Alex Hanna

Curriculum Vitae (December 5, 2024)

alex.hanna@gmail.com | alex-hanna.com | @alexhanna | dair-community.social/@alex Google Scholar | ORCID ID: 0000-0002-8957-0813

EMPLOYMENT

2022-	Distributed AI Research Institute Director of Research
2021-	University of California-Berkeley Lecturer, School of Information
2018-22	Google Nov 2020 - Feb 2022, Senior Research Scientist, Ethical AI Feb 2020 - Nov 2020, Research Scientist, Ethical AI July 2019 - Feb 2020, Program Manager, ML Fairness July 2018 - July 2019, Technical Curriculum Developer, ML, Google Cloud
2016-18	Assistant Professor, University of Toronto Mississauga Institute of Communication, Culture, Information and Technology Faculty of Information (Graduate appointment)

EDUCATION

2016	PhD, Sociology, University of Wisconsin-Madison.
2013	MS, Sociology, University of Wisconsin-Madison.
2007	BA, Sociology, Purdue University.
2007	BS, Computer Science and Mathematics, Purdue University.

PUBLICATIONS

Books

2025 The AI Con (with Emily M. Bender). Harper Books.

Peer-reviewed Conference Proceedings

- 2023 Jiang, H. H., Brown, L., Cheng, J., Khan, M., Gupta, A., Workman, D., **Hanna, A.**, Flowers, J., and Gebru, T. "AI Art and its Impact on Artists." *AIES* '24.
- 2023 Pinney, C., Raj, A., **Hanna, A.**, Ekstrand, M. "Much Ado About Gender: Current Practices and Future Recommendations for Appropriate Gender-Aware Information Access." *ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR* '23).

- 2022 Miceli, M., Yang, T., Garcia, A., Posada, J., Wang, S., Pohl, M., **Hanna, A.** "Documenting Data Production Processes: A Participatory Approach for Data Work." *Proceedings of the 2022 Conference on Computer Supported Cooperative Work (CSCW '22).*
- 2022 Thakkar, D., Ismail, A., Kumar, P., **Hanna, A.**, Sambasivan, N., Kumar, N. "When is Machine Learning Data Good?: Valuing in Public Health Datafication." *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*.
- 2021 Raji, I. D., Bender, E. M., Paullada, A., Denton, E., **Hanna, A.** "AI and the Everything in the Whole World Benchmark." *NeurIPS (Datasets and Benchmark Track)*.
- 2021 Koch, B., Denton, E., Hanna, A., Foster, J. G. "Reduced, Reused and Recycled: The Life of a Dataset in Machine Learning Research." *NeurIPS (Datasets and Benchmark Track)*.
 *Best Paper Award
- Scheuerman, M. K., Denton, E., Hanna, A.. "Do Datasets Have Politics? Disciplinary Values in Computer Vision Dataset Development." *Proceedings of the 2021 Conference on Computer Supported Cooperative Work (CSCW '21).* *Best Paper Award
- 2021 Hutchinson, B., Smart, A., **Hanna, A.**, Denton, E., Greer, C., Kjartansson, O., Barnes, P., Mitchell, M. "Towards Accountability for Machine Learning Datasets: Practices from Software Engineering and Infrastructure." *Proceedings of of the 2021 Conference on Fairness, Accountability, and Transparency.*
- 2021 Milagros, M., Yang, T., Naudts, L., Schuessler, M., Serbanescu, D., **Hanna, A.** "Documenting Computer Vision Datasets: An Invitation to Reflexive Data Practices." *Proceedings of of the 2021 Conference on Fairness, Accountability, and Transparency.*
- 2020 Mitchell, M., Baker, D., Moorosi, N., Denton, E., Hutchinson, B., **Hanna, A.**, Gebru, T. and Morgenstern, J., 2020, February. Diversity and inclusion metrics in subset selection. *Proceedings of the AAAI/ACM Conference on AI, Ethics, and Society* (pp. 117-123).
- 2020 Hanna, A., Denton, E., Smart, A. and Smith-Loud, J., 2020, January. Towards a critical race methodology in algorithmic fairness. *Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency* (pp. 501-512).
- Paullada, A., Raji, I. D., Bender, E., Denton, E., Hanna, A. "Data and its (dis) contents: A survey of dataset development and use in machine learning research." *Proceedings of the NeurIPS 2020 Workshop: ML Retrospectives, Surveys & Meta-analyses (ML-RSA).* *Best Paper Award
- 2020 Raji, I. D., Bender, E. M., Denton, E., **Hanna, A.**, Paullada, A. "AI and the Everything in the Whole Wide World Benchmark." *Proceedings of the NeurIPS 2020 Workshop: ML Retrospectives, Surveys & Meta-analyses (ML-RSA).*
- 2020 Denton, E., **Hanna, A.**, Amironesei, R., Smart, A., Nicole, H. and Scheuerman, M.K. "Bringing the People Back In: Contesting Benchmark Machine Learning Datasets." *Proceedings of the 2020 ICML Workshop: Participatory Approaches to Machine Learning*.

- 2020 **Hanna, A.**, Park, T. "Against Scale: Provocations and Resistances to Scale Thinking." *Proceedings of the 2020 CSCW Workshop: Reconsidering Scale and Scaling in CSCW Research.*
- 2013 **Hanna, A.**, C. Wells, P. Maurer, D. V. Shah, L. Friedland, and J. Mattes. Partisan Alignments and Political Polarization Online: A Computational Approach to Understanding the French and U.S. Presidential Elections. *Politics, Election, and Data Workshop (PLEAD)*. San Francisco, CA. November 1.
- 2011 **Hanna, A.**, B. Sayre, L. Bode, J. Yang, and D. V. Shah. Mapping the Political Twitterverse: Candidates and Their Followers in the Midterms. In *Proceedings of the Fifth International AAAI Conference on Weblogs and Social Media (ICWSM)*. Barcelona, Spain. July 17-21.

Peer-Reviewed Journal Articles

- 2024 Berrey, E., Hanna, A., Bass, K., and Kim, N. "U.S. and Canadian Higher Education Protests and University and Police Responses, 2012 to 2018." *Socius: Sociological Research for a Dynamic World*.
 2023 Khan, M. and Hanna, A. "The Subjects and Stages of AI Dataset Development: A Framework for Dataset Accountability." *Ohio State Technology Law Review*.
- 2023 Oliver, P., **Hanna, A.**, Lim, C. "Constructing Relational and Verifiable Protest Event Data: Four Challenges and Some Solutions." *Mobilization: An International Quarterly*.
- 2022 Oliver, P., Lim, C., Matthews, M. C., **Hanna, A.** "Black Protests in the United States, 1994 to 2010." *Sociological Science*.
- 2021 Scheuerman, M., Pape, M., **Hanna, A.** "Auto-essentialization: Gender in automated facial analysis as extended colonial project." *Big Data & Society*.
- 2021 Paullada, A., Raji, I. D., Bender, E., Denton, E., **Hanna, A.** "Data and its (dis) contents: A survey of dataset development and use in machine learning research." *Cell Patterns*.
- 2021 Denton, E., **Hanna, A.**, Amironesei, R., Smart, A., and Nicole, H. "On the Genealogy of Machine Learning Datasets: A Critical History of ImageNet." *Big Data & Society*.
- 2016 Shah, D. V., **A. Hanna**, E. P. Bucy, D. S. Lassen, J. Van Thomme, K. Bialik, J. Yang, and J. Pevehouse. "Dual Screening During Presidential Debates: Political Nonverbals and the Volume and Valence of Online Expression." *American Behavioral Scientist* 60(14): 1816-1843.
- Wells, C., J. Van Thomme, P. Maurer, A. Hanna, J. Pevehouse, D. V. Shah, and E. P.
 Bucy. "Coproduction or Cooptation? Real-time Spin and Social Media Response
 During the 2012 French and US Presidential Debates." *French Politics* 14(2): 206-233.
- 2015 Bode, L., **A. Hanna**, J. Yang, and D. V. Shah. "Candidate Networks, Citizen Clusters, and Political Expression: Strategic Hashtag Use in the 2010 Midterms." *The ANNALS of the American Academy of Political and Social Science* 659(1): 149-165.

- 2015 Shah, D. V., **A. Hanna**, E. P. Bucy, C. Wells, and V. Quevedo. "The Power of Television Images in a Social Media Age: Linking Biobehavioral and Computational Approaches via the Second Screen." *The ANNALS of the American Academy of Political and Social Science* 659(1): 225-245.
- Hanna, A. "Computer-aided Content Analysis of Digitally-enabled Movements." Mobilization: An International Quarterly 18(4): 367-388.
 *2014 Outstanding Graduate Student Paper Award, Mathematical Sociology Section, American Sociological Association.

Book Chapters

- 2017 **Hanna, A.** "Being transgender on the academic job market." in *Reflections on Academic Lives: Identities, Struggles, and Triumphs in Graduate School and Beyond,* eds. Staci Zavattaro and Shannon Orr.
- 2015 Shah, D. V., K. Culver, **A. Hanna**, T. Macafee, and J. Yang. "Computational Approaches to Online Political Expression: Rediscovering a 'Science of the Social'." in *Handbook of Digital Politics*, eds. Stephen Coleman and Deen Freelon.

Book Reviews

2012 The Second Palestinian Intifada: Civil Resistance. *Mobilization: An International Quarterly* 17(1): 103-104.

Pre-prints

2017 "MPEDS: A Semi-automated Approach to Generating Protest Event Data." [Preprint]

Blogs and Selected Media

- 2023 "AI Causes Real Harm. Let's Focus on That over the End-of-Humanity Hype." (with Emily M. Bender) *Scientific American*, August 2023.
- 2022 "AI Ethics Are in Danger. Funding Independent Research Could Help." (with Dylan Baker). *Stanford Social Innovation Review*, June 2022.
- 2020 "Lines of Sight." (with Emily Denton, Razvan Amironesei, Andrew Smart, and Hilary Nicole). *Logic Magazine*, December 2020.
- 2016 "Being Transgender on the Job Market." Inside Higher Ed, July 15.
- 2013 "The Signal and the Noise in Middle East Elections." (with Kevan Harris). *Foreign Policy*, December.
- 2013 "Lipsyncing for Your Life: A Highly Detailed Survival Analysis of *RuPaul's Drag Race Jezebel*, March 13.
- 2013 "Institutionalizing Computational Social Science." *orgtheory.net*, July 3.

2012 Featured (with Marc Smith) in "Visualizing the War on Women Debate." *Foreign Policy*, July/August.

SOFTWARE

Machine-learning Protest Event Data System (MPEDS) Website / Python package and Docker container / Annotation Interface

GRANTS

Major grants

2023	"Social Movements in Higher Education, 2012-18." (with Ellen Berrey). National Science Foundation (SES-2241920)
2020	"Student Protests and University Responses in the United States and Canada, 2012-2018." (with Ellen Berrey). Insight Grant, Social Sciences and Humanities Research Council of Canada (SSHRC).
2018	"U.S. and Canadian Anti-Racism Student Protests, 2012-2016." (with Ellen Berrey). Insight Development Grant, Social Sciences and Humanities Research Council of Canada (SSHRC).
2014	"Constructing and Validating an Automated Coding System for Electronic News Sources." (with Pamela Oliver and Chaeyoon Lim). National Science Foundation, SES-1423784.
2011-15	National Science Foundation Graduate Research Fellowship Program.
2011	Foreign Language and Area Studies Fellowship, academic year (declined).
2010	Foreign Language and Area Studies Fellowship, summer.

Minor Grants

2018	Connaught New Researcher Award, University of Toronto (declined).
2017	SSHRC Institutional Grant (SIG), University of Toronto Mississauga.
2016	Research and Scholarly Activity Fund, University of Toronto Mississauga.
2015	Vilas Travel Grant, University of Wisconsin-Madison.
2014	Department of Sociology Conference Travel Award, University of Wisconsin-Madison.
2014	Department of Sociology Small Grants Award, University of Wisconsin-Madison.
2013	Department of Sociology Conference Travel Award, University of Wisconsin-Madison.
2013	Social Science History Association Tilly Travel Award.
2013	International Studies Association Travel Award.
2013	Project on Middle East Political Science (POMEPS) Travel-Research-Engagement Grant (declined).

- 2011 Department of Sociology Small Grants Award, University of Wisconsin-Madison.
- 2011 Wisconsin Institutes for Discovery Emerging Interfaces Award.
- 2011 Graduate Student International Field Research Award, University of Wisconsin-Madison.

AWARDS AND HONORS

- 2024 *Fast Company* Queer 50.
- 2022 *Go Magazine* Women We Love.
- 2021 Featured in California Academy of Sciences *New Sciences* exhibit.
- 2021 *Fast Company* Queer 50.
- 2020 100 Brilliant Women in AI Ethics.

TEACHING

Courses Taught

Data, Power, and Infrastructure Political Change, Social Movements, and Media Social Data Analytics Methods of Sociological Inquiry

Selected Workshops and Online Courses

2020	Algorithmically-Encoded Bodies. Conference on Fairness, Accountability, and Transparency (FAT*), Barcelona, Spain. January 27-30.
2018	Introduction to Text as Data, University of New Mexico.
2018	Analyzing Social Media Data in Python. DataCamp.
2018	Introduction to Social Network Analysis. Zurich Summer School for Women in Political Methodology. University of Zurich.
2016	Data Science and Social Science. New York University.
2015	Software Carpentry Workshop for the Social Sciences. University of Wisconsin-Madison. June 3-4.
2014	Introduction to Python for Social Scientists. Indiana University, September 26.
2014	Programming as a Research Method: Beginner's Guide to Wranging Social Media Data with Python. Association of Education in Journalism and Mass Communication. Montreal, QC, Canada, August 6-9.
2013	International Summer School on Social Network Analysis. National Research University - Higher School of Economics, St. Petersburg, Russia. August 15-22.
2012-13	Social Media and Democracy Tworkshops, University of Wisconsin-Madison.

SERVICE TO PROFESSION

Sociologists for Trans Justice, 2016-Present.

CRAFT Co-Chair, FAccT 2021

Program Committee: FAccT (2020, 2021), AIES (2020, 2021), International Conference on Computational Social Science (2016-Present), International Conference on Weblogs and Social Media (2016-Present), #SMSociety (2014, 2015, 2017), SocInfo (2014, 2015, 2017)

Ad hoc Reviewer: American Behavioral Scientist; American Journal of Political Science; American Sociological Review; Big Data + Society; British Journal of Sociology; Computer-Supported Cooperative Work & Social Computing (2014); European Political Science Review; Information, Communication & Society; International Journal of Public Opinion Research; Journal of Broadcasting & Electronic Media; Journal of Informational Technology & Politics; Journal of the Association for Information Science and Technology; Journal of Open Source Software; Mobilization; Political Communication; PLoS ONE; Social Forces; Social Media + Society; Social Problems; Social Thought and Research; Sociological Methodology; Sociological Methods & Research

Webmaster, ASA Collective Behavior and Social Movements section, 2013-2016.

Department of Sociology Website Committee, University of Wisconsin-Madison, 2009-2016.

PROFESSIONAL AFFILIATIONS

American Sociological Association Society for the Social Studies of Science (4S) Association for Computing Machinery (ACM)

SOFTWARE SKILLS

Technical skills: Python (SciPy, NumPy, pandas, scikit-learn), R (ggplot2, tidyverse), Hadoop (Java MapReduce, Hive, Pig, streaming), SQL, HTML/CSS, JavaScript, Flask, Perl, PHP, C/C++, Java, Git, Bash, LATEX

LANGUAGES

English (native) Arabic (heritage learner, ACTFL OPI: Intermediate High [Summer 2010]) French (novice)

REFERENCES AVAILABLE UPON REQUEST