# Rohan Alexander

Assistant Professor, Information (51%) and Statistical Sciences (49%), University of Toronto Room 714, 140 St George St, Toronto, Ontario, M5S 3G6, Canada

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# Academic appointments

- Assistant Professor, Information & Statistical Sciences, University of Toronto Jul 2020 - current
  - Parental leave: From June to August 2021 I was on parental leave.
  - COVID-19: From March to December 2020 I shared full-time childcare duties (0.5 FTE on average). From January 2021 to May 2021, and again from September to December 2021, I shared part-time childcare duties, (0.25 FTE on average).
- Director, Technical Skills Curriculum & Instruction, Data Sciences Institute July 2021 - current
  - The DSI's Data Science and Machine Learning Certificates initially received \$2.5 million in financial support from Upskill Canada, Palette Skills, and the Government of Canada. This was renewed in 2025, for an overall investment to \$3.9M by 2026.
  - I work with three full-time staff to oversee all academic aspects including: liaise with industry and internal academic partners; establish, create and update curricula; hire and manage around 20 instructional and support staff for 16-week cohorts of around 125 learners.
  - Nearly 50 per cent of the first year of certificate participants secured job success via new employment, received promotions, or transitioned into new roles within six months of completion.
  - These courses are now also being taught to University of Toronto PhD students.
- Faculty Affiliate, Schwartz Reisman Institute for Technology and Society August 2020 - current
- Associate Director, Canadian Statistical Sciences Institute (CANSSI) Ontario Sep 2021 - current
  - CANSSI Ontario has an annual operating budget of around \$1 million.
  - I support the director and three full-time staff to promote research in data science and statistics by providing funding and hosting events.
- Senior Fellow, Massey College

Sep 2021 - Sep 2024

Co-lead, Data Sciences Institute Thematic Program in Reproducibility

Nov 2021 - Oct 2024

Post-doctoral Fellow, Information, supervised by Kelly Lyons

Jul 2019 - Jul 2020

#### Education

• PhD (Economics), Australian National University

Feb 2015 - Dec 2019

- Dissertation title: Essays on Applied Historical Labour Economics.
- Committee: John Tang (chair); Martine Mariotti; Tim Hatton; and Zach Ward.
- M. Economics, Australian National University

Feb 2012 - Nov 2012

• B. Economics, University of Queensland

Feb 2004 - Nov 2008

#### Book

• Alexander, Rohan, 2023, Telling Stories with Data, Chapman and Hall/CRC.

### **Edited book**

 Kennedy, Lauren, Rohan Alexander, and Andrew Gelman, (editors), Multilevel Regression and Poststratification: A Practical Guide and New Developments, (accepted by Cambridge University Press in July 2021, expected publication in 2026).

# Peer-reviewed journal articles<sup>1</sup>

• Katz, Lindsay, and Rohan Alexander, 2023, "Digitization of the Australian Parliamentary Debates, 1998-2022", Scientific Data, 10, 567, https://doi.org/10.1038/s41597-023-02464-w.

<sup>&</sup>lt;sup>1</sup>My work is interdisciplinary and there are different norms for author order and publication venue across disciplines. With regard to author order, Alexander and Ward, 2018, is alphabetical, all others follow the norm of the senior author last. Items in the "peer-reviewed conference proceedings" list—despite being a "conference proceeding"—can be "translated" as equivalent to a peer-reviewed journal article.

- Collins, Annie, and **Rohan Alexander**, 2022, "Reproducibility of COVID-19 pre-prints", *Scientometrics*, 4 July, https://doi.org/10.1007/s11192-022-04418-2.
- Alexander, Rohan, and Zach Ward, 2018, "Age At Arrival and Assimilation In The Age Of Mass Migration", *The Journal of Economic History*, 78(3), pp. 904-937, https://doi.org/10.1017/S0022050718000335.

# Peer-reviewed conference proceedings

Ferguson, Sharon, Paula Akemi Aoyagui, Rohan Alexander, Anastasia Kuzminykh, 2022, "A Thematic Comparison of Human and AI Explanations of Sexism Assessment", Human Centered AI Workshop at NeurIPS.

# Other publications

 Horton, Nicholas, Rohan Alexander, Aneta Piekut, and Colin Rundel, 2022, "Editorial: The Growing Importance of Reproducibility and Responsible Workflow in the Data Science and Statistics Curriculum", Journal of Statistics and Data Science Education, https://doi.org/10.1080/26939169.2022.2141001.

### **Under submission**

- De Angelis, Inessa, and **Rohan Alexander**, 2025, "What are Canadian Members of Parliament doing on Bluesky?", submitted to *Canadian Journal of Political Science*.
- Brodeur, Abel, David Valenta, Alexandru Marcoci, Juan P. Aparicio, Derek Mikola, Bruno Barbarioli, Rohan Alexander, ..., 2025, "Comparing Human-Only, AI-Assisted, and AI-Led Teams on Assessing Research Reproducibility in Quantitative Social Science", submitted to *Nature*, draft available: https://econpapers.repec.org/paper/zbwi4rdps/195.htm.
- Bhardwaj, Eshta, **Rohan Alexander**, Christoph Becker, 2025, "Limits to AI Growth: The Ecological and Social Consequences of Scaling", submitted to 2025 ACM Conference on Fairness, Accountability, and Transparency (FAccT '25), draft available: https://arxiv.org/pdf/2501.17980.

# **Pre-prints**

- Alexander, Rohan, Lindsay Katz, Callandra Moore, Zane Schwartz, 2023, "Evaluating the Decency and Consistency of Data Validation Tests Generated by LLMs", https://arxiv.org/abs/2310.01402.
- Chiu, Ke-Li, Annie Collins, and **Rohan Alexander**, 2022, "Detecting Hate Speech with GPT-3", *arXiv*, 24 March, https://arxiv.org/abs/2103.12407.
- Ferguson, Sharon, Mujgan Ozceylan, Rohan Alexander, Ishtiaque Ahmed, Young-Ho Kim, Anastasia Kuzminykh "Open for Interpretation: The Effects of LLM-Generated Input on Human Information Interpretation in Subjective Decision-Making".
- Wei, Christina Ziying, Omer Imran, Pelin Tanberg, Michaela Drouillard, Rohan Alexander, Anastasia Kuzminykh "Fair and Square: The Role of Subjectivity in Explanations of Financial Decision Models".
- Kennedy, Lauren, Jonah Gabry, Dewi Amaliah, and **Rohan Alexander**, 2023, "mrpkit: A reproducible, opinionated, workflow for multilevel regression with post-stratification in R".
- Collins, Annie, and **Rohan Alexander**, 2022, "History of MRP", (under review at Kennedy, Alexander, and Gelman, (editors), *Multilevel Regression and Poststratification: A Practical Guide and New Developments*).
- Alexander, Rohan, and Monica Alexander, 2021, "The Increased Effect of Elections and Changing Prime Ministers on Topics Discussed in the Australian Federal Parliament between 1901 and 2018", arXiv, 17 November, https://arxiv.org/abs/2111.09299.
- Alexander, Rohan, Samantha-Jo Caetano, Haoluan Chen, Michael Chong, Annie Collins, Shirley Deng, Isaac Ehrlich, Paul Hodgetts, Yena Joo, Marija Pejcinovska, Mariam Walaa, and Matthew Wankiewicz, 2021, "An Introduction to DoSStoolkit", arXiv, 19 May, https://arxiv.org/abs/2105. 09347.
- Chiu, Ke-Li, and **Rohan Alexander**, 2021, "On consistency scores in text data with an implementation in R", *arXiv*, 13 January, https://arxiv.org/abs/2101.05225.

• Hodgetts, Paul A., and **Rohan Alexander**, 2020, "cesR: An R package for the Canadian Election Study", *SocArXiv*, 3 September, https://osf.io/preprints/socarxiv/a29h8/.

# R packages

- Alexander, Rohan, and Paul A. Hodgetts, 2021, AustralianPoliticians.
- Hodgetts, Paul A., and Rohan Alexander, 2021, cesR.
- Alexander, Rohan, and A Mahfouz, 2021, heapsofpapers.

#### **Awards**

- 2022 ANU Australian Politics Studies Centre Visiting Scholar (\$2,500)
- Honourable Mention, 2021 Master of Information Student Council Instructor Awards

# Grants<sup>2</sup>

• NSERC Alliance Grant

February 2025 - December 2029

- Project: "Novel Statistical and Machine Learning Algorithms for Analysis of Canadian Political Donations and Lobbying Data"
- Funding: \$718,129
- Investigators: Rohan Alexander (PI), Laks Lakshmanan (co-PI), Shurui Zhou (Collaborator), Jesse Gronsbell (Collaborator)
- University of Toronto, Data Sciences Institute, Catalyst Grant

Feb 2025 - Jan 2026

- Project: "Automated LLM-based Pipelines to Improve Code Quality in the Social Sciences"
- Funding: \$100,000
- Investigators: Rohan Alexander (Named PI), Monica Alexander (co-PI), Chris Maddison (co-PI)
- Mitacs Business Strategy Internship

January 2025 - December 2025

- Project: "Open by Default"
- Funding: \$150,000
- Supervisor: Christopher Cochrane
- Co-Supervisor: Rohan Alexander
- SSHRC Partnership Grant–Stage 1

May 2024 - Sep 2024

- Project: "The Political Accountability, Transparency, and Representation Oversight Network"
- Funding: \$19,982
- Co-directors: Christopher Cochrane and Rohan Alexander
- SSHRC Partnership Development Grant

Mar 2024 - Mar 2026

- Project: "Transparency in Governance: Enhancing Data Integrity for Analyzing Conflicts of Interest and Lobbying in Canadian Politics"
- Funding: \$172,511
- Co-leads: Rohan Alexander and Zane Schwartz
- Co-applicants: Chris Cochrane, April Lindgren, Holly Ann Garnett, Randy Besco, Semra Sevi, Jacob Robbins-Kanter
- Open Philanthropy

Apr 2024 - Jun 2025

- Project: "Benchmarking LLM agents on real-world tasks: Reproducibility"
- Funding: \$174,112 USD (~\$235,342 CAD, as at 26 February 2024)
- Investigators: Abel Brodeur (PI), Alexandru Marcoci (co-PI), Rohan Alexander (co-PI)
- University of Toronto, Data Sciences Institute, Seed Funding for Methodologists Grant Feb 2024 Jul 2024
  - Project: "A methodological approach to automatically detect and improve issues in data science code with LLMs"
  - Funding: \$10,000
  - Investigator: Rohan Alexander (PI)
- University of Toronto, Data Sciences Institute, Computational & Quantitative Social Sciences Grant Jan 2024 Dec 2024

<sup>&</sup>lt;sup>2</sup>All amounts are Canadian dollars unless otherwise mentioned.

- Project: "Harmonizing Algorithms and Culture: Reconstructing Spotify's Danceability Metric to Explore the Algorithmic Rendering of Musical Style and Taste"
- Funding: \$10,000
- Investigator: Rohan Alexander (PI)
- SSHRC Partnership Engage Grant

Sep 2023 - Aug 2025

- Project: "Using machine learning to resolve data challenges to improve our understanding of Canadian lobbying activity"
- Funding: \$24,938
- PI: Rohan Alexander
- Partner organization: Investigative Journalism Foundation of Canada
- Mitacs Accelerate Jul 2023 Jun 2026
  - Project: "Follow the Money: Tracking the Influence of Lobbyists in Canada"
  - Partner organization: Investigative Journalism Foundation of Canada
  - Funding: \$426,666 (Mitacs: \$235K, IJF: \$192K)
  - Supervisor: Rohan Alexander
  - Co-Supervisor: Christopher Cochrane, Raymond Ng
- University of Toronto, Data Sciences Institute, Catalyst Grant

Feb 2023 - Jan 2024

- Project: "Providing data to improve representation by public officials"
- Funding: \$100,000
- Investigators: Peter Loewen (Named PI), Rohan Alexander (co-PI), Aya Mitani (co-PI), Elena Tuzhilina (co-PI)
- Canadian Statistical Sciences Institute (CANSSI) Ontario, Data Access Grant
   January 2023
  - Project: "Developing a large-scale lobbying and political donations dashboard to foster access to and interdisciplinary research on democratic accountability and political donations"
  - Funding: \$5,000
  - Co-PIs: Rohan Alexander, Chris Cochrane
- Australian Research Council (ARC), Discovery Projects

Jan 2023 - Dec 2025

- Project: "Australian Parliamentary Speech: How Deliberative? How Representative?"
- Funding: \$287,146 AUD
- Chief Investigators: Marija Taflaga, Keith Dowding
- Partner Investigators: Kenneth Benoit, Rohan Alexander
- University of Toronto, Data Sciences Institute, Data Access Grant

  Nov 2022 Nov 2023
  - Project: "Developing a large-scale lobbying and political donations dashboard to foster access to and interdisciplinary research on democratic accountability and political donations"
  - Funding: \$9,993
  - Co-PIs: Rohan Alexander, Chris Cochrane
- SSHRC Connection Grant

Oct 2022 - Sep 2024

- Project: "Follow the money: Mobilizing Canadian political donations data"
- Funding: \$50,000
- PI: Rohan Alexander
- Co-investigators: Jacob Robbins-Kanter, Wing Cheung Michael Wong, Zane Schwartz
- SSHRC Partnership Development Grant

Jun 2022 - Jun 2024

- Project: "Follow the Money: Donors, Donations, and Parties in Canadian Politics"
- Funding: \$169,855
- PI: Christopher Cochrane
- Co-applicant: Harold Jansen, Jacob Robbins-Kanter, Michael Pereira, Randy Besco, Rohan Alexander, Michael Wing-Cheung Wong, Zane Schwartz
- Mitacs Accelerate Jun 2022 Nov 2022
  - Project: "Follow the Money: Investigating Political Donations in Canada"
  - Partner organization: Investigative Journalism Foundation of Canada
  - Funding: \$48,000
  - Co-PIs: Rohan Alexander and April Lindgren.
- University of Toronto, Data Sciences Institute, SUDS May 2022 Aug 2022
  - Project: "Disparities in climate-induced health outcomes in the Greater Toronto Area"

- Funding: \$7,500
- Co-PIs: Rohan Alexander, Monica Alexander
- University of Toronto, School of Cities, Urban Challenge Grant Jan 2022 - Dec 2022
  - Project: "Disparities in climate-induced health outcomes in the Greater Toronto Area"
  - Funding: \$75,000
  - Co-PIs: Rohan Alexander, Monica Alexander, Karen Smith, Micah Hewer
- University of Toronto, Data Sciences Institute, Data Access Grant Dec 2021 - Apr 2022
  - Project: "Disparities in climate-induced health outcomes in the Greater Toronto Area"
  - Funding: \$10,000
  - Co-PIs: Rohan Alexander, Monica Alexander
- University of Toronto, Faculty of Information, SSHRC Institutional Grant Nov 2021 - Mar 2022
  - Project: "At what cost? Using Hansard data to understand the public policy that went 'missing' due to COVID-19"
  - Funding: \$3,500
  - PI: Rohan Alexander
- University of Toronto, Faculty of Arts & Science, PIEF

Sep 2021 - Mar 2022

- Project: "Developing the DoSS toolkit"
- Funding: \$10,000
- Co-PIs: Rohan Alexander, Samantha-Jo Caetano
- CANSSI Ontario, Workshop/Lecture (COWL) Program

Feb 2021

- Project: "Reproducibility of COVID-19 pre-prints"
- Funding: \$1,000
- PI: Rohan Alexander
- CANSSI Ontario Multidisciplinary Doctoral (Mdoc) training program

Sep 2021 - Sep 2025

- Funding: \$10,000 annually for five years
- Co-PIs: Rohan Alexander, Monica Alexander
- Mitacs Accelerate - Project: "Robust Taxonomy out of Receipt Item Labels"

Jun 2021 - Nov 2021

- Partner organization: Sensibill
- Funding: \$30,000
- Co-PIs: Rohan Alexander, Michael Guerzhoy
- University of Toronto, Faculty of Arts & Science, Pedagogical Innovation and Experimentation Fund Sep 2020 - Mar 2021
  - Project: "Developing an applied statistics toolkit"
  - Funding: \$15,000
  - Co-PIs: Rohan Alexander, Samantha-Jo Caetano
- University College London and University of Toronto, Strategic Partner Funds for AI collaborations Jul 2020 - Dec 2020
  - Project: "AI Governance: Building ethical frameworks to balance risk and innovation"
  - Funding: \$25,000
  - Co-PIs: Elizabeth Lomas, Kelly Lyons, Jenny Bunn, Rohan Alexander

# Teaching experience

# РнD

• Instructor, "INF3104: Data Science Foundations", Information Fall 2024 • Instructor, "INF3104: Data Science Foundations", Information Winter 2023

#### **Masters**

• Instructor, "INF2178: Experimental Design for Data Science", Information Winter 2021 • Instructor, "INF2178: Experimental Design for Data Science", Information Winter 2020

## Undergraduate

• Instructor, "STA304: Surveys, Sampling and Observational Data", Statistical Sciences Fall 2024

<ul> <li>Instructor, "STA302: Methods of Data Analysis I", Statistical Sciences</li> <li>Instructor, "INF312: Worlds Become Data", Information</li> <li>Instructor, "INF312: Worlds Become Data", Information</li> <li>Instructor, "INF312: Worlds Become Data", Information</li> <li>Instructor, "STA304: Surveys, Sampling and Observational Data", Statistica</li> <li>Instructor, "STA304: Surveys, Sampling and Observational Data", Statistica</li> </ul>	
Supervisory experience	
РнD	
<ul><li>Inessa De Angelis, Information</li><li>Ciara Zogheib, Information</li></ul>	Sep 2024 - current Sep 2022 - current
Masters	
<ul> <li>Xutong Jiang, Applied Computing (academic supervisor)         <ul> <li>Thesis: Automated Financial Modelling from Contractual Definitions</li> </ul> </li> <li>Michaela Drouillard, Information (academic supervisor)         <ul> <li>Research papers: Detecting Stylistic Variation in Pop Production and Re</li> </ul> </li> </ul>	Apr 2024 - Dec 2024  Sep 2023 - May 2024  chailding Danceahility: Can
crowdsourced metrics build reproducible audio features?  • Inessa De Angelis, Information (thesis supervisor)	Sep 2023 - May 2024
<ul> <li>Thesis: Torrential Twitter: Climate Change, Female Politicians, and Harassi</li> <li>First placement: PhD student, University of Toronto</li> </ul>	
<ul> <li>Lorena Almaraz De La Garza, Information (academic supervisor)</li> <li>Research paper: Machine Learning Inference for Demographic Features of Almost Print Placement: Senior Almachine Medical Steward Partner, Thomson Revision</li> </ul>	
<ul> <li>Ciara Zogheib, Information (thesis supervisor)</li> <li>Thesis: The "Paper and Pencil" Operations of Interdisciplinarity: Interdisciplinarity mation Practice</li> <li>First placement: PhD student, University of Toronto</li> </ul>	Sep 2021 - Jun 2022 plinary Integration as Infor-
<ul> <li>Elisa Du, Applied Computing (academic supervisor)</li> <li>Thesis: Enriched Understanding of Retail Receipts for Personalized Financia</li> <li>First placement: Machine Learning Engineer, Sensibill</li> </ul>	Mar 2021 - Dec 2021 al Insights
<ul> <li>Thomas William Rosenthal, Information (academic supervisor)</li> <li>Research paper: A Machine Learning Exploration into the Attributes that</li> <li>First placement: Data Scientist, Purpose Analytics</li> </ul>	Jan 2021 - Apr 2021 Define Single-Origin Coffee
Undergraduate	
<ul> <li>Connor Glossop, Engineering (senior thesis)</li> <li>Thesis: Analyzing Political Polarization in Canada's Parliament</li> <li>First placement: Data Scientist, Intact Insurance</li> </ul>	Sep 2022 - Apr 2023
<ul> <li>Callie Moore, Engineering (senior thesis)</li> <li>Thesis: Dyadic Representation in Canadian Parliament</li> <li>First placement: Data Analyst, Hospital for Sick Children</li> </ul>	Sep 2021 - Apr 2022
<ul> <li>Jeremy Hunt, Engineering (senior thesis)</li> <li>Thesis: Study of Software Tool Usage in Academics</li> </ul>	Sep 2020 - Apr 2021
Service	
Professional societies	
• President Data Science and Analytics Scation Statistical Society of Canada	Indaga Ingas

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• President, Data Science and Analytics Section, Statistical Society of Canada Jul 2024 - Jun 2025 • President-elect, Data Science and Analytics Section, Statistical Society of Canada Jul 2023 - Jun 2024

# Editorial

• Associate Editor, Journal of Statistics and Data Science Education

Summer 2021 - current

#### REFEREEING

- 2024: Journal of Statistics and Data Science Education (x1).
- 2023: Journal of Statistics and Data Science Education (x3); Social Sciences and Humanities Research Council of Canada; Archival Science; Harvard Data Science Review (x2); Demographic Research; PLOS Computational Biology; Canadian Journal of Political Science; Mitacs Accelerate.
- 2022: Chapman and Hall/CRC; Journal of Statistics and Data Science Education (x3); Political Analysis; Records Management Journal.
- 2021: Chapman and Hall/CRC (x3); Journal of Statistics and Data Science Education (x2).
- 2020: Canadian Journal of Political Science (x2); Political Analysis; Harvard Data Science Review; The Economic Record.

#### Outreach

Co-organizer, Toronto Data Workshop	Sep 2019 - current
<ul> <li>Moderator, Book Talk: "Digital Dreams Have Become Nightmares: What We Must Do", I</li> </ul>	J of T Department
of Computer Science and the Schwartz Reisman Institute for Technology and Soci	ety 10 Sep 2024
• Presenter, Adventures In Science Mentorship Program, U of T Faculty of Medicine	20 Mar 2024
Organizer, Florence Nightingale Day	2 Mar 2024
• Presenter, Generative AI's Issues and Opportunities, St Andrew's "Heart of the City"	27 Sep 2023
• Presenter, Data Science in Action Summer High School Camp, Harvard Biostatistics	19 Jul 2023
<ul> <li>Organizer, 1st Colloquium on Applications of Large Language Models</li> </ul>	11 Apr 2023
• Guest lecture, Climate justice and data science, "INF1322H: Communities and Values	s" 7 Mar 2023
<ul> <li>Organizer, 3rd Toronto Conference on Reproducibility</li> </ul>	23 Feb 2023
• Local host, Toronto Replication Games	22 Feb 2023
• Presenter, Adventures In Science Mentorship Program, U of T Faculty of Medicine	16 Feb 2023
Organizer, Florence Nightingale Day	18 Feb 2023
<ul> <li>Organizer, CANSSI Ontario Statistical Software Conference</li> </ul>	10 Nov 2022
Organizer, Florence Nightingale Day	9 Apr 2022
Organizer, 2nd Toronto Workshop on Reproducibility	23-25 Feb 2022
• Presenter, Data Science in Action Summer High School Camp, Harvard Biostatistics	7 Jul 2021
<ul> <li>Organizer, 1st Toronto Workshop on Reproducibility</li> </ul>	25-26 Feb 2021
• Co-organizer, MRP Working Group Ja	n 2020 - Nov 2021

#### DEPARTMENTAL AND UNIVERSITY COMMITTEES

• Advisor, Statistical Sciences PhD Student Research Day

• Co-organizer, Statistical Sciences PhD Practice Job Talk Day

<ul> <li>Member, Faculty Advisory Council, School of Cities</li> <li>Member, Data Sciences Speaker Series Committee, Data Sciences Institute</li> <li>Member, Graduate Committee, Statistical Sciences</li> <li>Coordinator, Applied Research and Education Seminar Series, Statistical Sciences</li> </ul>	August 2024 - current Mar 2023 - current July 2020 - current nces Jul 2022 - June	
Member, Undergraduate Advisory Group, Faculty of Information	July 2023 - June 2024	
• Member, Search Committee, ISD/HCDS Assistant Professor, Faculty of Information Aug 2023 - Apr		
2024	0 1	
Co-organizer, Statistical Sciences PhD Practice Job Talk Day	14 Dec 2023	
<ul> <li>Member, BI Recruitment and Admission Committee, Information</li> </ul>	Jul 2021 - Jun 2023	
<ul> <li>Member, Advisory Committee, Dean Search, Faculty of Information</li> </ul>	Nov 2022 - May 2023	
Co-organizer, Statistical Sciences PhD Practice Job Talk Day	12 Dec 2022	
<ul> <li>Chair, Data Sciences Speaker Series Committee, Data Sciences Institute</li> </ul>	Mar 2022 - Mar 2023	
• Member, Search Committee, Dalla Lana School of Public Health, Assistant Professor—Data Science		
Methods for Population Health and Health Systems	Jul 2022 - Mar 2023	
• Member, Faculty of Arts and Sciences Computation and Data Science Education Working Group Sep		
2021 - Jul 2022		
• Member, Applied Research and Education Seminar Series, Statistical Sciences	Jul 2020 - Jun 2022	

25 May 2022

17 Dec 2021

• Member, U of T Library Technical Skills Outreach Project

- Jul 2021 Jun 2022
- Member, Search Committee, Information, HCDS Teaching Stream Assistant Professor, Nov 2021 -Apr 2022
- Member, Search Committee, Information, Learning Hub Director and Teaching Stream Assistant Professor
   Nov 2020 - Apr 2020
- Member, Awards Committee, Information

Jul 2020 - Nov 2020

#### THESIS COMMITTEES

• Member, Criminology, PhD Thesis Committee, Jamie Duncan

Jan 2023 - current

- Title: *The border as a platform*
- Member, Information, PhD Thesis Committee, Mirai Gendi

Jun 2022 - current

- Title: Data science and process mining with application to digital forensics

#### **EXAM COMMITTEES**

Chair, Information, Masters Final Oral Examination, Shucen Lu	3 September 2024
• Member, Information, PhD Qualifying Exam Committee, Eshta Bhardwaj	Fall 2023 - Winter 2024
Member, Information, PhD Qualifying Exam Committee, Christina Wei	Fall 2023 - Winter 2024
• Examiner, Statistical Sciences, PhD Applied Research Comprehensive, Fred S	Song Fall 2023
• Chair, School of Graduate Studies, Final Oral Examination, Amanda Brijmoh	nan 30 Aug 2023
• Member, Statistical Sciences, PhD Final Oral Examination, Blair Bilodeau	14 Apr 2023
• Chair, Statistical Sciences, PhD Oral Exam Committee, Michaël Lalancette	14 Jul 2022
<ul> <li>Second Reader, Information, MI Thesis Defense, June Lim</li> </ul>	9 Sep 2021
- Title: Gendered Voices in Japanese Popular Music: A Data-Driven Analysis	
<ul> <li>Member, Statistical Sciences, PhD Oral Exam Committee, Alex Stringer</li> </ul>	27 Apr 2021
• Member, Statistical Sciences, PhD Oral Exam Committee, Arvind Shrivats	12 Feb 2021
<ul> <li>Member, Statistical Sciences, PhD Oral Exam Committee, Zhen Qin</li> </ul>	12 Jan 2021

# **Presentations**

- On Florence Nightingale Day
  - 6 Aug 2024, Chair, Joint Statistical Meetings (JSM), Portland Oregon.
- Trustworthy Data Science and Self-Reported LLM Usage
  - 4 Aug 2024, Joint Statistical Meetings (JSM), Portland Oregon.
- Reproducibility and code
  - 3 Jun 2024, Statistical Society of Canada (SSC), Annual Meeting, Newfoundland.
- Using LLMs to improve the trustworthiness of data science
  - 8 May 2024, Theory of Data Science Retreat, (online).
- AI and Data Science Education
  - 6 May 2024, Panelist, Data Science Leadership Summit, Atlanta.
- Automated testing of data science code with LLMs
  - 1 May 2024, STATSTRO Workshop, Toronto.
- Fixing Social Science by Integrating AI
  - 26 April 2024, SRI Research Exchange & Social, Toronto
- Improving Reproducibility in Quantitative Social Sciences: Establishing a Simulation-Based Workflow Enhanced with Large Language Models
  - 6 March 2024, Schwartz Reisman Institute for Technology and Society, Toronto.
- Evaluating the Decency and Consistency of Data Validation Tests Generated by LLMs
  - 7 December 2023, Australian Society for Quantitative Political Science, Brisbane.
  - 28 November 2023, Department of Statistical Sciences, Brown bag, Toronto.
  - 7 November 2023, Department of Mathematics & Statistics, University of Guelph.
- Integrating Large Language Models (LLMs) into the Data Science Workflow
  - 27 October 2023, Statistical Computing and Visualization (SCV) Committee, Statistics Society of Australia, (online).
- From teaching to practice: Insights from the Toronto Reproducibility Conferences

- 8 Aug 2023, Joint Statistical Meetings (JSM), Toronto.
- The Making of a Nation: Who Voted for Australian Federation?
  - 23 Jun 2023, Australia before Federation, Centre for Economic History, Canberra.
- *Testing, testing, is this thing right?* 
  - 27 Jan 2023, Quantitative Methods Cluster, University of Toronto.
  - 30 Nov 2022, FCT Abuja, Nigeria, UseR Group, (online).
  - 9 Nov 2022, Workshop in Computational & Quantitative Social Sciences, Toronto.
- The growing importance of reproducibility and responsible workflow in the data science and statistics curriculum
  - 13 Dec 2022, Panelist, CAUSE/JSDSE Webinar Series (online).
- Reproducible workflows
  - 2 Nov 2022, Biostatistics seminar series, Centre for Outcomes Research, McGill University Health Centre – Research Institute (online).
- Rethinking data science
  - 6 Oct 2022, Toronto Data Workshop, Toronto.
- On the role of reproducibility in data science
  - 4 Aug 2022, Stanford Data Science (online).
- Integrating reproducibility into undergraduate data science teaching
  - 14 Jul 2022, Australasian Teaching Economics Conference, (online).
  - 4 Jun 2022, Canadian Economics Association Conference, Carleton University, Ottawa.
- On the double burden of disadvantage in data science
  - 17 Jun 2022, We All Count, Talking Data Equity (online).
- Reproducible Data Science Workflows in R
  - 11 Jan 2022, Accra R User Ghana R Conference (online)
- What data science can learn from the James Webb Space Telescope
  - 17 Dec 2021, University of Toronto Statistics and MachIne LEarning (SMILE) Journal Club (online).
- On the privilege of turning our world into data
  - 16 Dec 2021, Young Irish Statisticians (online).
- A super opinionated talk about data science, APIs, and grad school applications
  - 18 Nov 2021, University of Toronto, Undergraduate Statistical Sciences Union Workshop (online).
- Remarks on data science
  - 19 Oct 2021, University of Toronto, Trinity College High Table (online).
- Introduction to Andrew Gelman
  - 17 Sep 2021, University of Toronto, Data Sciences Institute launch (online).
- Introduction to R
  - 22 Dec 2020, University of Toronto, Global Society for Genetics and Genome Biology (online).
- Choosing the optimal set of co-variates to satisfy competing priorities in multi-level regression with poststratification
  - 6 May 2020, MRP Reading Group (online).
- Forecasting Parliamentary Elections
  - 10 Dec 2019, Monash University, Department of Econometrics & Business Statistics, Melbourne.
  - 9 Dec 2019, Australian Society for Quantitative Political Science Conference, Melbourne.
  - 2 Dec 2019, Australian National University, Cake for Comments, Canberra.
  - 20 Nov 2019, POP Politics Workshop, Canberra.
  - 17 Oct 2018, University of Toronto, Political Behaviour Group, Toronto.
- A Word-Count Based Classifier of Politicians in the Australian Federal Parliament (1901–2018)
  - 4 Sep 2019, European Consortium for Political Research, General Conference, Wroclaw.
  - 22 Jun 2019, European Political Science Association, Annual Conference, Belfast.
  - 18 Jun 2019, Quantitative Text Analysis Workshop, Dublin.
- The Effect of Elections and Prime Ministers on Discussion in the Australian Federal Parliament (1901—2018)
  - 11 Jan 2019, Political Methodology Specialist Group, Annual Conference, Warwick.
  - 11 Dec 2018, Max Planck Institute for Demographic Research, Rostock.

- 22 Nov 2018, University of Toronto, Political Behaviour Group, Toronto.
- 25 Oct 2018, Australian National University, Research School of Economics, Canberra.
- 25 Oct 2018, Parliamentary Library, Parliament of Australia, Canberra.
- 24 Oct 2018, Australian National University, School of Politics and International Relations, Canberra.
- Exploring Australia's Hansard (1901–2017)
  - (Poster) 7-9 Sep, 2018 Economic History Association Meeting, Montreal.
- A Surnames-Based Analysis of Tasmanian Social Mobility (1803–2015)

  - 20 May 2016, UC Berkeley, Economic History Lunch, Berkeley.
    2 May 2016, Australian National University, Research School of Economics, Canberra.