

Rohan Alexander

Assistant Professor, Information and Statistical Sciences, University of Toronto

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Academic appointments

- Assistant Professor, Information & Statistical Sciences, University of Toronto July 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).
- Assistant Director, Canadian Statistical Sciences Institute (CANSSI) Ontario September 2021 - *Current*
- Senior Fellow, Massey College September 2021 - *Current*
- Academic Lead, Short courses, Data Sciences Institute July 2021 - *Current*
- Faculty Affiliate, Schwartz Reisman Institute for Technology and Society August 2020 - *Current*
- Co-lead, Data Sciences Institute Thematic Program in Reproducibility November 2021 - June 2023
- Post-doctoral Fellow, Information, supervised by Kelly Lyons July 2019 - July 2020

Education

- PhD (Economics), Australian National University February 2015 - December 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 February 2012 - November 2012
- B. Economics, University of Queensland February 2004 - November 2008

Book

- Alexander, Rohan, (forthcoming) *Telling Stories with Data*, Chapman and Hall/CRC.

Edited book

- Kennedy, Lauren, Rohan Alexander, and Andrew Gelman, (editors), *Multilevel Regression and Post-stratification: A Practical Guide and New Developments*, (accepted by Cambridge University Press in July 2021, expected publication in 2024).

Peer-reviewed journal articles

- 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 proceedings¹

- 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*.

¹My work is interdisciplinary and there are different norms for publication in different disciplines. I should be evaluated primarily as a social scientist (i.e. on journal articles and books), and items in this list—despite being a “conference proceeding”—are comparable to a journal article in social sciences. The only journal article based on alphabetical surnames is Alexander and Ward, 2018, the others reflect the typical senior author-last

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>.

Pre-prints

- Katz, Lindsay, and Rohan Alexander, 2023, 'Digitization of the Australian Parliamentary Debates, 1998-2022', *arXiv*, 6 April, <https://arxiv.org/pdf/2304.04561> (R&R at *Scientific Data*).
- Collins, Annie, and Rohan Alexander, 2022, 'History of MRP', in Kennedy, Lauren, Rohan Alexander, and Andrew Gelman, (editors), *Multilevel Regression and Poststratification: A Practical Guide and New Developments*.
- Chiu, Ke-Li, Annie Collins, and Rohan Alexander, 2022, 'Detecting Hate Speech with GPT-3', *arXiv*, 24 March, <https://arxiv.org/abs/2103.12407>.
- 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/>.

Software

- 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

- Data Sciences Institute (DSI) Catalyst Grant February 2023 - January 2024
 - \$100,000 for 'Providing data to improve representation by public officials'.
 - Investigators: Peter Loewen (Named PI), Rohan Alexander (co-PI), Aya Mitani (co-PI), Elena Tuzhilina (co-PI).
- CANSSI Ontario Data Access Grant January 2023
 - \$5,000 to purchase data in support 'Developing a large-scale lobbying and political donations dashboard to foster access to and interdisciplinary research on democratic accountability and political donations'.
 - Co-PIs: Rohan Alexander and Chris Cochrane.
- Australian Research Council Discovery Projects January 2023 - December 2025
 - \$287,146 for 'Australian Parliamentary Speech: How Deliberative? How Representative?'
 - Investigators: Marija Taflaga (Chief Investigator), Keith Dowding (Chief Investigator), Kenneth Benoit (Partner Investigator), Rohan Alexander (Partner Investigator).
- U of T Data Sciences Institute Data Access Grant November 2022 - November 2023
 - \$9,993 to purchase data in support of the project 'Developing a large-scale lobbying and political donations dashboard to foster access to and interdisciplinary research on democratic accountability and political donations'.
 - Co-PIs: Rohan Alexander and Chris Cochrane.

- SSHRC Connection Grant October 2022 - September 2024
 - \$50,000 on the project ‘Follow the money: Mobilizing Canadian political donations data’.
 - PI: Rohan Alexander.
 - Co-investigators: Jacob Robbins-Kanter, Wing Cheung Michael Wong, Zane Schwartz.
- SSHRC Partnership Development Grant June 2022 - June 2024
 - \$169,855 on the project ‘Follow the Money: Donors, Donations, and Parties in Canadian Politics’.
 - PI: Christopher Cochrane.
 - Co-applicant: Harold Jansen, Jacob Robbins-Kanter, Michael Pereira, Randy Besco, Rohan Alexander, Michael Wing-Cheung Wong, and Zane Schwartz.
- Mitacs Accelerate with Investigative Journalism Foundation of Canada June 2022 - November 2022
 - \$48,000 to support an intern associated with ‘Follow the Money: Investigating Political Donations in Canada’.
 - Co-PIs: Rohan Alexander and April Lindgren.
- U of T Data Sciences Institute Summer Undergraduate Data Science May 2022 - August 2022
 - \$7,500 to support an undergraduate over summer on the project ‘Disparities in climate-induced health outcomes in the Greater Toronto Area’.
 - Co-PIs: Rohan Alexander and Monica Alexander.
- U of T School of Cities Urban Challenge Grant January 2022 - December 2022
 - \$75,000 toward RAs and expenses associated with the project ‘Disparities in climate-induced health outcomes in the Greater Toronto Area’.
 - Co-PIs: Rohan Alexander, Monica Alexander, Karen Smith, and Micah Hower.
- U of T Data Sciences Institute Data Access Grant December 2021 - April 2022
 - \$10,000 to purchase ICES data in support of the project ‘Disparities in climate-induced health outcomes in the Greater Toronto Area’.
 - Co-PIs: Rohan Alexander and Monica Alexander.
- U of T Faculty of Information SSHRC Institutional Grant November 2021 - March 2022
 - \$3,500 to support an RA on the project ‘At what cost? Using Hansard data to understand the public policy that went ‘missing’ due to COVID-19’.
 - PI: Rohan Alexander.
- U of T Faculty of Arts & Science Pedagogical Innovation and Experimentation Fund September 2021 - March 2022
 - \$10,000 to continue developing the DoSS toolkit.
 - Co-PIs: Rohan Alexander, and Samantha-Jo Caetano.
- CANSSI Ontario Workshop/Lecture (COWL) Program February 2021
 - \$1,000 to support undergraduate research.
 - PI: Rohan Alexander.
- CANSSI Ontario Multidisciplinary Doctoral (Mdoc) training program September 2021 - September 2025
 - \$10,000 annually for five years to support a PhD student.
 - Co-PIs: Rohan Alexander, and Monica Alexander.
- Mitacs Accelerate with Sensibill June 2021 - November 2021
 - \$30,000 to support an intern associated with ‘Robust Taxonomy out of Receipt Item Labels’
 - Co-PIs: Rohan Alexander and Michael Guerzhoy.
- U of T Faculty of Arts & Science Pedagogical Innovation and Experimentation Fund September 2020 - March 2021.
 - \$15,000 to develop an applied statistics toolkit.
 - Co-PIs: Rohan Alexander, and Samantha-Jo Caetano.
- UCL & U of T Strategic Partner Funds for AI collaborations July 2020 - December 2020
 - \$25,000 for ‘AI Governance: Building ethical frameworks to balance risk and innovation’
 - Co-PIs: Elizabeth Lomas, Kelly Lyons, Jenny Bunn, and Rohan Alexander.

Teaching experience

PHD

- 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

- (*Upcoming*) Instructor, 'STA302: Methods of Data Analysis I', Statistical Sciences Winter 2024
- (*Upcoming*) Instructor, 'INF312: Worlds Become Data', Information Winter 2024
- Instructor, 'INF312: Worlds Become Data', Information Winter 2023
- Instructor, 'INF312: Worlds Become Data', Information Winter 2022
- Instructor, 'STA304: Surveys, Sampling and Observational Data', Statistical Sciences Winter 2022
- Instructor, 'STA304: Surveys, Sampling and Observational Data', Statistical Sciences Fall 2020

Supervisory experience

PHD

- Ciara Zogheib, Information September 2022 - *Current*

MASTERS

- Lorena Almaraz De La Garza, Information (academic supervisor) June 2022 - September 2022
 - Research paper: *Machine Learning Inference for Demographic Features of Political Donors*
 - First placement: Senior AI/ML Model Steward Partner, Thomson Reuters
- Ciara Zogheib, Information (thesis supervisor) September 2021 - June 2022
 - Thesis: *The 'Paper and Pencil' Operations of Interdisciplinarity: Interdisciplinary Integration as Information Practice*
 - First placement: PhD student, University of Toronto
- Elisa Du, Applied Computing (academic supervisor) March 2021 - December 2021
 - Thesis: *Enriched Understanding of Retail Receipts for Personalized Financial Insights*
 - First placement: Machine Learning Engineer, Sensibill
- Thomas William Rosenthal, Information (academic supervisor) January 2021 - April 2021
 - Research paper: *A Machine Learning Exploration into the Attributes that Define Single-Origin Coffee*
 - First placement: Data Scientist, Purpose Analytics

UNDERGRADUATE

- Connor Glossop, Engineering (senior thesis) September 2022 - April 2023
 - Thesis: *Analyzing Political Polarization in Canada's Parliament*
 - First placement: Data Scientist, Intact Insurance
- Callie Moore, Engineering (senior thesis) September 2021 - April 2022
 - Thesis: *Dyadic Representation in Canadian Parliament*
 - First placement: Data Analyst, Hospital for Sick Children
- Jeremy Hunt, Engineering (senior thesis) September 2020 - April 2021
 - Thesis: *Study of Software Tool Usage in Academics*

Service

PROFESSIONAL SOCIETIES

- President-elect, *Data Science and Analytics Section, Statistical Society of Canada*, July 2023 - June 2024

EDITORIAL

- Associate Editor, *Journal of Statistics and Data Science Education* Summer 2021 - *Current*

REFEREING

- 2023: *Journal of Statistics and Data Science Education* (x2); *Social Sciences and Humanities Research Council of Canada*; *Archival Science*; *Harvard Data Science Review*.
- 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* September 2019 - Current
- Organizer, *1st Colloquium on Applications of Large Language Models* 11 April 2023
- Organizer, *3rd Toronto Conference on Reproducibility* 23 February 2023
- Local host, *Toronto Replication Games* 22 February 2023
- Organizer, *Florence Nightingale Day* 18 February 2023
- Organizer, *CANSSI Ontario Statistical Software Conference* 10 November 2022
- Organizer, *Florence Nightingale Day* 9 April 2022
- Organizer, *2nd Toronto Workshop on Reproducibility* 23-25 February 2022
- Organizer, *1st Toronto Workshop on Reproducibility* 25-26 February 2021
- Co-organizer, *MRP Working Group* January 2020 - November 2021

DEPARTMENTAL AND UNIVERSITY COMMITTEES

- Member, Data Sciences Speaker Series Selection Committee, Data Sciences Institute March 2023 - Current
- Chair, Applied Research and Education Seminar Series, Statistical Sciences July 2022 - Current
- Member, BI Recruitment and Admission Committee, Information July 2021 - Current
- Member, Graduate Committee, Statistical Sciences July 2020 - Current
- Member, Advisory Committee, Dean Search, Faculty of Information November 2022 - May 2023
- Co-organizer, *Statistical Sciences PhD Practice Job Talk Day* 12 December 2022
- Chair, Data Sciences Speaker Series Selection Committee, Data Sciences Institute March 2022 - March 2023
- Member, Search Committee, Dalla Lana School of Public Health, Assistant Professor—Data Science Methods for Population Health and Health Systems July 2022 - March 2023
- Member, Faculty of Arts and Sciences Computation and Data Science Education Working Group September 2021 - July 2022
- Member, Applied Research and Education Seminar Series, Statistical Sciences July 2020 - June 2022
- Advisor, *Statistical Sciences PhD Student Research Day* 25 May 2022
- Co-organizer, *Statistical Sciences PhD Practice Job Talk Day* 17 December 2021
- Member, U of T Library Technical Skills Outreach Project July 2021 - June 2022
- Member, Search Committee, Information, HCDS Teaching Stream Assistant Professor, November 2021 - April 2022
- Member, Search Committee, Information, Learning Hub Director and Teaching Stream Assistant Professor November 2020 - April 2020
- Member, Awards Committee, Information July 2020 - November 2020

THESIS COMMITTEES

- Member, Criminology, PhD Thesis Committee, Jamie Duncan January 2023 - Current
– Title: *The border as a platform*
- Member, Information, PhD Thesis Committee, Mirai Gendi June 2022 - Current
– Title: *Data science and process mining with application to digital forensics*

EXAM COMMITTEES

- Examiner, Statistical Sciences, PhD Applied Research Comprehensive, Fred Song, Summer/Fall 2023

- Member, Statistical Sciences, PhD Final Oral Examination, Blair Bilodeau, 14 April 2023
- Chair, Statistical Sciences, PhD Oral Exam Committee, Michaël Lalancette 14 July 2022
- Second Reader, Information, MI Thesis Defense, June Lim 9 September 2021
 - Title: *Gendered Voices in Japanese Popular Music: A Data-Driven Analysis*
- Member, Statistical Sciences, PhD Oral Exam Committee, Alex Stringer 27 April 2021
- Member, Statistical Sciences, PhD Oral Exam Committee, Arvind Shrivats 12 February 2021
- Member, Statistical Sciences, PhD Oral Exam Committee, Zhen Qin 12 January 2021

Presentations

- *From teaching to practice: Insights from the Toronto Reproducibility Conferences*
 - (Upcoming) 5-10 August 2023, Joint Statistical Meetings (JSM), Toronto.
- *The Making of a Nation: Who Voted for Australian Federation?*
 - (Upcoming) 23 June 2023, Australia before Federation, Centre for Economic History, Canberra.
- *Climate justice and credible data science*
 - 7 March 2023, U of T, Faculty of Information, Guest lecture, “Communities and Values”.
- *Worlds become data*
 - 16 February 2023, U of T, Faculty of Medicine, Adventures In Science Mentorship Program.
- *Testing, testing, is this thing right?*
 - 27 January 2023, Quantitative Methods Cluster, University of Toronto.
 - 30 November 2022, FCT Abuja, Nigeria, UseR Group, (online).
 - 9 November 2022, Workshop in Computational & Quantitative Social Sciences, Toronto.
- *The growing importance of reproducibility and responsible workflow in the data science and statistics curriculum*
 - 13 December 2022, Panelist, CAUSE/JSDSE Webinar Series (online).
- *Reproducible workflows*
 - 2 November 2022, Biostatistics seminar series, Centre for Outcomes Research, McGill University Health Centre – Research Institute (online).
- *Rethinking data science*
 - 6 October 2022, Toronto Data Workshop, Toronto.
- *On the role of reproducibility in data science*
 - 4 August 2022, Stanford Data Science (online).
- *Integrating reproducibility into undergraduate data science teaching*
 - 14 July 2022, Australasian Teaching Economics Conference, (online).
 - 4 June 2022, Canadian Economics Association Conference, Carleton University, Ottawa.
- *On the double burden of disadvantage in data science*
 - 17 June 2022, We All Count, Talking Data Equity (online).
- *Reproducible Data Science Workflows in R*
 - 11 January 2022, Accra R User Ghana R Conference (online)
- *What data science can learn from the James Webb Space Telescope*
 - 17 December 2021, University of Toronto Statistics and Machine Learning (SMILE) Journal Club (online).
- *On the privilege of turning our world into data*
 - 16 December 2021, Young Irish Statisticians (online).
- *A super opinionated talk about data science, APIs, and grad school applications*
 - 18 November 2021, University of Toronto, Undergraduate Statistical Sciences Union Workshop (online).
- *Remarks on data science*
 - 19 October 2021, University of Toronto, Trinity College High Table (online).
- *Introduction to Andrew Gelman*
 - 17 September 2021, University of Toronto, Data Sciences Institute launch (online).
- *Introduction to R*
 - 22 December 2020, University of Toronto, Global Society for Genetics and Genome Biology (online).
- *Turning Our World Into Data*
 - 7 July 2021, Harvard Biostatistics Data Science in Action Summer Camp (online).

- *Choosing the optimal set of co-variables to satisfy competing priorities in multi-level regression with post-stratification*
 - 6 May 2020, MRP Reading Group (online).
- *Forecasting Parliamentary Elections*
 - 10 December 2019, Monash University, Department of Econometrics & Business Statistics, Melbourne.
 - 9 December 2019, Australian Society for Quantitative Political Science Conference, Melbourne.
 - 2 December 2019, Australian National University, Cake for Comments, Canberra.
 - 20 November 2019, POP Politics Workshop, Canberra.
 - 17 October 2018, University of Toronto, Political Behaviour Group, Toronto.
- *A Word-Count Based Classifier of Politicians in the Australian Federal Parliament (1901–2018)*
 - 4 September 2019, European Consortium for Political Research, General Conference, Wroclaw.
 - 22 June 2019, European Political Science Association, Annual Conference, Belfast.
 - 18 June 2019, Quantitative Text Analysis Workshop, Dublin.
- *The Effect of Elections and Prime Ministers on Discussion in the Australian Federal Parliament (1901–2018)*
 - 11 January 2019, Political Methodology Specialist Group, Annual Conference, Warwick.
 - 11 December 2018, Max Planck Institute for Demographic Research, Rostock.
 - 22 November 2018, University of Toronto, Political Behaviour Group, Toronto.
 - 25 October 2018, Australian National University, Research School of Economics, Canberra.
 - 25 October 2018, Parliamentary Library, Parliament of Australia, Canberra.
 - 24 October 2018, Australian National University, School of Politics and International Relations, Canberra.
- *Exploring Australia's Hansard (1901–2017)*
 - (Poster) 7–9 September, 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.