





hs2xu@uwaterloo.ca

PROFESSIONAL

Pivotal Labs

Software Developer Jan - Apr 2017

- Developed 3 iOS apps for a Fortune 10 client using Swift and Objective-C++
- Completely redesigned a navigation applet and eliminated over 90% of navigation bugs
- Led the initial research and development of a concierge reservation applet
- Created and optimized Concourse CI/CD pipelines to decrease testing times by 30%
- Faithfully used test-driven development while pair-programming with mature full-times

Pivotal Labs

Test Developer May - Aug 2016

- Verified daily stories on 2 Android/iOS projects in an agile development environment
- Pair-programmed over 20 Espresso and Earl Grey UI test suites for 4 mobile applications
- Setup automated Espresso tests for Android for use in a CI pipeline
- Worked on multiple projects on a weekly basis to deliver high quality apps to clients

Institute for Quantum Computing

Research Assistant Jan - Apr 2016

- Assembled Czerny-Turner monochromator under UWaterloo professor supervision
- Self-taught 3D CAD with Autodesk Inventor; data analysis and visualization with Matlab
- Designed and 3D-printed more than 15 plastic components and assemblies with Inventor
- Led the initial design of Matlab application used to present spectrometer data
- Soldered and programmed Arduino and Motor Shield to control multiple stepper motors

City of Toronto

Application
Developer
Jan - Dec 2015

- Created 3 server-based applications using Oracle APEX, Javascript, and PL/SQL
- Developed SQL queries and application workflows for Toronto Water employees
- Debugged numerous applications and updated application documentations
- Provided technical service to Toronto Water and other City of Toronto facilities

TECHNICAL

- Moderate web/server development experience with PHP, JavaScript, SQL
- Collaboratively developing UNIX shell emulator using pure Javascript/HTML/CSS: jerrxu.github.io
- Experienced with iOS and Android development, worked on numerous apps for school, work, and personally
- Hardware programming: used Assembly ARM, VHDL, and C to program microcontrollers and FPGA boards
- Circuits experience: used oscilloscope, function generator, and SPICE software to analyze non-linear circuits
- Creative software: created lightsaber virtual-reality game using Myo, Oculus Rift, and WiiMote

PROJECTS

Java Programming

Sept 2012 - Present

- Created numerous Android Applications with Eclipse and Android Studio
- Collaboratively developed Java programs, simulations, and 2D games with Greenfoot and Visual Studio
- Effectively completed large-scale projects while maintaining strong team communication

Waterloo Nano-Satellite Team

Sept 2014 - Present

- Developing power management system for the Canadian Satellite Design Challenge nanosatellite
- Working alongside power systems team to design and fabricate printed circuit boards using Eagle
- Cooperating with members of payload, ion thruster, and propulsion teams to optimize board layouts

EDUCATION

BASc in Computer Engineering - University of Waterloo, Class of 2019

Courses: Algorithms, Compilers, Data Structures, Embedded Microprocessors, Digital Hardware Systems
 Programming Mentor of Computer Science and Robotics Club | Violin Section Lead of UWSO
 HackWestern, NASASpaceApps, TerribleHacks Participant

