RICHARD TIAN Computer Engineering - richardyjtian@hotmail.com

richardyjtian.github.io | github.com/richardyjtian | linkedin.com/in/richardyjtian

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, Embedded Systems, 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

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

Smart Locker March 2018 – April 2018
UBC Course Project – Team of Six

- Designed a distributed system to enable quick and secure access to a smart locker
- Composed a touchscreen user interface using a Python GUI library for intuitive control
- Used the Python Cryptography library in conjunction with HTTPBasicAuth requests to securely verify passcodes with a Nginx server