KAYMIE SHIOZAWA

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Education

Massachusetts Institute of Technology (MIT)

Cambridge, MA

Candidate for Bachelor of Science in Mechanical Engineering

June 2019

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)

Teaching

Japan Karate Association/MIT Shotokan Karate Club

Aug. 2008 – Present

President of MIT Club

Experience

MIT Medlinks

Sept. 2015 - Present

Trained member for mental/physical health

• Health educator for my living group; hold occasional seminars 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

MakerLodge Feb. 2017 – May 2017

Mentor

· Mentored freshmen on various manufacturing skills at the first student-run makerspace at MIT

Mechanical Engineering Tutor Sept. - May 2017

Tutored mechanical engineering classes

Teaching and Sharing Skills to Enrich Lives (TASSEL Inc.)

Aug. 2013 – May 2015

Teacher

• Taught Cambodian children English via video chat

• Initiated a book drive and created audiobooks to aid the children's education

Relevant

MIT D'Arbeloff Lab

Cambridge, MA Sept. 2017 - Present

Experience

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

ISEE, Inc.

Cambridge, MA Sept. 2018 - Present

Mechanical Design Engineer

Undergraduate Researcher

• Designing hardware components for sensors to be mounted on autonomous vehicles

Developing PID steering and speed control of unconventional autonomous vehicles

Lockheed Martin Advanced Technology Center

Palo Alto, CA

Mechanical Structural/Robotics Engineer

June - Aug. 2018

· 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

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

Mar. 2018 - Present

Professional Development Coordinator

• Top 25% of class eligible for membership

• Organized info sessions and student-faculty lunches using a budget of \$10,000+

Undergraduate Practice Opportunities Program (UPOP)

Oct. 2016 – Sept. 2017

 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

• Designed, fabricated, and controlled a robotic arm and serial elastic actuator to aid hemiplegic patients

MIT

2.12 Introduction to Robotics

Sept. – Dec. 2017

Activities/

• Awarded Most Valuable Engineer of the team by peers and professors; Team placed 2nd **Manufacturing and Design Robotics Competition**

Feb. - Apr. 2017

Awards • Placed Top 32/160

MIT Autonomous Robotics Competition

Jan. 2016

Mechanical Co-Lead

Designed mechanisms that consistently completed the task and cooperated with software and electrical leads

Placed 2nd, Won the Two Sigma Prize