CONNOR GILROY

Computational sociologist & PhD candidate



EDUCATION



PhD, Sociology

University of Washington

Seattle, WA

Dissertation: "Expressions of Community: Understanding Variations in Community through LGBTQ Experiences." (proposal defended June 2022)

Committee: Kate Stovel (chair), Jelani Ince, Kyle Crowder, Mako Hill

Comprehensive Exam: "Community: Origins, Processes, and Consequences." Passed with distinction (June 2019) | reading list

Certificate: Special Concentration in Social Statistics (May 2019)

2018 2015

MA, Sociology

University of Washington

Seattle, WA

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

- Department of Sociology Outstanding Master's Thesis (2019)
- Graduate School Distinguished Thesis Award in Social Sciences (2019)

Committee: Kate Stovel (chair), Emilio Zagheni

2013 2009

BA, Biology and Geophysical Sciences

University of Chicago

Chicago, IL

Minor: Gender and Sexuality Studies



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

2020

Measuring the Predictability of Life Outcomes with a Scientific Mass Collaboration

Salganik, Matthew J., Ian Lundberg, Alexander T. Kindel, [and 109 others, including **Connor Gilroy**]. *Proceedings of the National Academy of Sciences* 117(15):8398–8403. doi: 10.1073/pnas.1915006117

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)



CONTACT

- ccgilroy.com
- github.com/ccgilroy
- **y** (accgilroy
- **in** ccgilroy
- **J** 731-225-0001

SKILLS

Programming: R, Python, Stan, SOL

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 forets, Bayesian statistics
- Text analysis: topic modeling, word embeddings
- Data visualization: ggplot2, matplotlib, shiny

Language: English (native), Spanish (advanced), Japanese (advanced), French (intermediate)

> This CV was made with the R package **pagedown**.

Last updated on 2023-01-04.



How Distinct is Gay Neighborhood Change? Patterns and Variation in Gayborhood Trajectories

Geography or Gemeinschaft? Disentangling the meaning of "community" through word embeddings

- Density, diversity, culture: How place characteristics shape individual sense of community for LGBTQ people
- Social Structure and Change in Public Opinion: The Case of Same-Sex Marriage

With Katherine Stovel. Invited book chapter for *Architecture of the Social*, Peter Hedström and Petri Ylikoski, editors. *draft submitted September 2016*

RESEARCH EXPERIENCE

2022 • Data Science intern

Meta ♀ Seattle, WA

- Analyzed feed engagement with reshared Groups content | R, SQL
- Built a data pipeline to create a new experimental metric | Python, SQL
- Reanalyzed a collection of experiments to quantify tradeoffs between types of content | R, SQL

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)

2021 | 2020 Graduate Research Assistant

University of Washington (with Zack Almquist)

Seattle, WA

- Text and network analysis of Twitter data from homeless care organizations | R, SOI
- Built a web crawler and a PostgreSQL database to scrape and store text data from nonprofit and government webpages | **Python, SQL**

2021, 2020

User Experience Research Intern

Facebook

◆ Seattle, WA

- 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)
- 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)

20 🕴 Consultant, Survey Data Analysis

The World Bank Group

• Washington, DC

• Statistical modeling and visualization of gender-based disparities in Central Asia; wrote reproducible R pipeline for updating reports with new waves of survey data (with Stephen Winkler, supervisor Audrey Sacks) | story based on analysis

FELLOWSHIPS, HONORS, & AWARDS

2019. Graduate School
Distinguished Thesis Award in
Social Sciences

2019. Department of Sociology Outstanding Master's Thesis

2018. Travel Award, Schwartz Endowment, University of Washington (\$1000)

2017. Best Poster (for "Extending the Demography of Sexuality with Digital Trace Data") (cowinner), Fall Lightning Talks and Poster Session, Center for Studies in Demography and Ecology, University of Washington

2017. Travel Award, Graduate School Fund for Excellence and Innovation, University of Washington (\$500)

2017. Participant in the Russell Sage Foundation Summer Institute in Computational Social Science (SICSS), Princeton University

2016–2017. NIH Big Data to Knowledge (BD2K) Fellowship, Center for Studies in Demography and Ecology, University of Washington (\$23376)

2016. Schwartz Award, Department of Sociology, University of Washington (\$3500)

2015–2016. Top Scholar Award, Graduate School Fund for Excellence and Innovation, University of Washington

2020

2018 2015

Graduate Research Assistant

University of Washington

Seattle, WA

• Agent-based network models of public opinion change (with Katherine Stovel)

TEACHING EXPERIENCE

Instructor

University of Washington

Seattle, WA

• SOC 225: Data and Society (2018, 2019) | syllabus, lab materials

Graduate Teaching Assistant

University of Washington

Seattle, WA

Undergraduate:

- SOC 316: Sociological Theory (2019)
- SOC 225: Data and Society (2018)
- SOC 401 A: Data Science and Population Processes (2017)
- SOC 351: Intimate Relationships (2016)

Graduate:

- SOC 504, 505, 506: Social Statistics (2019-2020, 2022-2023)
- CSSS 564: Bayesian Statistics for the Social Sciences (2018, 2019) | lab materials

Workshops and lectures

- Instructor (with Sandeep Soni), Comparing Word Embedding Models NLP+CSS 201 Tutorials (2021) | materials, recording
- Instructor, Workshop on Word Embeddings for the Social Sciences Computational Social Science reading group, Sociologists of Digital Things (2021) | materials
- Guest Lecturer, Demography and Data Science CSSS 563: Statistical Demography (Instructor: Adrian Raftery), University of Washington (2020, 2021) | lecture materials, lab materials
- Instructor, Introduction to tidycensus (with Neal Marquez) Computational Demography Working Group, Center for Studies in Demography and Ecology, University of Washington (2020) | materials
- Organizer, Seattle partner location for the Summer Institute in Computational Social Science (SICSS-Seattle) (with Bernease Herman) eScience Institute, University of Washington (2018) | website
- Facilitator, IUSSP Training workshop on Social Media, Big Data and Digital Demography (with Emilio Zagheni) Side meeting at the International Population Conference, Cape Town (2017) | materials



TOTHER WORK EXPERIENCE

Quality Assurance

Epic Systems Corporation

Verona. WI

· Automated and manual software testing

SFR\/ICF

Reviews for American Sociological Review, Socius, Sociological Methodology, Demographic Research, CHI, Journal of Homosexuality

2022–2023 Leader, Gender and Sexuality Graduate Research Cluster, Simpson Center, University of Washington

2020–2021 Secretary, Graduate Student Association, Department of Sociology, University of Washington

2018-2020. Organizer, Computational Demography Working Group, Center for Studies in Demography and Ecology, University of Washington

2018. Influencer, Social Media Team. ASA Sexualities Preconference

2016-2017. Officer. Rainbow Grads, University of Washington

2015–2017. Wiki Coordinator, Graduate Student Association, Department of Sociology, University of Washington

2015 2013

	2	CONFERENCE PRESENTATIONS
2022		Density, Diversity, Culture: How Place Characteristics Shape Individual Sense of Community for LGBTQ People Annual Meeting of the American Sociological Association Community and Urban Sociology Section Section, "Queer Placemaking Beyond the Gayborhood"
2021		Geography or Gemeinschaft? Disentangling the Meaning of "Community" through Word Embeddings Annual Meeting of the American Sociological Association Sociology of Culture Section Roundtable Session, "Meaning and Metaphor"
2019		Digital Traces of Sexualities: How Patterns of Social Media Disclosure Can Extend the Demography of Sexuality Annual Meeting of the American Sociological Association
2018		How Distinct is Gay Neighborhood Change? Patterns and Variation in Gayborhood Trajectories Annual Meeting of the American Sociological Association Special session on "The Social and Cultural Construction of Places"
2018		Power in the Pipeline? Queer Accountability and the Ethics of Data Processing ASA Sexualities Section Preconference Methodologically Queer" panel Philadelphia, PA
2018		Extending the Demography of Sexuality with Digital Trace Data Population Association of America Annual Meeting
2017		Social Movement Framing in the Media: The Case of Recent Anti- LGBT Legislation in the United States Annual Meeting of the American Sociological Association Sociology of Sexualities Roundtable Session