# JEFFREY HO TAK SHAN

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# PROFESSIONAL QUALIFICATIONS

- Lab experience using various electrical equipment for testing and circuit analysis
- Experienced in soldering and wiring electrical components on PCB
- Exposure to FPGA design with VHDL using Quartus design software
- Proficient in Python, C++, C, HTML, CSS, SQL, Java, Visual Basic, MPLAB Assembly Language
- Experience with Quartus, Eclipse, MATLAB
- Exposure to analog and digital design using Arduino Uno, PIC microcontrollers
- Strong written and verbal communication skills in English and French
- Leadership and teamwork skills proven through involvement in the FIRST Robotics team

#### WORK EXPERIENCE

#### **BLACKBERRY** – Waterloo

Sept 2015 - Dec 2015

Hardware Component Development Engineer

- Programmed Maccor scripts to run charge and discharge test cycles on Maccor machines
- Participated in design, analysis and integration of the BlackBerry Priv batteries
- Designed and implemented a test system using an Android application and shell script to drain the battery
- Developed various python scripts to parse data from battery fuel gauge and memory logs
- Used Excel Macro for automated plotting to simplify analysis
- Wrote shell scripts in Linux to automate various device functionalities
- Tested DRAM/Flash memory and used Quip to query and analyze data (DDR3 and eMMC)

#### **BLACKBERRY** – Waterloo

**Automation Test Engineer** 

Jan 2015 - May 2015

- Performed regression, verification and smoke testing on the BBM application
- Authored and implemented PA test cases using Gherkin and Ruby in Aptana Studio
- Kept track and logged detailed defects through JIRA bug tracking system
- Wrote and maintained PA test cases in MKS integrity software

**ZYNGA - Toronto** 

May 2014 - Aug 2014

Software Test Engineer

- Acted as QA lead and signed off on properly tested builds for iOS and Android platform devices
- Wrote and followed test plans and procedures to detail
- Participated and provided valuable input in the new app feature during meetings
- Logged detailed issues into JIRA and kept track of the bugs for verification testing
- Used eclipse DDMS to debug and keep track of crash logs

**On-Site Support Specialist** 

- Imaged Win 7 and other applications on machines for weekly hardware refreshes and lab requests
- Communicated with clients to diagnose and troubleshoot issues with VPN remote access
- Managed the administration of users' encrypted profiles using McAfee ePO
- Assisted in monthly audits and updated the status in inventory accordingly
- Used the configuration manager to distribute applications to users over the network

### RELEVANT PROJECTS

#### Portfolio Website

Self-Initiated Project Dec 2014

- Used HTML5, CSS and Bootstrap to implement a website from scratch

### **Traffic Lights Sequencer**

University of Waterloo, Digital Circuits

May 2013 – Aug 2013

- Implemented traffic lights simulator with FPGA chip in VHDL using Quartus design software
- Gained exposure to finite state machines and sequential logic design

# **Robot Car with Remote Control Capabilities**

Brebeuf College School, Computer Engineering Course

Sept 2009 - June 2011

- Experience on soldering, drilling and etching board
- Programmed remote control capabilities using PIC assembly language in MPLAB
- Gained exposure to various electrical components and the assembly of PCB components

#### **EDUCATION**

### UNIVERSITY OF WATERLOO

2012 - Present

Candidate for Bachelor Applied Sciences

Honours in Electrical Engineering, Co-operative program

Relevant Courses:

ECE 240 & 242: Electronics Circuits I & II ECE 250: Data Structures and Algorithms ECE 375: Electromagnetic Fields and Waves

ECE 318: Communication Systems

ECE 361: Power Systems & Components

## **ACHIEVEMENTS**

- Merit of Scholarship, University of Waterloo, September 2011
- Brother Edmund Rice's award for receiving honour roll in all four consecutive years of high school
- French Award in grade 9-12 of high school for receiving the highest average in Extended French