

**Education****University of Michigan – Ann Arbor, MI**; B.S.E in Aerospace Eng, Minor in Electrical Eng | 3.25/4.00 *Expected Apr 2020*

- [Intro to Aerospace Engineering](#), [Intro to Computers and Programming](#), [Multivariable Calculus](#)
- [Intro to Electronic Circuits](#), [Differential Equations](#), [Dynamics & Vibrations](#) (Fall 2017)
- [Solid Mech & Aero Struct](#), [Gas Dynamics](#), [Intro to Aerospace Engineering Systems](#), [Intro to Signals & Systems](#) (Winter 2018)

**Bergen County Academies – Hackensack, NJ**; Academy for Engineering Design and Technology *2012 – 2016***Work and Project Experience****Michigan eXploration Laboratory (MXL) – Research Assistant** *Jan 2017 –*

- Helped assemble engineering development unit for Tandem Beacon Experiment (TBEx), a pair of 3U CubeSats
- Wrote electronic checkouts for flight and debugged existing engineering development processes
- Populated flight-level PCBs and performed board validation procedures
- Responsible for PCB procurement and panelization, ran trade study to find optimal pricing with vendor
- Managing spacecraft bus for Measuring Actuator Response and Impedance in Orbit (MARIO) CubeSat, joint research project testing application of macrofiber composites (MFC) (ref: Prof. J. Cutler, [jwcutler@umich.edu](mailto:jwcutler@umich.edu))

**MXL-Strato – High Altitude Ballooning Subteam** *Jan 2017 –*

- Coordinated launch logistics and secured funding for NASA's 2017 Eclipse Ballooning Project
- Researching and developing a payload bus based off current spacecraft bus
- Researching controlled descent methods for easier recovery of payload (e.g. Magnus force cylinders)

**Introduction to Aerospace Engineering (Remote Controlled Blimp) – Student** *Jan 2017 – May 2017*

- Designed, built, test, and competed an Arduino-based RC blimp with a 3-person team
- Designed and delivered oral and written reports on project throughout duration of project
- Focused on structural, controls, and wiring design and manufacture (ref: Prof. P Washabaugh, [pete@umich.edu](mailto:pete@umich.edu))

**Recon Industrial Controls Corporation – Engineering Intern (1day/wk)** *Sept 2015 – Jun 2016*

- Tested methods for a wireless serial link to proprietary LabRecon board
- Ported LabRecon software to Linux using the WINE environment
- Helped develop LabRecon educational robotic platform, providing a variety of systems for students to utilize

**Locating and Identifying Viable Asteroids (NASA ICED) – Student** *Nov 2013 – Nov 2014*

- Prototyped device with Arduino, custom-made PCB to measure the magnetic permeability of an asteroid and estimate amount of water gained from harvest (ref: Michael Liva, [micliv@bergen.org](mailto:micliv@bergen.org))
- Worked in collaboration with Kokutai-ji High School, sponsored by the Japanese Ministry of Education
- Presented at the Super Science HS Convention, at the Hiroshima International Conference Hall
- Presented at the 2015 AIAA Young, Professional, Student, and Educator Conference

**Leadership Experience****hackBCA – Chief of Staff** *2014 – 2016*

- Coordinated staffing and day-of logistics for 650+ attendee high school hackathon

**Junior State of America (JSA) – Director of Fundraising** *2012 – 2015*

- Reduced overnight convention costs by over \$100 per attendee, ended 2014 with over \$3000
- 2014 Junior State of America National Civic Impact Award

**Extracurriculars****American Institute of Aeronautics and Astronautics (AIAA) – Professional Development Committee** *Sept 2016 –***Institute of Electrical and Electronics Engineers (IEEE)** *Sept 2017 –***ARROW Communication Association (Amateur Radio Club) – KD2OHT** *Sept 2017 –***Michigan Men's Glee Club; Bass I** *Sept 2016 –***Skills****Software – Experienced:** Altium Designer, MATLAB, LaTeX, Autodesk Inventor/AutoCAD, Microsoft Office**Software – Basic:** LTSpice, C/C++, Python, Git, Bash, Mathematica**Communication:** Technical Writing; Fluent in Mandarin