# Andrew Choi

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# QUALIFICATION SUMMARY

- Languages: C, C++, C#, Java, Swift, PHP, Python, CSS3, JavaScript, VHDL, XML, MATLAB, ARM Assembly.
- Experienced w/ Git, Bash, Bootstrap, D3.js, jQuery, AngularJS, JSON, Node.js, RequireJS, NPM, IBM Bluemix, Watsons APIs.
- Software: Eclipse, Android SDK, Visual Studio, Xcode, Photoshop, Altera Quartus, PGAdmin, MS SQL Studio, Keil µVision.
- Hardware: Integrated circuits, solenoids, transistors, multimeters, FPGA, Altera DE2 development board.
- In all co-op work terms, received an employer evaluation of **Outstanding Performance**, a rating reserved for only those few students who have distinguished themselves by their unique contribution or exceptional performance.

#### PROFESSIONAL EXPERIENCE

# **IBM**

#### iOS Developer

# April 2016 - Present | Toronto, ON

- As an iOS Mobile Application Developer, created an iOS native application using Apple's X-code development tools and major iOS frameworks in Objective-C and Swift. Familiarized with Apple's device provisioning and developer portal as well as Instruments and the X-code debugger. Worked with Apple's Human Interface Guidelines and App Store requirements.
- Worked with the mobile application development team on innovative iPhone applications using OOP, and database server applications. Served under the GBS Unit (Global Business Services) to integrate multiple IBM Bluemix APIs and services for mobile iOS (iPad, Apple TV) applications, including IBM Watson API, Text-to-Speech, Speech-to-Text, Dialog, Alchemy, etc.
- As a Hybrid Mobile Application Developer, developed using mobile web technologies (HTML5, JavaScript, CSS3), as well
  as hybrid technologies such as IBM MobileFirst (formerly WorkLight), and Apache Cordova, to construct Hybrid mobile
  applications. Incorporated JavaScript frameworks such as AngularJS, BackBoneJS, KnockoutJS, Dojo, Sencha Touch,
  jQuery, jQuery Mobile and Node.js. Internet of Things (IoT's), Apple TV, IBM Watson, IBM BlueMix, SensorTag, IBM
  DeveloperWorks.

#### **IBM**

# Android Developer Jan 2016 – April 2016 | Toronto, ON

- Incorporated various hardware technologies, including the Texas Instrument's SimpleLink™ Bluetooth Smart® / Multi-Standard SensorTag CC2650 STK in order to implement an IoT Device (Internet of Things). Utilized the low-power BLE MEMS sensors and Bluetooth RSSI values to implement new PoCs as well as to create real-life use cases (Java, Android Studio IDE).
- As an Android Mobile Application Developer, created a native Android application using Android development tools and major Android frameworks in Java. Utilized Android application signing process, Android Debug Bridge (ADB), Android Development Tools (ADT), and Android IDE (Integrated Development Environment), as well as Android Design Guidelines & Google Play requirements. Served under the GBS Unit (Global Business Services).
- Developed rich mobile and web user interfaces, component as well as widgets, using different solution development methodologies, including Waterfall, Agile, and Extreme Programming. Incorporated a variety of server side technologies, including J2EE, Spring Framework, Hibernate, Node.js, Python, and PHP.
- Employer Evaluation: Received **Outstanding Performance**, a rating "<u>reserved for only those few students</u> who have distinguished themselves by their unique contribution or exceptional performance."

#### **BLACKBERRY**

Service Tools Developer

May 4<sup>th</sup> 2015 – Sept 2015 | Waterloo, ON

- Worked with the Service Governance team as a co-op intern, was responsible for the development of enhancements and design modifications to existing BB10 applications (HOTS) & revamped websites (BBAR Client & GreenState) that support the major BlackBerry Service Product offerings, including Enterprise, Messaging, Handheld. Utilized CSS, JavaScript, JQuery, Bootstrap, Node.js, MS SQL, PHP, AJAX, D3.js, HighCharts.
- Worked with BlackBerry Service Measurement of program managers and analysts to ensure the timely delivery of
  enhancements following a weekly Agile sprint cycle. Worked with BBM features, including BBM Meetings, Protected,
  Stickers, Voice Chat, Cross Platform Capability, as well as RIM internal JIRA.
- Utilizing Git, NPM, Moment.js, AngularJS, Python, GitLab, revamped internal BlackBerry server websites that a large number of product managers use, for a mobile-friendly UI/UX, enabling the increase in efficiency.
- Employer Evaluation: Received **Outstanding Performance**, a rating "<u>reserved for only those few students</u> who have distinguished themselves by their unique contribution or exceptional performance."

#### **EDUCATION**

#### **UNIVERSITY OF WATERLOO**

Bachelor of Applied Science: Honours Computer Engineering

Sept 2014 - April 2019 | Waterloo, ON

- Relevant Courses: Digital Circuits & System, Engineering Design Embedded Systems, Digital Computers (ARM Assembly), Electronic Circuits, Algorithms and Data Structures (C++).
- Maintained Excellent Standing / Good Academic Standing while involved in rigorous and competitive soccer.
- <u>Midnight Sun Solar Rayce Car Club:</u> As a collaborative computer engineer of the electrical sector, utilized the Altium software for electronic PCB design. Took on soldering chips and microcontrollers on board.

#### PROGRAMMING PROJECTS

#### **ANDREWCHOI.ME**

Web Development & Design | Jan 1, 2015 - Present

Constructed a website utilizing Bootstrap, Sublime Text, CSS, JavaScript, JQuery, Git, Node.js, Wow.js, D3.js framework.

#### PARCEL DISTRIBUTION PROGRAM

C# / Waterloo Programming Competition (WEC) | Nov 2014

• Using Cartesian system, designed a recursive algorithm that finds a path such that mailman can reach every destination required for pickup & drop-off. Converts a JSON of obstructions to 2-dimensional bool array of viable paths.

#### **SCHOLARSHIPS & AWARDS**

#### VKCSF SCHOLARSHIP 2015 – 2016

Excellence in Academics, Athletics, Music | Sept 13, 2015

• Annual major scholarship given to 15 students currently enrolled in university, based on <u>excellence</u> in academics, athletics, artistic, volunteer, and well-roundedness. Invitation to the Hilton Hotel as a guest piano solo player.

### WATERLOO ARTHUR F. CHURCH ENTRANCE SCHOLARSHIP

In addition to President's Scholarship of Distinction | Sept 4, 2014

- Highest scholarship offered by University of Waterloo to 1 student in the Computer Engineering class of 2019.
- Presented to student w/ exemplary extracurricular activities/exceptional academic standing upon entrance (99% average).