

# Jennifer R. Lyng

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**OBJECTIVE:** To obtain a full-time position to utilize my knowledge and experience in the Electrical Engineering field

**EDUCATION:** Michigan Technological University  
Houghton, Michigan

Seeking a **B.S. in Electrical Engineering**  
**Expected Graduate April 2017**  
Current Cumulative GPA: 2.96

## COMPUTER/TECHNICAL SKILLS:

- AutoCAD
- Autodesk Inventor
- Eagle
- Linux C
- Mathematica
- MATLAB
- MS Office
- MultiSim
- NX 8.5
- Photoshop
- PSpice AD
- Simulink

## PROJECT EXPERIENCES:

### Project Title: Robotic Systems Enterprise (RSE) - Outreach

Objective: Designing hardware and software to support challenging hands-on robotics experiences for students

- Collaborating with Ford to run a Controlathon programming competition event

### Project Title: RSE - Great Lakes Research Center (GLRC) Weather Buoy

Objective: Researched and designed a modular power management system for the GLRC's weather buoys

- Fabricated and successfully tested a prototype power management system following project constraints and standards

### Project Title: RSE – Exoskeleton

Objective: Completed project plan for an exoskeletal knee joint

- Designed an electrical system that utilized an Arduino Uno board, solenoids, and pressure sensors

### Project Title: RSE – Robotic Learning Prototype

Objective: Worked collaboratively on a robot base – focused on the control and drive system

### Project Title: RSE– Broomball Zamboni

Objective: Conceptualized a design for a robotic Zamboni for Michigan Tech broomball rinks

- Assembled design plan which included bill of materials, brainstormed ideas, and a final design option

## LEADERSHIP:

### Department Director, RSE Outreach Project, January 2017 – Present (8-9 hours/week)

- Manage Outreach Project Managers
- Make executive decisions for the Outreach program

### Youth Mentor, Team Green 4848 Robotics, September 2013 – Present (1-2 hours/week)

- Assist students in engineering and robot design

### Project Manager, RSE Outreach Project, August 2016 – December 2016 (14-16 hours/week)

- Increased active membership by about 40% by significant recruiting efforts
- Greatly increased the presence of the Robotic Systems Enterprise on campus and in the community

### Public Relations, RSE, January 2016 – April 2016 (4-5 hours/week)

- Promoted enterprise through information sessions, other advertising on campus, and on our website

### Student Director, RSE, February 2015 – December 2015 (10-12 hours/week)

- Worked to improve the enterprise to increase active membership, improve structure, and locate new sponsors

## WORK HISTORY:

### Electrical Engineering Intern, Bay Tek Games, May 2015 – August 2015 (also Thanksgiving Break 2015 and Spring Break 2016)

- Assembled and tested circuit boards used in arcade games
  - Used Eagle design software to lay out circuit boards from schematics created by the Electrical Engineers
  - Tested games for software bugs
  - Assembled & tested electrical wiring harnesses and performed basic troubleshooting

### Food Service Employee, A&W Restaurant, Summer 2016 | Stiles Junction Food & Fuel Summers 2014 & 2015

- Prepared & served food plus received & put away food truck orders

## CO-CURRICULAR INVOLVEMENT:

### Society of Women Engineers, Michigan Tech SWE, September 2013 – Present, (1 hour/week)

### Team Green 4848, Oconto County 4-H Vex Robotics competition team, September 2009 – Present, (1-2 hours/week)

- Constructed innovative robots for Vex Robotics competitions, including state and national tournaments
- Designed promotional tools such as, brochures, sponsorship videos, banners, posters, etc.
- Mentored students in engineering design and processes

**INTERESTS/HOBBIES:** Circuit board design | Electronics | Robotics | Percussion | Arts & Crafts | Singing | Traveling