

# Alexandra C. Roche

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**OBJECTIVE** To obtain an internship position in the field of Electrical and Computer Engineering.

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**EXPERIENCE**

Ford Motor Company Dearborn, MI  
**EESE Infotainment Systems – Product Development Intern**  
May – Aug 2013  
**Project:** CANoe Model  
**Objective:** Implement various SDARS functions into existing CANoe Model

- Aided team by converting numerous documents for spec release
- Gained insight into infotainment systems and CAN signals
- Benchmarked competitor vehicle connectivity systems
- Helped organize and maintain intern presentation review meetings
- Developed team building skills through community service and intern events

Takata Auburn Hills, MI  
**Summer Engineering Intern**  
May – Aug 2012  
**Project:** Vibration Steering Wheel Demonstration  
**Objective:** Create new demonstration that gave a vibration steering wheel user modes

- Conceptualized and applied possible user modes for vibration steering wheel
- Manipulated vibration motor in steering wheel and created a GUI for demonstration using LabVIEW and Arduino hardware / software
- Learned the importance of both functionality and design in product development
- Present project and research to engineering team for future development
- Demonstration was showcased to upper management at internal Ford event

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**EDUCATION**

Michigan Technological University Houghton, MI  
**BS Electrical Engineering and Computer Engineering**  
Expected 2015  
GPA: 3.32

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**TECHNICAL SKILLS**

|               |            |                    |             |
|---------------|------------|--------------------|-------------|
| • LabView     | • Java     | • Circuit Analysis | • C         |
| • MATLAB      | • MultiSIM | • CADsoft EAGLE    | • P-Spice   |
| • Mathematica | • CANoe    | • Microsoft Office | • Soldering |
| • Assembly    | • Arduino  | • Siemens NX       | • Verilog   |

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**SOCIETIES**

**Eta Kappa Nu (IEEE-HKN)**  
Recording Secretary, MTU Chapter of HKN, 2013 – Present

**Society of Women Engineers (SWE)**  
Member, MTU Chapter of SWE, 2011 – Present

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**CO-CURRICULAR WORK EXPERIENCE**

Van Pelt and Opie Library Houghton, MI  
**Student Research Consultant**  
Aug 2013 – Present

- Working 8+ hours per week while maintaining a full academic schedule

Meijer Hartland, MI  
**Utility Worker**  
Sept 2009 – May 2012

- Maintained job for 2+ years and worked 18+ hours per week while attending school