

RICHARD TIAN Computer Engineering - richardytian@hotmail.com

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SKILLS

Languages:	Python, C, C++, C#, Java, SQL, JavaScript, HTML, CSS, JSON, XML, LaTeX
Development Tools:	Visual Studio, Jupyter Notebook, IntelliJ, MS SQL Server, Unity, Android Studio, Git
Operating Systems:	Windows, Linux, MacOS
Interpersonal Skills:	Problem Solving, Leadership, Teamwork, Communication

EDUCATION

University of British Columbia	Expected Graduation: April 2022
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Bachelor of Applied Science – Major in Computer Engineering, Minor in Commerce

- Dean's Honour List standing of four years
- Coursework – Data Structures and Algorithms, Artificial Intelligence, Machine Learning, Computer Vision, Database Systems, Computer Networking, Cryptography, Operating Systems, Embedded Systems

University of Washington	September 2019 – June 2020
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Exchange

- Corbett Fellowship Scholarship Recipient – presented to two UBC students recognized for top academic standings and clear educational goals (jsis.washington.edu/canada/people/richard-tian/)
- 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
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Software Developer Intern

- Established a distributed system to optimize BC healthcare supply chain processes through RFID automation
- Designed a RESTful API in Python to offer users an intuitive UI to view RFID data stored in a MS SQL Server
- Vigorously debugged and tested program to ensure robustness in a safety-critical healthcare system
- Conducted case studies and presented a business case to stakeholders and executives to illustrate tangible benefits of adopting RFID technology and generate project backing
- Created a detailed, technical design documentation to guarantee successful project handover

TECHNICAL PROJECTS

Hac-A-Pac	March 2020 – June 2020
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UW Capstone Project – Team of Three

- Developed a Pac-Man themed, create-your-own-level game that is accessible for children with disabilities
- Utilized Unity3D to create an elegant UI and fluid game engine for an enjoyable gaming experience
- Implemented customizable game speed, difficulty, and input options to cater to varying user preferences
- Consulted and interviewed project stakeholders to ensure all cognitive and motor needs were met

Translink Bus Texting App	July 2018 – August 2019
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Personal Project

- Developed an Android app to automate checking next bus arrival times at Vancouver bus stops
- Designed Java classes to abstract app elements and allow for efficient interactions between app components
- Utilized an SQLite database to store, organize and manipulate data based on user needs
- Gained a solid understanding of the Android app structure, debugging tools, and SMS and location features

Store Wayfinder	January 2019 – March 2019
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UBC Capstone Project – Team of Five

- Created 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
- Integrated OpenCV framework to use machine learning and computer vision in deciphering location points
- Adhered to strict programming practices, including Git version control, to ensure maintainability of code