2.12 Introduction to Robotics — Sept. – Dec. 2017
- 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 — Feb. – Apr. 2017
- Placed Top 32/160

MIT Autonomous Robotics Competition — Jan. 2016
Mechanical Co-Lead
- Placed 2nd, Won the Two Sigma Prize