

Tanya Whyte

DATA SCIENTIST · COMPUTATIONAL SOCIAL SCIENTIST

117 Marlow Ave, Toronto ON M4J3v2

(647) 880-0333 | ✉ twhyte2@gmail.com | 📄 <https://github.com/twhyte> | 🌐 <https://www.linkedin.com/in/twhyte2/>

Work Experience

University of Toronto

Toronto, ON

RESEARCH ASSISTANT

Sep 2014 - PRESENT

- Data scientist and web developer for Lipad Project (www.lipad.ca)
- Solo responsibility for full stack web development (HTML/CSS/Django/Python/Solr/PostgreSQL), deployment, and server administration (Apache/Linux) for web platform with >1000 monthly users.
- Update and maintain Lipad dataset via automation of web scraping, parsing, data linking and annotation, API integration, error correction, and data export tasks (Python/SQL).
- Develop data analysis code (specializing in text analytics and natural language processing) for statistical modeling of large political datasets for dissertation research and for Lipad team collaborations (Python/R/SQL).
- Deployment of data analysis jobs to AWS.

Higher Education Quality Council of Ontario

Toronto, ON

CONTRACT RESEARCHER

Sep 2015 - Sep 2016

- Analyzed topical trends in Canadian media coverage of postsecondary education policy issues employing supervised learning methods, sentiment analysis and topic modeling (Python/R).
- Authored a written report including visualizations and recommendations targeted at a nonspecialist audience.

University of Toronto

Toronto, ON

TEACHING ASSISTANT

Sep 2012 - Jul 2014

- Responsible for leading tutorials, grading, and answering student inquiries for 60 undergraduate students.

University of Toronto

Toronto, ON

RESEARCH ASSISTANT

Sep 2012 - Dec 2013

- Constructed political debate dataset on grain marketing policy and performed supervised text analysis (Excel, Python).
- Hired, trained, and directed a team of undergraduate research assistants to perform manual coding tasks.

University of Alberta

Edmonton, AB

RESEARCH ASSISTANT

Sep 2011 - Jul 2012

- Responsible for data entry, cleaning and processing for a historical digitization and data archiving project.

Publications

Davidson, Adrienne, Matthew Lesch, Maxime Heroulx-Legault, **Tanya Whyte**, Zain Asaf, Karol Czuba, and Alesha Porisky. 2017. Advancing the Study of Political Cleavages through Experimentation: Revisiting Regionalism and Redistributive Preferences in Canada. *Regional and Federal Studies* 27(2): 103-125

Beelen, Kaspar, Timothy Alberdingk Thijm, Christopher Cochrane, Kees Halvemaan, Graeme Hirst, Michael Kimmins, Sander Lijbrink, Maarten Marx, Nona Naderi, Ludovic Rheault, Roman Polyanovsky, **Tanya Whyte**. 2017. Digitization of the Canadian Parliamentary Debates. *Canadian Journal of Political Science* 50(3): 849-864.

Skogstad, Grace, and **Tanya Whyte**. 2015. Power, Authority Contests, and Policy Paradigm Change: Explaining Developments in the Grain Marketing Policy in Prairie Canada. *Canadian Journal of Political Science* 48(1): 79-100.

Education

University of Toronto

Toronto, ON

PHD, POLITICAL SCIENCE

Sep 2012 - Exp. Jun 2018

- SSHRC Doctoral Scholarship

University of Alberta

Edmonton, AB

MA, POLITICAL SCIENCE

Sep 2008 - Jun 2010

- SSHRC CGS Masters Scholarship

University of Alberta

Edmonton, AB

BA, POLITICAL SCIENCE

Sep 2004 - Jun 2008

- Roberta E. McKown Prize for Highest Graduating GPA
- F. T. Jenner Memorial Prize in Canadian Studies

Certificates

Oct 2017	Communicating Data Science Results	Coursera
Oct 2017	Data Structures	Coursera
Jul 2017	Algorithmic Toolbox	Coursera
Jul 2017	Practical Predictive Analytics: Models and Methods	Coursera
Apr 2017	Bayesian Statistics	Coursera
Jan 2017	Data Manipulation at Scale: Systems and Algorithms	Coursera
Aug 2015	Summer School in Experimental Social Science	CESS Oxford/Munk
Nov 2013	Computing for Data Analysis	Coursera

Other Projects

Oh, oh! Modeling Interruptions in the Canadian House of Commons, 1926-2015

Toronto, ON

WORKING PAPER

Jun 2014 - PRESENT

- Developed Markov Chain statistical model of interruption behaviour in the Canadian House of Commons.
- Article under review at *Journal of Legislative Studies*.

A Quantitative Model of Accountability in the Canadian House of Commons

Toronto, ON

DISSERTATION RESEARCH

Jun 2015 - PRESENT

- Transformed and annotated Lipad political dataset with additional metadata using web parsing and scraping
- Developed analytical model of accountability in political debate and trained and tested predictive textual model employing text2vec/doc2vec and topic models.

Hackathon: Understanding Euroscepticism Through the Lens of Big Data

Menaggio, Italy

INVITED PARTICIPANT

Dec 2017

- Worked with a team to develop a supervised text classifier for EU Parliamentary speeches and predict Euroscepticism scores for parties.

Free Alex Sadiqov Campaign

Toronto, ON

VOLUNTEER WEB DEVELOPER

Jun 2014 - Sep 2014

- Built and deployed custom online petition system in Wordpress.