

Engineering Co-op Program Faculty of Applied Science 2385 East Mall Vancouver, BC Canada V6T 1Z4 Phone 604 822 3022 Fax 604 822 3449 eng.coop@ubc.ca www.ubcengineeringcoop.com

# Marshall Elford

Computer Engineering

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#### TECHNICAL SKILLS

## **Programming Languages**

- C
- C#
- JavaScript
- HTML5
- CSS
- SQL
- Java
- Verilog

#### **Software Tools**

- Git
- TFS
- JIRA
- Visual Studio
- SQL Server Management Studio
- Quatus

#### **Additional Skills**

- Sony Vegas Pro
- Adobe Photoshop
- Adobe Premiere
- Microsoft Excel

#### **ACADEMIC & CO-OP STATUS**

#### **Academic Program**

- 5 of 8 academic terms completed
- Anticipated date of graduation: May, 2020

# Co-op Status

• Completed 2/5 work terms; available for 4 months beginning May, 2018

## TECHNICAL WORK EXPERIENCE

## PerfectMind Inc.

May, 2017 - December, 2017

#### Software Developer & Quality Assurance

- Completed development tasks on an MVC web application comprising of C#, JavaScript, HTML, CSS, and SQL components.
- Developed features containing Kendo, Knockout, and AJAX frameworks, initially using TFS for version control but later switching to Git.
- Provided data reconciliation and analysis for general ledger.
- Ensured the quality and stability of the product through defect verification, recreation, and adjustment.

## TECHNICAL PROJECTS

## www.marshallelford.com - Personal Website

October, 2017

• Designed a responsive, professional website using HTML, CSS, and JavaScript. Check it out!

## **Android App with Hardware Communication**

March, 2017

- Developed an app using Java and XML that autonomously displays a shopping list based on the amount of food remaining of each item in the client's pantry.
- Led the design and implementation of the Android app, as well as the hardware and its connection to an Arduino control system.

Multi-Functional Robot March, 2017

- Designed and built an autonomous robot using an Arduino with the added functionality of a working printer.
- Worked with a team of six to complete the design with the use of Git version control.

## Simple RISC Machine

October, 2016

- Built a reduced instruction set computing machine using Verilog.
- Executed calculations from instructions written in Assembly and displayed on a DE1-SoC board.

## **Social Network Analyzer**

October, 2016

- Designed a program in Java that analyzes a Twitter dataset with over 10 000 user entries.
- Created graph implementations of an adjacency list and matrix, used for creating breadth and depth first search algorithms.

## OTHER WORK EXPERIENCE

PJS Systems April, 2016 – August, 2016

## Audio/Visual Systems Installer

- Installed audio and visual systems, including digital displays, full room control units, and PA systems.
- Trained and proficient in the use of many technical tools.

## **VOLUNTEER WORK EXPERIENCE**

## **Theatre Department**

November, 2011 - April, 2015

## Backstage Manager

- Led a group of 30+ actors and a backstage crew.
- Directed a 3+ hour performance, ensuring all complications be settled in a timely manner.

## **EDUCATION**

## **University of British Columbia**

September, 2015 - Present

Bachelor of Applied Science - Computer Engineering

## **ACTIVITIES AND INTERESTS**

- · Soccer, Baseball, Swimming
- Graphic Design
- Film Enthusiast
- Retro Gaming