

RONALD E. ROBERTSON

Employment

2023 -	Research Scientist	Stanford Cyber Policy Center
2021 - 2023	Postdoctoral Fellow	Stanford Internet Observatory
2019	Research Intern	Microsoft Research NYC
2016 - 2021	PhD Fellow	Northeastern University
2015 - 2016	Associate Director	American Institute for Behavioral Research and Technology
2012 - 2015	Assistant Director	American Institute for Behavioral Research and Technology

Education

2016 - 2021	Network Science PhD	Northeastern University Dissertation: An Interdisciplinary Examination of Partisanship in Web Search Advisors: Profs. Christo Wilson (Comp. Sci.) & David Lazer (Pol. Sci.)
2010 - 2012	Psychology BA	University of California San Diego Graduated cum laude; Sociology minor
2008 - 2010	Psychology AA	Saddleback College; graduated cum laude

Publications

Journal Articles

- Van Meter, A., Wheaton, M. G., Cosgrove, V. E., Andreadis, K., & **Robertson, R. E.** (2025). The Goldilocks Zone: Finding the right balance of user and institutional risk for suicide-related generative AI queries. *PLOS Digital Health* DOI:10.1371/journal.pdig.0000711
- Robertson, R. E.**, Green, J., Ruck, D. J., Ognyanova, K., Wilson, C., & Lazer, D. (2023). Users choose to engage with more partisan news than they are exposed to on Google Search. *Nature*. DOI:10.1038/s41586-023-06078-5
- Robertson, R. E.**, Dunphy, A., Grossman, S., DiResta, R., & Thiel, D. (2023). Identifying search directives on social media. *Journal of Online Trust and Safety*, 2(1). DOI:10.54501/jots.v2i1.133
- Chen, A. Y., Nyhan, B., Reifler, J., **Robertson, R. E.**, & Wilson, C. (2023). Subscriptions and external links help drive resentful users to alternative and extremist YouTube channels. *Science Advances*. DOI: 10.1126/sciadv.add8080
- Mejova, Y., Gracyk, T., & **Robertson, R. E.** (2022). Googling for abortion: Search engine mediation of abortion accessibility in the United States. *Journal of Quantitative Description: Digital Media*, 2. DOI:10.51685/jqd.2022.007
- Ognyanova, K., Lazer, D., **Robertson, R. E.**, & Wilson, C. (2020). Misinformation in action: Fake news exposure is linked to lower trust in media, higher trust in government when your side is in power. *Harvard Kennedy School Misinformation Review*. DOI: 10.37016/mr-2020-024
- Robertson, R. E.**, Tran, F. W., Lewark, L. N., & Epstein, R. (2018). Estimates of non-heterosexual prevalence: The roles of anonymity and privacy in survey methodology. *Archives of Sexual Behavior*. DOI: 10.1007/s10508-017-1044-z
- Epstein, R., Ho, M., Hyun, S., Le, C., **Robertson, R. E.**, & Stout, D. (2017). A DSM-5-based online mental health referral inventory: A large-scale validation study. *Journal of Technology in Human Services*, 35 (3), 231-246. DOI: 10.1080/15228835.2017.1356800
- Epstein, R., Mejia, J., & **Robertson, R. E.** (2017). The frequency profile: An informative method for graphing the behavior of individuals post-hoc or in real time. *Behavior Analysis: Research and Practice*. DOI: 10.1037/bar0000052
- Epstein, R., **Robertson, R. E.**, Smith, R., Vasconcellos, T., & Lao, M. (2016). Which relationship skills count most? A large-scale follow-up study. *Journal of Couple and Relationship Therapy*. DOI: 10.1080/15332691.2016.1141136
- Epstein, R. & **Robertson, R. E.** (2015). The search engine manipulation effect and its possible impact on the outcomes of elections. *Proceedings of the National Academy of Sciences*, 112 (33), E4512-E4521. DOI: 10.1073/pnas.1419828112
- Epstein, R., & **Robertson, R. E.** (2014). How to measure sexual orientation range, and why it's worth measuring. *Journal of Bisexuality*, 14, 392-404. DOI: 10.1080/15299716.2014.933378

Conference Proceedings

Hu, D., Gleason, J., Abu Bakar Aziz, M., Koeninger, A., Guggenberger, N., **Robertson, R. E.**, & Wilson, C. (2024). Market or markets? Investigating Google Search's market shares under vertical segmentation. In *Proceedings of the International AAAI Conference on Weblogs and Social Media (ICWSM 2024)*. DOI: [10.1609/icwsm.v18i1.31340](https://doi.org/10.1609/icwsm.v18i1.31340) [Best Paper: Honorable Mention]

Gleason, J., Koeninger, A., Hu, D., Teurn, J., Bart, Y., Knight, S., **Robertson, R. E.**, & Wilson, C. (2024). Search engine revenue from navigational and brand advertising. In *Proceedings of the International AAAI Conference on Weblogs and Social Media (ICWSM 2024)*. DOI: [10.1609/icwsm.v18i1.31329](https://doi.org/10.1609/icwsm.v18i1.31329)

Hu, D., **Robertson, R. E.**, Hannak, A., & Wilson, C. (2024). U. S. Users' exposure to YouTube videos on- and off-platform. In *Proceedings of the 16th ACM Web Science Conference (WebSci 2019)*. DOI: [10.1145/3614419.3644027](https://doi.org/10.1145/3614419.3644027)

Gleason, J., Ghosh, A., **Robertson, R. E.**, & Wilson, C. (2024). Perceptions in pixels: Analyzing perceived gender and skin tone in real-world image search results. In *Proceedings of the ACM on Web Conference 2024*. (WWW 2024). DOI: [10.1145/3589334.3645666](https://doi.org/10.1145/3589334.3645666)

Gleason, J., Hu, D., **Robertson, R. E.**, & Wilson, C. (2023). Google the gatekeeper: How search components affect clicks and attention. In *Proceedings of the International AAAI Conference on Weblogs and Social Media (ICWSM 2023)*. DOI: [10.1609/icwsm.v17i1.22142](https://doi.org/10.1609/icwsm.v17i1.22142) [Best Paper Award]

Chwe, H., Williams, A., & **Robertson, R. E.** (2023) "Hey Beautiful": Race and gender on Tinder. In *Proceedings of the 56th Hawaii International Conference on System Sciences (HICCS 2023)*. PDF

Robertson, R. E., Olteanu, A., Diaz, F., Shokoui, M., & Bailey, P. (2021). "I can't reply with that": Characterizing problematic email reply suggestions. In *Proceedings of the 2021 ACM Conference on Human Factors in Computing Systems (CHI 2021)*. DOI: [10.1145/3411764.3445557](https://doi.org/10.1145/3411764.3445557)

Robertson, R. E. & Wilson, C. (2020). WebSearcher: Tools for auditing web search. *Proceedings of Computation + Journalism Symposium (C+J '20)*. PDF

Robertson, R. E., Jiang, S., Lazer, D., & Wilson, C. (2019). Auditing autocomplete: Suggestion networks and recursive algorithm interrogation. In *Proceedings of the 11th ACM Conference on Web Science (WebSci 2019)*. DOI: [10.1145/3292522.3326047](https://doi.org/10.1145/3292522.3326047)

Jiang, S., **Robertson, R. E.**, & Wilson, C. (2019). Bias misperceived: The role of partisanship and misinformation in YouTube comment moderation. In *Proceedings of the International AAAI Conference on Weblogs and Social Media (ICWSM 2019)*. DOI: [10.1609/icwsm.v13i01.3229](https://doi.org/10.1609/icwsm.v13i01.3229) [Outstanding Analysis Award]

Hu, D., Jiang, S., **Robertson, R. E.**, & Wilson, C. (2019). Auditing the partisanship of Google Search snippets. In *Proceedings of the 2019 Web Conference*. (pp. 693-704). DOI: [10.1145/3308558.3313654](https://doi.org/10.1145/3308558.3313654)

Sapiezynski, P., Zeng, W., **Robertson, R. E.**, Mislove, A., & Wilson, C. (2019). Quantifying the impact of user attention on fair group representation in ranked lists. In *Companion Proceedings of the 2019 Web Conference*. DOI: [10.1145/3308560.3317595](https://doi.org/10.1145/3308560.3317595)

Robertson, R. E., Jiang, S., Joseph, K., Friedland, L., Lazer, D., & Wilson, C. (2018). Auditing partisan audience bias within Google Search. In *Proceedings of the ACM: Human-Computer Interaction*, 1(2), Article 148. DOI: [10.1145/3274417](https://doi.org/10.1145/3274417) [Best Paper: Honorable Mention]

Robertson, R. E., Lazer, D., & Wilson, C. (2018). Auditing the personalization and composition of politically-related search engine results pages. In *Proceedings of the 2018 Web Conference* (pp. 955-965). DOI: [10.1145/3178876.3186143](https://doi.org/10.1145/3178876.3186143)

Epstein, R., **Robertson, R. E.**, Lazer, D., & Wilson, C. (2017). Suppressing the search engine manipulation effect (SEME). In *Proceedings of the ACM: Human-Computer Interaction*, 1(2), Article 42. DOI: [10.1145/3134677](https://doi.org/10.1145/3134677)

Books

Metaxa, D., Park, J. S., **Robertson, R. E.**, Karahalios, K., Wilson, C., Hancock, J., & Sandvig, C. (2021). Auditing algorithms: Understanding algorithmic systems from the outside in. *Foundations and Trends in Human-Computer Interaction*, 14(4), 272-344. DOI: [10.1561/11000000083](https://doi.org/10.1561/11000000083)

Commentary

Lewandowsky, S., **Robertson, R. E.**, & DiResta, R. (2023). Challenges in understanding human-algorithm entanglement during online information consumption. *Perspectives on Psychological Science*. DOI: [10.1177/17456916231180809](https://doi.org/10.1177/17456916231180809)

Robertson, R. E. (2022). Uncommon yet consequential online harms. *Journal of Online Trust and Safety*, 1(3). DOI: [10.54501/jots.v1i3.87](https://doi.org/10.54501/jots.v1i3.87)

Pasquetto, I., Swire-Thompson, B., Amazeen, M.A., Benevenuto, F., Brashier, N.M., Bond, R.M., Bozarth, L.C., Budak, C., Ecker, U.K.H., Fazio, L.K., Ferrara, E., Flanagan, A.J., Flammini, A., Freelon, D., Grinberg, N., Hertwig, R., Jamieson, K.H., Joseph, K., Jones, J.J., Garrett, K., Kreiss, D., McGregor, S., McNealy, J., Margolin, D., Marwick, A., Menczer, F., Metzger, M.J., Nah, S., Lewandowsky, S., Lorenz-Spreen, P., Ortellado, P., Pennycook, G., Porter, E., Rand, D.G., **Robertson, R. E.**, Tripodi, F., Vosoughi, S., Vargo, C., Varol, O., Weeks, B.E., Wihbey, J., Wood, T.J., & Yang, K.C. (2020). Tackling misinformation: What researchers could do with social media data. *Harvard Kennedy School Misinformation Review*. DOI: [10.37016/mr-2020-49](https://doi.org/10.37016/mr-2020-49)

Reports

Cryst, E., Schechter, N., **Robertson, R. E.**, & Thiel, D. (2021). Maduro's menagerie: Twitter client usage in a Venezuelan Twitter operation. Stanford Internet Observatory. [Report PDF](#)

Chen, A. Y., Nyhan, B., Reifler, J., **Robertson, R. E.**, & Wilson, C. (2021). Exposure to alternative & extremist content on YouTube. Anti-Defamation League. [Report PDF](#)

Lewandowsky, S., Smillie, L., Garcia, D., Hertwig, R., Weatherall, J., Egidy, S., **Robertson, R. E.**, O'Connor, C., Kozyreva, A., Lorenz-Spreen, P., Blaschke, Y., & Leiser, M. (2020) Technology and democracy: Understanding the influence of online technologies on political behaviour and decision-making. European Commission: Joint Research Centre. DOI: [10.2760/709177](https://doi.org/10.2760/709177)

Popular Media

Robertson, R. E., Jiang, S., Joseph, K., Friedland, L., Lazer, D., & Wilson (2018, November 6). [Is it the Algorithms or Us?](#) *Medium*

Robertson, R. E. (2018, June 4). [When will Google defend democracy?](#). *The Conversation*

Robertson, R. E. (2018, January 15). [The 21st century Skinner box](#). *Behavioral Scientist*

Work in Progress

Robertson, R. E., Williams, E. M., Carley, K. M., Thiel, D. (2025). Data Voids and Warning Banners on Google Search. Arxiv Preprint. DOI: [10.48550/arXiv.2502.17542](https://doi.org/10.48550/arXiv.2502.17542)

Hagan, M., Al Haider, N., & **Robertson, R. E.** (in progress). Does Google tell me my rights?: An audit of eviction right to counsel searches on Google.

Guo, Z., Wan, A., Yang, K., **Robertson, R. E.**, Ozturan, B., & Lazer, D. (in progress). Google Search results for politicians' names are dominated by a few nonpartisan sources.

Mejova, Y., Gimbrone, C. A., McKetta S., & **Robertson, R. E.** (in progress). Abortion-related ads on Google Search after *Dobbs v. Jackson*.

Teaching	Role	Course	University	Date
	Lead Instructor/ Organizer	Summer Institutes in Computational Social Science (SICSS-Stanford 2025)	Stanford University	August 2025 (planned)
	Lead Instructor	Data Science - Social Science Practicum	Northeastern University	Spring 2021
	Guest Lecturer	Fundamentals of Cybersecurity - Disentangling User Choice and Algorithmic Curation in Online Systems	Middlebury Institute	Fall 2024
	Guest Lecturer	Special Topics in Computer Science - Algorithm Audits	Northeastern University	Winter 2022
	Guest Lecturer	Algorithms that Affect Our Lives - Ranking and Moderating Online Political Information	Northeastern University	Spring 2020 & Fall 2020
Grants	Role	Award	Institutions	Date
	PI	NULab Seedling Grant: The Impact of Race and Gender in Online Dating (Link)	Northeastern University	Mar 2020 - Mar 2021
	Contributor	Volkswagen Foundation. Artificial Intelligence and the Society of the Future - Reclaiming individual autonomy and democratic discourse online (Link)	Max Planck Institute for Human Development, Northeastern University, University of Bristol	Nov 2020 - Nov 2024
	Contributor	NSF CHS: Small: Auditing Critical Dependencies Between Online Media Platforms (ID:1910064)	Northeastern University	Aug 2019 - Jul 2023
Organizing	Type	Name	Location	Date
	Research Session	The Impact of LLMs on the Evolution of Web Search (Link)	Stanford, CA	Sep 2024
	Workshop	ICWSM 2024 Data Challenge: Research Data in a Post-API, Decentralized, and Walled Garden Web (Link)	Buffalo, NY	Jun 2024
	Research Session	Trust & Safety in Search (Link)	Stanford, CA	Sep 2023
	Symposium	Uncommon yet Consequential Online Harms (Link)	Stanford, CA	Sep 2022
Reviewing	Journals		Conferences	
	<i>AI Communications</i> <i>Big Data & Society</i> <i>EPJ Data Science</i> <i>Humanities and Social Sciences Communications</i> <i>Information, Communication and Society</i> <i>Journal of Online Trust and Safety</i> <i>Nature</i> <i>Nature Communications</i> <i>Nature Human Behavior</i> <i>Nature Machine Intelligence</i> <i>PNAS Nexus</i> <i>Psychological Science</i> <i>Scientific Reports</i> <i>The Information Society</i>		Computer-Human Interaction (CHI) Computer Supported Cooperative Work (CSCW) European Conference on Information Systems (ECIS) Fairness, Accountability, and Transparency (FAccT) International Communication Association (ICA) International Conference on Computational Social Science (IC2S2) International Conference on Web and Social Media (ICWSM) International Conference on Web Search and Data Mining (WSDM) Special Interest Group on Information Retrieval (SIGIR) The Web Conference (WWW)	

Open Source
Code/Data

Repository	Description	Languages	Stars	Forks
WebSearcher	Tools for geolocating, collecting, and parsing web search results.	Python	40	16
suggests	Tools for auditing autocomplete suggestions on Google and Bing. Used in Robertson et al. (2019).	Python	23	7
domains	Repository of data on web domains. Compiles partisanship scores (e.g. Robertson et al. 2018) and news-related classifications from prior work.	Python	16	9
webusage	Browser extension and server code for collecting exposure and engagement data. Used in Robertson et al. (2023) and Chen et al. (2023).	Javascript, Python, SQL	3	0
exposure-engagement	Replication code and data for Robertson et al. (2023).	Python	2	0
IPtoCountry	Tools for converting IP addresses to country names or full location details with geoploting visualizations. [IP2Location 2016 Programming Contest Winner ; link]	R	6	4
dtables	Tools for generating descriptive frequency tables. Archived in 2020; 16K downloads on CRAN between May 2016 to Jan 2020.	R	9	2

A full list of public code and data repositories is available at: <https://github.com/gitronald>

Presentations

Invited Talks

Robertson, R. E. (2024, July). Disentangling user choice and algorithmic curation in online systems. Invited talk at the Max Planck Institute for Human Development. Berlin, Germany.

Robertson, R. E. (2024, April). Disentangling user choice and algorithmic curation in online systems. Invited talk at the Stanford Cyber Policy Center Spring Seminar Series. Stanford, CA.

Robertson, R. E. (2023, June). The impact of online systems. Invited talk for the University of Pennsylvania Chief Learning Officer (Ed.D) program. Stanford, CA.

Robertson, R. E. (2023, June). Measuring echo chambers, filter bubbles, and rabbit holes: Towards accurate assessments of users' interactions with online platforms. Invited talk with researchers at Meta. Virtual.

Robertson, R. E. (2022, November). Engagement outweighs exposure to partisan and unreliable news within Google Search. Invited paper presentation at the Stanford Cyber Policy Center Fall Seminar Series. Stanford, CA.

Robertson, R. E. (2021, March). Northeastern WebUsage Browser Extension. Invited talk at Mozilla's Internet Scale Social Science Workshop. Virtual.

Robertson, R. E. (2019, June). Invited speaker and panel member at the workshop on Complex Systems Perspectives on Algorithmic Bias at the International Conference on Web and Social Media Web (ICWSM 2019). Munich, Germany.

Robertson, R. E. (2019, May). Auditing autocomplete: Suggestion networks and recursive algorithm interrogation. Invited talk at the MIT Media Lab. Boston, MA.

Robertson, R. E. (2019, April). Attention biases and agency in information processing. Invited talk for the Workshop on AI-Assisted Information Architectures at the Max-Planck Institute for Human Development. Berlin, Germany.

Peer Reviewed Conferences (Selected)

Robertson, R. E., Williams, E. M., Carley, K. M., Thiel, D., DiResta, R., & Hancock, J. (2024, June). Data voids and warning banners: Evaluating content moderation on Google Search. Paper presented at the 18th annual International Conference on Web and Social Media (ICWSM). Buffalo, NY.

Robertson, R. E., Dunphy, A., Grossman, S., DiResta, R., & Thiel, D. (2023, August). Search directives in political communication. Paper presented at the 6th annual Politics and Computational Social Science (PaCSS) pre-conference. Los Angeles, CA.

Robertson, R. E., Dunphy, A., & Grossman, S. (2023, July). Identifying search directives on social media. Poster presented at the 9th International Conference on Computational Social Science (IC2S2). Copenhagen, Denmark.

Robertson, R. E., Olteanu, A., Diaz, F., Shokoui, M., & Bailey, P. (2021, May). “I can’t reply with that”: Characterizing problematic email reply suggestions. Paper presented at the annual meeting of the ACM Conference on Human Factors in Computing Systems (CHI 2021). Virtual.

Robertson, R. E., Wilson, C., & Lazer, D. (2020, September). Online information seeking during the 2018 U.S. congressional elections. Paper presented at the 116th annual meeting of the American Political Science Association (APSA 2020). Virtual.

Robertson, R. E., Wilson, C., & Lazer, D. (2019, July). Fake news and information seeking during the 2018 U.S. Congressional Elections. Paper presented at the 5th International Conference on Computational Social Science (IC2S2). Amsterdam, Netherlands.

Robertson, R. E., Jiang, S., Lazer, D., & Wilson, C. (2019, July). Auditing autocomplete: Suggestion networks and recursive algorithm interrogation. Paper presented at the annual ACM Conference on Web Science (WebSci 2019). Boston, MA.

Robertson, R. E., Jiang, S., Joseph, K., Friedland, L., Lazer, D., & Wilson, C. (2018, November). Auditing partisan bias within Google Search. Paper presented at the annual meeting of the association for Computer-Supported Cooperative Work (CSCW 2018). Jersey City, NJ.

Robertson, R. E., Lazer, D., & Wilson, C. (2018, April). Auditing the Personalization and Composition of Politically-Related Search Engine Results Pages. Paper presented at the 2018 World Wide Web Conference (WWW 2018). Lyon, France.

Robertson, R. E., Lazer, D., & Wilson, C. (2018, March). Modeling suggestion networks for algorithm auditing. Paper presented at CompleNet 2018. Boston, MA.

Epstein, R., & **Robertson, R. E.** (2017, March) The Search Engine Manipulation Effect (SEME): Understanding its power to change opinions and votes. Paper presented at the 2nd biennial meeting of the International Convention of Psychological Science. Vienna, Austria.

Epstein, R., & **Robertson, R. E.** (2016, April). A replication of the Search Engine Manipulation Effect (SEME), plus methods for suppressing the effect. Paper presented at the 96th annual meeting of the Western Psychological Association. Long Beach, CA.

Epstein, R., & **Robertson, R. E.** (2015, April). The Search Engine Manipulation Effect (SEME): Large-scale replications in two countries. Paper presented at the 95th annual meeting of the Western Psychological Association. Las Vegas, NV.

Epstein, R., & **Robertson, R. E.** (2014, April). Helping people preserve their privacy online: The surprising power of a click requirement. Paper presented at the 94th annual meeting of the Western Psychological Association. Portland, OR.

Robertson, R. E. & Epstein, R. (2014, April). Are we underestimating non-heterosexual prevalence? The critical role of survey methodology. Paper presented at the 94th annual meeting of the Western Psychological Association. Portland, OR.

Epstein, R., & **Robertson, R. E.** (2013, May). Democracy at risk: Search rankings can shift voter preferences substantially. Poster presented at the 25th annual meeting of the Association for Psychological Science. Washington, D.C.
