

## Current Address

2206 Dorchester Dr N.  
Apt 103  
Troy, MI 48084

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## Education

### *Cornell University*

- Masters of Engineering ..... May 2015
  - Mechanical Engineering focus in Dynamics Controls, and Robotics
  - GPA: 3.92 (4.3 scale)
- Bachelors of Science ..... May 2014
  - Mechanical Engineering, Minor in Computer Science
  - GPA: 4.05 (4.3 scale)

## Past Employment

### *FANUC America Corporation* ..... 2015-Present

- Position: Product Development Engineer - Applied Motion Group
- Developed cloud analytics to help predict and prevent robot downtime
  - Web interface for tracking and managing robot maintenance tasks using usage data sent from the robot
  - Developed analytic to predict reducer failure based on robot motion data from production path
- Tuned motion software for new P-40iA robot, working closely with mechanical engineers to meet life and reliability specifications
- Developed I/O interface for velocity and position control of axes used for process equipment
- Communicated regularly with Japanese office for product unification and testing

### *Research in LIMS Lab on hydraulic artificial muscles* ..... Summer/Fall 2014

- Simulated 7-link bipedal robot gait to extract forces in hydraulic cylinders
- Designed controller for dynamometer test apparatus for artificial muscle bundles and variable recruitment control strategy

### *Teaching Assistant for Computer System Organization and Programming* ..... Spring 2014

- Lead discussion sections and held weekly office hours for students
- Helped students to reinforce concepts such as CPU organization, assembly language, low level memory management, and optimization

### *Research in The Fluid Dynamics Research Lab* ..... Summer 2013

- Modelled flow around small-scale vertical-axis wind turbines for different airfoils

### *Assistant karate instructor* ..... 2009-2010

- Taught children (ages 5 and up) self defense

## Computer Skills

Programming: Java | Python | MATLAB | C | MIPS | OCaml | HTML | PHP | MySQL | Javascript | JQuery | Simulink | LabView | ROS | UNIX | AngularJS | jqPlot | C# | .NET | Apache Hadoop

CAD/Simulation: SolidWorks | ANSYS

Other: L<sup>A</sup>T<sub>E</sub>X | Microsoft Office | Excel | Google Docs | Git | Clearcase

## Other Experiences

Section Leader and Rank Leader in Big Red Marching Band ..... Spring 2012  
3D graphics modeling and animating using Blender 3D