# **Cheryl Lau**

3A Chemical Engineering

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**Current Address** 

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## **SKILLS SUMMARY**

- Experienced with Linux/Unix interface and basic Bash scripting
- Proficient at data manipulation and visualization in R and MATLAB
- Rudimentary knowledge of Python scripting
- Experienced with ANSYS computational fluid dynamics (CFD) and CAD software
- Advanced laboratory skills in experimentation, chemical characterization, and results analysis through a Directed Research Project
- Proficient at Microsoft Word, Excel, PowerPoint, Outlook; working knowledge of chemical engineering analysis with MATLAB and Aspen Plus
- Certified in WHMIS, OHSA, and first aid courses
- Ability to adapt quickly and learn independently
- Exemplary project and team management skills

### **WORK EXPERIENCE**

BioNanoTech Data Analyst, Ontario Institute for Cancer Research, Toronto, ON, Sept 2014 – Dec 2014

- Managed worldwide crowd-sourced competition: administered weekly meetings and effectively delegated tasks to project team members
- Provided ongoing support as liaison between competition coordinators and contestants
- Analyzed next-generation DNA sequencing data using R
- Performed computational validation of cancer mutation-detection algorithms

Electrical Engineering Design Developmental Student, AMEC NSS, Toronto, ON, Jan 2014 – May 2014

- Prepared electrical and instrumentation and control design change papers for Bruce Power and OPG nuclear power plants
- Maintained engineering project lifecycles in accordance with client procedures
- Coordinated project risk assessment tasks with appropriate stakeholders
- Compiled information to write and edit operational experience reports

Technical Engineering Writer, ANSYS Canada Ltd., Waterloo, ON, Apr 2013 – Aug 2013

- Examined and resolved defects in documentation for ANSYS software
- Improved and updated tutorials based on new software features
- Collaborated with subject matter experts to improve technical documentation

## **EDUCATION**

**Candidate for Bachelor of Applied Science,** Honours Chemical Engineering, University of Waterloo, ON, Sept 2012 – Present

Distinctions: Dean's Honours List, Fall 2012/Fall 2013/Spring 2014

**Relevant Work:** Water Purification with Bio-Renewable Nanomaterials, Directed Research Project, Sept 2013 - Dec 2013

- Synthesized renewable nanomaterials as an adsorbent for water purification
- Performed chemical characterization of the polymers in question
- Optimized capability of nanomaterial by adjusting synthesis process

## **ACTIVITIES/ MEMBERSHIPS**

Engineering Case Competition, University of Waterloo, July 2014

- Researched and analyzed environmental impacts of Canadian tar sands industry
- Designed feasible action plan to mitigate environmental impacts while optimizing socioeconomic effects
- Presented design plans with a high degree of professionalism

**Chief Advocacy Representative,** Engineers Without Borders University of Waterloo Chapter, Sept 2013 – Dec 2013

- Advocate policy reforms regarding global poverty to federal MP's
- Apply engineering design process to find potential solutions for real-world issues
- Collaborate with other universities, government officials, and representatives from Engineers Without Borders national office to promote local learning and action

### **VOLUNTEER EXPERIENCE**

Journalist, North American Young Generation in Nuclear Conference, Toronto, ON, May 2014

 Recorded speaker sessions, interviewed nuclear industry professionals, and wrote conclusive conference report