

Madeline Mooney

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maddiemooney.me

3rd year Computer Engineering student seeking co-op for Summer and Fall of 2019

Education

2016 - 2021 **Rochester Institute of Technology.**
Bachelors of Science in Computer Engineering
3.4 GPA - Kate Gleason College of Engineering Dean's List

Experience

- Fall 2018 **Software Engineering Co-op, Plexus Corp.**
Intern in the Software Group.
Implemented integration test structure that utilized DDS protocol to communicate between software items.
Validated medical device software as part of FDA approval process.
- Summer 2018 **Firmware Engineering Co-op, AMD.**
Intern on the Diagnostics and Tools team.
Automated execution of system level tests and reported test results through web interface. Designed and implemented interface for reserving and offlining test systems.
- Fall 2017 **Teaching Assistant, Rochester Institute of Technology.**
(Current) Head TA for Intro to Computer Engineering, Digital System Design I.
Prepared lab exercises, performed equipment quality checks, graded lab work and reports, held weekly mentoring meetings and office hours.
Recipient of RIT CMPE Fall 2017 Teaching Assistant Award.
- Summer 2017 **Machine Learning Research, Rochester Institute of Technology.**
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.
Presented research findings at RIT Undergraduate Research Symposium.

Projects

- 2018 **Morse Code Redundancy, github.com/maddiemooney/mcr.**
Transmits and receives Morse Code using lasers and photoresistors.
Designed circuit in PSpice, implemented transmitting and receiving algorithm in Arduino C.
- 2017 **WriteBot, 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.

Skills

Languages C/C#/Arduino C, ARM Assembly, VHDL, Verilog, Python, Java, HTML/CSS, PHP, JavaScript/JQuery, SQL, \LaTeX .

Tools/Misc Git, Altera Quartus, Xilinx, Keil Uvision, ModelSim/ISim, PSpice.