Kuanghua Qiao (Owen)

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# Objective

* I am an electrical engineering student who’s passionate about the electronics industry. Currently, I am looking for an entry-level job to apply my skills and expertise.

# Education

## B.Eng. Spec. Hons. Electrical Engineering | FEB 2019 | York University

* The Gordon and Agnes (Twambley) Brash Award in Eng York Aug 2014
* University Continuing Student Scholarship Nov 2015, Nov 2014

# Skills and qualifications

* Java, Javascript, C, C#, .NET Core, Python, PyQt GUI, bash shell scripting, Verilog, MIPS assembly
* MATLAB/Simulink, LabView, Altium Designer, Cadence, NX, Solidworks
* Linux, Data structures, OS, multithreaded programming, CPU architecture
* Digital communication, signal processing, control systems
* FPGA, Embedded software development, Atmel studio, Microchip family microcontroller
* Power electronics, PCB design, hot air rework
* Multimeter, oscilloscopes, function generator, digital analyzer
* Circuit testing, software debug, problem-solving and analytical skills

# Volunteer Experiences

## Electrical SUBSystem DesiGNer | York university Space engineering nanosatellite demonstration group | 2015-2016

* Revised existing power board PCB layout.
* Participated in creating payload handling application on NASA opensource OS core flight executive.
* Participated in battery qualification testing.

## Electrical SUBSystem DesiGNer | Lassat CSDC yorku team (Canadian Satellite Design Challenge) | 2016-2018

* Created a new component library for the satellite solar cell.
* Designed the schematic and the layout of satellite solar panels using Altium designer.
* Prepared presentation and tutorials for new members of the team.
* Took part in revising various electrical subsystems of the satellite such as OBC, EPS, ACS boards.

# Research Experiences

## Research Assistant | BioSA Lab York University | 2018-2019

* Designed and developed a wireless gesture recognition glove with IoT products.
* Designed and developed a breath rate sensing system for small animals with IoT products.
* Gained experience with wireless technologies such as BLE, Wi-Fi, TCP, HTTP.
* Designed and developed a testing platform for a bio-sensor IC with Arduino and custom PCB.
* Managed BOM files and ordered PCB and components from manufacturers and suppliers.
* Assemble the PCB with hot air rework station which includes 0603 components and DFN6 ICs.
* Gained experience with various serial communication protocols such as SPI, UART.
* Wrote graphical testing applications with PyQt, C#, MATLAB.