

INTERFACE KICK-OFF

The Organizers
- Betsy, Sabrina, Hien, Dan -

**WELCOME
BACK!**

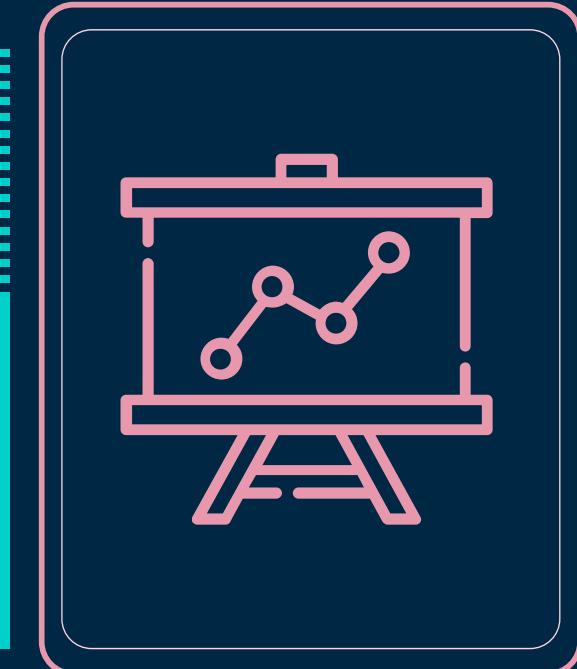
The Gist

- 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 & h a c k i n g



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 aaaaaaa

Betsy

01



Grab Bag of Relevant Law/Regulation

- Regulatory agencies (in Murica)
- Privacy & data protection
- Section 230

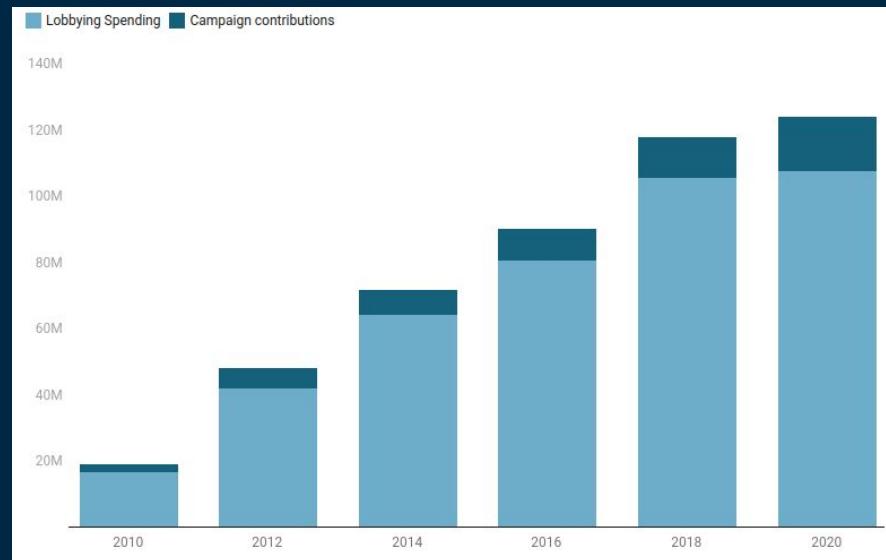
US Tech Regulation Orgs

- 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

Rank	Lobbying Client	Total Spent
1	Facebook Inc	19,680,000
2	Amazon.com	18,725,000
3	Comcast Corp	14,430,000
4	Lockheed Martin	12,960,810
5	Boeing Co	12,630,000
6	Northrop Grumman	12,050,000
7	Raytheon Technologies	11,960,000
8	Unilever	11,460,000



Priiiiiivacyyyyyyyy

- INTERFACE talks alot 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 -

02

Big Data in Previous Eras



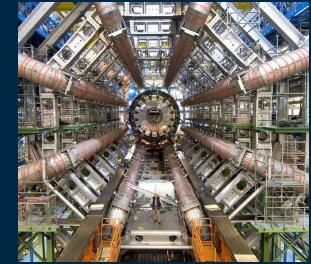
East German Stasi Archives

- 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

Key:

GB 10^9

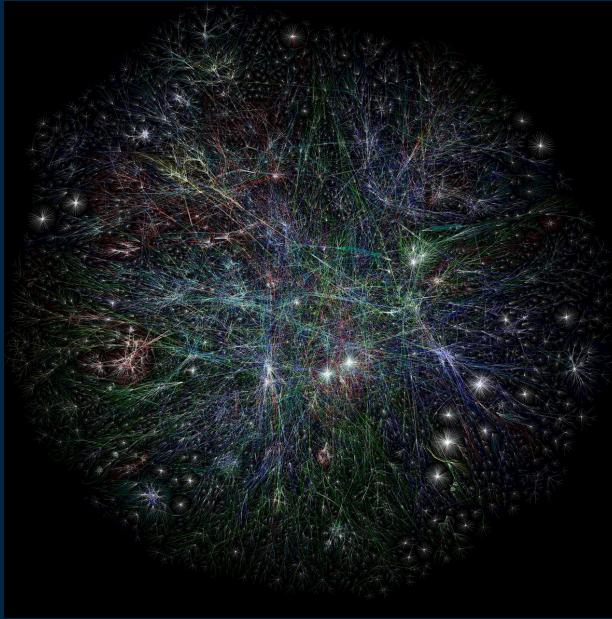
TB (1000 GB)

Petabyte (1000 TB), Exabyte
(1000 PB), Zettabyte (1000 EB)

GPT-3-powered AI Dungeon (4 TB
text data -- 11 billion 250 million
pages!!)

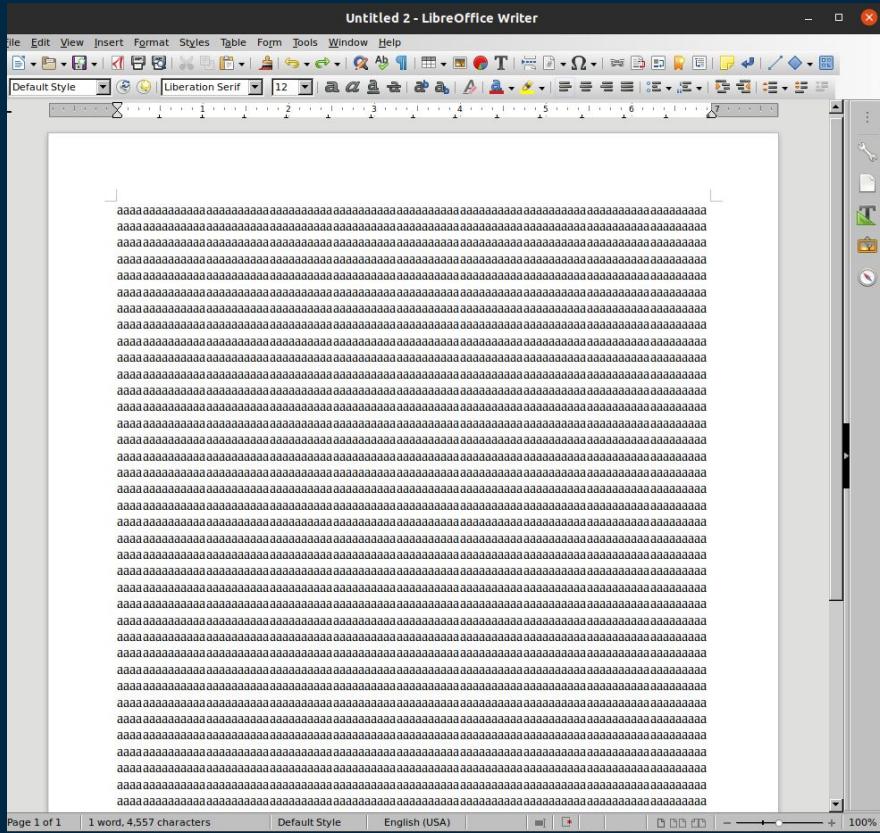
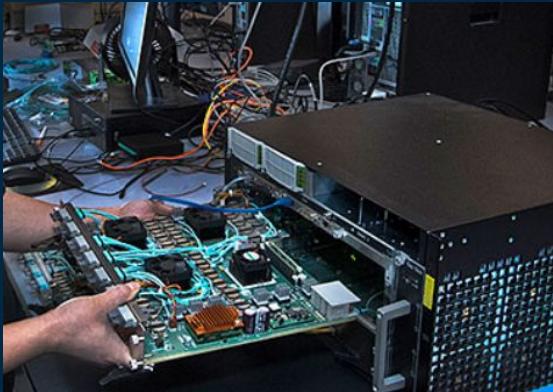
1 Petabyte/s

BIG DATA



~exabyte -- monthly Internet traffic in 2004
~zettabyte -- yearly Internet traffic in 2016

Research Process



ML is going to fix everything!!



shutterstock.com • 1392193913

jk.

- Our datasets are bad!!!
- The solution is not always ML!!!!

arXiv.org > cs > arXiv:1301.6822

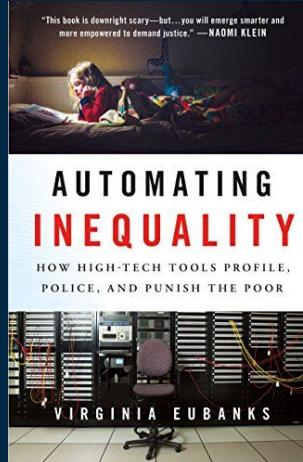
Computer Science > Information Retrieval

[Submitted on 29 Jan 2013]

Discrimination in Online Ad Delivery

Latanya Sweeney

A Google search for a person's name, such as "Trevon Jones", may yield a personalized ad for public records about Trevon that may be neutral, such as "Trevon Jones, Arrested?". This writing investigates the delivery of these kinds of ads by Google AdSense using a sample of racially associated names and associated personal names across two websites. First names, assigned at birth to more black or white babies, are found predictive of race (88% vs. 72%). On one website, generated ads suggestive of an arrest in 81 to 86 percent of name searches on one website and 92 to 95 percent on the other, while the other website generated ads suggesting a neutral copy: the word "arrest" appeared in 23 to 29 percent of name searches on one site and 0 to 60 percent on the other. On the more ad traffi



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RESEARCH ARTICLE

Dissecting racial bias in an algorithm used to manage the health of populations

ZIAD OBERMEYER, BRIAN POWERS, CHRISTINE VOGEL, AND SENDHIL MULLAINATHAN

Authors Info & Affiliations

SCIENCE • 25 Oct 2019 • Vol. 366, Issue 6464 • pp. 447-453 • DOI:10.1126/science.eav2342

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Bell Print Share

U.S. Facial Recognition Surveillance

Dan

03

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.



Nijeer Parks - February 2019, New Jersey (Reported April 2021)



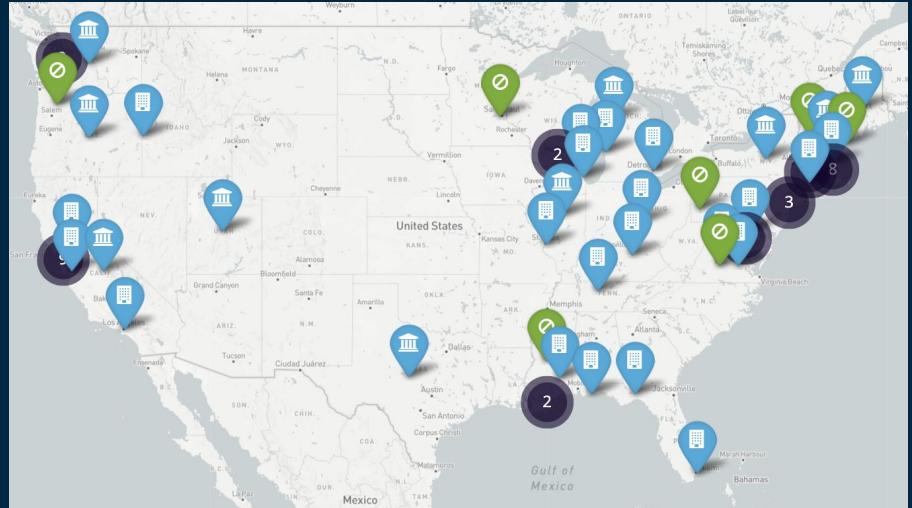
Robert Williams - January 2020, Michigan (Reported Aug. 2021)

Activist and regulatory efforts

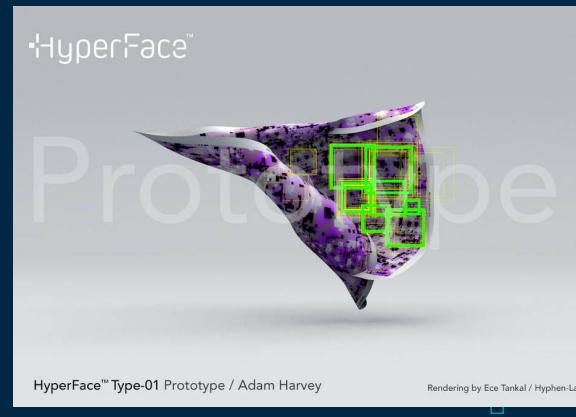
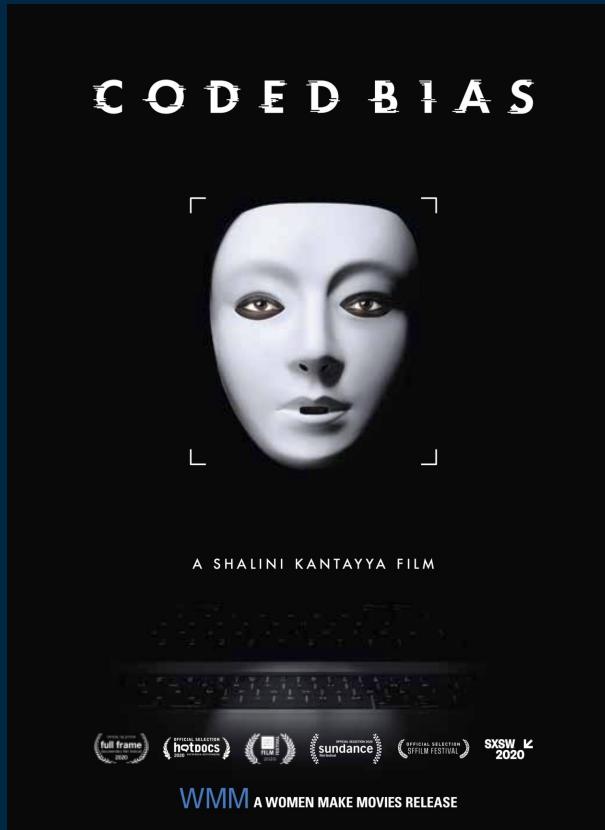
- Indefinite moratoriums from Amazon, Microsoft, IBM starting in June 2020
- Municipal/state-level bans while nationwide efforts underway

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

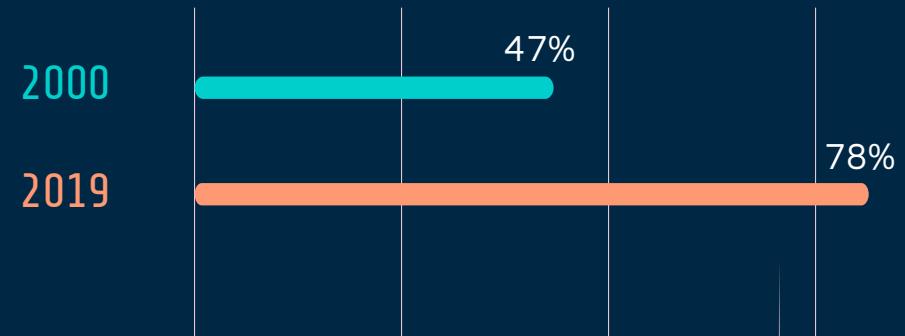
Ring & Neighbors vs.
Community Wireless
- Hien -

04

Neighborhood Watch



% people believing that crime in the US was worse than the year before



Source: Pew Research Center

Ring & Police Partnerships

POLICY \ TECH

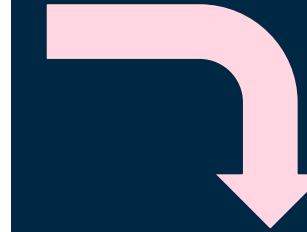
Amazon's Ring reportedly partners with more than 200 US police departments

Law enforcement across the country works with Ring

By Colin Lecher | @colinlecher

Jul 29, 2019, 6:22pm EDT

2019



Source: The Verge

POLICY \ TECH \ AMAZON

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

2021

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

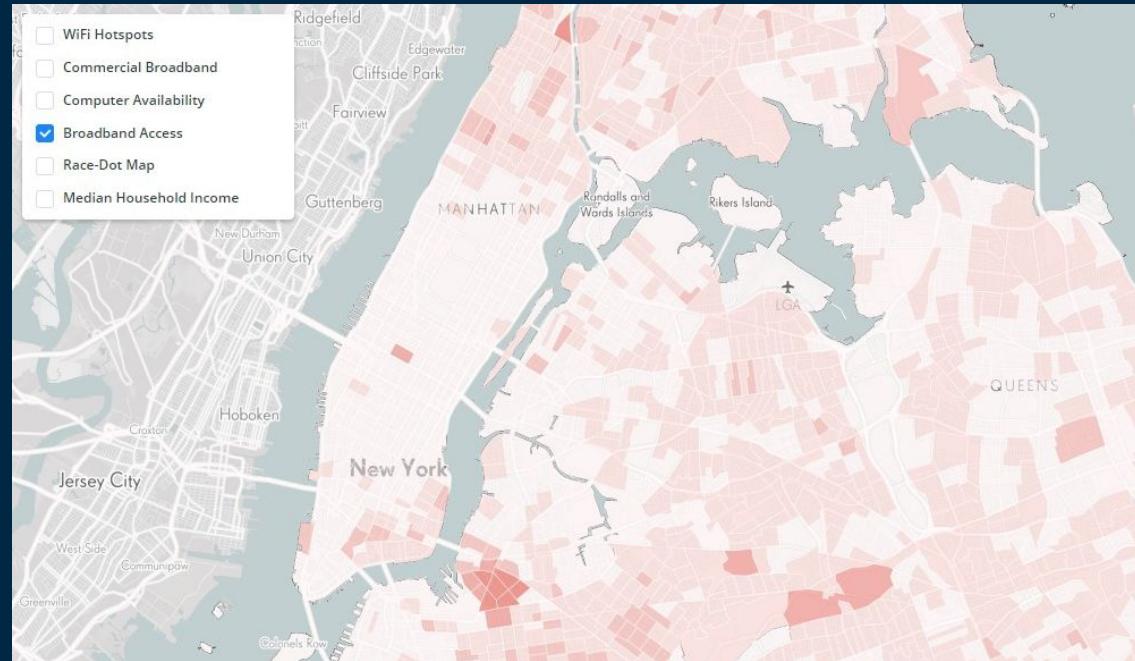
“... terrifically addictive, a
wildly engaging hodgepodge
of voyeurism, suspicion,
unease, and mystery”

—MAX READ, *NEIGHBORS* USER.
NY MAGAZINE



A very different
community network...

Digital Divide



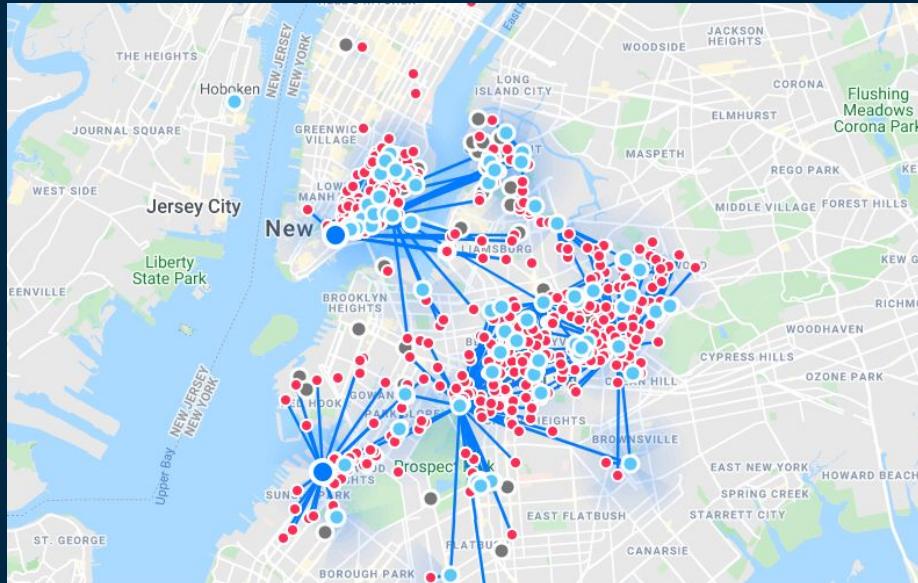
NYC broadband access map. Red = low/no access

Source: <https://winkj601.github.io/>

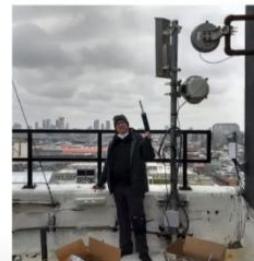
Digital Divide - the issue

- 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

Do you have any questions?

THANKS

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