

Jamie Ngai To Lo

Ngai_To_Lo@hotmail.com | NgaiTo.ca

EDUCATION

University of British Columbia

B.A.Sc. Chemical and Biological Engineering with Distinction,

CGPA: 3.7/4.33 (81%, 'A-' average)

Honors: NSERC, USRA

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

SKILLS

Cad Design: SolidWorks, AutoCAD, Inventor, EAGLECAD, Visio

Programming:

JavaScript HTML/CSS, VBA, MATLAB, Python, Arduino, LabView

Other:

MS Office, MS Access, Inkscape

Languages:

English, French, Chinese (Cantonese)

ACTIVITIES

Shung Ying Kung Fu Club,

Assistant coach

Origins,

Parkour

AWARDS

Dr. A. Paul Watkinson Design Award

4th Year Capstone award

Colin Oloman People's Choice Poster

4th Year Capstone award

First Place Poster: Chem-E-Car,

AIChE Student Conference-2016

First Place Presentation,

Engineering Research Day-2016

INTERESTS

3D Printing,
Trusting Natural Recursion,
Reading

WORK EXPERIENCE

Fortress Advanced Bioproducts (formerly S2G)

Technical Group

Research Assistant

Jan 2018 - Sep 2018

- Conducted various experiments contributing towards the scale-up for Front End Engineering Design.
- Developed scripts to improve workflow of HPLC Sampling procedures in Visual Basic.

Chemical and Biological Engineering

Undergraduate Assistant

Course developer, Lab Technician

Jun 2017 - Sep 2017

- Created an open-source flipped classroom course material in Python to push contemporary, interactive pedagogy.
- Collaborated with peers and supervisors to develop content that is both relevant and engaging.

The Biofoundry at UBC

Neuro-engineering Team

Research Assistant

May 2016 - Sep 2017

- Developed a brain model for preclinical drug trials using induced pluripotent stem cells to create 3D neurospheres.
- Designed and created an apparatus to function with the targeted neurons while recording the interaction using SolidWorks.

Chemical and Biological Engineering

Administration

Office Assistant

Jan 2016 - May 2016

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

Kumon

Math and Reading Tutor

Assistant instructor

Jan 2011 - May 2016

- Guided K-12 students with an approachable, adaptive teaching style to ensure that individual students performed above their grade level.

TECHNICAL PROJECTS

UBC Chem-E-Car Design Team

Logistics

- Managed the \$40,000 operating budget of the team, expanded team from 10 to ~40 students in 1 year.
- Created and developed the electrical systems controlling the car by breadboard prototyping and EAGLECAD for PCB fabrication.

Capstone (Bio-Based Adipic Acid)

Drafter

- Drafted the PFD and a simplified P&ID of the plant using AutoCad Plant 3D and MS Visio.
- Designed and created the poster for the team using Microsoft Publisher and Inkscape.

CONFERENCES & PRESENTATIONS

Canadian Society of Chemical Engineerings 2017

- Poster Presentation: 'An Open-Source, Team-Based Learning Approach to Chemical Engineering'

10th World Congress of Chemical Engineering 2017

- Chem-E-Car Competition

Harvard National Collegiate Research Conference 2017

- Poster Presentation: 'Cerebro-Engineering Development of a Pre-Clinical Model of Neurodegeneration Toward Drug Delivery'

AIChE Student Conference-2016

- Chem-E-Car competitor: 'Chem-E-Car'