

# Victor Liao

linkedin.com/in/victor-liao | github.com/victorliao1  
victor.liao@uwaterloo.ca | 807.633.3228

## EDUCATION

### UNIVERSITY OF WATERLOO

CANDIDATE FOR B.ENG IN  
SOFTWARE ENGINEERING  
2018 - 2023

• Data Science Club • ENGSOC Society •  
MATHSOC Society

### SIR WINSTON CHURCHILL C.V.I. IB DIPLOMA

2014 - 2018

• Student President • Math and Science  
Competition Club President

## SKILLS

### PROGRAMMING

Proficient:

• C++ • Python • C • Basic

Familiar:

• Assembly •  $\text{\LaTeX}$

• HTML • CSS • Javascript

### TOOLS

• git • linux • macOS

## AWARDS

• (2018) The John, Annie, John Seme II  
Memorial Scholarship

• (2018) Joshua Dyke Scholarship

• (2018) Waterloo Faculty of Mathematics  
Scholarship

• (2018) Gold Medal: Canadian Open  
Mathematics Challenge: Northern ON

• (2017) Gold Medal: Canadian Open  
Mathematics Challenge: Northern ON

• (2017) 1st Place: TD Canada Trust Math  
Contest

• (2017) 15th Place: International Caribou  
Cup Math Competition

• (2016) 3rd Place: International Caribou  
Cup Math Competition

• (2015) 6th Place: Ontario Provincial  
Environthon

## EXPERIENCE

### LAKEHEAD UNIVERSITY | COMPUTER SCIENCE INTERN

June 2018 - Aug 2018

- Developed algorithmic programs for university professor to use in lab modules in his class.
- Programs were written in C, and included numerical methods for engineering such as the Newton-Raphson method, and bisection method.
- Programs were written with varying levels of difficulty to accomodate for varying skillsets of students.

### THUNDER BAY REGIONAL RESEARCH INSTITUTE | ASSISTANT RESEARCH SCIENTIST

Sep 2017 - Nov 2017

- Peer-reviewed and edited 2 research focused High-Intensity Focused Ultrasound(HIFU) papers.
- Modified a Texas Instrument PCB design board to connect multiple waveform generators and the research computers.
- Operated a waveform generator and collected data on HIFU which was used to write a lab module for second year students at Lakehead University.

### LAKEHEAD UNIVERSITY | ASSISTANT RESEARCH SCIENTIST

Jan 2016 - April 2016

- Analyzed the reproduction rate of microalgae in malt wastewater under various environmental conditions.
- Utilized ICP-AES, centrifuge and many other analytical techniques to monitor the growth of the microalgae.
- Data collected on parameters assisted in the creation of a research paper.

### UNIVERSITY OF BRITISH COLUMBIA | SHAD FELLOW

July 2017 - August 2017

- Selected out of 1900 applicants to attend this summer Enrichment program for high school students.
- Created an app prototype and business plan that was presented to industry leaders.
- Participated and placed first in UBC's mechanical engineering competition
- Performed research on colitis using PVDF filters and Western Blot analysis on tissue samples.

## VOLUNTEER

### UNITED WAY | YOUTH FUNDRAISING EXECUTIVE COUNCIL

Sept 2016 - April 2017

- Elected onto the municipal youth fundraising council, and conducted multiple fundraising initiatives throughout the school year.
- Targeted fundraising initiatives to be interactive with the community, for outreach purposes.
- Ultimately raised more than \$15,000 for youth in the community that was allocated after various organizations presented their business plans.