Data and Society
Data and Astronomy – Lecture 12

3/15/21
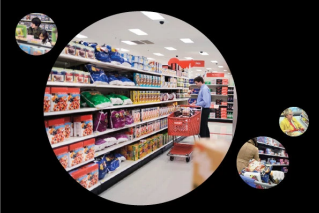
Today (3/15/21)

- **Op-Ed due tonight at 11:59 p.m.**

- Next assignment 3/18/21

- Guest Speaker Alyssa Goodman

- Presentations

Reading for 3/18

- **"How companies learn your secrets**", New York Times, **2012,** "the Target story", https://www.nytimes.com/2012/02/19/magazine/shopping-habits.html

How Companies Learn Your Secrets

Antonio Bolfo/Reportage for The New York Times

By Charles Duhigg

Feb. 16, 2012

Andrew Pole had just started working as a statistician for Target in 2002, when two colleagues from the marketing department stopped by his desk to ask an odd question: "If we wanted to figure out if a customer is pregnant, even if she didn't want us to know, can you do that? "

Guest Speaker: Alyssa Goodman

- Robert Wheeler Willson Professor of Applied Astronomy, Harvard University

- Research Associate of the Smithsonian Institution

- Founder of Glue library to explore the relationships between related datasets

- Research spans astrophysics, science education, data science, data visualization, and prediction

Date	Topic	Speaker	Date	Topic	Speaker
1-25	Introduction	Fran	1-28	The Data-driven World	Fran
2-1	Data and COVID-19	Fran	2-4	Data and Privacy -- Intro	Fran
2-8	Data and Privacy – Differential Privacy	Fran	2-11	Data and Privacy – Anonymity / Briefing Instructions	Fran
2-15	NO CLASS / PRESIDENT'S DAY		2-18	NO CLASS	
2-22	Legal Protections	Ben Wizner	2-25	Data and Discrimination 1	Fran
3-1	Data and Discrimination 2	Fran	3-4	Data and Elections 1	Fran
3-8	Data and Elections 2	Fran	3-11	NO CLASS / WRITING DAY	
3-15	Data and Astronomy (Op-Ed due)	Alyssa Goodman	3-18	Data Science	Fran
3-22	Digital Humanities	Brett Bobley	3-25	Data Stewardship and Preservation	Fran
3-29	Data and the IoT	Fran	4-1	Data and Smart Farms	Rich Wolski
4-5	Data and Self-Driving Cars	Fran	4-8	Data and Ethics 1	Fran
4-12	Data and Ethics 2	Fran	4-15	Cybersecurity	Bruce Schneier
4-19	Data and Dating	Fran	4-22	Data and Social Media	Fran
4-26	Tech in the News	Fran	4-29	Wrap-up / Discussion	Fran
5-3	NO CLASS				

Presentations

Upcoming Presentations

March 18

- "**Why so many data science projects fail to deliver**", MIT Sloan Management Review, https://sloanreview.mit.edu/article/why-so-many-data-science-projects-fail-to-deliver/?og=Home+Editors+Picks

- "**Using big data to measure environmental inclusivity in cities**," EOS, https://eos.org/articles/using-big-data-to-measure-environmental-inclusivity-in-cities

March 22

- "**New open source database tracks data on slaves, slavers, and allies**", Harvard Gazette, https://news.harvard.edu/gazette/story/2021/03/new-open-source-database-tracks-data-on-slaves-slavers-allies/ (Eric X.)

- "**Robo-writers: the rise and risks of language-generating AI**", Nature, https://www.nature.com/articles/d41586-021-00530-0 (Josh M.)

Fran Berman, Data and Society, CSCI 4370/6370

Need Volunteers – Presentations for March 25

- "**How Scientists scrambled to stop Donald Trump's EPA from wiping out climate data**", The Verge, https://www.theverge.com/22313763/scientists-climate-change-data-rescue-donald-trump (Justin O.)

- "**More than 100 scientific journals have disappeared from the Internet**", Nature, https://www.nature.com/articles/d41586-020-02610-z (Liam M.)

Presentations for March 15

- "**Hunting for a giant black hole, astronomers found a nest of darkness,**" New York Times, https://www.nytimes.com/2021/02/26/science/astronomy-black-hole-ngc6397.html (Greg S.)

- "**NASA's Webb telescope will be the world's premier space science observatory – Here's what those those powerful capabilities mean for astronomy,**" SciTechDaily, https://scitechdaily.com/nasas-webb-telescope-will-be-the-worlds-premier-space-science-observatory-heres-what-those-powerful-capabilities-mean-for-astronomy/ (Angelina M.)