Raymond Liu

raymliu@cs.ubc.ca • Vancouver, Canada

Education

University of British Columbia	Sep 2024 – present
Master of Science in Computer Science	Vancouver, Canada

Advisor: Kevin Leyton-Brown

University of Toronto	Sep 2019 – Apr 2024
Honours Bachelor of Science in Computer Science, minor in Mathematics	Toronto, Canada

Research Experience

Graduate Research Assistant	Sep 2024 – present
University of British Columbia: Game Theory and Decision Theory lab	Vancouver, Canada

- Modelling human strategic behavior using real-time video game replays.
- Enhancing educational peer review systems with LLM-assisted grading.

Undergraduate Research Assistant	May – Aug 2024
University of Toronto: Computational Linguistics & Natural Language Processing Lab	Toronto, Canada

- Studied how patterns in LLM revisions conformed to theories of gendered language reform.
- **Supervisors**: Prof. Suzanne Stevenson and Prof. Barend Beekhuizen

Undergraduate Research Assistant	Sep 2023 – Dec 2023
University of Toronto: Department of Computer Science	Toronto, Canada

- Modelled the structural properties of social media communities as an economic content market.
- **Supervisor**: Prof. Peter Marbach

Undergraduate Research Assistant	July 2022 – Feb 2023
University of Toronto: Computational Linguistics & Natural Language Processing Lab	Toronto, Canada

- Created statistical models of the cognitive factors and patterns leading to semantic change.
- **Supervisor**: Prof. Yang Xu

Undergraduate Research Assistant	May – Aug 2020
University of Toronto: Department of Mathematics	Toronto, Canada

- Conducted an interview study on teaching quality within the UofT introductory calculus courses.
- **Supervisor**: Prof. Sarah Mayes-Tang

Teaching Experience

Graduate Teaching Assistant	Sep 2024 – Dec 2025
University of British Columbia: Department of Computer Science	Toronto, Canada

CPSC430: Computers and Society	Sep – Dec 2025
CPSC430: Computers and Society	Sep – Dec 2024

Undergraduate Teaching Assistant	Sep 2020 – Dec 2021
University of Toronto: Department of Mathematics	Toronto, Canada

MAT246: Introduction to Abstract Mathematics	Sep – Dec 2021
MAT237: Multivariable Calculus with Proofs (Textbook Editor)	May – Aug 2021
MAT135 and 136: Calculus I and II	Sep 2020 – Apr 2021

Other Experience and Projects

Curb Usage – Data Analysis and Physical Interventions Sep 2023 – Apr 2024
Multidisciplinary Urban Capstone Project (MUCP): IBI Group Inc. Toronto, Canada

- Collected, visualized, and analyzed curb data to model the accessibility of the University of Toronto campus and design interventions in physical infrastructure.

Software Engineer Intern Sep 2022 – Apr 2023
Wish (ContextLogic Inc.) Toronto, Canada

- Worked on improving performance, fixing problems, and testing features within the Wish Orders and Returns system, using Python and SQL.

Publications

Fugikawa O, Hayman O, **Liu R**, Yu L, Brochhagen T and Xu Y (2023) A computational analysis of crosslinguistic regularity in semantic change. Front. Commun. 8:1136338. doi: 10.3389/fcomm.2023.1136338

Honors and Awards

Graduate TA Award	2025
UBC Advanced Machine Learning Training Network Graduate Trainee	2025
NSERC Undergraduate Student Research Award	2024
Fields Undergraduate Summer Research Program Fellowship	2022
Howard Ferguson Scholarship	2021
Jackman Scholars-in-Residence Undergraduate Award	2021
C. L. Burton Scholarship for Mathematics and Physical Sciences	2021
Joseph Alfred Whealy In-course Scholarship	2020
Dr. James A. & Connie P. Dickson Scholarship in Science & Mathematics	2020

Extracurricular Involvement

Skule Music Sep 2021 – Apr 2024
University of Toronto Toronto, Canada

- Played violin, arranged and transposed music, scheduled rehearsals, and led the strings section as concertmaster. Organized and performed at concerts, university galas, semiformals, and other events.
- Groups include Skule Orchestra (symphonic orchestra), Iron Strings (string quartet), and Skule Nite (pit band for a musical revue).