

# Rohan Alexander

Assistant Professor, Information and Statistical Sciences, University of Toronto

Room 714, 140 St George St, Toronto, Ontario, M5S 3G6, Canada

✉ rohan.alexander@utoronto.ca    🌐 RohanAlexander    🐦 rohanalexander    🌐 rohanalexander.com

## 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, equivalent to 1 FTE.

COVID-19: From March to December 2020 I shared full-time childcare duties, equivalent to 0.5 FTE on average. From January 2021 to May 2021, and again from September to December 2021, I shared part-time childcare duties, equivalent to 0.25 FTE on average.

Co-lead, Data Sciences Institute Thematic Program in Reproducibility      November 2021 - *Current*

Assistant Director, Canadian Statistical Sciences Institute (CANSSI) Ontario      September 2021 - *Current*

Senior Fellow, Massey College      September 2021 - *Current*

Faculty Affiliate, Schwartz Reisman Institute      August 2020 - *Current*

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; Zach Ward.

M. Economics, Australian National University      February 2012 - November 2012

B. Economics, University of Queensland      February 2004 - November 2008

## Books

Alexander, Rohan, *Telling Stories with Data*, (accepted for publication by CRC Press in May 2021).

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

## Peer-reviewed journal articles

Collins, Annie, and Rohan Alexander, 2022, 'Reproducibility of COVID-19 pre-prints', *Scientometrics*, (accepted), <https://arxiv.org/abs/2107.10724>.

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.

## Pre-prints

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*.

Provides access to biographical and political data about Australian federal politicians who served between 1901 and 2021. Published on CRAN and downloaded 1,742 times as at 27 April 2022.

Hodgetts, Paul A., and Rohan Alexander, 2021, *cesR*.

Provides access to the Canadian Election Study Datasets. Published on CRAN and downloaded 1,585 times as at 27 April 2022.

Alexander, Rohan, and A Mahfouz, 2021, *heapsofpapers*.

Makes it easier to respectfully download papers, CSVs, websites, and similar. Published on CRAN and downloaded 2,804 times as at 27 April 2022.

## Grants

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 Hewer.

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.

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

(Upcoming) Instructor, 'Applied Statistics I', Information Winter 2023

(Upcoming) 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, 'INF2178: Experimental Design for Data Science', Information	Winter 2021
Instructor, 'STA304: Surveys, Sampling and Observational Data', Statistical Sciences	Fall 2020
Instructor, 'INF2178: Experimental Design for Data Science', Information	Winter 2020

## Supervisory experience

### PHD

Ciara Zogheib, Information	September 2022 - Current
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### MASTERS

Ciara Zogheib, Information (thesis supervisor)	September 2021 - June 2022
Title: <i>The 'Paper and Pencil' Operations of Interdisciplinarity: Interdisciplinary Integration as Information Practice</i>	
Elisa Du, Applied Computing (academic supervisor)	March 2021 - December 2021
Title: <i>Enriched Understanding of Retail Receipts for Personalized Financial Insights</i>	

### UNDERGRADUATE

Callie Moore, Engineering (senior thesis)	September 2021 - April 2022
Title: <i>Dyadic Representation in Canadian Parliament</i>	
Jeremy Hunt, Engineering (senior thesis)	September 2020 - April 2021
Title: <i>Study of Software Tool Usage in Academics</i>	

## Service

### OUTREACH

Co-organizer, <i>Toronto Data Workshop</i>	September 2019 - Current
Organizer, <i>Florence Nightingale Day</i>	9 April 2022
Promotes gender diversity in statistics and data science by providing high school students with teaching activities, mentoring sessions, and panel discussions with statisticians and data scientists.	
Organizer, <i>Toronto Workshop on Reproducibility</i>	25-26 February 2021 & 23-25 February 2022
Annual conference with three tracks: evaluating reproducibility, practices of reproducibility, and teaching reproducibility. Hosted online, and attracts global presenters and attendees.	
Co-organizer, <i>MRP Working Group</i>	January 2020 - November 2021

### COMMITTEES

Chair, Data Sciences Speaker Series Selection Committee, Data Sciences Institute	March 2022 - Current
Member, Faculty of Arts and Sciences Computation and Data Science Education Working Group	September 2021 - Current
Member, BI Recruitment and Admission Committee, Information	July 2021 - Current
Member, Graduate Committee, Statistical Sciences	July 2020 - Current
Member, Search Committee, Information, HCDS Teaching Stream Assistant Professor,	November 2021 - April 2022
Co-organiser, Applied Research and Education Seminar Series, Statistical Sciences	July 2020 - Current
Member, Search Committee, Information, Learning Hub Director and Teaching Stream Assistant Professor	November 2020 - April 2020
Member, Awards Committee, Information	July 2020 - November 2020

### DEPARTMENTAL MISCELLANEOUS

Advisor, <i>Statistical Sciences PhD Student Research Day</i>	25 May 2022
Co-organizer, <i>Statistical Sciences PhD Practice Job Talk Day</i>	17 December 2021

## EXAM AND THESIS COMMITTEES

Member, Information, PhD Thesis Committee, Mirai Gendi	January 2022 - Current
Title: <i>Data science and process mining with application to digital forensics</i>	
Second Reader, Information, MI Thesis Defense, June Lim	9 September 2021
Title: <i>Gendered Voices in Japanese Popular Music: A Data-Driven Analysis</i>	
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

## EDITORIAL SERVICE

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

2022: Journal of Statistics and Data Science Education (x1)  
2021: CRC Press (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.

## Presentations

*On the double burden of disadvantage in data science*  
(Upcoming) 17 June 2022, We All Count, Talking Data Equity (online).  
*Teaching reproducibility*  
(Upcoming) 4 June 2022, Canadian Economics Association Conference, Carleton University, Ottawa.  
*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.