

Mindy Tieu

Email: mindy.tieu@students.olin.edu

Phone: (848)-565-8777

Portfolio: mintyish.github.io

EDUCATION

Olin College of Engineering, Needham MA

Bachelor of Science, Mechanical Engineering

May 2017

GPA 3.54

- Courses: Mechanical Dynamics, Thermodynamics, User Oriented Collaborative Design, Mechanical Design.

Sophia University, Tokyo, Japan

Study Abroad Semester, September 2015 - January 2016.

- American Association of Teachers of Japanese Bridging Scholarship Recipient 2015.

EXPERIENCE

Amazon Robotics

Senior Capstone

Needham, MA

Sep 2016 - Present

- Member of 6-person team of seniors working on year-long proof of concept project sponsored by Amazon Robotics.
- Designing and building pick and place system to robustly sense and manipulate variable objects in warehouse setting.
- Designing and prototyping electro-mechanical subsystems for variable object handling.

Superpedestrian

Mechanical Engineering Intern

Cambridge, MA

May 2016 - Aug 2016

- Architected, executed, and documented mechanical design validation plan for full product assembly before ship to customers.
- Investigated grease application method and did system level analysis of sound pressure and drag forces in final product.
- Designed and fabricated tests structures for extreme environmental conditions and representative dynamic forces.

Olin College of Engineering

Course Assistant

Needham, MA

Sept 2015 - Dec 2016

- Guided students through mechanical design processes, CAD modeling, and rapid prototyping for Design Nature course.
- Tutored students in mechanical dynamics and assisted professors in course design for Quantitative Engineering Analysis course.

Biomedical Materials Research Engineer

Jun 2015 - Aug 2015

- Conducted FEA for validation of orthodontic pacifier designs accounting for nonlinear properties and dynamic elements.

Mechanical Design Research Engineer

Jun 2015 - Aug 2015

- Designed, fabricated, and tested gravity actuated perching landing gear for implementation on unmanned aerial vehicles.

Olin Intelligent Vehicles Lab

Autonomous Drones for Whale Research Engineer

Needham, MA

Sep 2014 - Dec 2014

- Implemented autonomous quad-copter drones in whale research project "Snot Bot" with Ocean Alliance.
- Field tested and acquired data from drone and whale interaction simulations.

Robot X Research Engineer

Jan 2014 - May 2014

- Designed and fabricated sensor mounts on Robot X, an intelligent maritime vehicle shared by Olin and MIT.
- Developed advanced composite fabrication skills for marine applications through CAD modeling and machine shop use.

PUBLICATIONS

Autonomous Aerial Vehicles for Remote Sample Collection in Difficult Conditions

- Paper published to IEEE International Conference on Technologies for Practical Robot Applications, 11-12 May 2015, Woburn, MA.
- Poster presented at Northeast Robotics Colloquium, 11 Sept 2014, Brown University, RI.

Demonstrations of Bio-Inspired Perching Landing Gear for UAVs

- Paper published to SPIE Smart Materials Conference on Bioinspiration, Biomimetics, and Bioreplication VI in Nevada March 2016.

SKILLS

Experienced in: SolidWorks, SolidCAM, FEA, MATLAB, LabVIEW, HTML, CSS, LaTeX, Photoshop, InDesign

Trained on: Manual/CNC Mill, CNC Router, Lathe, Laser Cutter, Composites, 3D Printers, Environmental Chambers

Interests: Videogames, running, fencing, costume design and fabrication

Foreign Languages: Cantonese, Japanese, Russian