

Skills

Programming Languages

- Python
- Java
- C++/C#
- 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.

Sub-Team Leader; Augmented Reality Research

2019-01, present

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.

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

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

Paid Tutor

2014-03, 2018-08

Kumon North America, Napa, CA

- Three to six hours/week, I helped tutor children of all ages (from K-12) in math and English.

Leader

2015-10, 2018-05

Justin-Siena FIRST (FTC) Robotics Club, Napa, CA

- Organized 2 teams of 20 high school students to build a robot in a six-week time span.
- Handled programming the robot, finances, documentation, and outreach

Founder and Club Leader

2016-08, 2018-05

Ladies Empowering America's Future (LEAF) in STEM Club, Napa, CA

- Founded LEAF club to encourage women to become interested in STEM.
- Taught children in elementary and middle school how to problem solve and code.

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: 3.95

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

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.

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.