

JL2MA@edu.uwaterloo.ca (613) 265 2168 \$\&\\\\$809 Mancuso Court, Ottawa, ON

https://github.com/jiama843 http://john-ma-personal-web.herokuapp.com

# SUMMARY OF QUALIFICATIONS

- Technical Skills: Ruby on Rails, Java, C, C++, C#, JavaScript, jQuery, Python, TensorFlow, Docker, SQL, NodeJS, Swift, Unity, Bash
- Passionate developer with projects involving a variety of frameworks, APIs and languages

### **WORK EXPERIENCE**

Open Source Integrations Developer Blindside Networks Inc.

September 2018 - December 2018 Ottawa, ON

- Integrated over 30 new features to <u>Greenlight</u>/, a front end interface for a web conferencing API with thousands of concurrent users
- Added server mockups, stubs and test cases to achieve approximately 90% code coverage
- Implemented several backend scripts in Ruby for a major LTI integration with the Moodle LMS

## **Quality Engineering Software Developer**

September 2017 - December 2017 Ottawa, ON

IBM - Canada Lab

- Maintained the continuous integration testing system for Cognos Analytics
- Proposed, developed and demoed an automated installation/configuration tool for the system, increasing setup efficiency by 75% on all new VM environments
- Verified the functionality of all Cognos BI components across all cloud testing servers

### PROGRAMMING PROJECTS

## **Web Development**

[Ruby on Rails, jQuery, NodeJs, Wicket, SQL, Java]

- Contributed and wrote code for several web apps using a variety of different frameworks
- Implemented many webpages that read/write to a large SQL database which stores data for over 1000 users in an app targeted towards teaching Latin courses
- The Alpheios Project/ Personal Website (link above)/ OCAC Badminton/ Feridun-Bot/

### **Machine Learning**

[Python, Tensorflow, NumPy]

- <u>TH11Bot</u>/ Created a functional neuroevolving algorithm using self made python libraries and the NEAT encoding scheme to beat Touhou 11 Stage 1 on hard difficulty
- Yikes-lolinator/ Implemented an LSTM chat generator to mimic user speech patterns using the Tensorflow API. Predicted with an accuracy of 86% on a test set of 3000 discord messages

#### **Other Projects**

[Python, Node.js, Android Studio, Java, Swift]

- Factor+/ An educational math game for iOS that placed 1st in the TechU 2016 AppJam
- <u>PyRemote</u>/ Lead a team of three members to make an Android application that allows the user to gain full control of a host operating system and issue commands by voice

### **EDUCATION**

University of Waterloo

Candidate for Bachelor of Computer Science (BCS)

Waterloo, ON Expected June 2021

#### **ACTIVITIES**

Game Development Club (GDC)/UW Piano Association/UW Badminton Club/Sogo Club