

# Jamie Ngai To Lo

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## EDUCATION

### University of British Columbia

Chemical and Biological  
Engineering,

Graduation: May 2019

CGPA: 3.6/4.33 (79%, 'B+' average)

Honors: NSERC USRA

## SKILLS

Strong fundamentals of **chemical engineering** with understanding in **electrical design** and **programming**

**Cad Design:** SolidWorks, AutoCad, Inventor

### Scientific Computing:

MATLAB, Python, Arduino

**Electronics:** EAGLECAD

## ACTIVITIES

**UBC Chem-E-Car**, Logistics

**Chemical Engineering Undergraduate Student Club**, Webmaster

**Shung Ying Kung Fu Club**, Assistant coach

**Origins**, parkour

## AWARDS

### Cadet Medal of Excellence

Awarded to cadets who have demonstrated excellence in citizenship outside the Cadet program.

## RECENT WORK EXPERIENCE

### The Biofoundry at UBC

Research Assistant

Neuro-engineering Team

May 2016 – current

- Developed a pre-clinical model for neurodegeneration using the concepts of tissue engineering and traumatic brain injury models.
- Created an apparatus to quantify trauma induced onto a neuro-cell culture using *SolidWorks*.
- Designed an animation of the process using *SolidWorks* to effectively convey the apparatus' operating protocol.
- Debugged an Aerotech direct drive motor, saving weeks of time and servicing costs.
- Identified and repaired hardware faults in a 3D printer and printed cell chambers for the apparatus.

### Chemical and Biological Engineering

Office Assistant

Administration

Jan 2016 – May 2016

- Organized and tracked financial spendings of professors through their speedchart system.

### Kumon

Assistant instructor

Math and Reading Tutoring

Jan 2011 – May 2016

- Guided K-12 students with an approachable, adaptive teaching style to ensure that individual students performed above their grade level.
- Communicated with parents about student progress and

## TECHNICAL PROJECTS

### UBC Chem-E-Car Design Team

Logistics

- Managed the \$30,000 operating budget of the team, Expanded team from 10 to ~40 students in 1 year. Streamlined organizational structure and leadership roles.
- Created and developed the Electrical systems controlling the car by breadboard prototyping and *EAGLECAD* for PCB fabrication.

### CHBE Student Council

Webmaster

- Maintained the undergraduate council website using *HTML* and *CSS*.
- Collaborated with the student council to deliver pertinent content about academic activities, events, and conferences.

## CONFERENCES & PRESENTATIONS

### AICHe Student Conference-2016

Chem-E-Car competitor: 'Chem-E-Car' - First place poster competition.

### Clean Energy BC Generate Conference-2016

Poster presentation: 'Zinc-nickel Flow cell'

### Engineering Research Day-2016

Undergraduate presentation: 'Chem-E-Car' - First Place .