VICTORIA CHUI

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EDUCATION

University of Toronto **Toronto, ON**
PhD in Information Sep. 2023 - Present

- Studying human-centered algorithm design to assist AI decision-making tools in healthcare

University of Toronto **Toronto, ON**
Master of Information - MI (CGPA 4.0/4.0) 2023

- Thesis: "Towards Human-Centered Models in Healthcare: Development of Practical Applications for Surgical Wards"
- Selected coursework: 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 Thesis – Faculty of Information Sep. 2023 - Present

- Developing a Canadian diabetes risk prediction model (project funded by CIFAR - $900,000 over 3 years)
- Analyzing US patient data to investigate costs for hospital infrastructure and patients

University of Toronto **Toronto, ON**
Master's Thesis – Faculty of Information Dec. 2021 - May 2023

- Developed time series models to predict daily surgical case volumes
- Explored the intersection of data science and healthcare for human-centered strategies

University of Toronto **Toronto, ON**
Research Assistant – Faculty of Information Sep. 2022 - March 2023

- Analyzed surgical site infection data using clustering and predictive methods

McGill University **Montréal, QC**
Undergraduate Honours Thesis – Department of Biochemistry July 2020 - Dec. 2021

- Developed molecular dynamics simulations to examine IFIT protein and nonstandard-RNA interactions

PUBLICATIONS

- **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

TEACHING ASSISTANT EXPERIENCE

University of Toronto **Toronto, ON**
INF2178 – Experimental Design for Data Science (140 students) Winter 2024

- Spearheading syllabus development
- Leading 1 tutorial per week, 1 x 1 hour, across 10 weeks
- Answering student concerns via email/Quercus/office hours
- Grading student assignments and projects

CCT202 – Human-Machine Communication (65 students)   Fall 2023

- Marking weekly discussion responses and one major assignment (15% of grade)
- Invigilating examinations
- Responding to student queries via email/Quercus

INF1339 – Introduction to Computational Thinking (150 students across 2 sections)   Fall 2023

- Leading 2 tutorials per week, 2 x 1.5 hours, across 10 weeks
    - Teaching key concepts (logic, abstraction, modulation) and leading formative assessments
- Responding to student queries in class and via email/Quercus/office hours
- Grading student assignments and projects

COMMUNITY OUTREACH

University Health Network – Toronto Western Hospital (TWH)   **Toronto, ON**

Clinical Administrative Hospital Volunteer   Sep. 2023 – Present

- Performing administrative duties and assisting patients at the TWH Neurology Clinic

Faculty of Information, University of Toronto   **Toronto, ON**

Faculty Search Committee Member   Sep. 2022 – July 2023

- Assisted the 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

Faculty of Information Data Science Hackathon – First Place Winner   March 2023

- In partnership with Service Canada, Integrity branch
- Developed an algorithm and interface to detect fraud from (falsified) family benefit data

First-Class Honours Degree (Bachelor of Science)   June 2021

- Issued by McGill University to honours degree recipients with a CGPA over 3.5

Faculty of Science Scholarship   Sep. 2018

- Issued by the McGill University Faculty of Science to students with a CGPA in the top 5%

Dean's Honour List   Sep. 2018

- Issued by the McGill University Faculty of Science to students with a CGPA in the top 10%

McGill Alma Mater Entrance Scholarship   Sep. 2017

- Issued by McGill University upon acceptance ($5000)

University of Northern British Columbia Scholar (DECLINED)   Sep. 2016

- Full-ride scholarship issued to students at the top of their high school cohort (~$20 000)