Data and Society
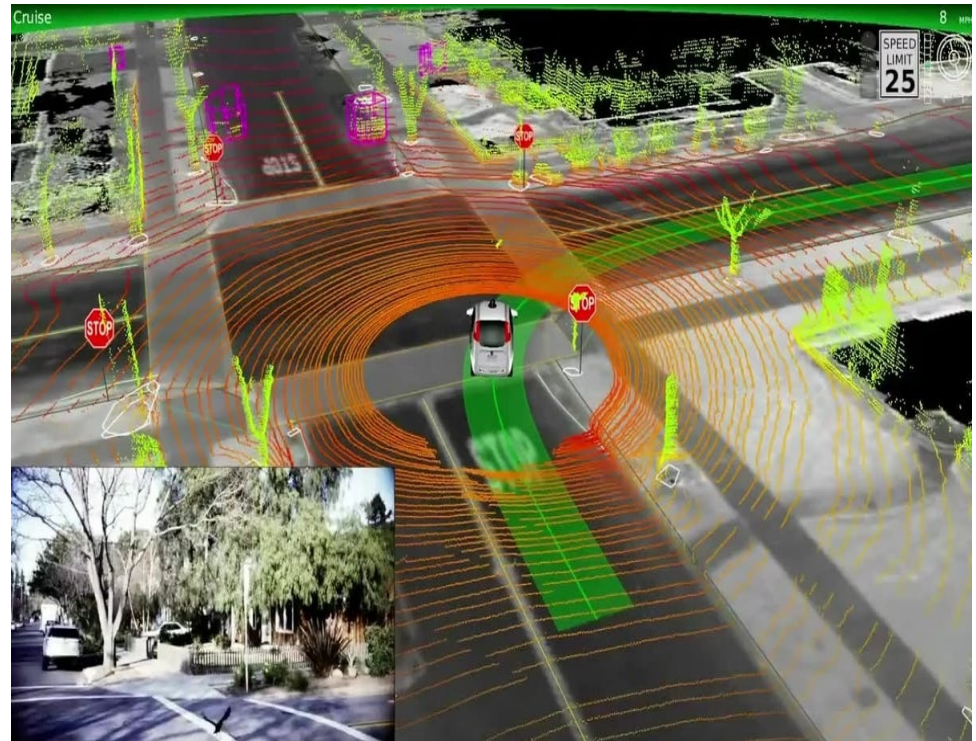## Smart Farms – Lecture 17

4/1/21

Today's Class

- **Personal Essay (Face Recognition) due 11:59 p.m. tonight / Instructions in Lecture 1**

- **Last Assignment: April "Choice Assignment" instructions after break**

- Guest speaker Rich Wolski

- Student Presentations

Watch before next class (4/5/21)

Chris Urmson's Ted
Talk on Self-driving
Cars

https://www.youtube.
com/watch?v=tiwVMr
TLUWg

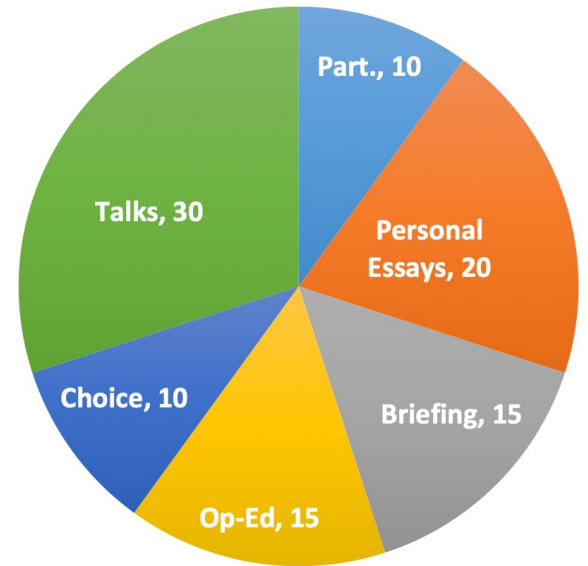| Date	Topic	Speaker	Date	Topic	Speaker
1-25	Introduction	Fran	1-28	The Data-driven World	Fran
2-1	Data and COVID-19	Fran	2-4	Data and Privacy -- Intro	Fran
2-8	Data and Privacy – Differential Privacy	Fran	2-11	Data and Privacy – Anonymity / Briefing Instructions	Fran
2-15	NO CLASS / PRESIDENT'S DAY		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	Digital Rights in the EU and China	Fran
4-26	Tech in the News	Fran	4-29	NO CLASS	Fran
5-3	Wrap-up / Discussion				

Guest speaker Rich Wolski, UCSB

- Duval Family Presidential Chair for Energy Efficiency, UCSB

- Founder and former CTO of Eucalyptus Systems

- Lifetime Achievement Award, ACM/IEEE High Performance Distributed Computing Conference, Cloud Innovation Award

- Creator of Network Weather Service, EveryWare, G-Commerce, etc.

- Research interests: Cloud computing, IoT, distributed and parallel computing, etc.

"Choice" Assignment

- Choose **ONE** for your last writing assignment:

    - **Personal Essay #3** (10 points possible) **OR**

    - **Op-Ed #2** (15 points possible, anything over 10 is extra credit)

- **DUE APRIL 15, 11:59 p.m**. Send .docx to bermaf@rpi.edu

- **Personal Essay Topic:** What data-driven technology do you think will be most impactful in the next 5 years? Why? How do you think it will affect society? (600 words)

- **Op-Ed Topic:** Write a persuasive piece about a data-driven or data-related topic (data must be some part of the focus or justification). (750 - 800 words)

Presentations

Upcoming Presentations

April 5

- "**Your self driving car isn't ready. Smarter roads might change that**," CNN Business, https://www.cnn.com/2021/03/05/cars/cavnue-self-driving-lanes/index.html

- "**Waymo simulated real world crashes to prove its self-driving cars can prevent deaths**", The Verge, https://www.theverge.com/2021/3/8/22315361/waymo-autonomous-vehicle-simulation-car-crash-deaths

April 8

- "**Vaccine passports pose ethical thicket for Biden Administration**," Politico, https://www.politico.com/news/2021/03/17/vaccine-passports-ethics-biden-administration-476384

- "'**This is bigger than just Tinmit**': How Google tried to silence a critic and ignited a movement". Fast Company, https://www.fastcompany.com/90608471/timnit-gebru-google-ai-ethics-equitable-tech-movement

April 12

- "**What a gambling app knows about you**", New York Times, https://www.nytimes.com/2021/03/24/technology/gambling-apps-tracking-sky-bet.html

- "**Can computer algorithms learn to fight wars ethically?**", Washington Post, https://www.washingtonpost.com/magazine/2021/02/17/pentagon-funds-killer-robots-but-ethics-are-under-debate/?no_nav=true&tid=a_classic-iphone

Need Volunteers – 4/15

- "**New wave of hacktivism adds twist to cybersecurity woes**," Reuters, https://www.reuters.com/article/uk-cyber-hacktivism-focus/new-wave-of-hacktivism-adds-twist-to-cybersecurity-woes-idINKBN2BH3I3 (Chris P.)

- "**Clop ransomware gang breaches University of Colorado and University of Miami**," Security Magazine, https://www.securitymagazine.com/articles/94891-clop-ransomware-gang-breaches-university-of-colorado-and-university-of-miami (Greg. S.)

Today's Presentations

April 1

- "**Smart farms are hackable farms**," IEEE Spectrum, https://spectrum.ieee.org/riskfactor/telecom/security/cybersecurity-report-how-smart-farming-can-be-hacked (Adam M.)

- "**Farms are going to need different kinds of robots**," BBC News, https://www.bbc.com/news/business-56195288 (Justin C.)