# **Emily Wiseman**

Computer engineering student, Memorial University of Newfoundland

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github.com/not-so-wiseman

### SUMMARY OF QUALIFICATIONS

I am a demonstrably, enthusiastic and quick learner eager to work in embedded software. I have work term experience developing a **VxWorks** device and sanity testing VxWorks labs. During my work terms I have developed in **C, Python, JavaScript**, and **HTML** and have experience working in **Java** and **C++** through University. I have a strong work ethic, a professional attitude, and I can adapt to new challenges.

#### PROFESSIONAL EXPERIENCE

#### CURTISS-WRIGHT, KANATA ON

### **SOFTWARE DEVELOPER INTERN** ( September 2019 – December 2019)

Preformed Development Operations (DevOps) and manual testing as part of Curtiss-Wright's test automation team. DevOps duties included creating design requirements, utilizing Jenkins, JIRA, and Bitbucket to streamline operations, and

- Spearheaded Static Analysis Testing integration into the Curtiss-Wright Linux BSP development lifecycle. This translated into
- Designed a REST API, using Python, to broker requests between Jenkins Pipelines, Bitbucket, and Linux Virtual Machines. This API solved a major design challenge involving the incompatibility of existing software.
- Authored a software design document (SDD) for Curtiss-Wright upper management outlining the design requirements, implementation plan, and importance of the project
- Created command-line scripts (Shell and Bash) to simplify the day to day use of Static Analysis Software used by Curtiss-Wrights. This enabled developers to use the tool with little to no ramp-up time
- Preformed manual testing on Curtiss-Wright ruggedized boards, running Wind River VxWorks, thoroughly and on time to ensure a Curtiss-Wright BSP product met its release date.

#### WIND RIVER SYSTEMS, KANATA ON

### WEB DEVELOPMENT INTERN ( January 2019 − April 2019)

Developed a full-stack web application and assisted the Technical Publications team. The web application was built using the Python backend framework, Django, to host RESTful endpoints, process data from JIRA, and query a Postgres Database. The frontend of the website was created using the JavaScript framework Vue.js.

- Designed and implemented a full-stack web application, following agile development practices, which
  pulled data from several sources and displayed it on a dynamic dashboard. This allowed management
  at Wind River to quickly view, filter, and save project statistics.
- Quickly ramped up with an Eclipse-based DITA tool to resolve a key customer-facing issue within a large documentation set for a major product release.

## TECHNICAL PUBLICATIONS INTERN ( January 2018 – August 2018)

Assisted the Wind River Helix Device Cloud team in improving user onboarding practices and developed management tools for Wind River's Technical Publications group.

- Completed and presented a competitive analysis of cloud services (IBM Cloud, AWS Cloud, and Microsoft Azure) for Wind River IoT products. The competitive analysis presented product management with industry best practices for IoT cloud onboarding.
- Prototyped a device weather simulator using VxWorks as a proof of concept for a Wind River IoT product's new user-onboarding process
- Created a Python application for Information Development management to transfer and parse data to a Microsoft Excel spreadsheet
- Designed and built a web interface using Flask and jQuery for the Jira Scraper tool used by product management to track content development times
- Improved the frontend of Wind River's Product Availability Matrix website using Angular (a JavaScript front-end framework). This improvement allowed Wind River staff to retrieve operations information for course delivery more reliably.

# WOMEN IN SCIENCE AND ENGINEERING NEWFOUNDLAND (WISE NL), ST. JOHN'S NL EDUCATION COORDINATOR ( March 2017 – June 2017 & August 2017 – October 2017)

We have to have some fun. Don't worry about it – just sort of throw it in. Everybody should paint what they see and what they feel. Drop in a happy little sky here.

- Planned and organized WISE NL's 2017 Remotely Operated Vehicles (ROV) webinars as part of Canada's Science Odyssey week and Science Literacy week
- Created detailed project reports for the 2017 ROV webinars for event sponsors
- Recruited rural NL schools to participate in the ROV webinars
- Oversaw and managed the operating and expenditures budget
- Created flyers and displays advertising the ROV webinars

# OCCUPATIONAL HEALTH AND SAFETY (OHS), STANDARDS AND REGULATORY REVIEW, ST. JOHN'S NL

### RECORDS MANAGEMENT ASSISTANT/ RECEPTIONIST (# July 2016 - August 2016)

- Assisted in the upkeep of the OHS registry
- Performed data entry and upkeep of the workplace accident database
- Digitalized physical records for archival

# MEMORIAL UNIVERSITY OF NEWFOUNDLAND FACULTY OF ENGINEERING AND APPLIED SCIENCE, ST. JOHN'S NL

## RESEARCH ASSISTANT ( June 2015 - August 2015)

Student research position with Memorial University of Newfoundland's Swarm robotics research group. Researched the capabilities of the Sphero's, a spherical open-source robot, in swarm robotics using JavaScript.

• Co-authored and presented a research paper describing applications of the Sphero robot in swarm robotics (See conference presentations and publications)

#### **EDUCATION**

# Bachelor of Computer Engineering (Co-Op Program), Memorial University of Newfoundland Expected Grad. 2022

### AWARDS & SCHOLARSHIPS

- Memorial University of Newfoundland Endowment Fund Scholarship (2016)
- City of Mount Pearl Science Technology Engineering and Math Award (2015)

### CONFERENCE PRESENTATIONS & PUBLICATIONS

**Wiseman, E.**, Vardy, A. (2015), "Detecting Collisions on the Sphero Robot," 24th Annual Newfoundland Electrical and Computer Engineering Conference (NECEC)