

CS 492 Winter 2023 Sections 001 and 002
University of Waterloo
Instructors: dan brown and Maura Grossman

Weekly class reading schedule

1. **Tuesday, 9 January:** Welcome, introduction, initial case studies
 - a. Introduction
 - Hao, Karen, and Heidi Swart. “South Africa’s Private Surveillance Machine Is Fueling a Digital Apartheid.” *MIT Technology Review*. April 19, 2022. <https://www.technologyreview.com/2022/04/19/1049996/south-africa-ai-surveillance-digital-apartheid/>.
 - Chiang, Ted. “Will A.I. Become the New McKinsey?” *The New Yorker*. May 4, 2023. <https://www.newyorker.com/science/annals-of-artificial-intelligence/will-ai-become-the-new-mckinsey>.
 - b. Case 1: the case of Monseigneur Burrill
 - The Pillar. “Pillar Investigates: USCCB Gen Sec Burrill Resigns after Sexual Misconduct Allegations,” *The Pillar*. July 20, 2021. <https://www.pillarcatholic.com/p/pillar-investigates-usccb-gen-sec>.
 - Morrison, Sara. “A Priest’s Resignation after His Phone Location Data Leaked Shows the Urgent Need for Data Privacy Laws.” *Vox*. July 21, 2021. <https://www.vox.com/recode/22587248/grindr-app-location-data-outed-priest-jeffrey-burrill-pillar-data-harvesting>.
 - Steinfels, Peter. “The Deep Strangeness of the Catholic Church’s Latest Scandal.” *The Atlantic* (blog). August 15, 2021. <https://www.theatlantic.com/ideas/archive/2021/08/catholic-priest-jeffrey-burrill-grindr-pillar/619758/>.
 - c. Case 2: biased HR system from Amazon
 - Dastin, Jeffrey. “Insight - Amazon Scraps Secret AI Recruiting Tool That Showed Bias against Women.” *Reuters*. October 11, 2018, sec. World. <https://www.reuters.com/article/idUSKCN1MK0AG/>.
 - **[Read at least the abstract]**
Kay, Matthew, Cynthia Matuszek, and Sean A. Munson. “Unequal Representation and Gender Stereotypes in Image Search Results for Occupations.” In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*, 3819–28. CHI ’15. New York, NY, USA: Association for Computing Machinery, 2015. <https://doi.org/10.1145/2702123.2702520>.

Third hour: Elise Vist from the Writing and Communication Centre will visit to give a workshop about strong thesis-statement generation and arguments.

2. **Tuesday, 16 January:** Definitions of discrimination, more case studies
 - a. Definitions of discrimination

- **[Focus on Section 2]**
Kleinberg, Jon, Jens Ludwig, Sendhil Mullainathan, and Cass R. Sunstein. “Discrimination in the Age of Algorithms.” *Journal of Legal Analysis*. April 22, 2019. <https://academic.oup.com/jla/article/doi/10.1093/jla/laz001/5476086?login=true>.
 - **[Focus on Section 3]**
Zuiderveen Borgesius, Frederik. “Discrimination, Artificial Intelligence and Algorithmic Decision-Making.” *Council of Europe*. July 2, 2019. <https://www.coe.int/en/web/artificial-intelligence/-/news-of-the-european-commission-against-racism-and-intolerance-ecri->.
- b. Case 1: Fintech and algorithmic discrimination
- **[Focus on abstract and introduction]**
Kelley, Stephanie, Anton Ovchinnikov, David R. Hardoon, and Adrienne Heinrich. “Antidiscrimination Laws, Artificial Intelligence, and Gender Bias: A Case Study in Nonmortgage Fintech Lending.” *Manufacturing & Service Operations Management* 24, no. 6. November 2022. <https://doi.org/10.1287/msom.2022.1108>.
- c. Case 2: Housing and AI applications
- McIlwain, Charlton. “AI Has Exacerbated Racial Bias in Housing. Could It Help Eliminate It Instead?” *MIT Technology Review*. October 20, 2020. <https://www.technologyreview.com/2020/10/20/1009452/ai-has-exacerbated-racial-bias-in-housing-could-it-help-eliminate-it-instead/>.
 - Smith, Gary. “High-Tech Redlining: AI Is Quietly Upgrading Institutional Racism.” *Fast Company* (blog). November 20, 2018. <https://www.fastcompany.com/90269688/high-tech-redlining-ai-is-quietly-upgrading-institutional-racism>.
- d. Fairness and values
- Chou, Joyce, and Roger Ibars. “In Pursuit of Inclusive AI.” *Microsoft Design* (blog). August 22, 2019. <https://medium.com/microsoft-design/in-pursuit-of-inclusive-ai-eb73f62d17fc>.
 - **[Read overview and key insights]**
Venkatasubramanian, Sorelle A. Friedler, Carlos Scheidegger, Suresh. “The (Im)Possibility of Fairness: Different Value Systems Require Different Mechanisms For Fair Decision Making.” *Communications of the ACM*. April 2021. <https://cacm.acm.org/magazines/2021/4/251365-the-impossibility-of-fairness/abstract>.

Third hour: no class

3. **Tuesday, 23 January**: Racial discrimination, criminal justice

- a. Case study: COMPAS
- Angwin, Julia, Jeff Larson, Surya Muttu, and Lauren Kirchner. “Machine Bias.” *ProPublica*. May 23, 2016.

<https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>.

- Hao, Karen, and Stray, Jonathan. “Can You Make AI Fairer than a Judge? Play Our Courtroom Algorithm Game.” *MIT Technology Review*. October, 17 2019. <https://www.technologyreview.com/2019/10/17/75285/ai-fairer-than-judge-criminal-risk-assessment-algorithm/>.
- b. Facial recognition and racial bias
 - Bosque, Melissa del. “Facial Recognition Bias Frustrates Black Asylum Applicants to US, Advocates Say.” *The Guardian*. February 8, 2023, sec. US news. <https://www.theguardian.com/us-news/2023/feb/08/us-immigration-cbp-one-app-facial-recognition-bias>.
 - Hill, Kashmir. “Accused of Cheating by an Algorithm, and a Professor She Had Never Met.” *The New York Times*. May 27, 2022, sec. Technology. <https://www.nytimes.com/2022/05/27/technology/college-students-cheating-software-honorlock.html>.
 - Najibi, Alex. “Racial Discrimination in Face Recognition Technology.” *Science in the News* (blog). October 24, 2020. <https://sitn.hms.harvard.edu/flash/2020/racial-discrimination-in-face-recognition-technology/>.
- c. Racial bias in healthcare algorithms
 - Ledford, Heidi. “Millions of Black People Affected by Racial Bias in Health-Care Algorithms.” *Nature* 574, no. 7780. October 24, 2019. <https://doi.org/10.1038/d41586-019-03228-6>.
 - Wachter, Sandra, Brent Mittelstadt, and Chris Russell. “Health Care Bias Is Dangerous. But So Are ‘Fairness’ Algorithms.” *Wired*. August 2, 2023. <https://www.wired.com/story/bias-statistics-artificial-intelligence-healthcare/>.

Third hour: Rebecca Hutchinson from the Library will visit to give a workshop on source gathering and assessing articles for quality.

4. **Tuesday 30 January:** Indigenous people

- a. Digital divide in Canada and the US
 - Evans, Pete. “Digital Divide Holds Back Indigenous Communities and Canada’s Economy, New Report Finds.” *CBC News*. July 14, 2021. <https://www.cbc.ca/news/business/rbc-indigenous-report-1.6100857>.
 - Scheintek, Samantha. “First Nations High-Speed Internet Access Lagging behind Canadian Average.” *CBC News*. April 19, 2023. <https://www.cbc.ca/news/indigenous/first-nations-high-speed-internet-access-lagging-behind-canadian-average-1.6815370>.
 - Chakravorti, Bhaskar. “How to Close the Digital Divide in the U.S.” *Harvard Business Review*. July 20, 2021. <https://hbr.org/2021/07/how-to-close-the-digital-divide-in-the-u-s>.
 - Young, San San F. “Broadband Bruce: Fighting Canada’s Digital Divide.” *Al Jazeera*, June 17, 2017.

<https://www.aljazeera.com/program/witness/2017/6/17/broadband-bruce-fighting-canadas-digital-divide>.

- b. Designing using Indigenous approach
 - Kite, Suzanne. “How to Build Anything Ethically.” Monograph. Honolulu, HI: Indigenous Protocol and Artificial Intelligence Working Group and the Canadian Institute for Advanced Research, 2020, Section 4.4 (pp. 75-84).
<https://doi.org/10.11573/spectrum.library.concordia.ca.00986506>.
- c. Case study 1: AI and language models and Indigenous language
 - Kick Point Inc. “Can Search Engines Understand Indigenous Languages? | National Day for Truth and Reconciliation 2021,” September 28, 2021.
<https://kickpoint.ca/what-if-you-couldnt-search-the-internet-in-your-own-language/>.
- d. Case study 2: search in Indigenous languages
 - Hao, Karen. “A New Vision of Artificial Intelligence for the People.” *MIT Technology Review*. April 22, 2022.
<https://www.technologyreview.com/2022/04/22/1050394/artificial-intelligence-for-the-people/>.
 - Vox. “Why AI Doesn’t Speak Every Language.” YouTube. 2023.
<https://www.youtube.com/watch?v=a2DgdsE86ts>.

Third hour: no class

5. **Tuesday 6 February:** Gender discrimination. Guest: TK Pritchard (Executive Director, National Abortion Federation Canada) to visit both sections
 - a. Overall phenomenon of structural gender discrimination
 - Chin-Rothmann, Caitlin, and Mishaela Robison. “How AI Bots and Voice Assistants Reinforce Gender Bias.” *Brookings*. November 23, 2020.
<https://www.brookings.edu/articles/how-ai-bots-and-voice-assistants-reinforce-gender-bias/>.
 - Perez, Caroline Criado. “The Deadly Truth about a World Built for Men – from Stab Vests to Car Crashes.” *The Guardian*. February 23, 2019, sec. Life and style.
<https://www.theguardian.com/lifeandstyle/2019/feb/23/truth-world-built-for-men-car-crashes>.
 - b. Gender-inclusive design process
 - Fonseca, Sabrina. “Designing Forms for Gender Diversity and Inclusion.” *Medium*. September 4, 2020. <https://uxdesign.cc/designing-forms-for-gender-diversity-and-inclusion-d8194cf1f51>.
 - c. Abortion and privacy
 - Newman, Lily Hay. “The Surveillance State Is Primed for Criminalized Abortion.” *Wired*. May 24, 2022.
<https://www.wired.com/story/surveillance-police-roe-v-wade-abortion/>.

- Singer, Natasha, and Brian X. Chen. “In a Post-Roe World, the Future of Digital Privacy Looks Even Grimmer.” *The New York Times*. July 13, 2022, sec. Technology.
<https://www.nytimes.com/2022/07/13/technology/personaltech/abortion-privacy-roe-surveillance.html>.
- d. Technology-based violence
- **[This article is long, but excellent; if you don’t have time, focus on pages 5-20.]**
Dunn, Suzie. “Technology-Facilitated Gender-Based Violence: An Overview.” *Centre for International Governance Innovation*. December 7, 2020. <https://www.cigionline.org/publications/technology-facilitated-gender-based-violence-overview/>.
 - Clayton, James, and Jasmin Dyer. “Apple AirTags - ‘A Perfect Tool for Stalking.’” *BBC News*. January 19, 2022.
<https://www.bbc.com/news/technology-60004257>.

Third hour: Course Instructors to give a workshop on editing your writing.

6. **Tuesday 13 February:** discrimination against LGBTQ folx; deepfakes and porn
- a. Sexual orientation and facial recognition
- Arcas, Blaise Aguera y. “Do Algorithms Reveal Sexual Orientation or Just Expose Our Stereotypes?” *Medium* (blog). January 18, 2018.
<https://medium.com/@blaisea/do-algorithms-reveal-sexual-orientation-or-just-expose-our-stereotypes-d998fafdf477>.
 - **[Long, but excellent; read if you’re interested!]**
Arcas, Blaise Aguera y. “Physiognomy’s New Clothes.” *Medium* (blog). May 20, 2017. <https://medium.com/@blaisea/physiognomys-new-clothes-f2d4b59fdd6a>.
 - Levin, Sam. “New AI Can Guess Whether You’re Gay or Straight from a Photograph.” *The Guardian*. September 7, 2017, sec. Technology.
<https://www.theguardian.com/technology/2017/sep/07/new-artificial-intelligence-can-tell-whether-youre-gay-or-straight-from-a-photograph>.
- b. Trans people and digital surveillance
- **[Long; read overview at minimum, but this is all important.]**
Kladzyk, René. “Policing Gender: How Surveillance Tech Aids Enforcement of Anti-Trans Laws.” *POGO*. June 28, 2023.
<https://www.pogo.org/investigations/policing-gender-how-surveillance-tech-aids-enforcement-of-anti-trans-laws>.
 - Melendez, Steven. “Uber Driver Troubles Raise Concerns about Transgender Face Recognition.” *Fast Company* (blog). August 9, 2018.
<https://www.fastcompany.com/90216258/uber-face-recognition-tool-has-locked-out-some-transgender-drivers>.
- c. Deepfake porn and the AI revolution
- Dunn, Suzie. “Women, Not Politicians, Are Targeted Most Often by Deepfake Videos.” *Centre for International Governance Innovation*.

March 3, 2021. <https://www.cigionline.org/articles/women-not-politicians-are-targeted-most-often-deepfake-videos/>.

- Wiggers, Kyle, and Amanda Silberling. “Meet Unstable Diffusion, the Group Trying to Monetize AI Porn Generators.” *TechCrunch*. November 17, 2022. <https://techcrunch.com/2022/11/17/meet-unstable-diffusion-the-group-trying-to-monetize-ai-porn-generators/>.

Third hour: Project proposal finalization with teaching assistants (Milestone #1 due 16 February)

*****NO CLASS ON 20 FEBRUARY DUE TO READING WEEK*****

7. **Tuesday 27 February:** discrimination against disabled people

- a. Digital life as a disabled person
 - Smith, Peter, and Laura Smith. “Artificial Intelligence and Disability: Too Much Promise, yet Too Little Substance?” *AI and Ethics* 1, no. 1. February 1, 2021. <https://doi.org/10.1007/s43681-020-00004-5>.
- b. Accessibility as a default, and design for disability
 - **[Read the article this points to, which is about alt-tags and how they are created.]**
Daniels, Nicole. “Lesson of the Day: ‘The Hidden Image Descriptions Making the Internet Accessible.’” *The New York Times*. February 28, 2022, sec. The Learning Network. <https://www.nytimes.com/2022/02/28/learning/lesson-plans/lesson-of-the-day-the-hidden-image-descriptions-making-the-internet-accessible.html>.
 - Engler, Alex. “For Some Employment Algorithms, Disability Discrimination by Default.” *Brookings*. October 31, 2019. <https://www.brookings.edu/articles/for-some-employment-algorithms-disability-discrimination-by-default/>.
 - Oyewole, Busayomi. “Making Accessibility the Default.” *Medium* (blog). November 26, 2018. <https://medium.com/@busayomi/making-accessibility-the-default-f8a9f1d8e259>.
 - WAI Initiative (WAI). “Designing for Web Accessibility – Tips for Getting Started.” *Web Accessibility Initiative (WAI)*. September 2015. <https://www.w3.org/WAI/tips/designing/>.
 - Yeo, Catherine. “NLP Bias Against People with Disabilities.” *Fair Bytes* (blog). May 13, 2020. http://fairbytes.org/post/nlp_bias_against_people_with_disabilities/index.html
- c. Mental health and privacy
 - Germain, Thomas. “Mental Health Apps Aren’t All As Private As You May Think.” *Consumer Reports*. March 2, 2021. <https://www.consumerreports.org/health/health-privacy/mental-health-apps-and-user-privacy-a7415198244/>.

- Levine, Alexandra S. “Suicide Hotline Shares Data with For-Profit Spinoff, Raising Ethical Questions.” *POLITICO*. January 28, 2022. <https://www.politico.com/news/2022/01/28/suicide-hotline-silicon-valley-privacy-debates-00002617>.

Third hour: Writing exercise with course instructors

8. **Tuesday 5 March:** Privacy and the right to be forgotten

a. Surveillance capitalism

- **[This is a long, complicated video; maybe read the article below first.]**
In a Nutshell: Shoshana Zuboff: Shoshana Zuboff: Surveillance Capitalism and Democracy.
<https://www.youtube.com/watch?v=5AvtUrHxg8A>.
- Parsons, Lian. “Harvard Professor Says Surveillance Capitalism Is Undermining Democracy.” *Harvard Gazette*. March 4, 2019. <https://news.harvard.edu/gazette/story/2019/03/harvard-professor-says-surveillance-capitalism-is-undermining-democracy/>.

b. Privacy or not?

- Kerry, Cameron. “Protecting Privacy in an AI-Driven World.” *Brookings*. October 2, 2020. <https://www.brookings.edu/articles/protecting-privacy-in-an-ai-driven-world/>.
- Thayer, Joel. “Privacy — a Big Tech Sleight of Hand.” Text. *The Hill* (blog). May 27, 2022. <https://thehill.com/opinion/cybersecurity/3503439-privacy-a-big-tech-sleight-of-hand/>.

c. Case 1: Healthcare deals

- Feathers, Todd, Katie Palmer, and Simon Fondrie-Teitler. “‘Out Of Control’: Dozens of Telehealth Startups Sent Sensitive Health Information to Big Tech Companies.” *The Markup*. December 13, 2022. <https://themarkup.org/pixel-hunt/2022/12/13/out-of-control-dozens-of-telehealth-startups-sent-sensitive-health-information-to-big-tech-companies>.
- Shead, Sam. “Britain Gave Palantir Access to Sensitive Medical Records of Covid-19 Patients in £1 Deal.” *CNBC*. June 8, 2020. <https://www.cnn.com/2020/06/08/palantir-nhs-covid-19-data.html>.

d. Right to be forgotten or not?

- Auxier, Brooke. “Most Americans Support Right to Have Some Personal Info Removed from Online Searches.” *Pew Research Center* (blog). January 27, 2020. <https://www.pewresearch.org/short-reads/2020/01/27/most-americans-support-right-to-have-some-personal-info-removed-from-online-searches/>.
- Solove, Daniel. “Is the Right to Be Forgotten Good or Bad? This Is the Wrong Question.” *TeachPrivacy*. May 29, 2014. <https://teachprivacy.com/right-forgotten-good-bad-wrong-question/>.

e. Case 2: newspaper archives

- Radiolab. “Right to Be Forgotten.” Radiolab Podcasts | WNYC Studios. April 8, 2023. <https://www.radiolab.org/podcast/right-be-forgotten-2308>.
- f. Case 3: queer porn archive
- Robertson, Tara. “Digitization: Just Because You Can, Doesn’t Mean You Should.” *Tara Robertson Consulting* (blog). March 21, 2016. <https://tararobertson.ca/2016/oob/>.
 - Robertson, Tara. “Update on On Our Backs and Reveal Digital.” *Tara Robertson Consulting* (blog). August 16, 2016. <https://tararobertson.ca/2016/oob-update/>.

Third hour: Group work on project milestone with teaching assistants.

9. **Tuesday 12 March**: International issues and surveillance
- a. Digital police surveillance in several countries
- Koksall, Nil. “‘Terrifying’: How a Single Line of Computer Code Put Thousands of Innocent Turks in Jail.” *CBC News*. January 19, 2018. <https://www.cbc.ca/news/world/terrifying-how-a-single-line-of-computer-code-put-thousands-of-innocent-turks-in-jail-1.4495021>.
 - Rajagopalan, Megha. “This Is What A 21st-Century Police State Really Looks Like.” *BuzzFeed News*. October 17, 2017. <https://www.buzzfeednews.com/article/meghara/the-police-state-of-the-future-is-already-here>.
 - Wang, Xinyuan. “Hundreds of Chinese Citizens Told Me What They Thought about the Controversial Social Credit System.” *The Conversation*. December 17, 2019. <http://theconversation.com/hundreds-of-chinese-citizens-told-me-what-they-thought-about-the-controversial-social-credit-system-127467>.
- b. Data colonization
- Dahmm, Hayden, and Tom Moultrie. “Avoiding the Data Colonialism Trap.” *TRENDS*. February 22, 2021. <https://www.sdsntrends.org/blog/2021/datacolonialism?locale=en>.
 - Erastus, Emsie. “Algorithmic Apartheid? African Lives Matter in Responsible AI Discourse.” *Paradigm Initiative*. May 21, 2021. <https://paradigmhq.org/algorithmic-apartheid-african-lives-matter-in-responsible-ai-discourse/>.
- c. Case study: Facial recognition data from Africa
- Hawkins, Amy. “Beijing’s Big Brother Tech Needs African Faces.” *Foreign Policy* (blog). July 24, 2018. <https://foreignpolicy.com/2018/07/24/beijings-big-brother-tech-needs-african-faces/>.
- d. Choose your own adventure! Look at these privacy violation sites and try out this video game:
- Masnick, Mike, Randy Lubin, and Leigh Beadon. “Trust & Safety Tycoon.” 2023. <https://trustandsafety.fun>.

- “Privacy International | Examples of Abuse.” 2023.
<https://privacyinternational.org/examples>.

Third hour: Group work on project milestone with teaching assistants (Milestone #2 due 15 March)

10. **Tuesday 19 March:** Fixes—can we change the culture of tech and CS education?

a. Impostor syndrome in technology professionals

- Bloodhart, Brittany, Meena M. Balgopal, Anne Marie A. Casper, Laura B. Sample McMeeking, and Emily V. Fischer. “Outperforming yet Undervalued: Undergraduate Women in STEM.” *PLOS ONE* 15, no. 6. June 25, 2020. <https://doi.org/10.1371/journal.pone.0234685>.
- Campbell, Molly. “Feeling Like a Fraud: Impostor Syndrome in STEM.” *Technology Networks*. July 10, 2019.
<http://www.technologynetworks.com/tn/articles/feeling-like-a-fraud-impostor-syndrome-in-stem-324839>.

b. Workplace culture in tech

- Bhuiyan, Johana, Sam Dean, and Suhauna Hussain. “Diversity in Technology: Industry Pros Share Their Stories.” *Los Angeles Times*. June 24, 2020 sec. Technology and the Internet.
<https://www.latimes.com/business/technology/story/2020-06-24/diversity-in-tech-tech-workers-tell-their-story>.
- Fowler, Susan. “Reflecting on One Very, Very Strange Year at Uber.” Personal blog. February 19, 2017.
<https://www.susanjowles.com/blog/2017/2/19/reflecting-on-one-very-strange-year-at-uber>.
- Mundy, Liza. “Why Is Silicon Valley So Awful to Women?” *The Atlantic*. March 14, 2017.
<https://www.theatlantic.com/magazine/archive/2017/04/why-is-silicon-valley-so-awful-to-women/517788/>.

c. Educational culture in tech

- Anderson, Melinda D. “How the Coding Craze Could Lead to ‘Technical Ghettos.’” *The Atlantic* (blog). February 29, 2016.
<https://www.theatlantic.com/education/archive/2016/02/will-the-push-for-coding-lead-to-technical-ghettos/471300/>.
- **[Optional: This is pretty old, and the authors’ later work somewhat contradicts their conclusions!]**
Blum, Lenore, and Carol Frieze. “In a More Balanced Computer Science Environment, Similarity Is the Difference and Computer Science Is the Winner.” Computing Research Association (CRA) Archive. May 2005.
<https://archive.cra.org/CRN/articles/may05/blum.frieze.html>.
- Quesenberry, Jeria, and Carol Frieze. “Change Culture, Not Curriculum, to Get More Women into Computer Science.” *Google: The Keyword* (blog). May 9, 2016. <https://blog.google/outreach-initiatives/education/change-culture-not-curriculum-to-ge/>.

- Walther, Kendra, and Richard E. Ladner. “Broadening Participation by Teaching Accessibility.” *Communications of the ACM*. October 2021. <https://cacm.acm.org/magazines/2021/10/255707-broadening-participation-by-teaching-accessibility/fulltext>.

Third hour: Group work on final deliverable for project with teaching assistants.

11. Tuesday 26 March: Fixes—laws, regulations, and other approaches

There are a lot of these: please pick some of the approaches and read all of the articles from those approaches. We will cover both case studies.

a. Politics of technology

- Hao, Karen. “Inside the Fight to Reclaim AI from Big Tech’s Control.” *MIT Technology Review*. June 14, 2021. <https://www.technologyreview.com/2021/06/14/1026148/ai-big-tech-timnit-gebru-paper-ethics/>.
- **[This isn’t nearly as long as the paper by the same group of authors in Week 2; please read the whole thing.]**
Kleinberg, Jon, Jens Ludwig, Sendhil Mullainathan, and Cass R. Sunstein. “Algorithms as Discrimination Detectors.” *Proceedings of the National Academy of Sciences* 117, no. 48. December 2020. <https://doi.org/10.1073/pnas.1912790117>.
- Miceli, Milagros, Julian Posada, and Tianling Yang. “Studying Up Machine Learning Data: Why Talk About Bias When We Mean Power?” *Proceedings of the ACM on Human-Computer Interaction* 6, issue GROUP. January 14, 2022. <https://doi.org/10.1145/3492853>.

b. Soft law and self-regulation

- Hagendorff, Thilo. “The Ethics of AI Ethics: An Evaluation of Guidelines.” *Minds and Machines* 30, no. 1. March 1, 2020. <https://doi.org/10.1007/s11023-020-09517-8>.
- Tardif, Antoine. “What the White House’s AI Bill of Rights Means for America & the Rest of the World - Unite.AI.” *Unite.AI*. October 14, 2022. <https://www.unite.ai/what-the-white-houses-ai-bill-of-rights-means-for-america-the-rest-of-the-world/>.

c. Hard law and government regulation

- Law Commission of Ontario. “Regulating AI: Critical Issues and Choices.” *SSRN Scholarly Paper*. April 14, 2021. <https://doi.org/10.2139/ssrn.3853249>.
- Mia Hoffmann. “The EU AI Act: A Primer.” *Center for Security and Emerging Technology (CSET)*. Sept. 26, 2023. <https://cset.georgetown.edu/article/the-eu-ai-act-a-primer/>.
- Susan Linda Ross and Andrew Allen Yeh. “New York City begins enforcing restrictions on the use of artificial intelligence in employment decisions.” *Norton Rose Fulbright* (blog). July 2023. <https://www.nortonrosefulbright.com/en->

[us/knowledge/publications/e90da0c0/new-york-city-begins-enforcing-restrictions-on-the-use-of-artificial-intelligence](https://knowledge/publications/e90da0c0/new-york-city-begins-enforcing-restrictions-on-the-use-of-artificial-intelligence)

- d. Other approaches: specialized agencies, algorithmic audits, worker power improvements
- Tutt, Andrew. “An FDA for Algorithms.” *Administrative Law Review* 69, no. 1. 2017. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2747994
 - Government of Canada. “Algorithmic Impact Assessment Tool.” March 22, 2021. <https://www.canada.ca/en/government/system/digital-government/digital-government-innovations/responsible-use-ai/algorithmic-impact-assessment.html>.
 - Hao, Karen, and Nadine Freischlad. “The Gig Workers Fighting Back against the Algorithms.” *MIT Technology Review*. April 21, 2022. <https://www.technologyreview.com/2022/04/21/1050381/the-gig-workers-fighting-back-against-the-algorithms/>.
- e. Case study: bug bounties
- Kenway, Josh, Camille François, Sasha Costanza-Chock, Inioluwa Deborah Raji, and Joy Buolamwini. “Bug Bounties For Algorithmic Harms?” *Algorithmic Justice League*. January 2022. <https://www.ajl.org/bugs>.
- f. Case study: let the AI identify problems?
- Eisenstadt, Leora F. “#MeTooBots and the AI Workplace.” *University of Pennsylvania Journal of Business Law* 24, no. 2 (2022): 350. <https://scholarship.law.upenn.edu/jbl/vol24/iss2/1>

Third hour: Group work on final deliverable for small-group project with teaching assistants

12. **Tuesday 2 April:** Small-Group project presentations and course wrap-up