Riley Van Wie Chapman

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Olin College of Engineering

1000 Olin Way, MB 707

Needham, MA 02492

Education

Olin College of Engineering - Needham, MA   May 2017
  Candidate for Bachelor of Science in Engineering: Robotics   GPA 3.73

Ticonderoga High School - Ticonderoga, NY   June 2013
  Advanced Regents Diploma with Honors - Valedictorian

Experience

Draper - Autonomous Vehicle Engineering Internship - Boston, MA   Summer 2016
- Autonomous city driving for tier one supplier of automotive safety equipment
  - Assessed the functionality 77Ghz automotive radar on test system and developed visualization tool for displaying tracked objects from multiple sources
  - Developed electrical system and actuated steering mechanism for front steering robotic platform for autonomous system testing

Olin Electric Motorsports (Formula SAE Electric team)   Fall 2013 - Present
- As the senior electrical engineer on the team, I am the chief electrical system architect.
  - Spec'd components for 80kW powertrain
  - Structured the low voltage power distribution and communication network (CAN)
  - Designed configuration of a >5kWh lithium battery pack
  - Designed PCBs with high and low voltage sections
  - Designed, manufactured, and tested 10kW brushed DC motor controller

Robotics Research - Olin Intelligent Vehicles Lab   Spring 2014 - Present
- Contributed on 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)

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