## **MATTHEW HODGSON**

Bachelor of Software Engineering

PHONE: 778-210-0126

EMAIL: matthodg@uvic.ca

GITHUB: https://github.com/Hrodgeir

## **SUMMARY**

I am a soon to be graduate of a Bachelor of Software Engineering degree from the University of Victoria. Taking an interest in developing innovative and practical software, I have completed various personal projects and cooperative work terms. I strive to further my knowledge of anything and everything software related, with a keen interest in fields such as artificial intelligence, web development, and automation. I hope for an opportunity to apply my skills and unique perspective to a promising software project.

#### **EDUCATION**

#### **BACHELOR OF SOFTWARE ENGINEERING**

University of Victoria

SEPTEMBER 2013 - APRIL 2018

Study of the requirements, development, implementation, testing, maintenance, and evolution of software systems ranging from embedded systems to large scale systems.

# WORK EXPERIENCE

#### **APPLICATION DEVELOPER**

Victoria, BC

ISM Canada - Technology Engineering Services

MAY 2016 - AUGUST 2016 (4 Months) & JANUARY 2017 - APRIL 2017 (4 Months)

- Developed Windows Presentation Foundation applications for ISM Canada's IT Support staff that involved XAML, VB.NET, SQL, and C# in an AGILE development environment.
- Overhauled an existing application to have an intuitive user interface, more functionality, and an enhanced code structure.
- Developed applications involving software automation and testing frameworks.
- Created various test plans and user guides for multiple applications.
- Provided insight on design patterns and implementation of features.
- Gathered complex requirements from users and converted such requirements into individual tasks.

### **WEB APPLICATION DEVELOPER**

Victoria, BC

University of Victoria - Department of Continuing Studies JANUARY 2015 - AUGUST 2015 (8 Months)

- Developed ASP.NET web applications for UVIC's Division of Continuing Studies student registration system that involved HTML, CSS, Angular, Razor MVC, and C# in an AGILE development environment.
- Developed a strong understanding of how a realistic software lifecycle works and how to communicate effectively with team members on a large variety of programming tasks.
- Provided input and ideas to help towards the development of the web applications.

## TECHNICAL KNOWLEDGE

#### **PROGRAMMING LANGUAGES**

C#	600 Hours
С	200 Hours
Java	200 Hours
Python	150 Hours
VB.NET	150 Hours
SQL (Various Schemas)	50 Hours
C++	30 Hours
Haskell	10 Hours
Go	10 Hours
Prolog	10 Hours

## **DEVELOPMENT TOOLS**

Visual Studio	850 Hours
.NET Framework	850 Hours
WPF & XAML	400 Hours
TFS	200 Hours
Git	100 Hours
SVN	100 Hours
Eclipse	100 Hours

#### WEB DEVELOPMENT

HTML/CSS	150 Hours
REST API	50 Hours
JavaScript	50 Hours
Angular	25 Hours
ASP.NET	25 Hours
Razor MVC	15 Hours

#### **OPERATING SYSTEMS**

Windows	15,000 Hours
Linux	200 Hours
Macintosh	25 Hours

## **METHODOLOGY & TESTING**

AGILE	850 Hours
Manual Testing	200 Hours
Requirements Elicitation	80 Hours
Unit Testing	50 Hours
Integration Testing	20 Hours
NUnit	20 Hours
JMeter	10 Hours

#### **PROJECTS**

## **PERSONAL WEBSITE**

http://hrodgeir.github.io/

Made using HTML and CSS.

#### **OPTIMIZED FIR FILTER**

https://github.com/Hrodgeir/Embedded-Systems-Project Made using C optimization techniques.

#### **GAME PROTOTYPE**

https://github.com/Hrodgeir/TileGame

Experimented with various game prototypes using Unity and Microsoft XNA Game. The above is a tile based A\* pathfinding prototype.

#### **PONG GAME**

https://github.com/Hrodgeir/Pong

Made using Unity with C# scripting.

#### LINUX PROCESS SHELL

https://github.com/Hrodgeir/LinuxProcessShell
Made using C to view Linux processes.

## **SETTLERS OF CATAN AI**

https://github.com/Hrodgeir/CENG420

An artificial intelligence using heuristics that determines the best strategy to use when playing the board game Settlers of Catan.

More detailed descriptions can be found here: https://github.com/Hrodgeir

#### **REFERENCES**

## **ACADEMIA**

Available upon request.

## **INDUSTRY**

Available upon request.