INTERFACE
KICK-OFF

The Organizers
- Betsy, Sabrina, Hien, Dan -
WELCOME BACK!
The Gist

Betsy: Tech regulation
  + **Primer:** Section 230 & gov entities

Sabrina: How big is big data
  + **Primer:** Core biases in ML

Hien: Tech in communities
  - Neighbors app by Ring (by Amazon) & police partnerships
  - Community-owned networks

Dan: US Surveillance
Other topics/areas we’ve done...

- machine learning & art
- counterculture/hippie influence on the formation of the internet
- open-source intelligence (OSINT) in journalism
- digital contact tracing for covid
- 3D-printed weapons
- education & technology
- cybersecurity & hacking
Goals

- Give a taste of the range of topics that INTERFACE discusses
- Bring up useful background information & shared assumptions in broad strokes (and allow them to be challenged)
- Get to know yalls and your interests and what you want from the year!
LOGISTICS
- we meet weekly
- we (usually) drink boba
- often we go to dinner together afterwards (extremely optional)
- chill, no particular member requirements
tech regulation aaaaaaaaa

Betsy
Grab Bag of Relevant Law/Regulation

- Regulatory agencies (in Murica)
- Privacy & data protection
- Section 230
US Tech Regulation Orgs

- Federal Trade Commission (FTC)
  - enforces federal consumer protection laws that prevent fraud, deception and unfair business practices (ex: antitrust)

- Federal Communications Commission (FCC)
  - regulates communications by radio, television, wire, satellite, and cable

- More generally, Congress, Courts...
  - Sen. Orrin Hatch (R-UT) :/
Tech regulation is ... tough
INTERFACE talks a lot about threats to privacy, but what does that mean?

- Data privacy law in the US is a hot mess
  - Patchwork of laws, differing by sector and state

- Most comprehensive regulation is EU’s GDPR

- A fundamental right? A core constitutional principle? A gray area?
  - *Grisworld v Connecticut* found a right to privacy derived from the 14th Amendment
  - How to manage tradeoffs with other rights?
  - We want your thoughts!
Section 230 of the Communications Decency Act

- "No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider"
- grants ISP’s, platforms that host 3rd-party content, etc immunity for content posted on them
- has allowed for YouTube and Vimeo vids, Amazon and Yelp reviews, Facebook and Twitter social networking
Section 230 of the Communications Decency Act

- controversial: some people want platforms to be more proactive about removing disinformation, others want to remove the power for platforms to selectively police content

- We talk about: content moderation, disinformation, & censorship
How Big is Big Data

Core Biases in ML
- Sabrina -
Big Data in Previous Eras

East German Stasi Archives
- Files on 5.6 million people
- 69 miles of written archives; audio and visual recordings; sweat and body odour samples
- 270,000 staff members; 180,000 informers
Key Questions

- What metric is used to evaluate how “big” a dataset is?
- What can people do with big data, now and in the future?
Who has big data today?

4 Petabytes/day  Databases woo  GPT-3-powered AI Dungeon (4 TB text data -- 11 billion 250 million pages!!)  1 Petabyte/s

Key:
GB $10^9$
TB (1000 GB)
Petabyte (1000 TB), Exabyte (1000 PB), Zettabyte (1000 EB)
BIG DATA

~exabyte -- monthly Internet traffic in 2004
~zettabyte -- yearly Internet traffic in 2016
Research Process
ML is going to fix everything!!
- Our datasets are bad!!!
- The solution is not always ML!!!!
U.S. Facial Recognition Surveillance
Dan
Widespread and harmful

Facial recognition usage across US - Clearview + others (2021, Ban Facial Recognition)

Span of facial recognition access by law enforcement (2016, Georgetown The Perpetual Line-up)

One in two American adults is in a law enforcement face recognition network.
Questionable Technical Backing

Gender and racial bias found in Amazon’s facial recognition technology (again)

Research shows that Amazon’s tech has a harder time identifying gender in darker-skinned and female faces

By James Vincent | Jan 25, 2019, 9:45am EST

NIST Study Evaluates Effects of Race, Age, Sex on Face Recognition Software

Demographics study on face recognition algorithms could help improve future tools.
Nijer Parks - February 2019, New Jersey (Reported April 2021)

Activist and regulatory efforts

- Indefinite moratoriums from Amazon, Microsoft, IBM starting in June 2020
- Municipal/state-level bans while nationwide efforts underway

The two-year fight to stop Amazon from selling face recognition to the police

This week’s moves from Amazon, Microsoft, and IBM mark a major milestone for researchers and civil rights advocates in a long and ongoing fight over face recognition in law enforcement.
Activism efforts
Community Tech
Ring & Neighbors vs. Community Wireless
- Hien -
% people believing that crime in the US was worse than the year before

2000
47%

2019
78%

Source: Pew Research Center
Amazon’s Ring reportedly partners with more than 200 US police departments

Law enforcement across the country works with Ring

By Colin Lecher | @colinlecher  Jul 29, 2019, 6:22pm EDT

Amazon’s Ring now reportedly partners with more than 2,000 US police and fire departments

Only two states—Montana and Wyoming—have no departments on the Ring program

By Kim Lyons | @SocialKimLy  Jan 31, 2021, 11:26am EST
What happens in the police partnership

- Portal to request footage from community
- Request directly from Ring through court order/subpoena
- Discounts on Ring products
- Free products to gift to community (for app adoption)
- Coaching on how to request footage from community (social media, emails, messages templates + instructions)

Outcome:
- Time wasted reviewing raccoons videos
- Lots of racism on Neighbors
- Mainly arrests for nonviolent petty crimes
- Identifying police brutality protesters using Ring footage
“... terrifically addictive, a wildly engaging hodgepodge of voyeurism, suspicion, unease, and mystery”

—Max Read, Neighbors User.
NY Magazine
A very different community network...
Digital Divide

NYC broadband access map. Red = low/no access

Source: https://winkj601.github.io/
Digital Divide – the issue

- Broadband access reliant on ISPs
- ISPs misreports coverage
- In case of natural disasters, communities are isolated
- ISP provided broadband is costly
- As always, disproportionately affect POC
Community-operated Meshnet - the solution

Install Leader Training Program

- New skills
- Teamwork and teaching
- Building community

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Do you have any questions?

THANKS

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