

Keith Choa

Toronto, ON M5J 0E1
(647) 617-2462

[linkedin.com/in/keithchoa](https://www.linkedin.com/in/keithchoa) | github.com/cookieth | kchoa@edu.uwaterloo.ca

PROFILE

- Computer Engineering co-op student with over 2 years' strong experience in performing programming tasks such as resolving/debugging embedded software errors in a time-sensitive, competitive environment, implementing code documentation strategies to increase team productivity, and creating frameworks to test functionality of embedded systems.
- Possess strong knowledge of Computer Engineering concepts, such as working with IDE's, efficient programming, and database manipulation. 6 years proficiency in C/C++ programming language, with experience in object-oriented design, data structures, and various algorithms.
- Also knowledgeable in building web tools using Python, PHP, HTML, Javascript, SQL, and Google API in order to monitor sensory data.

WORK EXPERIENCE

Artesyn Embedded Technologies, Inc.

June 2019 - August 2019

Intern

- Responsible for stress testing and quality assurance tasks, such as EMI, Transient Response, Over/Under Current and Voltage, Waveform Distortion, and Thermal Behaviour of within the design engineering department of a \$100 million Industrial Power Supplies company. I increased productivity by 20% for this department's process.

Mapúa University, Manila

June 2018 - June 2018

NICT Japan Project Student Research Intern

- Responsible for designing a real-time temperature module which required temperature processing using Python and MySQL, and displaying the information on a locally hosted website with HTML, PHP and Javascript.
- Collaborated with researchers on the "Evapotranspiration-Based Irrigation System with Internet of Things (IoT) Integration for Smart Farming Application" project, which can transform the farming industry in The Philippines.

VOLUNTEER EXPERIENCE

ISM VEX Robotics Team

August 2016 - December 2019

Co-Lead Programmer (C/C++)

- Co-led the Robotics team in designing software enabling both remote-controlled and autonomous mechanical robotic motion

Achievements:

Placed in the top 3 ISM teams and represented our school for 3 consecutive years (2017-19) at the East Asian Regional VEX Robotics Competition in Taipei, Taiwan; Awarded the 2018 VEX Innovate Award

LAKAS, Indigenous Education Program

October 2017 - December 2017

Creator and Teacher of a Programming/Circuitry Curriculum (in C/C++)

- Initiated and translated a Robotics curriculum for high school students in an indigenous community in the Philippines into Filipino
- Coordinated the implementation of the program with the Principal of LAKAS, a locally-based community NGO

Achievement:

Recognized for overall excellence in dedication and innovation to the program by the program supervisors

EDUCATION

University of Waterloo

August 2019 - June 2024 (expected)

- Currently enrolled in the Computer Engineering Co-Op program

HarvardX (Online, in progress) - Introduction to Computer Science (CS50x)

December 2017 - Present

- Covered fundamental computer science concepts using C++, including: search algorithms, data types, pointers, and data structures (bitmaps, linked lists, binary search trees)

International School Manila (ISM), Philippines

August 2015 - June 2019

- Graduate of the International Baccalaureate (IB) Diploma Program, with a score of 43 out of 45
- **ISM Leadership Award (2018, 2019)** Awarded to the top 5 students who have shown outstanding leadership in co-curricular activities
- **Exemplary Student Award (2016, 2017)** Awarded to the top 5 students who exemplify school-wide goals and dispositions
- **National Honors Society, USA (2019)** Cumulative GPA of >6.25 (out of 7), and who exemplify NHS's values (assessed via an application)