

THE SEEDS READER

Student Engagement and Enrichment in Data Science (SEEDS) Reading List
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OVERVIEW AND PURPOSE

To give students in the SEEDs program the background and significance of intersectional and critical race approaches to data science with a focus on both practical and philosophical perspectives on the relationship between data, culture, and society.

PRIMARY OBJECTIVE

Ensuring that SEEDS students have both knowledge and understanding of key frameworks and perspectives that they can utilize both within and outside of the program.

LEADING QUESTION(S)

- How can we use data to improve the conditions of Black communities?
- What does Black Studies bring to research on data, science, and technology?
- How is intersectional data constructed and understood across fields and disciplines?
- In what ways can Afrofuturism be used to create more ethical and socially just theories and practices in STEM fields?

SHORT READINGS (Less than 10 Pages)

1. Johnson, Jessica Marie, and Mark Anthony Neal. "Introduction: Wild Seed in the Machine." (2017): 1-2.
<https://www.tandfonline.com/doi/full/10.1080/00064246.2017.1329608>
2. Benjamin, Ruha. "Catching Our Breath: Critical Race STS and the Carceral Imagination." *Engaging Science, Technology, and Society* 2 (2016): 145-156.
<https://pdfs.semanticscholar.org/4c78/cf348cd086247ef8c45eb327087bd7d88bd0.pdf>
3. Coleman, Grisha, and Thomas F. Defrantz. "Reach, Robot: AfroFuturist Technologies." *We Travel the Space Ways*. transcript-Verlag, 2019. 53-68.

<https://www.slomoco.surf/read/reach-robot-afrofuturist-technologies/section/968f3ce9-b67a-4fdb-a6a8-7de2c76e06ea>

4. Browne, Simone. "Race and surveillance." *Handbook on Surveillance Studies*. New York: Routledge (2012): 72-79.
5. Keeling, Kara. "Queer OS." *Cinema Journal*, vol. 53 no. 2, 2014, p. 152-157. *Project MUSE*. <https://muse.jhu.edu/article/535715>
6. Noble, Safiya Umoja. "Missed connections: What search engines say about women." *Bitch Magazine* 54 (2012): 36-41. https://safiyaunoble.files.wordpress.com/2012/03/54_search_engines.pdf
7. Joyce, Kelly, et al. "Toward a Sociology of Artificial Intelligence: A Call for Research on Inequalities and Structural Change." *Socius* 7 (2021). <https://journals.sagepub.com/doi/full/10.1177/2378023121999581>
8. Phan T, Wark S. Racial formations as data formations. *Big Data & Society*. July 2021. <https://journals.sagepub.com/doi/full/10.1177/205395172111046377>
9. Gebru, Timnit, et al. "Datasheets for Datasets." *Communications of the ACM* 64.12 (2021): 86-92. https://dl.acm.org/doi/fullHtml/10.1145/3458723?casa_token=2G2hHrXLPPQAAAAA:x8sMvoknn-gM7TlAWjvYm7A-lC6FTVcYlD2xgnnB8S7hL7OyCK1E18JmPXcmKtm-SktHQhoxZ6YikA

ADDITIONAL READINGS (Greater than 10 Pages)

1. Coleman, Beth. "Race as Technology." *Camera Obscura: Feminism, Culture, and Media Studies*. 24.1 (70) (2009): 177-207.
2. McGlotten, Shaka. "Black Data." *No Tea, No Shade: New Writings in Black Queer Studies*. (2016): 262-86. Video Transcript of condensed piece linked below <https://sfonline.barnard.edu/traversing-technologies/shaka-mcglotten-black-data/>
3. Buolamwini, Joy, and Timnit Gebru. "Gender shades: Intersectional accuracy disparities in commercial gender classification." *Conference on fairness, accountability and transparency*. PMLR, 2018. <http://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf>
4. Benjamin, Ruha. 2016. "Racial Fictions, Biological Facts: Expanding the Sociological Imagination through Speculative Methods." *Catalyst* 2(2).
5. Amaro, Ramon. 2019. As If. e-flux architecture: Becoming Digital, <https://www.e-flux.com/architecture/becoming-digital/248073/as-if/>
6. Noble, Safiya Umoja. *Algorithms of Oppression*. New York University Press, 2018.
7. Everett, Anna. "On cyberfeminism and cyberwomanism: High-tech mediations of feminism's discontents." *Signs: Journal of Women in Culture and Society* 30.1

(2004): 1278-1286.

8. Fouche, Rayvon. "Say it loud, I'm black and I'm proud: African Americans, American artifactual culture, and black vernacular technological creativity." *American Quarterly* 58.3 (2006): 639-661.
9. Johnson, Jessica Marie. "Markup BodiesBlack [Life] Studies and Slavery [Death] Studies at the Digital Crossroads." *Social Text* 36.4 (137) (2018): 57-79.
10. Freelon, Deen, Charlton D. McIlwain, and Meredith Clark. "Beyond the hashtags:# Ferguson,# Blacklivesmatter, and the online struggle for offline justice." Center for Media & Social Impact, American University, Forthcoming (2016).
<https://cmsimpact.org/resource/beyond-hashtags-ferguson-blacklivesmatter-online-struggle-offline-justice/>
11. Bailey, Moya. "Shaping God": The Power of Octavia Butler's Black Feminist and Womanist SciFi Visions in the Shaping of a New World — An Interview with Adrienne Maree Brown <https://adanewmedia.org/2013/11/issue3-baileybrown/>
12. Nelson, Alondra. "The social life of DNA: racial reconciliation and institutional morality after the genome." *The British journal of sociology* 69.3 (2018): 522-537.
https://onlinelibrary.wiley.com/doi/pdf/10.1111/1468-4446.12607?casa_token=0ZZOpXhUKLoAAAAA:kiFscbRECIQghv12SxV1fkmirS2Kx1WnL7w-SJE_ro5q-A7j3z970PCH7UoRuiEG2ah8ks23yHZ5rU0T

WEEKLY DISCUSSION AND/OR EVENT TOPICS

- Critical Race Approaches to Data Science: Participatory Design and Creating Community Based Standards for Research
- Rep Your Set: The History of Data and the Representation of Race
- Let's Talk About Reading: Data Literacy in the Public Sphere
- Designing Data Defenses: Database Design, Cybersecurity, and the Protection of Vulnerable Population(s)
- Mis/Information and Memes: Understanding Disinformation in the Era of Big Data
- "Black on the Block": Race, Redlining, and the Use(s) of Census Data
- POC's and the Pandemic: COVID-19 and the History of Healthcare Data
- The Black Tax: Using Data to Address Wealth Inequality and Access to Resources
- Skinfolk vs. Kinfolk: DNA, Genes, and the Politics of Manipulating Human Cell Data
- Unpacking the Black Box: Algorithms and the Data of Discriminatory Design
- Where My Sisters At?: Data Feminism and the Ethics of Intersectional Data

- Predicting Bias: Robots, Recommendation Systems, and Machine Learning
- Calculating Clicks: The Role of Race in Consumer Insights and Audience Data
- DEI and Data: The Role of Fairness and Equality in STEM
- Bringing Intersectionality to Identity Based Data: On The Disaggregation of Data
- The “Missing Missing”: Understanding the Complexity of Missing Data Sets
- Mask Off: Facial Recognition Data and the Construction of a Digital Panopticon
- Enter the Meta-Verse: Data Justice and Public Policy in Virtual Environments
- Making a Mess: Data Cleaning and the Politics of Noisy Data
- The Afro-Future: On Speculative Ethics and Constructing a Black Data Culture