# Andrew Choi

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University of Waterloo
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North Vancouver British Columbia, Canada

#### QUALIFICATION SUMMARY

- Languages: C, C++, C#, Java, PHP, Python, CSS3, JavaScript, VHDL, XML, LaTex, MATLAB, ARM Assembly.
- Experienced w/ Git, Bootstrap, D3.js, jQuery, AngularJS, JSON, Node.js, RequireJS, NPM.
- Software: Eclipse, Android SDK, Visual Studio, Photoshop, Altera Quartus II, PGAdmin, MS SQL Studio, Keil μVision.
- Hardware: Integrated circuits, solenoids, transistors, multimeters, FPGA, Altera DE2 development board.

#### PROFESSIONAL EXPERIENCE

#### <u>IBM</u>

#### iOS Developer

## July 2016 - Sept 2016 | Downtown Toronto



- As an iOS Mobile Application Developer, created an iOS native application using Apple's X-code development tools and major iOS frameworks using 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/Blackberry mobile applications for designing various mobile applications for the clients in transportation and financial services, with the use of object-oriented programming, C++, Objective-C, and database server applications.

#### <u>IBM</u>

#### Android Developer

## April 2016 – July 2016 | Downtown Toronto



- As an Android Mobile Application Developer, created a native Android application using Android development tools and major Android frameworks using 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.
- 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.
- Collaborated with the application development department on innovative Android/Blackberry mobile applications for developing and implementing mobile applications for clients in travel and other industries, with the help of object-oriented programming, Java, as well as other database management systems & server applications.

#### **IBM**

## Hybrid Developer

## January 2016 – April 2016 | Downtown Toronto



- 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/BlackBerry mobile applications. Incorporated JavaScript frameworks such as AngularJS, BackBoneJS, KnockoutJS,
  Dojo, Sencha Touch, jQuery, jQuery Mobile and Node.js.
- Incorporated web development technologies including HTML5, CSS3, JavaScript, and Ajax. Utilizing web standards, developed using different mobile native technologies, architecture, frameworks and Application Programming Interfaces (APIs) in platforms including iOS, Android, and Hybrid.

#### **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.

#### MIDNIGHT SUN SOLAR RAYCE CAR

**Electrical Sector** 

Dec 2014 - Feb 2015 | Waterloo, ON



- Utilized the Altium software for electronic PCB design. Took on soldering chips and microcontrollers on board.
- Developed University of Waterloo Midnight Sun Solar Rayce Car products as a collaborative computer engineer.

#### **EDUCATION**

#### **UNIVERSITY OF WATERLOO**

Bachelor of Applied Science: <u>Honours Computer Engineering</u> 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.

#### PROGRAMMING PROJECTS

## **ANDREWCHOI.ME**

Development & Design | Jan 1st 2015 - Present



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

#### PARCEL DISTRIBUTION PROGRAM

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



**CITY OF** 

VANCOUVER

• 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.

## THREE-IN-ONE MINI-GAME APPLICATION C & C# Application | July 2014

Developed an app on Visual Studio which includes 3 text-based mini-games: Up&Down, Soccer 333, Ice-Cream!

## **SCHOLARSHIPS & AWARDS**

#### WATERLOO ARTHUR F. CHURCH ENTRANCE SCHOLARSHIP

In addition to President's Scholarship of Distinction | Sept 4<sup>th</sup> 2014



- Highest scholarship offered by University of Waterloo to 1 student in the Computer Engineering class of 2019.
- Presented to student with <u>exemplary</u> extracurricular activities & exceptional academic standing (99% average).

#### 2015 - 2016 VKCSF SCHOLARSHIP

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



THE VANCOUVER KOREAN-CANADIAN SCHOLARSHIP FOUNDATION

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