SOC 6984 TS: Digital Sociology

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Office Hour: T 12:00PM-3:00PM and by appointment, McBryde 524

Course Description

In today's digitally mediated, surveilled, and liquidated world, having data seems to be all that matters. But what is the worth of social science in the big data era? How should we navigate all the biases and hubris that come with digital data? What can digital data really tell us about society?

This course will focus on how to use digital data creatively and critically in your own research. We will cover a wide range of possibilities, from Twitter to TikTok, from Google Street View to ChatGPT, from illegal crypto-markets and conspiracy theory groups online to predictive policing and precision medicine offline, for both qualitative and quantitative research. Although the focus is on academic research, we will also touch on industry research. At the end of the course, you will be equipped with a theoretical foundation and methodological intuition that allow you to exploit the potential of digital data with creativity and confidence, while avoiding the hidden pitfalls of spending too much time online.

No prior coding experience is required. Over the course of the semester, you will get some exposure to R just enough to make you comfortable seeing and playing with digital data in their ugly forms, but you definitely don't have to be a coder to contribute to digital sociology.

Course Requirements

Readings will be made available through Canvas. Consider bringing with you to every class (1) a copy of any required readings (so that you can quickly reference specific sections of the text), (2) a pen and a notebook (so that you can take notes by hand¹), and (3) a Windows/macOS/Linux laptop (so that you can follow along when I demonstrate code in class).

Participation (25%)

Full participation in class discussion is essential for your training, and needs to be based on thorough preparation for each class, regardless of whether you are presenting or not. If I have to keep asking "does anyone remember what the paper says," that is a sign that no one is getting an A.

Memos and Presentations (25%)

You will sign up to write reading memos on 3 readings of your choice, 2 pages single-spaced each, due at 5pm the day before class. The first page should accurately summarize and critically evaluate any key questions, design, and/or contributions in that reading. The second page should articulate at least two ideas and/or questions that extend beyond what is already being said in the reading. Here are some examples of what you could discuss on your second page:

- A data point that is interesting, intriguing, or disturbing.
- A theoretical construct that is inspiring, redundant, or pretentious.
- A research design that is clever, stupid, or ostentatious.
- A question that you want to know the answer to but you can neither find one from the reading, nor think of a good one right away.
- A product, a service, or a policy change that can be initiated based on empirical evidence in the reading to help solve real-world problems.

On days you write reading memos, you will also be responsible for facilitating class discussion about "your" paper. You should start with a 5-minute presentation on your memo, and then get the discussion started by raising your ideas/questions.

¹Psychologists have found strong experimental evidence that even when laptops are used solely to take notes, they result in shallower cognitive processing and the degeneration of note-taking into transcribing verbatim rather than reframing information in your own words (Mueller and Oppenheimer 2014).

Mini Projects (25%)

Together we will complete 4 methodological mini projects so that you feel comfortable evaluating others' uses and abuses of digital data and thinking about using digital data in your own research. These projects are short and straightforward and usually start with cases and code that I will have demonstrated in class, which you will then repeat, reapply, and reinterpret using either datasets I provide or data from your own research.

Working Document (25%)

At the end of the course, you will submit a 10-15 page working document. Depending on your situation, it can take on many forms, including but not limited to:

- an empirical analysis,
- a theoretical exposition,
- a methodological exploration,
- a pilot or feasibility study for a larger project you have in mind,
- a grant proposal,
- a review article,
- a thesis/dissertation proposal,
- a thesis or dissertation chapter, or
- an annotated ad hoc qualifying exam reading list.

The working document doesn't have to be a polished or even finished product, as long as it is interesting, readable, and makes extensive, critical, and/or innovative use of what you've learned in this class – something digital sociology. I encourage you to meet with me mid-semester to discuss your plan.

Tentative Course Schedule

PART I: What's Sociological about Digital Data?

WEEK 1 Digital: A Hazardous Concept

1/22 REQUIRED:

Winner, Langdon. 1980. "Do Artifacts Have Politics?" *Daedalus* 109 (1): 121–136.

Latour, Bruno. 1994. "Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts." In *Shaping Technology/Building Society: Studies in Sociotechnical Change*, edited by Wiebe E Bijker and John Law, 225–258. MIT Press.

Marx, Leo. 2010. "*Technology*: The Emergence of A Hazardous Concept." *Technology and Culture* 51 (3): 561–577.

"Technology" Pp.98-105 in Wrathall, Mark A. 2006. *How to Read Heidegger.* How to Read. New York, NY: WW Norton.

WEEK 2 A Political Economy of Digitality

1/29 REQUIRED:

Deleuze, Gilles. 1992. "Postscript on the Societies of Control." *October* 59:3–7.

Burrell, Jenna and Fourcade, Marion. 2021. "The Society of Algorithms." *Annual Review of Sociology* 47 (1): 213–237.

Fourcade, Marion and Healy, Kieran. 2021. "Rationalized Stratification."

McMillan Cottom, Tressie. 2020. "Where Platform Capitalism and Racial Capitalism Meet: The Sociology of Race and Racism in the Digital Society." *Sociology of Race and Ethnicity* 6 (4): 441–449.

RECOMMENDED:

Star, Susan Leigh. 1999. "The Ethnography of Infrastructure." *American Behavioral Scientist* 43 (3): 377–391.

Zuboff, Shoshana. 2019. The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. Public Affairs, 2019.

Benjamin, Ruha. 2019. Race After Technology: Abolitionist Tools for the New Jim Code. Medford, MA: Polity Press, 2019.

Crawford, Kate. 2021. *Atlas of AI Power, Politics, and the Planetary Costs of Artificial Intelligence*. New Haven, CT: Yale University Press.

Fourcade, Marion and Healy, Kieran. 2024. *The Ordinal Society*. Cambridge, MA: Harvard University Press.

Week 3 Digital Inequality in a Cyberpunk Society

2/5 REQUIRED:

DiMaggio, Paul et al. 2001. "Social Implications of the Internet." *Annual Review of Sociology* 27 (1): 307–336.

Rosenfeld, Michael J and Thomas, Reuben J. 2012. "Searching for a Mate: The Rise of the Internet as a Social Intermediary." *American Sociological Review* 77 (4): 523–547.

Rafalow, Matthew H. 2018. "Disciplining Play: Digital Youth Culture as Capital at School." *American Journal of Sociology* 123 (5): 1416–1452.

Luhr, Sigrid Willa. 2024. "Engineering Inequality: Informal Coaching, Glass Walls, and Social Closure in Silicon Valley." *American Journal of Sociology* 129 (5): 1409–1446.

RECOMMENDED:

Robinson, Laura et al. 2015. "Digital Inequalities and Why They Matter." *Information, Communication and Society* 18 (5): 569–582.

Hampton, Keith N. 2017. "Studying the Digital: Directions and Challenges for Digital Methods." *Annual Review of Sociology* 43 (1 2017): 167–188.

DiMaggio, Paul and Bonikowski, Bart. 2008. "Make Money Surfing the Web? The Impact of Internet Use on the Earnings of U.S. Workers." *American Sociological Review* 73 (2): 227–250.

Lin, Ken-Hou and Lundquist, Jennifer. 2013. "Mate Selection in Cyberspace: The Intersection of Race, Gender, and Education." *American Journal of Sociology* 119 (1 2013): 183–215.

Curington, Celeste Vaughan, Lin, Ken-Hou, and Lundquist, Jennifer Hickes. 2015. "Positioning Multiraciality in Cyberspace: Treatment of Multiracial

Daters in an Online Dating Website." *American Sociological Review* 80 (4): 764–788.

Downey, Douglas B and Gibbs, Benjamin G. 2020. "Kids These Days: Are Face-To-Face Social Skills Among American Children Declining?" *American Journal of Sociology* 125 (4): 1030–1083.

Rafalow, Matthew H. 2020. *Digital Divisions: How Schools Create Inequality in the Tech Era*. Chicago, IL: University of Chicago Press, 2020.

Braghieri, Luca, Levy, Ro'ee, and Makarin, Alexey. 2022. "Social Media and Mental Health." *American Economic Review* 112 (11 2022): 3660–3693.

WEEK 4 Who Are Producing Digital Data for Us?

2/12 REQUIRED:

Shestakofsky, Benjamin. 2017. "Working Algorithms: Software Automation and the Future of Work." *Work and Occupations* 44 (4 2017): 376–423.

Stark, Luke and Levy, Karen. 2018. "The Surveillant Consumer." *Media Culture & Society* 40 (8): 1202–1220.

Excerpts from Roberts, Sarah T. 2019. *Behind the Screen: Content Moderation in the Shadows of Social Media.* Yale University Press.

Excerpts from Bail, Chris. 2021. *Breaking the Social Media Prism: How to Make Our Platforms Less Polarizing.* Princeton University Press, 2021.

RECOMMENDED:

Gray, Mary L and Suri, Siddharth. 2019. *Ghost Work: How to Stop Silicon Valley from Building a New Global Underclass*. New York, NY: Harper-Collins.

Vallas, Steven and Schor, Juliet B. 2020. "What Do Platforms Do? Understanding the Gig Economy." *Annual Review of Sociology* 46 (1 2020): 273–294.

Lei, Ya-Wen. 2021. "Delivering Solidarity: Platform Architecture and Collective Contention in China's Platform Economy." *American sociological review* 86 (2 2021): 279–309.

Li, Zhuofan. 2024. "When Being a Data Annotator Was Not Yet a Job: The

Laboratory Origins of Dispersible Labor in Computer Vision Research." *Socius* 10 (2024): 23780231241259617.

Due: Mini Project #1

PART II: Structures and Relationships in Digital Data

WEEK 5 The Strength of Virtual Ties

2/19 REQUIRED:

Granovetter, Mark S. 1973. "The Strength of Weak Ties." *American Journal of Sociology* 78 (6): 1360–1380.

Rossman, Gabriel, Esparza, Nicole, and Bonacich, Phillip. 2010. "I'd Like to Thank the Academy, Team Spillovers, and Network Centrality." *American Sociological Review* 75 (1): 31–51.

Wimmer, Andreas and Lewis, Kevin. 2010. "Beyond and Below Racial Homophily: ERG Models of a Friendship Network Documented on Facebook." *American Journal of Sociology* 116 (2): 583–642.

Leahey, Erin, Lee, Jina, and Funk, Russell J. 2023. "What Types of Novelty Are Most Disruptive?" *American sociological review* 88 (3 2023): 562–597.

RECOMMENDED:

Breiger, Ronald L. 2004. "The Analysis of Social Networks." In *Handbook of Data Analysis*, edited by Melissa Hardy and Alan Bryman, 505–526. SAGE.

Burt, Ronald S. 2004. "Structural Holes and Good Ideas." *American Journal of Sociology* 110 (2 2004): 349–399.

Hofstra, Bas et al. 2017. "Sources of Segregation in Social Networks: A Novel Approach Using Facebook." *American Sociological Review* 82 (3): 625–656.

Fraiberger, Samuel P et al. 2018. "Quantifying Reputation and Success in Art." *Science* 362 (6416 2018): 825–829.

Bail, Christopher A, Brown, Taylor W, and Wimmer, Andreas. 2019. "Prestige, Proximity, and Prejudice: How Google Search Terms Diffuse across the World." *American Journal of Sociology* 124 (5): 1496–1548.

McMahan, Peter and McFarland, Daniel A. 2021. "Creative Destruction: The Structural Consequences of Scientific Curation." *American Sociological*

Review 86 (2): 341-376.

Week 6 The Web of Group-Hyperlinks

2/26 Guest: Dr. Jennifer Johnson

REQUIRED:

Breiger, Ronald L. 1974. "The Duality of Persons and Groups." *Social Forces* 53 (2): 181–190.

Ahn, Yong-Yeol et al. 2011. "Flavor Network and the Principles of Food Pairing." *Scientific Reports* 1 (1): 196.

Blaschke, Steffen, Schoeneborn, Dennis, and Seidl, David. 2012. "Organizations as Networks of Communication Episodes: Turning the Network Perspective Inside Out." *Organization Studies* 33 (7): 879–906.

Lerner, Jürgen and Lomi, Alessandro. 2020. "The Free Encyclopedia that Anyone Can Dispute: An Analysis of the Micro-Structural Dynamics of Positive and Negative Relations in the Production of Contentious Wikipedia Articles." *Social Networks* 60 (2020): 11–25.

Sugishita, Kashin and Masuda, Naoki. 2023. "Social Network Analysis of Manga: Similarities to Real-World Social Networks and Trends Over Decades." *Applied Network Science* 8 (1 2023): 1–17.

RECOMMENDED:

Lizardo, Omar. 2006. "How Cultural Tastes Shape Personal Networks." *American Sociological Review* 71 (5 2006): 778–807.

DellaPosta, Daniel, Shi, Yongren, and Macy, Michael. 2015. "Why Do Liberals Drink Lattes?" *American Journal of Sociology* 120 (5): 1473–1511.

Hoffman, Mark Anthony. 2019. "The Materiality of Ideology: Cultural Consumption and Political Thought after the American Revolution." *American Journal of Sociology* 125 (1): 1–62.

Błoch, Agata, Vasques Filho, Demival, and Bojanowski, Michał. 2022. "Networks from Archives: Reconstructing Networks of Official Correspondence in the Early Modern Portuguese Empire." *Social Networks* 69 (2022): 123–135.

WEEK 7 Online Marketplace, DarkNets, and Crowdfunding

3/5 Guest: Dr. Laura Halcomb

REQUIRED:

Diekmann, Andreas et al. 2014. "Reputation Formation and the Evolution of Cooperation in Anonymous Online Markets." *American Sociological Review* 79 (1): 65–85.

Duxbury, Scott W and Haynie, Dana L. 2023. "The Asymmetry of Embeddedness: Illegal Trade Networks and Drug Purchasing Diversity on An Online Illegal Drug Market." *Social Forces* 102 (4): 1535–1554.

Dalla Chiesa, Carolina and Dekker, Erwin. 2021. "Crowdfunding Artists: Beyond Match-Making on Platforms." *Socio-Economic Review* 19 (4): 1265–1290.

Halcomb, Laura. 2023. "Crowdfunding a Life: How Relationships Shape Requests for Financial Assistance." *Socio-Economic Review* 21 (2): 721–740.

RECOMMENDED:

DiMaggio, Paul and Louch, Hugh. 1998. "Socially Embedded Consumer Transactions: For What Kinds of Purchases Do People Most Often Use Networks?" *American Sociological Review* 63 (5): 619–637.

Baym, Nancy K. 2018. Playing to the Crowd: Musicians, Audiences, and the Intimate Work of Connection. NYU Press, 2018.

Kricheli-Katz, Tamar, Regev, Tali, and Correll, Shelley. 2019. "Why Are Women Penalized in Product Markets?" *Socius* 5:237802311986102.

Ladegaard, Isak. 2020. "Open Secrecy: How Police Crackdowns and Creative Problem-Solving Brought Illegal Markets out Of the Shadows." *Social Forces* 99 (2): 532–559.

Schor, Juliet B and Vallas, Steven P. 2021. "The Sharing Economy: Rhetoric and Reality." *Annual Review of Sociology* 47 (1): 369–389.

Schneiderhan, Erik and Lukk, Martin. 2023. *GoFailMe: The Unfulfilled Promise of Digital Crowdfunding*. Palo Alto, CA: Stanford University Press, 2023.

Duxbury, Scott W and Haynie, Dana L. 2021. "Shining a Light on the Shadows: Endogenous Trade Structure and the Growth of an Online Illegal Market." *American Journal of Sociology* 127 (3): 787–827.

Haynie, Dana L and Duxbury, Scott W. 2024. "Online Illegal Cryptomarkets." *Annual Review of Sociology* 50 (1): 671–690.

Due: Mini Project #2

PART III: Words and Pixels in Digital Data

WEEK 8 All the Internet's a Corpus, and All the Men and Women Merely Words

3/19 Guest: Dr. Thomas Dearden

REQUIRED:

Selections from Grimmer, Justin, Roberts, Margaret E, and Stewart, Brandon M. 2022. *Text as Data: A New Framework for Machine Learning and the Social Sciences*. Princeton University Press.

DiMaggio, Paul, Nag, Manish, and Blei, David. 2013. "Exploiting Affinities Between Topic Modeling and the Sociological Perspective on Culture: Application to Newspaper Coverage of U.S. Government Arts Funding." *Poetics* 41 (6): 570–606.

Karell, Daniel and Freedman, Michael. 2019. "Rhetorics of Radicalism." *American Sociological Review* 84 (4): 726–753.

Heiberger, Raphael H, Munoz-Najar Galvez, Sebastian, and McFarland, Daniel A. 2021. "Facets of Specialization and Its Relation to Career Success: An Analysis of U.S. Sociology, 1980 to 2015." *American Sociological Review* 86 (6): 1164–1192.

Nie, Ke. 2021. "Disperse and Preserve the Perverse: Computing how Hip-Hop Censorship Changed Popular Music Genres in China." *Poetics* 88:101590.

RECOMMENDED:

Griffiths, Thomas L and Steyvers, Mark. 2004. "Finding Scientific Topics." Proceedings of the National Academy of Sciences of the United States of

America 101 Suppl 1 (2004): 5228-5235.

Bail, Christopher A, Brown, Taylor W, and Mann, Marcus. 2017. "Channeling Hearts and Minds: Advocacy Organizations, Cognitive-Emotional Currents, and Public Conversation." *American Sociological review* 82 (6): 1188–1213.

Fligstein, Neil, Stuart Brundage, Jonah, and Schultz, Michael. 2017. "Seeing Like the Fed: Culture, Cognition, and Framing in the Failure to Anticipate the Financial Crisis of 2008." *American Sociological Review* 82 (5): 879–909.

Esberg, Jane. 2020. "Censorship as Reward: Evidence from Pop Culture Censorship in Chile." *American Political Science Review* 114 (3): 821–836.

WEEK 9 Word Embeddings and the Missing Linguistics

3/26 Guest: Dr. Andrew McCumber

REQUIRED:

Selections from Grimmer, Justin, Roberts, Margaret E, and Stewart, Brandon M. 2022. *Text as Data: A New Framework for Machine Learning and the Social Sciences*. Princeton University Press.

Zhou, Di. 2022. "The Elements of Cultural Power: Novelty, Emotion, Status, and Cultural Capital." *American Sociological Review* 87 (5): 750–781.

Bonikowski, Bart, Luo, Yuchen, and Stuhler, Oscar. 2022. "Politics as Usual? Measuring Populism, Nationalism, and Authoritarianism in U.S. Presidential Campaigns (1952-2020) with Neural Language Models." *Sociological Methods & Research* 51 (4 2022): 1721–1787.

Jiang, Wenhao. 2023. "The Cultural Devaluation of Feminized Work: The Evolution of Occupational Prestige and Gender Typing in the United States, 1900-2019." *SocArXiv*.

McCumber, Andrew and Davis, Adam. 2024. "Elite Environmental Aesthetics: Placing Nature in A Changing Climate." *American Journal of Cultural Sociology* 12 (1): 53–84.

RECOMMENDED:

Domingos, Pedro. 2012. "A Few Useful Things to Know About Machine Learning." *Communications of the ACM* 55 (10): 78–87.

Garg, Nikhil et al. 2018. "Word Embeddings Quantify 100 Years of Gender and Ethnic Stereotypes." *Proceedings of the National Academy of Sciences of the United States of America* 115 (16): E3635–E3644.

Lenci, Alessandro. 2018. "Distributional Models of Word Meaning." *Annual Review of Linguistics* 4 (1): 151–171.

Rodriguez, Pedro L and Spirling, Arthur. 2022. "Word Embeddings: What Works, What Doesn't, and How to Tell the Difference for Applied Research." *Journal of Politics* 84 (1): 101–115.

Wilmers, Nathan and Zhang, Letian. 2022. "Values and Inequality: Prosocial Jobs and the College Wage Premium." *American sociological review* 87 (3 2022): 415–442.

Stuhler, Oscar. 2022. "Who Does What to Whom? Making Text Parsers Work for Sociological Inquiry." *Sociological Methods & Research* 51 (4 2022): 1580–1633.

Barberá, Pablo et al. 2020. "Automated Text Classification of News Articles: A Practical Guide." *Political Analysis*, 1–24.

Nelson, Laura K et al. 2021. "The Future of Coding: A Comparison of Hand-Coding and Three Types of Computer-Assisted Text Analysis Methods." *Sociological Methods & Research* 50 (1): 202–237.

Li, Zhuofan and Abramson, Corey M. 2023. "Ethnography and Machine Learning: Synergies and New Directions." In *Oxford Handbook of the Sociology of Machine Learning*. 2023.

Binsbergen, Jules van et al. 2024. (almost) 200 years of news-based economic sentiment. w32026. National Bureau of Economic Research, 2024.

WEEK 10 From Images to Chatbots to a Future with Generative AI

4/2 Guest: Dr. Maaz Gardezi

REQUIRED:

Hwang, Jackelyn and Sampson, Robert J. 2014. "Divergent Pathways of Gentrification: Racial Inequality and the Social Order of Renewal in Chicago Neighborhoods." *American Sociological Review* 79 (4): 726–751.

Adukia, Anjali et al. 2023. "What We Teach About Race and Gender: Representation in Images and Text of Children's Books." *Quarterly Journal of Economics* 138 (4): 2225–2285.

Davidson, Thomas. 2024. "Start Generating: Harnessing Generative Artificial Intelligence for Sociological Research." *Socius* 10.

Guilbeault, Douglas et al. 2024. "Online Images Amplify Gender Bias." *Nature* 626 (8001): 1049–1055.

RECOMMENDED:

Legewie, Joscha and Schaeffer, Merlin. 2016. "Contested Boundaries: Explaining Where Ethnoracial Diversity Provokes Neighborhood Conflict." *American Journal of Sociology* 122 (1): 125–161.

Kristensen-McLachlan, Ross Deans et al. 2023. "Chatbots Are Not Reliable Text Annotators." *arXiv*, 2311.05769.

Dietrich, Bryce J. 2021. "Using Motion Detection to Measure Social Polarization in the U.S. House of Representatives." *Political Analysis* 29 (2): 250–259.

Bernasco, Wim et al. 2022. "Promise Into Practice: Application of Computer Vision in Empirical Research on Social Distancing." *Sociological Methods & Research* (2022): 00491241221099554.

Torres, Michelle. 2024. "A Framework for the Unsupervised and Semi-Supervised Analysis of Visual Frames." *Political Analysis* 32 (2): 199–220.

Bail, Christopher A. 2024. "Can Generative Ai Improve Social Science?" *Proceedings of the National Academy of Sciences of the United States of America* 121 (21): e2314021121.

Joyce, Kelly et al. 2021. "Toward a Sociology of Artificial Intelligence: A Call for Research on Inequalities and Structural Change." *Socius* 7:2378023121999581.

Due: Mini Project #3

PART IV: How to Use and Abuse Digital Data

WEEK 11 Code of the Street, Code of the Tweet

4/9 REQUIRED:

Bennett, W Lance and Segerberg, Alexandra. 2012. "The Logic of Connective Action." *Information, Communication and Society* 15 (5): 739–768.

Excerpts from Tufekci, Zeynep. 2017. Twitter and Tear Gas: The Power and

Fragility of Networked Protest. New Haven, CT: Yale University Press, 2017.

Stuart, Forrest. 2019. "Code of the Tweet: Urban Gang Violence in the Social Media Age." *Social Problems* 67 (2 2019): 191–207.

Baldor, Tyler. 2022. "Acquainted Strangers: Thwarted Interaction in Digitally Mediated Urban Gay Bars." *Social Problems* 69 (1 2022): 58–73.

RECOMMENDED:

Earl, Jennifer and Kimport, Katrina. 2011. *Digitally Enabled Social Change: Online and Offline Activism in the Age of the Internet.* Cambridge, MA: MIT Press.

Tufekci, Zeynep. 2017. Twitter and Tear Gas: The Power and Fragility of Networked Protest. New Haven, CT: Yale University Press, 2017.

Bail, Christopher A et al. 2018. "Exposure to Opposing Views on Social Media Can Increase Political Polarization." *Proceedings of the National Academy of Sciences* 115 (37): 9216–9221.

Schradie, Jen. 2019. *The Revolution That Wasn't: How Digital Activism Favors Conservatives*. Cambridge, MA: Harvard University Press, 2019.

Zhang, Han and Pan, Jennifer. 2019. "CASM: A Deep-Learning Approach for Identifying Collective Action Events with Text and Image Data from Social Media." *Sociological Methodology* 49 (1): 1–57.

Porta, Donatella della et al. 2024. "Expanding Protest Event Analysis Through Videos." *Mobilization* 29 (2 2024): 245–262.

Hsiao, Yuan, Leverso, John, and Papachristos, Andrew V. 2023. "The Corner, the Crew, and the Digital Street: Multiplex Networks of Gang Online-Offline Conflict Dynamics in the Digital Age." *American Sociological Review* 88 (4 2023): 709–741.

WEEK 12 Electronic Health Records and Digital Health Apps

4/16 REQUIRED:

Ruckenstein, Minna and Schüll, Natasha Dow. 2017. "The Datafication of Health." *Annual Review of Anthropology* 46 (1): 261–278.

Obermeyer, Ziad et al. 2019. "Dissecting Racial Bias in An Algorithm Used to Manage the Health of Populations." *Science* 366 (6464): 447–453.

Cruz, Taylor Marion. 2024. "Racing the Machine: Data Analytic Technologies and Institutional Inscription of Racialized Health Injustice." *Journal of Health and Social Behavior* 65 (1): 110–125.

Greve, Henrich R et al. 2022. "Online Conspiracy Groups: Micro-Bloggers, Bots, and Coronavirus Conspiracy Talk on Twitter." *American Sociological Review* 87 (6 2022): 919–949.

Bergemann, Patrick and Brandtner, Christof. 2024. "Territoriality and the Emergence of Norms During the Covid-19 Pandemic." *American Journal of Sociology*.

RECOMMENDED:

Berg, Marc and Bowker, Geoffrey. 1997. "The Multiple Bodies of the Medical Record: Toward a Sociology of An Artifact." *Sociological Quarterly* 38 (3): 513–537.

Miller, Amalia R and Tucker, Catherine E. 2011. "Can Health Care Information Technology Save Babies?" *Journal of Political Economy* 119 (2): 289–324.

Lupton, Deborah. 2014. "Critical Perspectives on Digital Health Technologies: Digital Health Technologies." *Sociology Compass* 8 (12 2014): 1344–1359.

Vaan, Mathijs de and Stuart, Toby. 2022. "Gender in the Markets for Expertise." *American Sociological Review* 87 (3): 443–477.

Vale, Mira D. 2024. "Moral Entrepreneurship and the Ethics of Artificial Intelligence in Digital Psychiatry." *Socius* 10:23780231241259641.

WEEK 13 Criminal Records, Predictive Policing, and Big Data Surveillance

4/23 Guest: Dr. Ashley Reichelmann

REQUIRED:

Brayne, Sarah. 2017. "Big Data Surveillance: The Case of Policing." *American Sociological Review* 82 (5): 977–1008.

Brayne, Sarah and Christin, Angèle. 2020. "Technologies of Crime Prediction: The Reception of Algorithms in Policing and Criminal Courts." *Social Problems* 68 (3): 608–624.

Brayne, Sarah, Lageson, Sarah, and Levy, Karen. 2023. "Surveillance Deputies: When Ordinary People Surveil for the State." *Law & Society Review* 57 (4): 462–488.

Lara-Millán, Armando and Guzman-Garcia, Melissa. 2023. "Digital Platforms and the Maintenance of the Urban Order." *Social Problems*, spad053.

RECOMMENDED:

Ferguson, Andrew Guthrie. 2019. The Rise of Big Data Policing: Surveillance, Race, and the Future of Law Enforcement. New York, NY: NYU Press.

Brayne, Sarah. 2020. *Predict and Surveil: Data, Discretion, and the Future of Policing.* New York, NY: Oxford University Press.

Lageson, Sarah Esther. 2020. *Digital Punishment: Privacy, Stigma, and the Harms of Data-Driven Criminal Justice*. Oxford University Press.

Newell, Bryce Clayton. 2021. *Police Visibility: Privacy, Surveillance, and the False Promise of Body-Worn Cameras.* University of California Press.

Calacci, Dan, Shen, Jeffrey J, and Pentland, Alex. 2022. "The Cop In Your Neighbor's Doorbell: Amazon Ring and the Spread of Participatory Mass Surveillance." *Proceedings of the ACM on Human-Computer Interaction* (New York, NY, USA) 6 (CSCW2 2022): 1–47.

Due: Mini Project #4.

WEEK 14 Credit, Risk, and Metrics

4/30 REQUIRED:

Carruthers, Bruce G. 2013. "From Uncertainty Toward Risk: the Case of Credit Ratings." *Socio-Economic Review* 11 (3): 525–551.

Kiviat, Barbara. 2019. "The Moral Limits of Predictive Practices: The Case of Credit-Based Insurance Scores." *American Sociological Review* 84 (6): 1134–1158.

Christin, Angèle. 2018. "Counting Clicks: Quantification and Variation in Web Journalism in the United States and France." *American Journal of Sociology* 123 (5): 1382–1415.

Ranganathan, Aruna and Benson, Alan. 2020. "A Numbers Game: Quan-

tification of Work, Auto-Gamification, and Worker Productivity." *American Sociological Review* 85 (4): 573–609.

RECOMMENDED:

Bouk, Dan. 2017. "The History and Political Economy of Personal Data over the Last Two Centuries in Three Acts." *Osiris* 32 (1): 85–106.

Brensinger, Jordan. 2023. "Identity Theft, Trust Breaches, and the Production of Economic Insecurity." *American Sociological Review* 88 (5): 844–871.

PART V: Conclusion

WEEK 15 Being A Sociologist in a Digital World

5/7 REQUIRED:

Wagner, Claudia et al. 2021. "Measuring algorithmically infused societies." *Nature* 595 (7866): 197–204.

Due: Presentation #2

Week 16 **Due**: Working Document.

Land and Labor Acknowledgment

Virginia Tech acknowledges that we live and work on the Tutelo / Monacan People's homeland and we recognize their continued relationships with their lands and waterways. We further acknowledge that legislation and practices like the Morrill Act (1862) enabled the commonwealth of Virginia to finance and found Virginia Tech through the forced removal of Native Nations from their lands, both locally and in western territories.

We understand that honoring Native Peoples without explicit material commitments falls short of our institutional responsibilities. Through sustained, transparent, and meaningful engagement with the Tutelo / Monacan Peoples, and other Native Nations, we commit to changing the trajectory of Virginia Tech's history by increasing Indigenous student, staff, and faculty recruitment and retention, diversifying course offerings, and meeting the growing needs of all Virginia tribes and supporting their sovereignty.

We must also recognize that enslaved Black people generated revenue and resources used to establish Virginia Tech and were prohibited from attending until 1953. Through InclusiveVT, the institutional and individual commitment to Ut Prosim (that I may serve) in the spirit of community, diversity, and excellence, we commit to advancing a more diverse, equitable, and inclusive community.