

## Melinda K. Saxton

[mksaxton@mtu.edu](mailto:mksaxton@mtu.edu)

### Local Address

406 Sheldon Ave – Apt 2  
Houghton, MI 49931  
Phone: (989) 329-4378

### Permanent Address

8765 W. Emery Rd.  
Houghton Lake, MI 48629  
Phone: (989) 329-4378

**Objective:** To obtain an internship or co-op position within a company in a Mechanical Engineering or a related field.

**Education:** **Michigan Technological University (MTU), Houghton, MI**

- BS in Mechanical Engineering, expected graduation date May 2010
- GPA: 2.78

**Houghton Lake High School, Houghton Lake, MI**

- Advanced placement courses in Chemistry, Math and English
- GPA: 3.906

### **Engineering Projects:**

#### **EcoCAR, Vehicle Team Enterprise – Mechanical Team**

- Project: Design and implement hybrid architecture into a 2009 Saturn Vue.
- Problem: Utilize a hybrid drive train to improve fuel economy and reduce emissions without sacrificing the performance of the vehicle.
- Action: Developed a hybrid vehicle architecture, modeled the architecture changes in UGNX in order to ensure the drive train packaging is feasible.
- Results: Still in the design stage of this process.

#### **Challenge X, Vehicle Team Enterprise - Vehicle Integration Team**

- Project: Design and implement hybrid power train into a 2005 Chevy Equinox.
- Problem: Engine failure (head gasket), Temperature sensor failure.
- Action: Ran tests to determine where the failure had occurred, disassembled top end of engine, rebuilt engine, replaced temperature sensors.
- Results: Engine is now in proper running condition.

**Employment:** **Roscommon County Road Commission, Prudenville, MI (5/08-8/08)**

#### Engineering Intern (summer internship) (40+ hours a week)

- Work on road development and maintenance projects.
- Updated County road systems in AutoCAD and RoadSoft.
- Collected traffic count data.
- Work as an engineer onsite to oversee project.

**MDOT, Houghton Lake, MI (6/05-8/06)**

#### Rest Area Attendant (summers) (40 hours a week)

- Cleaned and maintained rest areas, grounds and equipment

**The Custard Cup, Houghton Lake, MI (6/02-5/08)**

#### Customer Service/ Trainer/ Manager (summers) (16-35 hours a week)

- Cleaned and maintained equipment and grounds
- Trained new employees
- Worked as a customer service employee

**Leadership:** **Michigan Tech SAE, Michigan Technological University**

- Active member (1/08-present)- Secretary (present)

**Michigan Tech Sledheads, Michigan Technological University**

- Active member (8/06-present)- Secretary (1/07-1/08)

**KEY Club** (volunteer organization), Houghton Lake High School

- Active member (8/04-6/06)- President (8/05-6/06)

### **Skills:**

#### Technical

Mechanical Capabilities  
Use of standard shop equipment  
General vehicle maintenance  
Machining Equipment (Lathe, Mill, CNC)

#### Computer

UGNX  
Microsoft (Word, Excel, PowerPoint, Visio)  
CAD  
MATLAB  
Mathmatica  
RoadSoft