

RICHARD TIAN

UBC Computer Engineering

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SKILLS

Languages: Java, Python, C, C++, HTML, CSS, JavaScript, JSON, XML, Verilog, ARM Assembly, X86 Assembly
Software: React, Eclipse, Android Studio, Atom, Vim, Command Line, Git
OS: Linux Operating System, Windows Operating System
Microcontrollers: Raspberry Pi, Arduino, FPGA
Equipment: Oscilloscope, Multimeter, Signal Generator, Soldering Iron

EDUCATION

University of British Columbia Expected Graduation: April, 2021

Bachelor of Applied Science, Computer Engineering

- Dean's Honour List standing
- Courses: Software Construction, Algorithms and Data Structures, Microcomputers, Operating Systems, Digital Systems Design, Circuit Analysis

University of Washington September, 2019 - June, 2020

Exchange - Minor in Honours Mathematics

- Recipient of the Corbett Fellowship Scholarship – an award presented to two UBC students with top academic standings and clear educational goals

TECHNICAL PROJECTS

Store Wayfinder January, 2019 – March, 2019

UBC Course Project – Team of Five

- Created a device that helps customers to navigate an unfamiliar store
- Hardware accelerated graphics to achieve exponential speedup in response time
- Determined how to implement a dynamic shopping list with multiple pages
- **Tools used:** Verilog, C

TicTalk - tictalk.azureedge.net January, 2019

nwHacks Group Project – Team of Six

- Created a web app that allows users to practice speaking English with an AI bot
- Assisted with incorporating speech-to-text, chatbot, and grammar feedback APIs
- Integrated user statistics into the graphical interface to show progress over time
- **Tools used:** HTML, CSS, JavaScript, React

Vancouver Translink Bus Texting App July, 2018 - August, 2018

Personal Project

- Constructed an Android app that quickly checks bus arrival times at a stop
- Utilized a SQL database in storing user data to cater to a diverse audience
- **Tools used:** Java, XML

Personal Profile - richardytian.github.io July, 2018 - August, 2018

Personal Project

- Developed a website to display projects and skills
- Explored graphic design in creating an original layout
- **Tools used:** HTML, CSS

Smart Locker

March, 2018 - April, 2018

UBC Course Project – Team of Six

- Designed an account based, smart locker system, with a team of six
- Implemented NFC communication between a Raspberry Pi and an Android app
- Composed a touchscreen user interface using a GUI library
- **Tools used:** *Raspberry Pi, Python*

Autonomous Robot

February, 2018 - March, 2018

UBC Course Project – Team of Six

- Programmed an Arduino robot to perform self-driving, follow a path, and write words
- Achieved precise motion through real time feedback from various sensors
- **Tools used:** *Arduino, C++*

EXPERIENCE

Computer Engineering Course Assistant

January, 2019 - Present

UBC Access & Diversity

- Supported a student with a learning disability in understanding course material
- Took responsibility in being punctual and clarifying lecture ambiguities

Private Tutor

June, 2015 - September, 2017

Self-employed

- Tutored high school level Math, Chemistry, Physics, and English
- Taught an ESL student for over a year and helped him place high in the ELL program

Richmond Green Ambassadors Team Leader

September, 2012 - June, 2016

City of Richmond

- Led a team of ten in facilitating and regulating citywide events
- Annually co-hosted the REaDY summit, a youth sustainability conference

Zero Waste Leadership Clinic Co-Host

August, 2014 - February, 2015

Metro Vancouver

- Co-hosted a sustainability leadership event exploring the impacts of waste
- Promoted waste reduction awareness among two dozen youth

INTERESTS AND ACTIVITIES

- Tinkering and problem solving
- Developing apps
- Playing the violin
- Rollerblading, skating and working out