



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

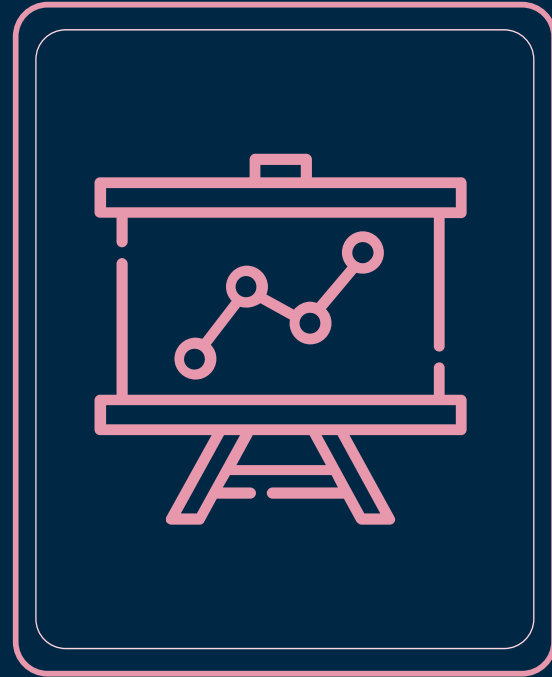
Hien: Tech in communities
- Neighbors app by Ring (by Amazon) & police partnerships
- Community-owned networks

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

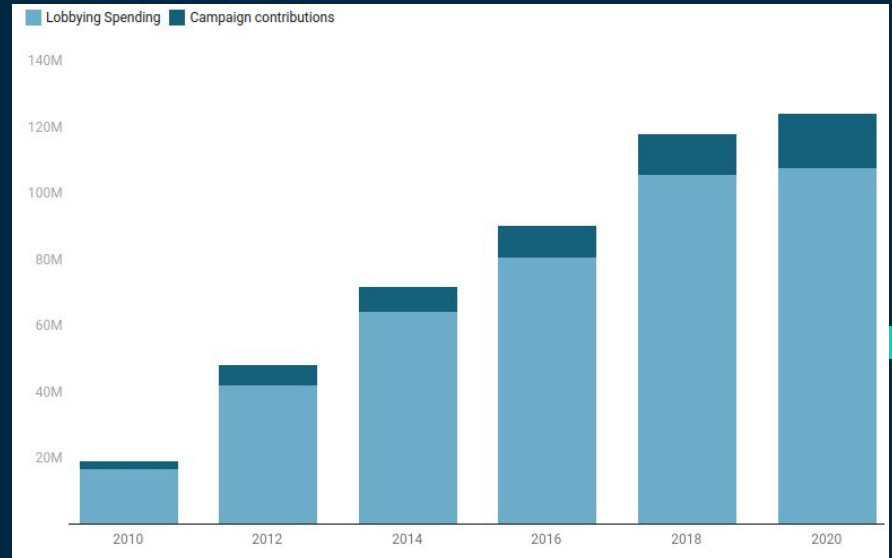
- Federal Trade Commission (FTC)
 - enforces federal consumer protection laws that prevent fraud, deception and unfair business practices (ex: antitrust)
- Federal Communications Commission (FCC)
 - regulates communications by radio, television, wire, satellite, and cable
- More generally, Congress, 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





Priiiiiivacyyyyyyyyyy

- 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?



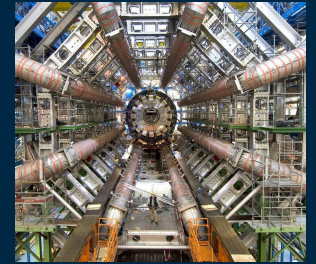
4 Petabytes/day



Databases woo



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



1 Petabyte/s

Key:

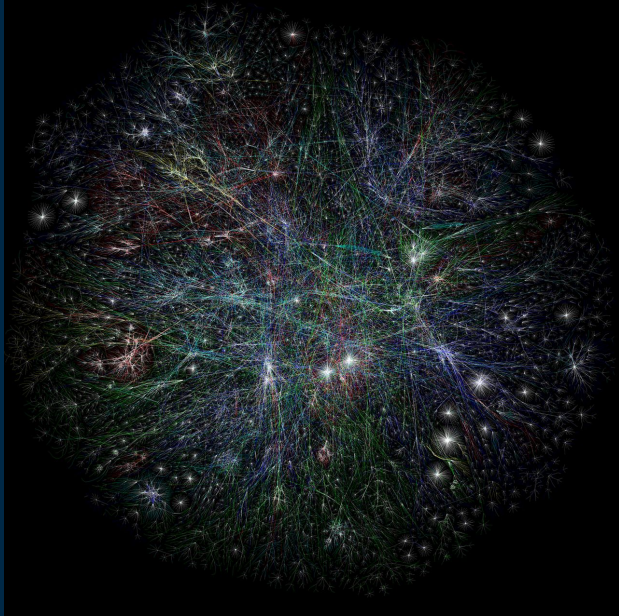
GB 10^9

TB (1000 GB)

Petabyte (1000 TB), Exabyte

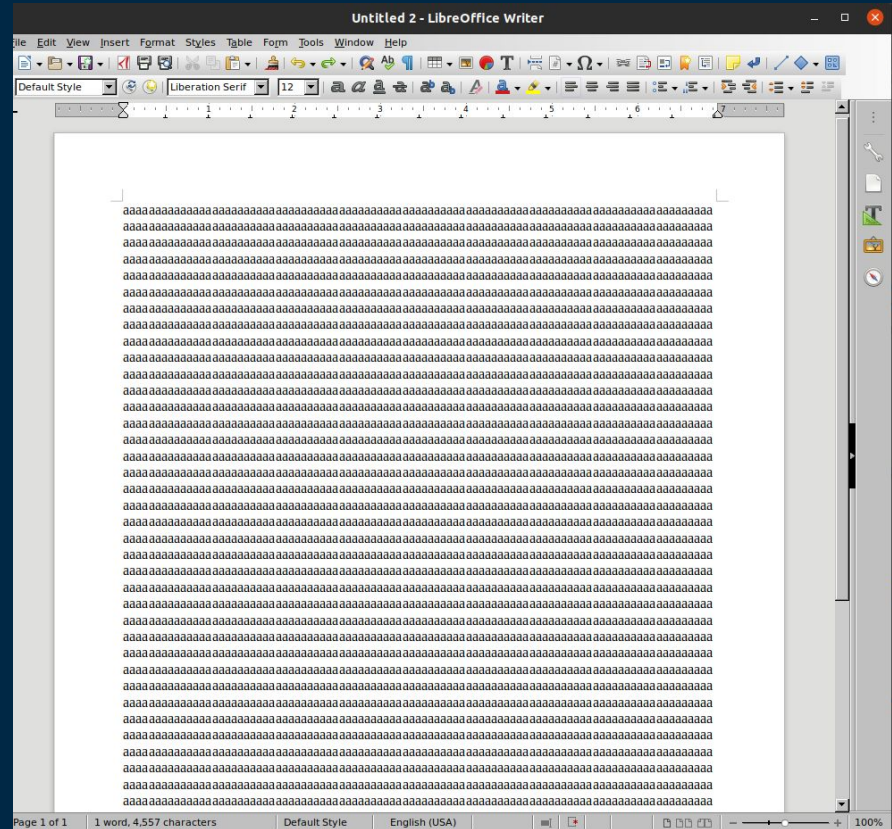
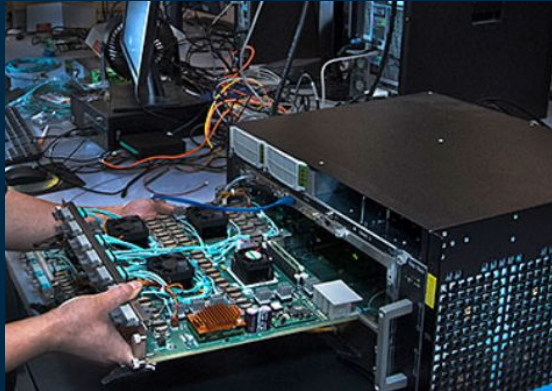
(1000 PB), Zettabyte (1000 EB)

BIG DATA



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

Research Process



ML is going to fix everything!!



shutterstock.com · 1392193913

jk.

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

arXiv.org > cs > arXiv:1301.6822

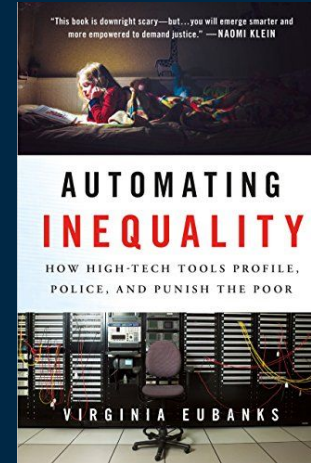
Computer Science > Information Retrieval

[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, "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% for Jermaine, 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 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



Science

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RESEARCH ARTICLE

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

ZIAD OBERMEYER · BRIAN POWERS · CHRISTINE VOGELI AND · SENDHIL MULLAINATHAN · Authors Info & Affiliations

SCIENCE · 25 Oct 2019 · Vol 366, Issue 6464 · pp 447-453 · DOI:10.1126/science.aar2342

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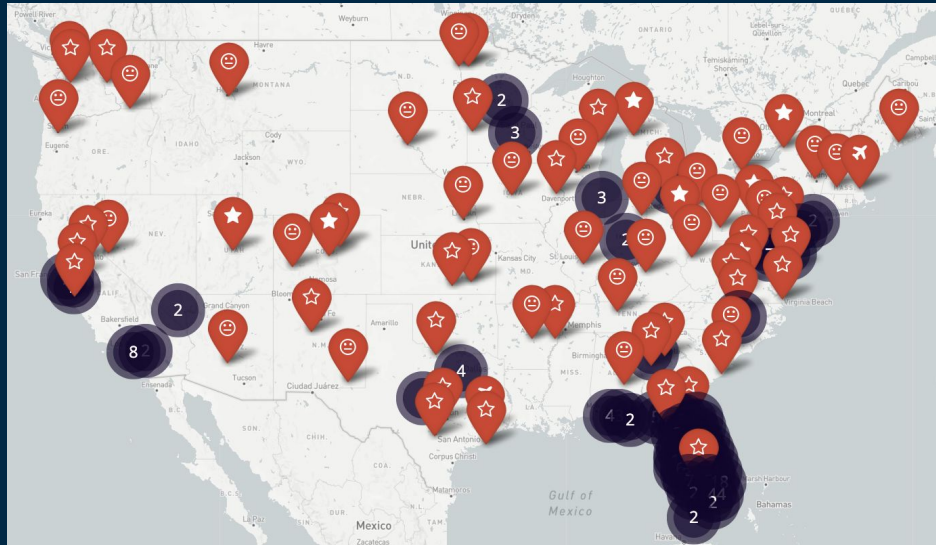
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U.S. Facial Recognition Surveillance

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)

 **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)



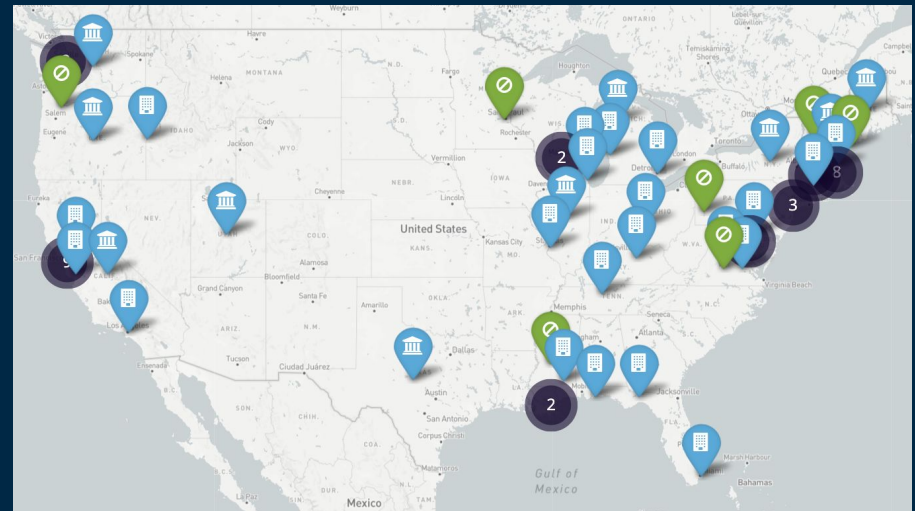
Robert Williams - January 2020, Michigan (Reported Aug. 2021)

Activist and regulatory efforts

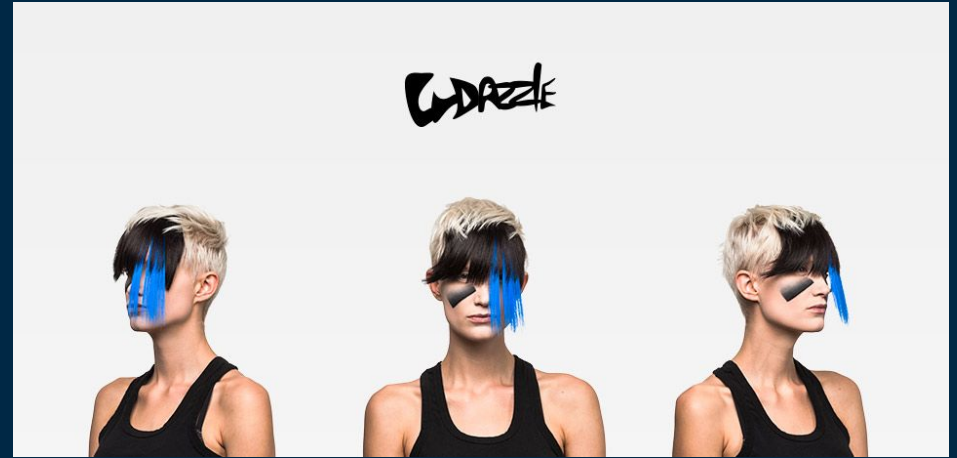
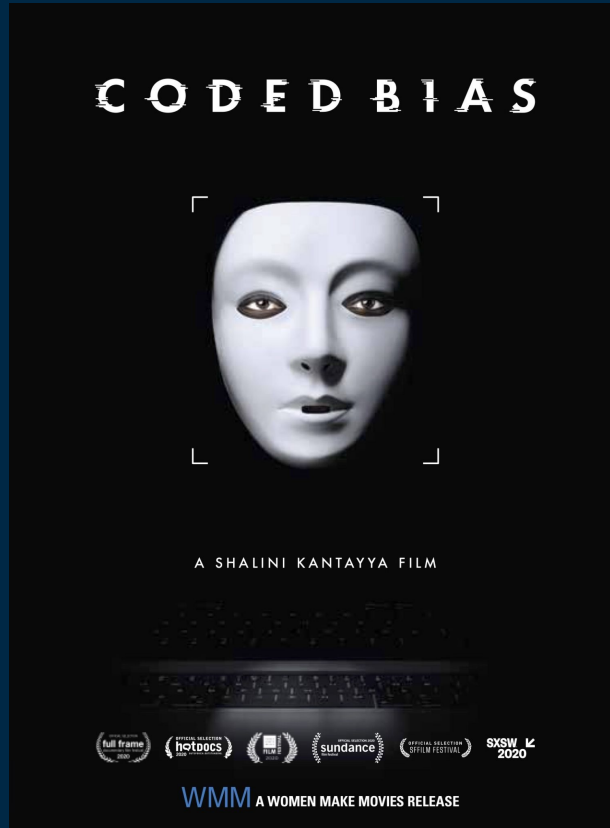
- Indefinite moratoriums from Amazon, Microsoft, IBM starting in June 2020
- Municipal/state-level bans while nationwide efforts underway

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

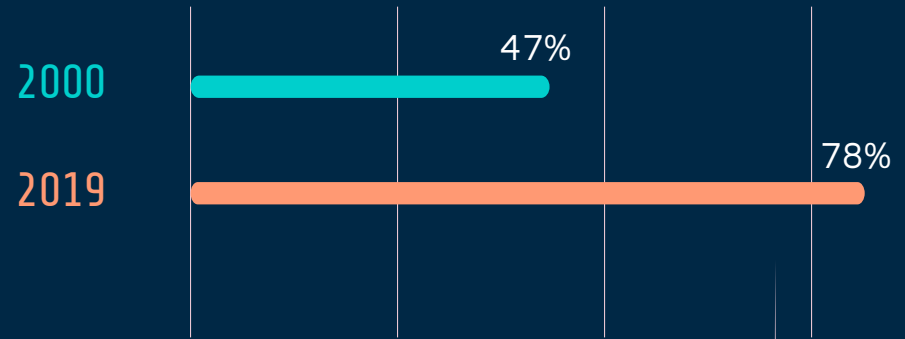
Ring & Neighbors vs.
Community Wireless
- *Hien* -

04

Neighborhood Watch



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



Source: [Pew Research Center](#)

Ring & Police Partnerships

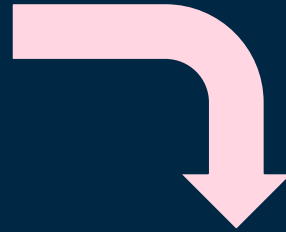
POLICY \ TECH \

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



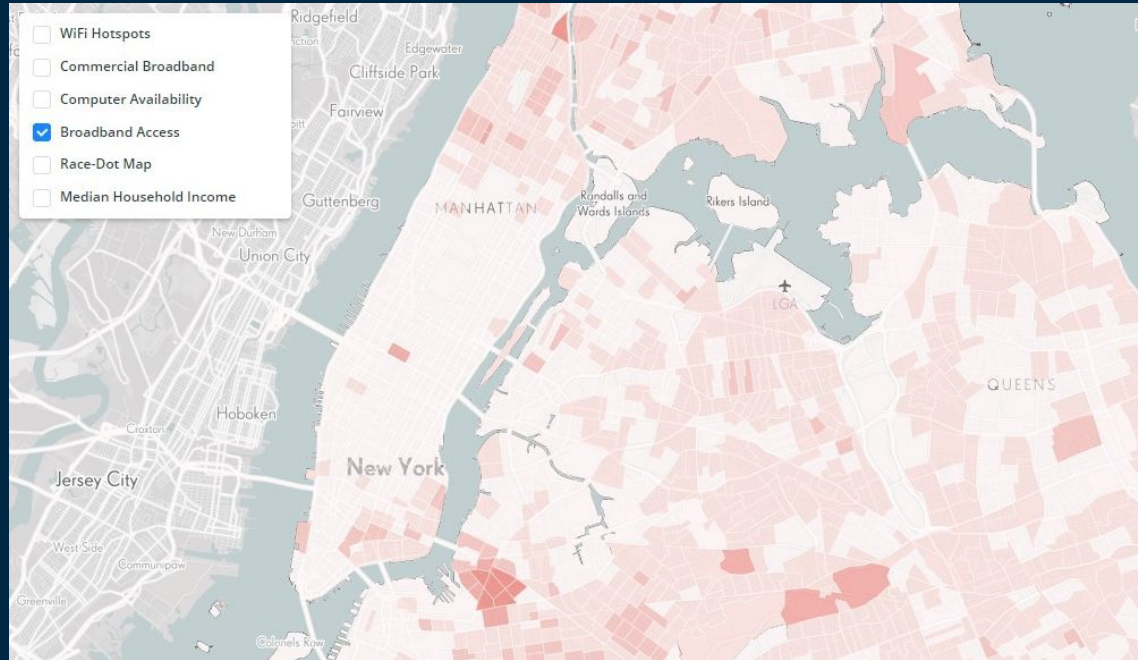
“... terrifically addictive, a
wildly engaging hodgepodge
of voyeurism, suspicion,
unease, and mystery”

—MAX READ, *NEIGHBORS* USER.
NY MAGAZINE

The background is a dark blue gradient. It features several vertical white lines of varying lengths scattered across the frame. Interspersed among these lines are small squares in three colors: light blue, light orange, and light pink. Some squares are solid, while others are hollow outlines. The overall aesthetic is clean and modern.

A very different
community network...

Digital Divide



NYC broadband access map. Red = low/no access

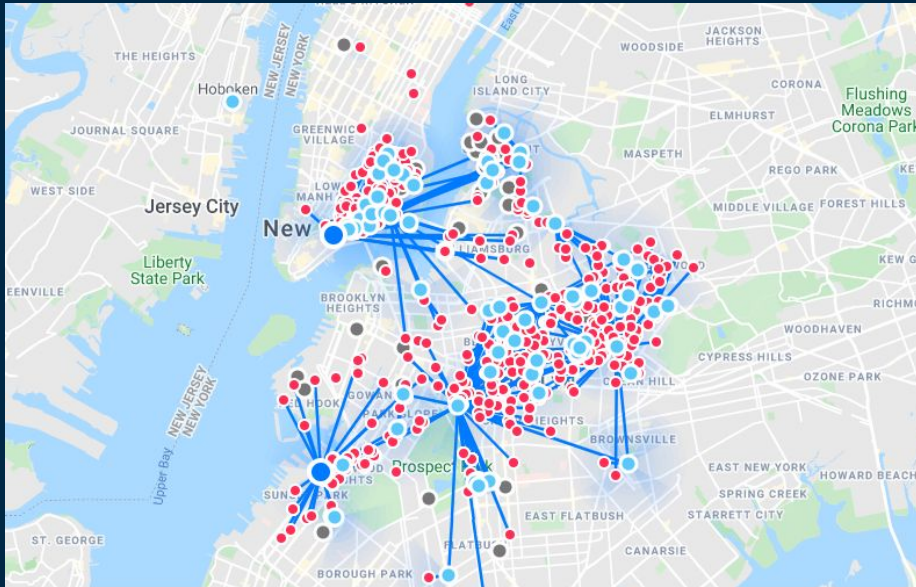
Source: <https://winkj601.github.io/>

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



929
Total

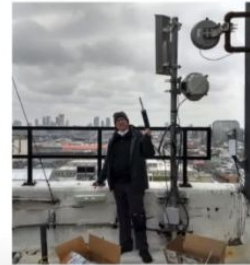
55
AP

794
Non-hub

78
Hub

2
SN

Install Leader Training Program



New skills



Teamwork and teaching



Building community

Do you have any questions?

THANKS

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