

# Michael Shullick

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## EDUCATION

### ROCHESTER INSTITUTE OF TECHNOLOGY

#### BS/MS IN COMPUTER ENGINEERING

Expected May 2019 | Rochester, NY

GPA: 3.6 / 4.0

Honors, Dean's List,

Presidential Scholarship

#### Lab Courses

Assembly Language Programming

Circuit Analysis I & II

Computer Science I & II

Digital System Design I & II

Electronics I

Interface & Digital Electronics

## LINKS

Portfolio: [shullick.net](http://shullick.net)

Github:// [shoelick](#)

LinkedIn:// [mshullick](#)

## SKILLS

### PROGRAMMING

Languages

C++ • C • VHDL

ARM Cortex-M0+ Assembly

Python • Java • C#

Javascript • PHP • CSS

Tools:

ROS • OpenCV

Machine Learning •  $\text{\LaTeX}$

Octave • Bash

### HARDWARE

Oscilloscopes • FPGAs

Digital Logic Circuit Design

Numerous Development Boards

### SOFTWARE

Altera Quartus II

Xilinx ISE • Modelsim

Keil  $\mu$ Vision • IAR Workbench

Linux • Subversion • Git

IntelliJ • PyCharm • Netbeans

PTC Creo • Autodesk Inventor

Solidworks

## OBJECTIVE

An engineering internship for the summer of 2017.

Seeking experience with hardware design and machine learning.

## EXPERIENCE

### ROCKWELL AUTOMATION

#### EMBEDDED SOFTWARE ENGINEER - CO-OP

May 2016 – Jan 2017 | Mayfield Heights, OH

- Maintained prototype firmware for next generation of I/O modules, including driver development and implementing tests for EMC verification.
- Contributed to general firmware development of safety-certified next-generation PLC I/O modules on an international team of developers.
- Served as co-project manager of co-op led Career Fair Project: a checkers-playing robot gantry. Responsibilities included maintaining project timelines and communication between team, managers, and vendors.
- Designed a simple machine vision API and gained experience sizing motors and gearboxes based on a system's torque and inertia requirements.

### ROCHESTER INSTITUTE OF TECHNOLOGY

#### TEACHING ASSISTANT FOR DIGITAL SYSTEMS DESIGN I

Jan 2016 – May 2016 | Rochester, NY

#### STUDENT LAB INSTRUCTOR FOR CS I - PYTHON

Aug 2015 – Dec 2015 | Rochester, NY

### FORCE ROBOTS, LLC

#### SOFTWARE DEVELOPMENT INTERN

May 2015 – Aug 2015 | Cleveland, OH

- Contributed to both backend and frontend software development for an articulate robot designed to finish casted and machined components.
- Independently developed a specialized JQuery plugin for graphing data useful to robot programming.
- Made deployment of code easier by setting up CMake with a large project and creating a distributable package.

### RIT - NATIONAL TECHNICAL INSTITUTE OF THE DEAF

#### VIDEO PRODUCTION ASSISTANT

Sep 2014 – May 2015 | Rochester, NY

- Edited deaf-oriented productions using Final Cut Pro and Adobe Premier
- Live-event camera operator
- Provided general troubleshooting and support between software updates

## PROJECTS

### CUSTOM ROBOT ARM | PERSONAL SIDE PROJECT

August 2015 – September 2016

Independently designed and fabricated a robot arm driven by a Raspberry Pi running ROS. Mechanical design based on ABB Palletpack. Learned how to train OpenCV cascade classifiers to identify chess pieces for potential robot application.

### MINDCLOUD IDEA NETWORK | IMAGINERIT EXHIBIT

Jan 2015 – May 2015 | Rochester, NY

Lead development of a website similar to Quora, but focused on market discovery and product innovation. Built from scratch a PHP-based MVC backend and a frontend based on Foundation. Presented at RIT's Creativity and Innovation festival.