# **BRANDON WONG**

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#### **OBJECTIVE**

Mechanical engineer with research and international internship experience, seeking summer 2024 internships

#### **EDUCATION**

Bachelor of Mechanical Engineering, Massachusetts Institute of Technology

Expected 2025

Relevant Coursework: Robotics, Dynamics and Controls, Mechanics of Materials, Electronic Systems, Thermal fluids, Fundamentals of Programming

### **SKILLS**

**Technical Skills** CAD, rapid prototyping, Arduino, Python, Photography and video making

Soft Skills Public speaking, event planning and leadership

Languages English (native), Spanish (fluent), Japanese (fluent), Mandarin (elementary)

## WORK AND RESEARCH EXPERIENCE

Hardware intern

TeamLab

June 2023 - August 2023

Tokyo, Japan

• Designed an autonomous charging system and algorithm for uniquely marking continuously flying drones

• Researched methods and proposed applications for manufacturing origami-like foldable 3d printed structures

## Undergraduate researcher

June 2022 - December 2022

MIT Human Computer Interaction Engineering Laboratory

Cambridge, MA

- Developed a 3d printed capacitive rotary encoder, ran technical evaluations, co-authored the resulting paper accepted by the Association of Computing Machinery
- Developed a means of re-configurable circuits by levitating conductive particles, co-authored the research proposal and presented at the ACM symposium of User Interface Software and Technology. (Demo video)

## Undergraduate researcher

January 2023 - present

MIT Computer Science and Artificial Intelligence Laboratory

Cambridge, MA

- Developed folding algorithms to automate and improve efficiency of origami design
- Created various web applications to implement algorithms for public use

## PERSONAL PROJECTS

**Origami artwork portfolio** Coded a personal page from scratch and uploaded some of my best origami artworks from the past few years. (Portfolio) Recipient of internationally recognized Joisel Award .

Grid folder Designed a device for origami purposes that can fold evenly spaced creases about 4-5 times faster than folding by hand. (Demo video)

Reconfigurable folding circuits Prototype for a circuit printed on paper that rewires itself with different folding patterns. (Demo video)

#### **EXTRA-CURRICULAR ACTIVITIES**

- President of OrigaMIT origami club, leading weekly meetings and hosting a national-scale annual origami convention with 180+ attendees
- Active member and leader in MIT's Asian Christian Fellowship, organizing and leading the weekly large group fellowship gatherings
- Vocal percussionist in MIT's Cross Products Christian a capella group