Audrey W. Lee

(707) 927-8047 ◆ alee2@olin.edu ◆ audrey-lee88.github.io

Skills

Programming Languages

- Python
- C++/C#
- Java
- HTML

Software

- SolidWorks
- Autodesk Inventor/Revit
- Unity
- MATLAB
- Mathematica
- Arduino
- Adobe Photoshop/Illustrator

Machine Shop

- Laser Cutter
- 3D Printing
- Drill Press
- Band Saw
- Scroll Saw
- Belt Sander
- Resin 3D Printing

Additional Interests

- Robotics
- Entrepreneurship
- Playing Piano & Violin

Experience

Leader; Computer Engineer; Robot Perception **2018-09, present**
Human Interactive Robotics Laboratory (HIRo), Olin College of Engineering, Needham, MA

- Worked in a team to program robotic arms to interact with the physical world.
- Worked on several projects one involving robotic arms competing against humans in chess and leader of another geared towards object detection and location in a 3D space.
- Working on a project that involves Reinforcement Learning with object localization

Member **2018-09, present**
Society of Women Engineers (SWE), Olin College of Engineering, Needham, MA

- Encourage women to be interested in STEM and volunteer at Olin affiliated events to promote women in STEM

Teaching Assistant **2020-09, present**
Quantitative Engineering Analysis II, Olin College of Engineering, Needham, MA

- Assistant to teaching various topics concerning Thermodynamics, Mechanical Systems, and Signal Processing.

Sub-Team Leader; Augmented Reality Research **2019-01, 2020-02**
Spatial Computing Laboratory, Olin College of Engineering, Needham, MA

- Using Unity and C#, created an AR experience that focuses on consumer interactions with the AR program and other consumers
- Leading Machine Learning sub-team to overlay and match models with real-world objects.

Website Design **Summer 2020**
Northern California

- Helped a small business owner design and create their own website to help gain more clients and share information about their service.

STEM Camp Instructor **Summer 2019**
iD Tech Camp, Northern California

- Taught Machine Learning in Python and Vex Robotics in C++ to children ages 10-18 at several Northern California locations

Education

Olin College of Engineering **Expected Graduation - May 2022**

- Bachelor of Science in Electrical and Computer Engineering.
- Recipient of 4-year, 50% Olin Merit Scholarship
- GPA: 3.96

Justin-Siena High School **2014-08, 2018-05**

- Graduated top 5% of class with 14 Honors and Advanced Placement® courses in mathematics, English, science, social studies and computer science
- GPA: 4.48

Projects

Data Structures and Algorithms Course **2020-04, 2020-05**
Maze Generation and Traversal Project

- Implemented Depth First Search, Breadth First Search, and an A* algorithm to traverse randomly generated mazes.

Machine Learning Course **2019-11, 2019-12**
Neural Tunes Project

- Trained a LSTM RNN model to generate music notes from 315 MIDI files of Beatles music.

Principles of Engineering Course **2019-10, 2019-12**
Castle of Air Project

- Using an Arduino, created, designed, and prototyped a PCB that filters and amplifies sound waves. Using Arduino's IDE, performed Fourier Transform on the sound waves to extract frequencies and their respective amplitudes.