

Ryan J. Gallagher

COMPUTATIONAL SOCIAL SCIENCE || NETWORK SCIENCE || COMMUNICATION || TEXT AS DATA

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Skills

Programming Python (e.g. PySpark, Pandas, SciPy, Matplotlib, Scikit-Learn, spaCy, NetworkX), command line, SQL / Presto
Quantitative Methods Network analysis, machine learning, natural language processing, regression analysis, data visualization
Qualitative Skills Research design, interdisciplinary communication, technical instruction, code review, junior mentorship

Open Source Code

Social Media Data Retrieves and stores data from Twitter's API v2 using PostgreSQL || github.com/ryanjgallagher/focalevents
Network Models Implements Bayesian network models and model fit measures || github.com/ryanjgallagher/core_periphery_sbm
Text Visualization Quantifies and visualizes differences between collections of text data || github.com/ryanjgallagher/shifterator

Experience

Research Assistant Boston, MA
NETWORK SCIENCE INSTITUTE, NORTHEASTERN UNIVERSITY Sep. 2017–PRESENT
Research how networks emerge on social media to voice, connect, and amplify experiences of oppression and marginalization

Graduate Affiliate Remote
CENTER FOR INFORMATION, TECHNOLOGY, AND PUBLIC LIFE, UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL Aug. 2021–PRESENT
Collaborate with fellow online communication experts on research and policy regarding social media and democracy

Core Data Science Intern Menlo Park, CA
CORE DATA SCIENCE, FACEBOOK Sep. 2019–Nov. 2019
Identified information operations by working across platform integrity, virality monitoring, and network analysis teams

Education

Northeastern University Boston, MA
PH.D. NETWORK SCIENCE, *Specialization: ONLINE COMMUNICATION AND MARGINALIZATION* Sep. 2017–Aug. 2022

University of Vermont Burlington, VT
MS MATHEMATICS, *Graduate Certificate: COMPLEX SYSTEMS* Aug. 2015–May 2017

Select Research Projects

Sustained Online Amplification of COVID-19 Elites in the United States
RYAN J. GALLAGHER, LARISSA DOROSHENKO, SARAH SHUGARS, DAVID LAZER, BROOKE FOUCAULT WELLES. (2021). *Social Media + Society*.
Leveraged a large Twitter panel to examine how different demographics turn to different social and political elites for pandemic-related information

Say Their Names: Resurgence in Collective Attention Toward Black Victims of Fatal Police Violence
HENRY WU, RYAN J. GALLAGHER, THAYER ALSHAABI, ET AL. (2021). UNDER REVISION AT *Big Data & Society*
Showed how the death of George Floyd raised attention on Twitter to over 185 past instances of fatal extrajudicial police violence from the last decade

Reclaiming Stigmatized Narratives: The Networked Disclosure Landscape of #MeToo
RYAN J. GALLAGHER, ELIZABETH STOWELL, ANDREA G. PARKER, BROOKE FOUCAULT WELLES. (2019). *Proceedings of the ACM: Human-Computer Interaction*, (CSCW). **BEST PAPER HONORABLE MENTION AWARD** AND **FRANK PRIZE IN PUBLIC INTEREST COMMUNICATIONS FINALIST**.
Used predictive classifiers and network analysis to show how #MeToo reduced the stigma of sharing experiences of sexual violence on Twitter

Anchored Correlation Explanation: Topic Modeling with Minimal Domain Knowledge
RYAN J. GALLAGHER, ET AL. (2017). *Transactions of the Association for Computational Linguistics (TACL)*.
Implemented and validated topic models that can be flexibly guided to topics of interest by seeding them with “anchor” words

Interdisciplinary Instruction

Instructor of Record Boston, MA
DATA SCIENCE FOR THE SOCIAL SCIENCES AND HUMANITIES, NORTHEASTERN UNIVERSITY Aug. 2021–Dec. 2021
Taught students from various disciplinary backgrounds how to apply data science and programming to social questions

Co-Organizer Cambridge, MA
SUMMER INSTITUTE IN COMPUTATIONAL SOCIAL SCIENCE PARTNER SITE, MIT Jun. 2018–Dec. 2019
Organized a two week multidisciplinary program for training early career researchers in computational social science