Owen Qiao

Mississauga, ON, L5R 3P5 | 647-220-5668 | qiaokuanghua@gmail.com

Objective

- I am an electrical engineering graduate who's passionate about the electronics industry. Currently, I am working as a research assistant. And I am looking for an entry-level job starting around December.

Education

- B.Eng. Spec. Hons. Electrical Engineering | Feb 2019 | York University

Achievements

- The Gordon and Agnes (Twambley) Brash Award in Eng York Nov 2015, Nov 2014
- The award is presented annually to a full-time student enrolled in the Engineering Degree Program within the Lassonde School of Engineering, who has maintained a cumulative grade point average of 6.0 (B) or above.

- University Continuing Student Scholarship Aug 2014
- The York University Continuing Student Scholarships are distributed annually in August for the upcoming fall/winter session to undergraduate degree students who have achieved outstanding academic results in the previous summer and fall/winter sessions.

- Lassonde Undergraduate Research Conference Aug 2018
- A Non-Invasive Wireless Respiratory Monitoring System for Animals (poster)

Skills and qualifications

SOFTWARE SKILLS
- Java, Javascript, C, C#, .NET Core, Python, PyQt GUI, MIPS assembly
- Linux, Object-Oriented Programming, Data structures, multithreaded programming, Git

HARDWARE SKILLS
- FPGA, Verilog, Embedded software development, I2C, SPI, UART, Bluetooth, Wifi
- Embedded hardware design, Power Electronics, PCB layout design, BOM management
- SMT soldering, Hot air rework, Wire bonding, Electroplating, Electronics repair

THEORETICAL KNOWLEDGE
- Digital communication, Digital logic, Signal processing, Control systems,Operating systems
- 3-phase power distribution network, Synchronous machines, Transformers

DESIGN AND DIAGNOSTIC TOOLS
- MATLAB, LabView, Altium Designer, Cadence, NX, Solidworks, Siemens PSSE, Atmel studio
- Multimeter, oscilloscopes, Function generator, Logic analyzer, Network analyzer

SOFT SKILLS
- Can-do attitude, dare to take on any challenge, willing to learn anything to get the job done
- Ability to plan, prioritize and execute multiple tasks and meet the designated deadlines
- Good teamwork and communication skill as well as, dependent problem-solving skills

Volunteer Experiences

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

- Revised existing EPS board PCB layout.
- Participated in creating payload handling the application on NASA opensource OS.
- Conducted battery qualification test.
- Gained elementary knowledge in embedded software development.

ELECTRICAL TEAM LEAD | LASSAT CSDC YORKU TEAM (CANADIAN SATELLITE DESIGN CHALLENGE) | 2016-PRESENT

- Created new component libraries for the satellite solar cell.
- Schematic entry and the layout design 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.

Work Experiences

RESEARCH ASSISTANT | BIOSA LAB YORK UNIVERSITY | 2018-PRESENT

- 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.
- Designed and developed a testing platform for a bio-sensor IC with Arduino and custom PCB.
- Conducted chemical test on bio-sensor ICs.
- Managed BOM files and ordered PCB and components from manufacturers and suppliers.
- Assemble the PCB with hot air rework station.
- Wrote graphical testing interface with PyQt, C#, MATLAB.
- Gained experience with various serial communication protocols such as SPI, UART.
- Gained experience with wireless technologies such as BLE, Wi-Fi, TCP/IP.
- Extensive hands-on experience with sensors and data acquisition system.
- Excellent device characterization, testing, and product prototyping skills