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, VS, 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, Minor in Commerce

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

University of Washington   September, 2019 - June, 2020
Exchange

- Recipient of the Corbett Fellowship Award – a scholarship 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 navigate an unfamiliar store
- Hardware accelerated graphics to achieve exponential speedup in response time
- Implemented a dynamic, multi-page shopping list stored on the FPGA's SDRAM
- ***Tools used:*** *FPGA, 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 - richardyjtian.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
- Focused on the long-term success of students through extended teachings

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 modern waste
- Promoted waste reduction awareness among thirty youth through a presentation

INTERESTS AND ACTIVITIES

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