

Connor Gilroy

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Summary: Computational social scientist & PhD candidate, with 7+ years of experience analyzing text, spatial, network, and survey data. I have 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.

Skills: programming (R, Python, SQL, and Stan), data collection (webscraping and webcrawling, geocoding, APIs), databases (Hive, 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)

Employment

University of Washington. 2015 – present

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)

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)

Meta. summer 2020, 2021, 2022

Data Science Intern. 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 (2022, Communities Ecosystem team)

Quantitative User Experience Research Intern. 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)

The World Bank Group. 2020

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

Epic Systems Corporation. 2013 – 2015

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

Education

2023 (expected). PhD, Sociology, University of Washington

2018. MA, Sociology. University of Washington

2013. BA, Biology and Geophysical Sciences, University of Chicago

Selected Publications

Gilroy, Connor and Ridhi Kashyap. 2021. "Digital Traces of Sexualities: Understanding the Salience of Sexual Identity through Disclosure on Social Media." *Socius* 7: 1–18. doi: [10.1177/23780231211029499](https://doi.org/10.1177/23780231211029499)

Filippova, Anna, **Connor Gilroy**, Ridhi Kashyap, Antje Kirchner, Allison C. Morgan, Kivan Polimis, Adaner Usmani, and Tong Wang. 2019. "Humans in the Loop: Incorporating Expert and Crowdsourced Knowledge for Predictions using Social Survey Data." *Socius* 5: 1–15. doi: [10.1177/2378023118820157](https://doi.org/10.1177/2378023118820157). (corresponding author; responsible for ML modeling and computational reproducibility)