# Elizabeth Morrow

2A Mechatronics Engineering

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## **Software Skill Summary**

Languages: C#, Java, C/C++,

HTML

OS: Windows 8/8.1,

Ubuntu, Fedora

IDEs: Visual Studio,

Eclipse,

CodeComposer, Android Studio

#### **Technical Skills**

Software Development

- Embedded Systems
- Applications
- Mobile

Design and 3D Modeling

- Interface Design (Photoshop, Balsamiq)
- Mechanical Design (Solidworks)
- Electrical Layout (Altium, AutoCAD)

**Process Automation** 

 Powershell/Bash Scripting I am a student looking to continue creating fast, flexible, beautiful software while improving my skills as a developer.

## **Professional Experience**

Control Systems Design – MedAvail Technologies

Aug. 2014 – Dec. 2014

- Lead designer and developer of handset testing application(C#). Used Fast Fourier Transforms to analyze signal quality. Saved company \$15,000.
- Reworked machine log converter application(C#), implemented hashing and multithreading resulting in a 300% improvement in execution speed.
- Integrated log converter into utility software, translating machine logging events in real time.
- AutoCAD electrical layout work

**Software Co-op** – Midnight Sun Solar Race Car Team

Jan. 2014 – Apr. 201

- Developed CAN message parser (C#,SQL) for diagnostic use on solar car.
- Wrote firmware for lights control board (C).
- Lead design and CAD of electrical system test harness (SolidWorks).
- Hardware bring-up and debugging (Altium).

# **Projects**

# Watchtower Robot (NXT platform, C++)

 Built and programmed a robot to scan a user-defined radius for movement using an ultrasonic sensor and fire projectiles until the target is subdued.

### MSP430 Maze Navigation (C)

• Programmed an MSP430 powered chassis to perform various tasks such as line following and maze navigation.

### **Education**

Candidate for Honors Bachelor of Mechatronics Engineering, University of Waterloo

2013 present

Relevant Courses: MTE 140 Data Structures and Algorithms, MTE 262 Microprocessors and Digital Logic

### **Activities and Interests**

• Bilingual (French) • Traveling • Hockey • Performing in Musicals