

# JOHN MA

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## SUMMARY OF QUALIFICATIONS

- **Technical Skills:** Java, C, C++, C#, HTML5, CSS3, JavaScript, Swift, Xcode, Unity, Scheme, Bash, Python, Git, Android Studio, SQL, Wicket, Bootstrap, Node.js
- **Passionate developer** with interests and projects involving a variety of different software frameworks, APIs, concepts and languages
- **Collaborator and leader** within teams of considerable size

## WORK EXPERIENCE

### Quality Engineering Software Developer

September 2017 - December 2017

IBM - Canada Lab

Ottawa, ON

- Monitored/maintained the continuous integration testing system for Cognos Analytics
- **Proposed and developed** an automated installation/configuration tool for the system using Java and SQL, **increasing setup efficiency by 75%** on all new VM environments
- Logged defects against product failures, reconfigured the system for parallel execution over multiple releases and optimized automated test cases
- Verified the functionality of all Cognos BI components across all cloud testing servers
- Troubleshooted issues arising from unsuccessful product builds

## PROGRAMMING PROJECTS

### Adjuveris/AlpheiosPlus - Web Application

March 2017 - September 2017

[Wicket, SQL, Java]

- Contributed to a Web Application targeted towards universities teaching Latin courses alongside a **team of over 30 members** in an Agile development environment
- Implemented several webpages that read/write (via Hibernate ORM) to a large SQL database which **stores data for over 1000 university students/professors**
- Introduced a new UI design for displaying nested class notifications and assignments

### Factor+ - Math Application for iOS

September 2015 - May 2016

[Swift, Xcode]

- Successfully created an app targeted towards training grade 10 students to factor quadratics, working within a team of three members using Xcode and Swift
- Focused on UX, UI and coded all the algorithms for generating factoring questions, integrating components following an iterative development model
- Placed **1st in the TechU 2016 AppJam** and won \$500 in prize money

### PyRemote - Phone Application for Remote Desktop Access

February 2018

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

- **Lead a team of three members** to create an application for Android devices that allows the user to gain full control of a host operating system and issue commands by voice
- **Proposed, conceptualized, planned the idea**, and worked on bridging the connection between Android and Unix by establishing a connection via IPv4 using the socket.io server API for Node.js

### 2D Side-Scrolling Application for Android Devices

December 2016 - January 2017

[Android Studio, Java]

- Created a side scrolling Android game with a custom game loop using Object Oriented concepts
- Implemented effective design patterns to increase maintainability and code sanitization

## EDUCATION

### University of Waterloo

Candidate for Bachelor of Computer Science (BCS)

Waterloo, ON  
Expected June 2021