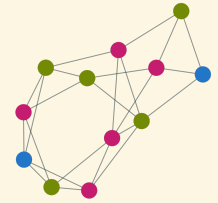


CONNOR GILROY

Computational social scientist & PhD candidate

Sociologist seeking roles in data science or quantitative social science. I have 7+ years of experience analyzing text, spatial, network, and survey data, with broad skills in statistics, programming, and written and visual communication of analytic insights. My dissertation research uses NLP methods and survey data to explain variations in expressions and experiences of community across digital and location-based contexts.



EMPLOYMENT

present
|
2015

University of Washington

Seattle, WA

Graduate Teaching Assistant & Instructor: Taught sections and courses including sociological theory, data and society (undergraduate); social statistics, data science and population processes, Bayesian statistics for the social sciences (graduate); digital demography and word embeddings for social sciences (workshops)

Graduate Research Assistant: Analyzed Twitter networks of US homeless care organizations; built a web crawler and a PostgreSQL database to collect and store text data from nonprofit and government webpages (with Zack Almquist). Built an agent-based network model of public opinion change (with Katherine Stovel)

summer
2022,
2021,
2020

Meta

Seattle, WA

Data Science Intern (2022): Analyzed feed engagement with reshared Facebook Groups content, presented insights to the Director of Data Science for Communities, built a data pipeline to create a new metric, reanalyzed a collection of experiments to quantify tradeoffs between types of content, and launched a new experiment to assess incremental value of reshared content (Communities Ecosystem team)

Quantitative User Experience Research Intern (2020, 2021): Designed and conducted two studies (log data analysis with random forest models, behaviorally-targeted followup survey) of factors driving initial participation in new online communities (2020, Community Creation team). Designed, fielded, and analyzed a complex stratified survey of job seeker needs and satisfaction; wrote a widely-referenced technical guide to creating inverse probability weights for nonresponse using an internal Python tool; evaluated quality of an external vendor's missing data imputation for a sensitive survey question (2021, Commerce Ecosystem team)

2020

The World Bank Group

Washington, DC

Consultant, Survey Data Analysis: Created statistical models and data visualizations of gender-based disparities in Central Asia; wrote reproducible R pipeline for updating reports with new waves of survey data

2015
|
2013

Epic Systems Corporation

Verona, WI

Quality Assurance: Automated and manual software testing for web APIs and enterprise healthcare software



EDUCATION

expected
2023

PhD, Sociology

University of Washington

Seattle, WA

Dissertation: "Expressions of Community: Understanding Variations in Community through LGBTQ Experiences."

2018

MA, Sociology

University of Washington

Seattle, WA

Thesis: "How Distinct is Gay Neighborhood Change? Patterns and Variation in Gayborhood Trajectories."

Distinguished Thesis Award in Social Sciences, 2019. Joined webscraped and geocoded gay bar data with Census data to statistically compare trajectories of change in gayborhoods to matched neighborhoods.

2013

BA, Biology and Geophysical Sciences

University of Chicago

Chicago, IL



SELECTED PUBLICATIONS

2021

Digital Traces of Sexualities: Understanding the Salience of Sexual Identity through Disclosure on Social Media

Gilroy, Connor and Ridhi Kashyap. *Socius* 7: 1-18. doi: 10.1177/23780231211029499

Compiled a dataset through the Facebook Marketing API, fit Bayesian loglinear models to the results, and used simulations from those models to produce visualizations of variations in sexual identity disclosure rates by age, gender, and relationship status. Funded by an NIH Big Data to Knowledge (BD2K) fellowship.

2019

Humans in the Loop: Incorporating Expert and Crowdsourced Knowledge for Predictions using Social Survey Data

Filippova, Anna, Connor Gilroy, Ridhi Kashyap, Antje Kirchner, Allison C. Morgan, Kivan Polimis, Adaner Usmani, and Tong Wang. *Socius* 5: 1-15. doi: 10.1177/2378023118820157. (corresponding author)

Fit regularized regression models to predict life outcomes from survey data, varying the coefficient penalties according to human-derived variable importance ranking from a wikisurvey. Managed the reproducibility of our code base and coordinated the project writeup. Funded by the Russell Sage Foundation Summer Institute in Computational Social Science.

CONTACT

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🐦 [@ccgilroy](https://twitter.com/ccgilroy)

in [ccgilroy](https://www.linkedin.com/company/ccgilroy)

📞 731-225-0001

SKILLS

Programming:

R, Python, SQL, Stan

Data science:

- **Data collection:** webscraping and crawling, geocoding, APIs (US Census, social media)
- **Databases:** Hive and PostgreSQL
- **Surveys:** stratified survey design and weighting
- **Statistical modeling:** GLMs, hierarchical models, regularized regression, random forests, Bayesian statistics
- **Text analysis:** topic modeling, word embeddings
- **Data visualization:** ggplot2, matplotlib, shiny

CSS workshops organized:

- SICSS-Seattle (2018)
- IUSSP training workshop on digital demography (Cape Town, 2017)
- Computational Demography Working Group (UW, 2018-2020)
- Word Embeddings for the Social Sciences (2021)
- Comparing Word Embedding Models (2021)

This resume was made with the R package [pagedown](#).

Last updated on 2023-01-04.