

# GARY LEUNG

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## Education

**University of Toronto**  
**St. George Campus**  
Sep 2015 – May 2019

- Bachelor of Applied Science in Engineering Science
- Cumulative GPA: 3.94/4.00
- Relevant Coursework: Data Structure and Algorithms, Digital and Computer Systems, Operating Systems

## Experience

**Dynamics Graphic Project**  
May 2017 – Aug 2017  
Toronto, Ontario

### C++ Software Developer

- Calibrated and debugged camera/projector setups using the OpenCV library in C++.
- Developed structured light imaging functions to display and compare optimized patterns for depth calculations.
- Implemented several image analysis algorithms to calculate object depth in a scene.

**University of Toronto**  
**Project Holodeck**  
Sept 2017 – Present  
Toronto, Ontario

### C#/Unity Software Member

- Interfaced serial communication between Unity and an omnidirectional treadmill to mimic walking in VR space.
- Created test environments to debug project prototypes.

**CUHK Institute of Precision Engineering**  
May 2016 – Aug 2016  
Hong Kong, China

### Prototype Development Researcher

- Wrote C code for Arduino to achieve precise control of a mechatronic arm.
- Presented to research team improvements/insights analyzed from collected model movement data, which are now implemented for next prototypes.

**Mechatronic Design Association**  
Sept 2016 – May 2016  
Toronto, Ontario

### C++ Software Developer

- Developed a C++ program using OpenCV in Linux for the movement of an autonomous submarine in response to colored buoys.
- Lead and managed the buoy software sub team by organizing the program structure and allocating weekly tasks.

## Projects

**Kaitan Word Learner**  
JavaScript, jQuery

- Developed a chrome extension which assists users in language learning by compiling statistics of encountered words.

**Ad Data Visualization**  
C#, Unity

- Developed an augmented reality visualization program for advertising data.
- Implemented a predictive model for future trends using a neural network.

## Skills

**Proficient in:** C++, Python, JavaScript

**Experience with:** C, C#, Java, HTML, CSS, Arduino

**Tools:** Linux, Git, Visual Studio, Unity

## Awards and Accomplishments

- 4x University of Toronto Dean's List
- Engineering Science Pong AI Tournament 2015 – 1<sup>st</sup> Place
- Hack the Valley 2017 – MLH Hack Harassment Award Winner
- Hack with IX 2016 – 3<sup>rd</sup> Place