

# Alison Alexsy

(313) 539-3569  
amalexsy@mtu.edu

## EDUCATION

Michigan Tech University  
**BS Mechanical Engineering**  
Minor: Aerospace Engineering

**Houghton, MI**  
**Graduated Dec 2017**

## PROFESSIONAL EXPERIENCE

### Aerospace Enterprise Senior Design

**January 2017 – December 2017**

**Project:** Recertification of Aerospace Clean Room

**Mission:** Design an array of sensor implementation within an ISO 8 classified cleanroom by providing continual real-time monitoring of environmental conditions including humidity, air pressure, temperature and airflow velocity.

- Powered sensor system using circuit boards fabricated from design to production within tight six-month deadline
- Integrated sensor design with Raspberry Pi controlled IoT project builder, resulting in increased ergonomics

### Ground Support Equipment Team Member

**May 2015 - December 2017**

*MTU Aerospace Enterprise*

- Aided preliminary conception, design and integration of satellite electrical ground support equipment
- Created, maintained and monitored project scope, including schedule and deliverables
- Developed testing documentation and procedures, upholding mission standards and requirements from sponsors including the Department of Defense and NASA

### Structures Team Member

**August 2013 - May 2015**

*MTU Aerospace Enterprise*

- Utilized tools such as SolidWorks and Siemens NX to design structural elements of spacecraft components
- Performed FEA analyses on flight hardware and structures, optimizing mass without compromising strength
- Designed for manufacturability, extreme environment survival, and launch vehicle compatibility in mind

## SELECTED TECHNICAL SKILLS

- |                     |                  |                  |
|---------------------|------------------|------------------|
| ○ AutoCAD           | ○ LabVIEW        | ○ MATLAB         |
| ○ GD&T              | ○ LMS Test.Lab   | ○ Simulink       |
| ○ Siemens NX        | ○ Autodesk EAGLE | ○ Bash Scripting |
| ○ SolidWorks        | ○ MS Project     | ○ Linux          |
| ○ Altair Hyperworks | ○ LMS AMESim     | ○ Ruby           |

## WORK EXPERIENCE

### Telecom Physical Plant Location Technician

**August 2016 – December 2017**

*Michigan Tech Information Technology*

- Managed telecommunications updates for 100 campus building physical plant AutoCAD location maps
- Supported Pinnacle database comprising of 100,000+ network data jacks

## PROFESSIONAL ASSOCIATIONS

**Society of Women Engineers (SWE):** Member

*August 2013 – Present*

**WMTU Radio Station:** Head of Marketing, Member

*August 2013 – December 2017*

**Radio Astronomy Team (RATs):** President, Member

*September 2011 – June 2013*

- Performed radio scans from student built 18-ft. radio telescope
- Led team as first female president in 20 years of club's existence