VICTORIA CHUI

victoria.chui@mail.utoronto.ca | victoriachui.github.io

EDUCATION

University of Toronto Toronto, ON
PhD in Information 2023-Present

- Studying human-centered algorithmic design to assist decision-making in healthcare
- Deconstructing and developing predictive models for diabetes diagnosis and complications in Ontario
 Master of Information MI (CGPA 4.0/4.0)
 - Thesis title: Towards Human-Centered Models in Healthcare: Development of Practical Applications for Surgical Wards
 - Selected coursework: computer programming, data analytics, topic modelling, statistics, data visualization, research methods, machine learning, human values in data science

McGill University

Montréal, QC

Honours Bachelor of Science in Biochemistry – HBSc (CGPA 3.77/4.0)

2021

Selected coursework: biotechnology, probability and statistics, immunology, anatomy and physiology

RESEARCH EXPERIENCE

University of Toronto

Toronto, ON

PhD – Faculty of Information

2023-Present

- Analyzing Canadian health data to deconstruct and improve risk assessment models for diabetes care
- Developing an understanding of community trust regarding healthcare AI in the Peel Region, Ontario
- Under the supervision of Dr. Shion Guha, and in partnership with the Dalla Lana School for Public Health
 Master's Thesis Faculty of Information
 2021-2023
 - Developed time series models to predict daily surgical case volumes
 - Explored the intersection of data science and healthcare to develop human-centered strategies in practice
 - Under the supervision of Dr. Shion Guha, and in partnership with Parkview Health, USA

Research Assistant - Faculty of Information

2022-2023

- Analyzed surgical site infection data using clustering and predictive methods
- Scoped the landscape of Canadian child welfare resources and risk assessment models

McGill University

Undergraduate Honours Thesis – Department of Biochemistry

Montréal, QC 2020-2021

- Developed molecular dynamics simulations to examine IFIT protein and nonstandard-RNA interactions
- Executed simulations on GROMACS software, using Compute Canada ARC systems

PUBLICATIONS

- Laura C Rosella, James Shaw, Shion Guha, Ibukun-Oluwa Omolade Abejirinde, Jennifer L Gibson, Lorraine Lipscombe, Kathy Kornas, Remziye Zaim, Victoria Chui, and Ijeoma Uchenna Itanyi. 2025. A participatory approach to deploy responsible artificial intelligence for diabetes prediction and prevention.
 DIGITAL HEALTH 11, (2025), 20552076251358540. https://doi.org/10.1177/20552076251358541
- Victoria Chui, Kelly McConvey, Erina Seh-Young Moon, Maya Ghai, and Shion Guha. 2025. Towards
 Sustainable Community-Designed AI Systems in the Public Sector. In ACM SIGCAS/SIGCHI Conference on
 Computing and Sustainable Societies (COMPASS '25), July 22–25, 2025, Toronto, ON, Canada. ACM, New York,
 NY, USA, 4 pages. https://doi.org/10.1145/3715335.3737683

- Victoria Chui, Jessica Pater, Tammy Toscos, and Shion Guha. 2023. Applying Human-Centered Data
 Science to Healthcare: Hyperlocal Modeling of COVID-19 Hospitalizations. In Companion Proceedings of the
 2023 ACM International Conference on Supporting Group Work (GROUP '23). Association for Computing
 Machinery, New York, NY, USA, 24–26. https://doi.org/10.1145/3565967.3570979
- Victoria Chui. 2023. Towards Human-Centered Models in Healthcare: Development of Practical Applications for Surgical Wards. Master's Thesis. University of Toronto, Toronto, Canada.

TEACHING

Instructor – University of Toronto Toronto, ON INF2178 – Experimental Design for Data Science (120 students) Winter 2026 INF1340 – Programming for Data Science (50 students) Summer 2024, 2025 Teaching Assistant – University of Toronto Toronto, ON • INF2178 – Experimental Design for Data Science (120 students) Winter 2024, 2025 • INF1339 – Introduction to Computational Thinking (150 students) Fall 2023, 2024 • CCT202 – Human-Machine Communication (65 students) Fall 2023 Course Development - Centennial College Toronto, ON DATA702 – Data Foundations Fall 2024 DATA707 – Qualitative Data Fall 2024

COMMUNITY OUTREACH

Doctoral Student Association, Faculty of Information

Toronto, ON

Vice-President

2024-2025

Representing and advocating for doctoral student needs at the iSchool, University of Toronto

Student Volunteer (Conference) - DCMI 2024

Toronto, ON

University Health Network - Toronto Western Hospital (TWH)

Toronto, ON

Clinical Administrative Hospital Volunteer

2023-2025

Performing administrative duties and assisting patients at the TWH Neurology Clinic

Faculty of Information, University of Toronto

Toronto, ON

Faculty Search Committee Member

2022-2023

- Assisted search committees for four full-time teaching-stream faculty members at the Faculty of Information, as the student representative
- Participated in shortlisting and interview rounds
- Collaborated on job posting descriptions for four different full-time teaching-stream positions

AWARDS

Doctoral Ontario Graduate Scholarship (OGS) - \$15 000	2025-2026
PhD Enhancement Award – Faculty of Information	2024
Faculty of Information Data Science Hackathon - First Place Winner	2023
First-Class Honours Degree (Bachelor of Science)	2021
 Issued by McGill University for honours degree recipients with a CGPA over 3.5 	
University of Northern British Columbia Scholar Recognition [DECLINED]	2016

CERTIFICATES

Course Design Certificate - University of Toronto

2024

• Teaching certificate through the Teaching Assistants' Training Program