Ari Decter-Frain

Email: agd75@cornell.edu   **GitHub**: aridf   **Website**: aridecterfrain.com

Phone: (607) 379-8380   **LinkedIn**: aridecterfrain   **Citizenship**: Canada

Research Interests	Computational demography, applied Bayesian statistics, elections and voting, political polarization, economic insecurity

Education

Cornell University   Ithaca, NY, US
PhD in Policy Analysis and Management   Aug 2019 – Present
Committee: D. Miller, M. Macy, M. Hall

London School of Economics   London, UK
MSc in Inequalities and Social Science   Aug 2016 – Dec 2017
Advisor: A. Reeves. *Rank: Distinction*

University of Winnipeg   Winnipeg, MB, CA
BA in Psychology   Sep 2012 – May 2016
2016 Valedictorian; *GPA: 4.42 / 4.50*

Honors and Awards

SSHRC Doctoral Fellowship	2021-2024
DSSG Fellowship (U. of Washington eScience Institute)	2020
First Year Graduate Fellowship (Cornell University)	2019
Hobhouse Memorial Prize for best overall performance (LSE)	2017
Undergraduate Research Award (U. of Winnipeg)	2014

Academic Papers

Comparing ecological inference approaches to measuring racially polarized
L. Collingwood, J. Burke, A. Decter-Frain, H. Murayama, P. Sachdeva, M. Barreto
Under review.

Small area population estimates from consumer data
A. Acolin, M. Hall, A. Decter-Frain.
In preparation.

Millions of co-purchases and reviews reveal the spread of polarization and lifestyle politics across online markets
A. Ruch, A. Decter-Frain, R. Batra, M. Macy.
In preparation.

Why and how do moralistic groups create heroes?
A. Decter-Frain, R. Vanstone, J. Frimer.
In Handbook of Heroism and Heroic Leadership, 2017

Impressive words: Linguistic predictors of public approval of U.S. Congress
A. Decter-Frain, J. Frimer.
Frontiers in Psychology: Personality and Social Psychology, 2016

Research Experience

Data Science for Social Good Fellow   May 2020 – Aug 2020
University of Washington eScience Institute
Developed eiCompare 3.0, an R package for quantifying minority vote dilution in US
elections, incorporating feedback from stakeholders at the ACLU, National Democratic
Redistricting Committee, and the UCLA Voting Rights Project.

Research Assistant   May 2020 – Sept 2020
Matthew Hall, Cornell University
Cleaned and analyzed a large digital trace dataset containing over 1 billion records.
Developed Bayesian statistical models for calibration and nowcasting in Stan.

Research Assistant   Oct 2014 – May 2016
University of Winnipeg Moral Psychology Lab

Teaching Experience

Teaching assistant, PAM (Cornell University)   Spring 2021
PAM 2070: Big Data for Big Policy Problems
Lead and prepare materials for weekly tutorials teaching introduction to R for statistics
and data science. Hold weekly office hours.

Teaching assistant, PAM (Cornell University)   Fall 2020
PAM 2060: Statistics for PAM Majors
Led and prepared materials weekly hands-on tutorials teaching introduction to Stata
for statistics. Held weekly office hours.
Average student rating: 4.5/5.

Industry Experience

Graphika Technologies, Inc.   New York, NY, US
Machine Learning Engineer   May 2021 - Nov 2021
Developed and modularized a stance detection model for use on Twitter, including
cross-validated feature selection and explainability. Developed a deep learning pipeline
for clustering heterogeneous data from multiple social media platforms.

Center for Migration Studies   New York, NY, US
Shiny Developer   Sept 2020 - Dec 2020
Developed a Shiny application for users to quickly access and download data on pop-
ulation levels of vulnerable migrants across the US.

Multi-Health Systems Technology R&D   Toronto, ON, CA
Product Manager   Oct 2018 - May 2019

Assumed ownership of a workplace mental health screening product. Supervised a team of two software developers and a data scientist to support distributors' API integration. Achieved a five-fold increase in unit sales.

Multi-Health Systems Innovation Hub   Toronto, ON, CA
Research Analyst   Summer 2020
Developed R-based products including: Minimum viable product of a custom assessment-building application, an algorithm to isolate the most predictive items in assessments, and a dynamic, automated PDF reporting system.

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<tr><td>Presentations and Posters</td><td>

Who moves during recessions? March 2022

Presenting at the 2021 APPAM Fall Research Conference session *Housing Shocks, Exposure, and Implications*

Small area population estimates from consumer data May 2021
with A. Acolin and M. Hall
Poster at the 2021 Population Association of America (PAA) Annual Meeting

eiCompare: Comparing BISG to CVAP Estimates in Racially Polarized Voting Analyses Nov 2020
with J. Burke, H. Murayama, and P. Sachdeva
Politics of Race, Immigration, and Ethnicity Consortium Nov 2020 Meeting

Agentic and communal rhetoric in the quest for political popularity June 2017
with J. Frimer
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Skills

Programming
Proficient in: R, Python, SQL, Stan
Familiar with: Stata, HTML, CSS

Languages
English (fluent), French (Conversational)