

JOHN MA

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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

Sept. 2018 - Dec. 2018

Blindside Networks Inc.

Ottawa, ON

- Integrated over **30 new features** to [Greenlight/](#), 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

Sept. 2017 - Dec. 2017

IBM - Canada Lab

Ottawa, ON

- Maintained and improved 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](#)]

- [TH11Bot/](#) - 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](#), [NodeJS](#), [Android Studio](#), [Java](#), [Swift](#)]

- [Factor+/-](#) - An educational math game for iOS that placed **1st in the TechU 2016 AppJam**
- [PyRemote/](#) - **Led a team of three members** to make an Android application that allows the user to gain full control of a host OS 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