Medicine (coronavirus edition)

Objectives

- Examine racial inequities in algorithms used to manage healthcare in the United States
- Identify how computational methods are being used in the COVID-19 crisis
- Consider the ethical implications of automated contact tracing via smartphones
- Discuss the benefits and drawbacks of using smartphone location data to track the spread of COVID-19

Assigned readings

- Obermeyer, Z., Powers, B., Vogeli, C., & Mullainathan, S. (2019). Dissecting racial bias in an algorithm used to manage the health of populations. *Science*, 366(6464), 447-453.
- Benjamin, R. (2019). Assessing risk, automating racism. *Science*, 366(6464), 421-422.

Coronavirus-related readings

- A guide to healthy skepticism of artificial intelligence and coronavirus
- Apple/Google Exposure Notification - FAQ
- The Apple-Google Contact Tracing System Won't Work. It Still Deserves Praise.
- As Coronavirus Surveillance Escalates, Personal Privacy Plummets
- Mangrum, D., & Niekamp, P. (2020). College Student Contribution to Local COVID-19 Spread: Evidence from University Spring Break Timing. Available at SSRN 3606811.

Optional readings

Response paper prompt

Contact tracing is one of the major tools used by public health officials to minimize the spread of COVID-19. Traditional contact tracing is labor-intensive and requires public health workers to identify all individuals who have potentially been exposed to infected individuals. Digital tools such as Google/Apple's exposure notification program are designed to enable automated notifications in the event of COVID-19 exposure, but are specifically decentralized to maximize individual privacy. This method requires users to opt-in to the tracing system, which will likely result in far lower participation rates than if the system was opt-out or mandatory. What are the ethical concerns with a mandatory system? Are these concerns outweighed by the benefits to health and safety for the community? Ultimately, your paper should answer the question: should individuals be required to enable contact tracing software on their smartphones for the duration of the COVID-19 crisis?