

Education

University of Toronto, St. George Campus
Masters of Science, Sep 2020 – present

- Computational Social Science & ML
- GPA **4.00**/4.00

Bachelor of Science, Sep 2015 – June 2020

- GPA **3.89**/4.00
- Computer Science Specialist, Cognitive Science Major

Completed Relevant Courses

- Intro to Machine Learning (CSC2515)
- Intro to Natural Language Processing (CSC401)
- Intro to Neural Networks (CSC321)
- Intro to Artificial Intelligence (CSC384)
- Intro to Computational Social Science
- Computational Cognition (COG403)

Research and Industry Experience

Amazon Dec 2021 - present

Software Developer Engineer |

- Work as part of the Supply Chain Optimization Supplier Performance Team
- React, Java, TypeScript, AWS services (DynamoDB, API Gateway, SQS)

Computational Social Science Lab & Patreon September 2020 - Present

UofT, Graduate Researcher

- Conduct the first large scale analysis of Membership platforms on the largest of its kind, Patreon
- Apply Data Science techniques to understand user loyalty, retention, budgeting, and online behaviors
- Analyze results of real-time experiments to understand the impact of feature introduction to difference user metrics
- Analyze Patreon's complete transaction dataset from platform inception until July 2021

Amazon May 2020 - August 2020

Software Developer Engineering Intern

- Work with the Supply Chain Optimization Data Accuracy team
- React, Java, TypeScript, AWS services (DynamoDB, API Gateway, SQS)

University of Toronto Sep - Dec 2020

Head Assignment Teaching Assistant, CSC110

- Assist in writing class assignment questions and solutions
- Organize tutorials and answer student questions
- Coordinate organization with fellow TAs

Cognitive Lexicon Lab March 2019 – July 2020

UofT, Undergraduate Research Assistant

- Working with the Cognitive Lexicon Lab and Yang Xu on computationally studying language learning and culture shifts in love songs over time.

Intel Sep. 2018 – 2019

Publications

- **El Sanyoura, L. and Xu, Y.** Gender convergence in the expressions of love: A computational analysis of lyrics. In *Proceedings of the 42nd Annual Meeting of the Cognitive Science Society*.
- **Leiyu, J. El Sanyoura, L. Xu, Y.** How nouns surface as verbs: Inference and generation of word class conversion. In *Proceedings of the 42nd Annual Meeting of the Cognitive Science Society*.

Extracurricular Activities

- **ProjectX Research Team Member**

Undergraduate AI Group (UAIG), April 2020 - August 2020

- Organizing a \$70K prize-pooled global undergraduate machine learning research competition to tackle issues of climate change
- Building project requirements, gathering datasets, and defining the problem domain for students

Software Engineering Intern

- Optimizing Deep Learning Algorithms and Machine Learning Inference on the FPGA and its graph compiler
- Building new customer features
- Increasing Test Coverage

MIT-IBM Watson AI Lab, June – Sep. 2018

Undergraduate Research Intern AI

- Optimizing Neuroscience-inspired PredNets
- Running Hyper parameter Optimization for biologically inspired Neural Network Regularizers
- Working under the supervision of David Cox.

VISxAI Workshop @IEEE VIS 2018 & 2019

Program Committee Member

- Reviewing AI explainable submissions to the VISxAI workshop
- Submitting feedback for workshop submissions

Teaching Assistant Sep 2017 – Dec 2017

University of Toronto, CSC209

- Holding tutorials classes for students
- Marking assignments and exams
- Answering students' questions

FPGA High Level Design Developer Intern

Intel, May 2017 – September 2017

- Enhancing security standards of the products to ensure deployment
- Updating and resolving errors in the FPGA runtime

Undergraduate Researcher supervised by David Liu

University of Toronto, Sep 2016 – Dec 2016

- Enhancing **Courseography**, a web application that helps students navigate their university careers through interactive visualization of courses, requirements, and paths between them

- **Course Curriculum Designer and Executive Member**
Undergraduate AI Group (UAIG), March 2019- present
 - Writing lecture material for the AI course LearnAI and supervising the application committee
 - Gathering more than 70 applications for the course and making AI accessible
- **Curriculum Designer & Workshop Teacher**
TechXplore
 - Beginner & Intermediate Python Workshop: Variables, Data structures, functions (2019)
 - Intermediate Python Workshop: Object Oriented Programming, Recursion, Trees (2018 & 2019)
- **UofT Hacks (VI & VII)**
 - Learn TO Hack: Intro to APIs and steps for a successful Hackathon (2019 & 2020)
- **General Council Member, 2017 Freshman Orientation Coordinator**
Computer Science Students Union (CSSU), Jul – Apr 2018
 - Organizing events to improve student life, hosting more than 5 times the events of past years
 - Improving student culture through surveys, events, and an upgraded code of conduct
 - Acting as the liaison between the department and the students
- **Peer Mentor and Study Group Leader**
 - **COG250 Registered Study Group Leader** (2016)
 - Hosting weekly study groups to go solidify the understanding of the materials
 - **CSC236 Registered Peer Mentor** (2016)
 - Tutoring students in the course CSC236 as a Professor-appointed peer mentor
- **Co-Founder and President**
 - **Hello, Girl**, Jan 2017 – present
 - Strengthening the bonds between the Women in CS community
 - Subgroup Winning 3rd Place in the Hackathon *Lady Hacks* (2017)
 - Holding social gatherings, discussion groups, study sessions, and online forum
- **Basketball Intramural Division MVP (x2)**
 - **Victoria College, University of Toronto** (2015-19)

Awards and Scholarships

- | | |
|--|---|
| ○ 2021 Deep Mind Scholar: | ○ UofT Student Leadership Award (2020) |
| ○ 2020 Canadian Valedictorian: Invited by PM Justin Trudeau to address all Canadian graduates | ○ Konrad Group Women in Technology Scholarship (Feb. 2018) |
| ○ UofT John H. Moss Scholarship (2020) | ○ Dean's List Scholar (2015-2018) |
| ○ Vector AI Scholarship (2020) | ○ The Joseph Wesley MacCallum Scholarship (Aug. 2018) |
| ○ Google Women Techmakers Scholarship: \$5000 | ○ The Dale Anne Freed Scholarship (July 2017) |
| ○ UofT Grad Entrance Award (2020) | ○ Clifton Graham Roberts Admission Scholarship (June 2015) |
| ○ Thriller Prize in Computer Science (2020) | ○ MUN Secretary General Award: (April 2009) |
| ○ National Rhodes Scholar Finalist (2019) | |

Artistic Portfolio

- | | |
|--|---|
| ● Photography <ul style="list-style-type: none"> ○ Winner of the <i>2014 YMCI Spectrum Photography Competition</i> ○ Featured in the VicXposure Art Gala | ● Dance and Choreography <ul style="list-style-type: none"> ○ 3rd place, Canada National Show Choir Competition (2015) ○ Several class recitals and performances choreographed |
| ● Songwriting, Singing, Guitar <ul style="list-style-type: none"> ○ 1000+ views on Youtube, 100+ listens on SoundCloud, several live performances and shows | ● Writing <ul style="list-style-type: none"> ○ 2nd Place Winner of the Lebanon National Short Story Competition for the story, "RED" |
| ● Filmmaking <ul style="list-style-type: none"> ○ <i>"The Uoft Raindance Film Festival"</i> screened <i>New To The Cold</i>, the documentary about my family's immigration to Canada | |