

Kuanghua Qiao

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

Objective

I am an electrical engineering student who's passionate about the space engineering. I have worked on CSDC during my undergrad years and I was really inspired by the mechatronics aspect of space engineering especially after the trip to CSA in Ottawa. And I have been eager to further the space engineering technology ever since.

Education

B.Eng. Spec. Hons. Electrical Engineering | Oct 2018 | 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)
K. Qiao, A. Nickerson, S. MacDonald, E. Ghafar-Zadeh
- 61st IEEE International Midwest Symposium on Circuits and Systems Aug 2018
Age-Related Macular Degeneration Diagnostic Tool: Hardware and Software Development
N. Mohaghegh, S. Munidasa, X. Zihao, Q. Owen, S. Magierowski, and E. Ghafar-Zadeh

Skills and qualifications

- CubeSat design approach
- Mechanics and thermal design
- Java, C, C#, and .NET Core
- Entry level data analysis and digital signal processing with Python
- Unix/Linux shell scripting and software development
- Knowledge of data structure
- Operating system and multithreaded programming
- MATLAB, Simulink
- VI design with LabView
- PCB Design with Altium Designer
- Analog and Digital circuit design with Cadence EDA tools
- CPU architecture and MIPS assembly language
- Embedded Systems Development, IoT, BLE
- Microsoft Word, PowerPoint, Excel
- Test-driven development approach

- Debug, Problem-solving and analytical skills
- Excellent communication and teamwork skills
- Ability to create concise and informative technical reports

Experiences

CREATIVE MANAGER | EXCELLASSONDE | 2014-2015

- Advertised our tutoring service by creating and distributing posters and doing announcements before lectures.
- Worked as a peer tutor on first and second- year courses such as physics, Java, and C etc.
- Prepared and conducted interviews to recruit new peer tutors for our organization.

VICE PRESIDENT | ELECTRICAL ENGINEERING CLUB FOR STUDENTS | 2014-2018

- Co-founder the of the club.
- Participated in the creation of the constitution, club registration, and other various administrative tasks.
- Provided logistic support for events such as C Programming Tutorial, Armature Radio Building, and other various club projects.

ELECTRICAL SYSTEM DEVELOPER | CSDC (CANADIAN SATELLITE DESIGN CHALLENGE) | 2015-PRESENT

- Designed the satellite solar panel.
- Prepared presentation and tutorials for new members of the team.
- Took part in the modification of various electrical subsystems of the satellite.
- Participated in the vibration test at David Florida Laboratory CSA.

RESEARCH ASSISTANT | BIOSA LAB YORK UNIVERSITY | 2018-PRESENT

- Designed and implemented wireless embedded systems with IoT products.
- Designed PCB for IC testing.
- Gained experience with various serial communication protocols such as I2C, SPI, UART.
- Got familiar with wireless technologies such as BLE, TCP, HTTP.
- Gained experience with embedded development on Atmel microcontrollers.