# RICHARD TIAN computer Engineering - richardyjtian@hotmail.com

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#### **SKILLS**

Languages: Java, Python, C, C++, SQL, HTML, CSS, JavaScript, XML

Development Tools: React, Eclipse, Android Studio, Atom, Microsoft Visual Studio, Vim, Git

Operating Systems: Linux, Windows, MacOS

#### **EDUCATION**

#### **University of British Columbia**

Expected Graduation: April 2022

Bachelor of Applied Science - Computer Engineering with a Minor in Commerce

- Dean's Honour List standing of three years
- Relevant Courses: Software Construction, Algorithms and Data Structures, Operating Systems,
  Computer Networking, Microcomputers, Network Security and Cryptography

#### **University of Washington**

September 2019 – June 2020

Exchange

- Corbett Fellowship Scholarship Recipient presented to two UBC students recognized for top academic standings and clear educational goals
- Walter H Gage and Elsie M Harvey Education Abroad Scholarship Recipient presented to UBC students nominated for a record of academic excellence

#### **WORK EXPERIENCE**

#### **Provincial Health Services Authority**

May 2019 – August 2019

Software Developer Intern

- Developed a distributed system to improve the efficiency and transparency of BC healthcare's supply chain processes through RFID automation
- Designed a RESTful API with Python and Flask for intuitive user setup of RFID technology and to handle backend transactions with a Microsoft SQL Server
- Constructed and presented a business case to stakeholders and executives to explain the tangible benefits of adopting RFID technology from conducting case studies
- Created a technical documentation outlining design procedures and the agile approach taken

### **TECHNICAL PROJECTS**

## Store Wayfinder

January 2019 - March 2019

UBC Course Project – Team of Five

- Developed an embedded system to help customers navigate an unfamiliar store
- Modified Verilog source code to hardware accelerate graphics and achieve exponential speedup
- Implemented a dynamic, multi-page shopping list using C to interact with the SDRAM of an FPGA
- Followed strict programming practices, including Git version control, to ensure maintainability of code
- Incorporated OpenCV framework to use machine learning in deciphering user locations

#### TicTalk - tictalk.azureedge.net

January 2019

nwHacks Group Project – Team of Six

- Designed a React web application to allow users to practice speaking English with an AI bot
- Assisted with researching speech-to-text, chatbot, and grammar feedback APIs
- Explored graphic design in creating an original layout to appeal to a student demographic
- Integrated user statistics into the graphical interface to show progress over time

#### Vancouver Translink Bus Texting App

July 2018 - August 2018

Personal Project

- Developed an Android app to automate the process of checking bus arrival times at a bus stop
- Designed a new class in Java to solidify and represent the abstract notion of a bus stop
- Utilized an SQLite database in storing, manipulating, and organizing data to cater to differing user needs
- Gained a solid understanding of the Android app structure, debugging tools, and SMS and location features