

Madeline Mooney

(585)363-1526
✉ m.mooney098@gmail.com
📄 github.com/maddiemooney

2nd year Computer Engineering student seeking coop for Fall of 2018

Education

2016–2021 **Rochester Institute of Technology.**
BS in Computer Engineering
3.34 GPA

Projects

- Feb 2018 **Vizualizer**, www.github.com/maddiemooney/vizualizer.
3D Audio visualizer. Detects frequencies in real time and updates to show frequency concentration.
Written in Python using PyOpenGL and PyAudio.
- Jan 2018 **Morse Code Redundancy**, www.github.com/maddiemooney/mcr.
Transmits then receives morse code using lasers and photoresistors.
Designed circuit, transmitting and receiving algorithm in Arduino C.
- Feb 2017 **WriteBot**, www.github.com/maddiemooney/writebot.
Repurposing CD drives to create a mini CNC plotting machine.
Rewrote the stepper motor library for Arduino, other functionality written in Arduino C and Python.

Experience

- May–August 2017 **Machine Learning Research.**
Created an online monitoring system that takes sounds produced by different machining processes and labels them according to a classifier created by a support vector machine algorithm
Written in Python, using Scikit-learn, PyAudio, PyQt5, and PyQtGraph
Presented research findings at RIT Undergraduate Research Symposium
- Aug 2017 - **Teaching Assistant.**
Teaching assistant for Intro to Computer Engineering (CMPE 110), Digital System Design (CMPE 160)
Set up lab exercises, performed equipment quality checks, graded lab work, held weekly mentoring meetings and office hours.
Recipient of RIT CMPE Fall 2017 Teaching Assistant Award

Skills

- Languages Python, Java, C/Arduino C, VHDL, ARM Assembly
- Markup HTML/CSS, \LaTeX
- OS Linux, MacOS, Windows
- Tools/Misc Microsoft Office, GIMP, PyQt, PyOpenGL, PyAudio, Git, JetBrains IDEs, Keil Uvision, ModelSim, Altera Quartus, PSpice

Activities

- Aug 2016 - **Computer Science House.**
RIT Special Interest House
Editor of weekly newsletter, Segfault
- Aug 2013 - **Women in Computing Hackathon.**
24 Hour Hackathon held at RIT