The Politics of Algorithms

COMM 154-254 / SOC 154 / CSRE 154T
Spring 2018
T/Th, 12-1:20pm
300-300

Prof. Angèle Christin
angelec@stanford.edu
Office hours: Tuesday 2:15-4:15pm
Rm 334 Building 120

Teaching Assistants:
Anna Gibson (agibson2@stanford.edu)
and Jeff Nagy (jsnagy@stanford.edu)

Office hours:
Anna Gibson: Tuesdays 3-5pm
Jeff Nagy: Tuesdays 9:30-11:30am
300 Atrium Area, Building 120

Course description
Algorithms have become central actors in today’s digital world. In areas as diverse as social media, journalism, education, healthcare, and policing, computing technologies increasingly mediate communication processes. This course will provide an introduction to the social and cultural forces shaping the construction, institutionalization, operation, and uses of algorithms. In so doing, we will explore how algorithms relate to political issues of modernization, power, and inequality. Readings will range from social scientific analyses to media coverage of ongoing controversies relating to Big Data. Students will leave the course with a better appreciation of the broader challenges associated with researching, building, and using algorithms.

Learning goals
- Students will be able to identify content, interactions, and behaviors that have been shaped by algorithms
- Students will be able to recognize and critically analyze the values and goals informing the construction of algorithms
- Students will be able to explain the different mechanisms through which algorithms reinforce differences between groups
- Students will be able to apply these mechanisms in analyzing other algorithmic techniques not covered in the course
Requirements and grading
Please note that the assignments are not the same at the Undergraduate (Comm 154/Soc 154/CSRE 154T) and Graduate levels (Comm 254).

Comm 154 / Soc 154 / CSRE 154T (Undergraduate Level)
1. Write three short reading responses about the readings (approximately 300 words altogether, due on Wednesdays by 8pm, on Canvas in the “discussion” page for your section). The format for these responses can vary, but it is useful to include short descriptions of the main ideas, concepts, and arguments that you found stimulating, as well as your questions, concerns, or disagreements. The responses must conclude with a couple of questions to open up the discussion during sections. You will sign up for the dates of your three responses during the first section meeting.
2. A midterm paper (hard copy due on May 3 in class). You will be asked to choose among several possible topics and write an essay of approximately 1,000 words. You will draw on the course readings and class discussions to develop a focused argument in response to an assigned question.
3. A final paper (hard copy due on June 5 in class). You will be asked to choose among several possible topics and write an essay of approximately 2,000 words. The questions will ask you to synthesize course readings and link them to new issues or objects.

Grades will be determined based on the written assignments and course participation. The breakdown will be the following:
• Reading response posts and questions: 15%
• Class participation: 15%
• Midterm examination: 30%
• Final paper: 40%

Your papers need to be submitted on time and should represent your best work at every level. Work submitted late or with errors of fact, grammar or spelling will be penalized. The Honor Code applies to all your work.

Comm 254 (Graduate Level)
1. Write four reading response posts on the optional readings. Graduate students taking the course will be expected to read (and cover in your reading responses) two of the “optional” readings each week in addition to the required ones. The reading responses will connect the optional readings to the mandatory readings (approximately 300 words, due by 8pm Wednesday, on Canvas, in the “discussion” section).
2. A midterm examination. You will be asked to choose among several possible topics and write an essay of approximately 1,500 words. You will draw on the course readings and class discussions to develop a focused argument in response to an assigned statement.
3. For the final paper, graduate students will be asked to choose among several possible topics and write an essay of approximately 2,500 words. The questions will ask you not only to synthesize course readings and link them to issues or objects discussed in class,
but also to develop an original, rigorous argument based on several of the theoretical readings examined in class and supported by a variety of empirical examples.

Grades will be determined based on the written assignments and course participation. The breakdown will be the following:

- Blog posts: 20%
- Class participation: 10%
- Midterm examination: 30%
- Final paper: 40%

Readings
The readings will be made available on Canvas.

Cell Phones, Laptops, Tablets, and other Electronic Devices
Please turn off all electronic means of communication for the duration of class. See Clay Shirky’s “Why I Just Asked My Students to Put Their Laptops Away” as well as Pam A. Mueller and Daniel M. Oppenheimer. 2014. “The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking,” Psychological Science, 25 (6). You may not talk on the phone, text, IM, email, read, solve crosswords, take pictures, etc. during class. All of these activities are likely to distract you, your peers, and the instructors, which is not fair to others in the class. Those engaging in these activities may be asked to leave the class. Direct repercussions could include loss of class attendance and class participation points.

Respect privacy and do not make digital recordings of others without their consent
Digital recordings and privacy concerns will be a recurring topic as we discuss present day media processes and effects. It is essential to the success of this class that participants feel comfortable sharing questions, ideas, concerns, stories, and experiences during class discussions. Therefore, you may not create any audio, photographic, or video recordings during class time.

Students with Documented Disabilities
Students who may need an academic accommodation based on the impact of a disability must initiate the request with the Office of Accessible Education (OAE). Professional staff will evaluate the request with required documentation, recommend reasonable accommodations, and prepare an Accommodation Letter for faculty dated in the current quarter in which the request is being made. Students should contact the OAE as soon as possible since timely notice is needed to coordinate accommodations. The OAE is located at 563 Salvatierra Walk (phone: 723-1066, URL: http://studentaffairs.stanford.edu/oae).

Well-Being, Stress Management, & Mental Health
If you (or someone you know) are experiencing personal, academic, or relationship problems and would like someone to talk to, reach out to the Counseling and Psychological Services (CAPS)
on campus. CAPS is the university’s counseling center dedicated to student mental health and wellbeing. As specialists working with undergraduate and graduate students, CAPS staff will work to address your needs through an initial CAPS phone screen appointment. CAPS provides a broad range of services including: crisis counseling, individual therapy, medication assessment and management, and group therapy. These services are provided by a diverse and multicultural professional staff. Many services are available without additional charge for students who have paid the Campus Health Service Fee. Phone assessment appointments can be made at CAPS by calling 650-723-3785, by accessing the VadenPatient portal through the Vaden website, or by coming to the second floor of the Vaden Health Center from 8:30 am–5 pm Monday through Friday. For more information about CAPS services, visit: 
https://vaden.stanford.edu/caps-and-wellness

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Week 1. April 3-5. Introduction. What are algorithms? Do they have politics?

April 3

April 5

Optional
Week 2. April 10-12. Facebook, Filter Bubbles, and the Public Sphere

April 10

April 12
Fraser, Nancy. 1990. “Rethinking the Public Sphere.” Social Text 25/26: 56-80.
Zuckerberg, Mark. 2016. “I Want to Share Some Thoughts on Facebook and the Election.”

Optional


Week 3. April 17-19. Privacy, Surveillance, and Control

April 17

April 19

Optional
Society 10(2): 101-127.

Week 4. April 24-26. Algorithmic Discrimination and Inequality

April 24

April 26

Optional

Week 5. May 1-3. Algorithmic Selves I: Identities and Time

May 1


May 3

**Guest Lecture by Prof. Judy Wajcman**


Optional


-- Midterm Paper Due on May 3 --

Week 6. May 8-10. Algorithmic Selves II: Intimacy, Friendship, and Bodies

May 8


May 10

**Guest lecture by Anna Gibson**


Optional

**Week 7. May 15-17. Algorithmic Institutions: Work and Money**

**May 15**

**May 17**

***Guest lecture by Jeff Nagy***
https://bitcoin.org/bitcoin.pdf
https://motherboard.vice.com/en_us/article/ae3p7e/bitcoin-is-unsustainable

Optional
Narayanan, Arvind, Joseph Bonneau, Edward Felten, Andrew Miller, Steven Goldfeder, and


**May 22**


Marwick, Alice. 2013. Introduction and Chapter 4 in *Status Update. Celebrity, Publicity, and Branding in the Social Media Age*. Yale University Press.

**May 24**


**Optional**


**May 29**


**May 31**


Ananny, Mike, and Crawford, Kate. 2016. “Seeing Without Knowing: Limitations of the
Transparency Ideal and its Application to Algorithmic Accountability.” New Media & Society.

Optional

Week 10. June 5. Wrapping things up

Optional

-- Final Paper Due on June 5 --