Elizabeth Morrow

2A Mechatronics Engineering

189 Albert St
Waterloo, ON
(705) 868-9774
elizabethannmorrow@gmail.com

elizabeth-morrow.com

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

Projects

Midnight Sun Solar Race Car Team Electrical Lead
- Ongoing firmware development (C), CAN network specialist, C#/Python diagnostic applications development, team manager.

Watchtower Robot (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.

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 | Jan. 2014 – Apr. 2014

- 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).

Leadership Experience

Student Teams Director – Waterloo Engineering Society
- Liason between administration and teams, organizes events and demonstrations, keeps documentation up to date.

Hockey Team Captain - Waterloo Intramurals
- Responsible for scheduling, finances, communication with officials, and organization of team events.

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