Kuanghua Qiao

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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, C, C#, .NET Core, Python, bash shell scripting, Verilog, MIPS assembly
- MATLAB, Simulink, LabView, Altium Designer, Cadence, NX
- The data structure, OS, multithreaded programming, CPU architecture
- Atmel studio, Microchip family microcontroller
- Embedded software development, power electronics, 4-layer PCB Design, hot air rework
- Multimeter, oscilloscopes, function generator, digital analyzer
- Circuit testing, software debug, problem-solving and analytical skills

Experiences

ELECTRICAL SUBSYSTEM DESIGNER | YORK UNIVERSITY SPACE ENGINEERING NANOSATELLITE DEMONSTRATION GROUP | 2015-2016

- Revised existing power board PCB layout.
- Wrote 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 schematic and layout library for the project.
- 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 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.
- Gained experience with bio-sensor packaging with epoxy.
- Wrote graphical user interfaces with PyQt, C#, MATLAB.