Jamie Ngai To Lo

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EDUCATION

University of British Columbia
B.A.Sc. Chemical and Biological Engineering,

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

Other:
MS Office, MS Access, Inkscape

Languages:
English, French, Chinese (Cantonese)

ACTIVITIES

Shung Ying Kung Fu Club,
Assistant coach

Origins,
Parkour

AWARDS

Cadet Medal of Excellence,
Royal Canadian Air Cadets

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'