# Riley Van Wie Chapman

email: riley.chapman@students.olin.edu

cell: 1(518) 304-3539

portfolio: <u>rlychpmn.wordpress.com</u>

Olin College of Engineering 1000 Olin Way, MB 707 Needham, MA 02492

#### **Education**

Olin College of Engineering - Needham, MA

Candidate for Bachelor of Science in Engineering: Robotics

May 2017 GPA 3.74

Ticonderoga High School - Ticonderoga, NY

Advanced Regents Diploma with Honors - Valedictorian

June 2013

## **Experience**

# **REVO Electric Racing (student team)**

Fall 2013 - Present

- Electric FSAE/Formula Hybrid vehicle racing Spring 2016
  - Designed electrical safety systems, compiled the conjunction of both rule sets
  - Programmed CAN communication with Sevcon motor controllers (Python, embedded C, Arduino), mentoring younger team members
  - ► Tested tractive system components (wiring, wrenching)
- Electric Reverse Trike Powertrain Subteam Leader
  - ► Designed (Solidworks, 3D printing), electrically implemented (design, soldering), and repeatedly tested (debugging) of 10kW brushed DC motor controller
  - Designed and fabricated battery box (Solidworks, Laser Cutting, Sheet Metal)

# Robotics Research - Olin Intelligent Vehicles Lab

Spring 2014 - Present

- On team that developed an autonomous marine mammal research drone system -SnotBot, coauthored paper and attended OCEANS '15 conference in Genova, Italy
- Coded ROS/Mavlink communication, moving home base function (Python, ROS)
- Developed software for interaction and facial tracking (C, Python, ROS) for 3 ft. tall 3D printed Humanoid Robot Intel's Jimmy

### Internship at Loci Controls - Greentown Labs, Somerville, MA

Summer 2015

- Calibrated gas flow and concentration sensors (Serial Communication, Python)
- Designed and built quality assurance rig to test pressure tolerances (Python)

#### Internship at Catz Sports - Needham, MA

Summer 2014

- Designed and developed web application for athletic coaching (JS, HTML, CSS)
- Developed algorithm for producing tailored workouts for growing individuals (JS)

#### Silver Bay YMCA of the Adirondacks - Silver Bay, NY

Summer 2013

· Maintenance/Facilities Department: shadowed Electrician, Mechanic, and Carpenter

**Student Conservation Association -** Yellowstone National Park

Summer 2012

Improved and maintained trail system with backcountry crew for a month

Skills: Python, C, ROS, JS, HTML, CSS, MATLAB, SolidWorks, Altium, Mill, Lathe, Sheet Metal, Laser Cutting, 3D Printing, Drone Piloting, Wiring, Wrenching, Soldering Interests: Backpacking, Biking, Music performance (Bass, Guitar, Drums), Mountain Climbing, Unicycling, Fire Arts, Rock Climbing, Tele Skiing, Ultimate Frisbee, Videography