

# ***Tech & Power***

**Building Community-Centric Tech Policy**

**Jennifer Lee**

**Technology & Liberty Project Advocate**



# Discuss: Can technology fix structural inequity?

***Structural inequity*** = the systemic disadvantage of one social group compared to other groups with whom they coexist. Examples of structural inequities are the personal, interpersonal, institutional, and systemic drivers—such as racism, sexism, classism, able-ism, xenophobia, and homophobia, that create systematic differences in the opportunities groups have, leading to unfair and avoidable differences in outcomes.

Source: The National Academy of Sciences / Communities in Action: Pathways to Health Equity

# Overview

- (1) Technology & Structural Inequity
- (2) New Technologies = New Power Dynamic
- (3) Building Community-Centric Technology Policy
- (4) Key Takeaways

# **1: THE BIG PICTURE**

## **Technology & Structural Inequity**

**Assumption:  
Tech will fix our societal  
problems & make people's  
lives better.**



Source: P.S. Mueller

# AI and Health Care Are Made for Each Other

The Future of Artificial Intelligence In  
The Workplace

**Automation Technology Can  
Enhance Federal Cybersecurity**

**4 Reasons to Use Artificial Intelligence in Your Next Embedded  
Design**

**The Army Is Bringing Artificial  
Intelligence To Its Armored  
Vehicles**

**China throws its weight behind A.I. and  
blockchain as it aims to be the world's tech  
leader**

**Question: Does tech make the world better? And if so, for whom?**

# Technology isn't “neutral”

Every technology reflects a set of value choices, often made by people in positions of power.

## Microsoft HoloLens



Wiki: Ramadhanakbr / BY-SA 4.0

An Open Letter to Microsoft: Don't Bid on the US Military's Project JEDI

Signed by employees of Microsoft



Wiki: DocteurCosmos / CC BY-SA 3.0

Hostile architecture:  
Bolts installed  
on steps in  
France



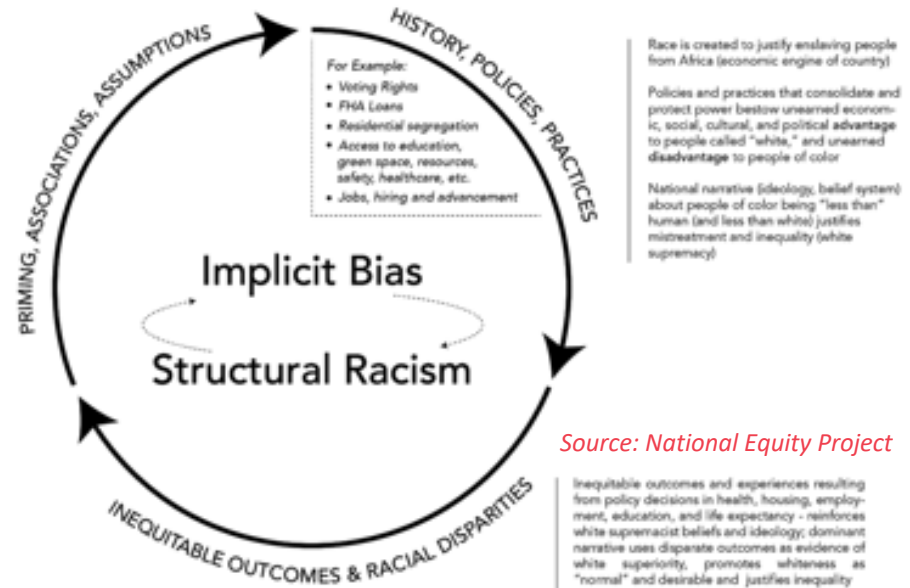
Bench in Calgary,  
Alberta, Canada

Twitter: @isaacazuelos



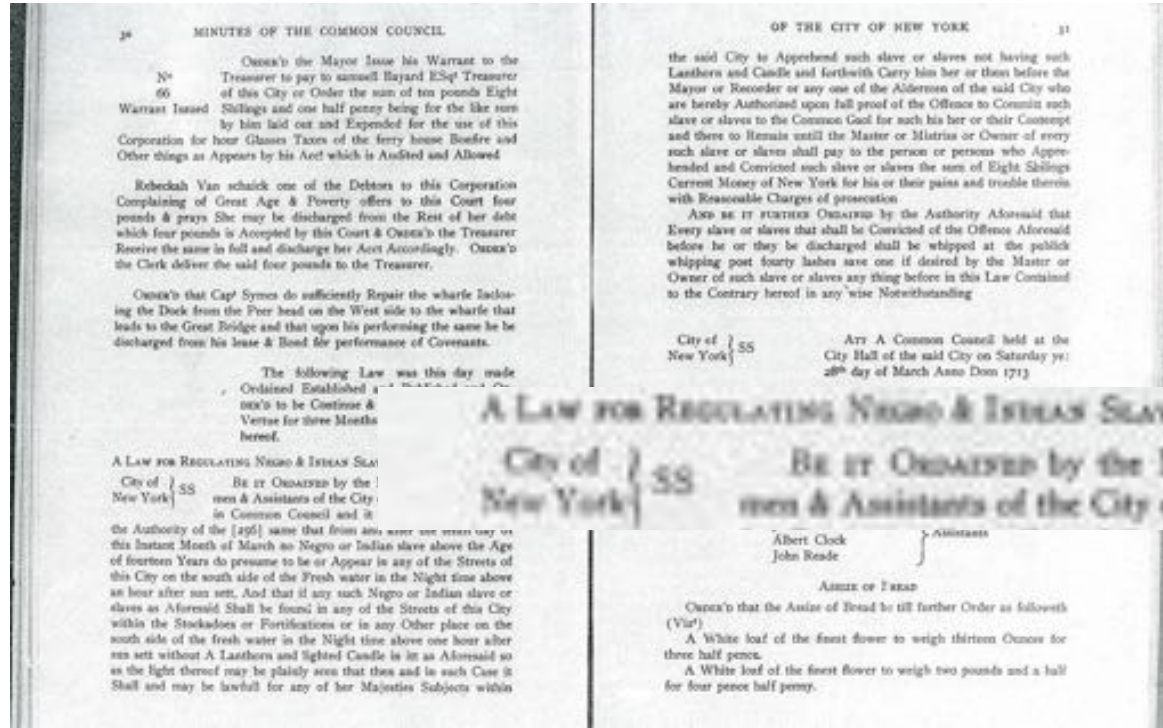
# Technologies are being released into a context of structural inequity

- **Structural inequity** = personal, interpersonal, institutional, and systemic drivers that create systematic differences in the opportunities groups have, leading to unfair and avoidable differences in outcomes.
- When one group has historically set the rules and written the laws of the land, **access of others to resources and power is limited.**



**Technology has always  
disproportionately impacted  
marginalized groups**

# 1700s: NYC's Lantern Law



The minutes from the meeting of New York City's Common Council in March 1713, when New York's lantern law was put in place.

Ethan Chiel / NYC Municipal Archives

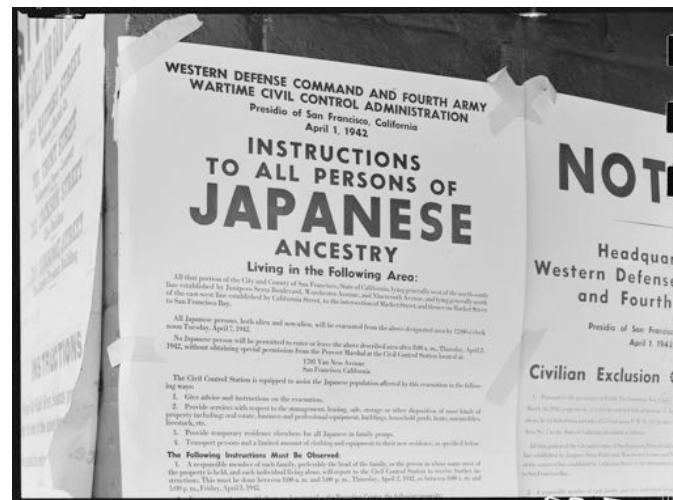
# 1940s: Japanese Incarceration



Members of the Mochida family awaiting evacuation bus. Identification tags are used to aid in keeping the family unit intact during the evacuation.

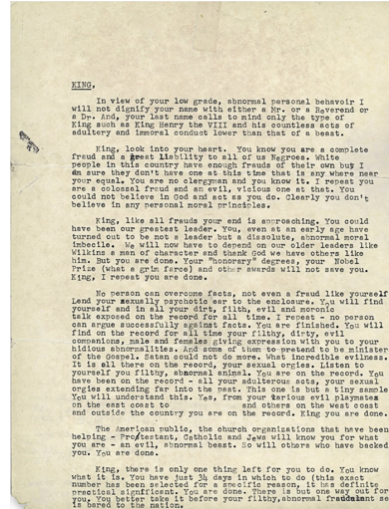
IBM's Hollerith Punch Card

*Lange, Dorothea / National Archives and Records Administration*



Official notice of exclusion and removal

# 1950s: FBI Surveillance of Civil Rights Leaders



The "suicide letter", that the FBI mailed anonymously to Martin Luther King Jr. in an attempt to convince him to commit suicide

FBI

The FBI's "COINTELPRO" or Counter Intelligence Program targeted civil rights leaders and Black Panther Party leaders and "neutralized" via assassination, imprisonment, public humiliation, and false crime charges.

# 2000s: NYPD's Muslim Surveillance Program



Since at least 2002 - 2017, the New York City Police Department's Intelligence Division engaged in the religious profiling and suspicionless surveillance of Muslims in New York City and beyond.

*Julius Schorzman / CC BY-SA 2.0*



# 2010s: ICE Targeting Immigrants for Deportation



ICE is continuing to use automated license plate readers, cell snooping devices, facial recognition, and other technologies to target immigrants for deportation.

*ICE / Flickr*

# 2018: A shift in the tech narrative

- Cambridge Analytica
- Project Maven
- Project JEDI
- Amazon pitching Rekognition to ICE



Cambridge  
Analytica



facebook



**DON'T BE EVIL**

End the work on the Pentagon's drone  
project





# 2018: A shift in the tech narrative



## **2: NEW TECH = NEW POWER**

**Artificial Intelligence & Automated Decision Systems**

# What is artificial intelligence?

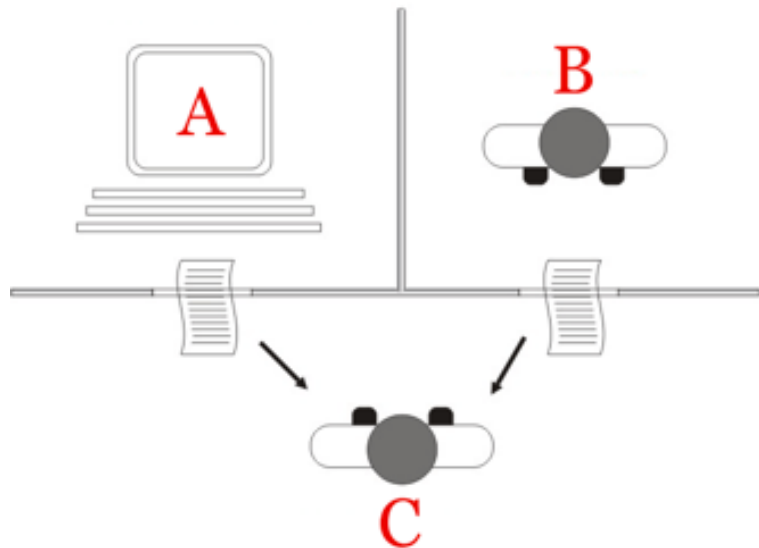
- **AI** = A field of computer science dedicated to building machines that solve problems usually solved by humans
- **Algorithms** = step-by-step directions that form the building blocks of AI systems



*Marco Verch / CC BY 2.0*

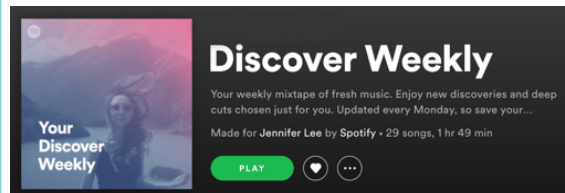
# General & Narrow AI

## General AI



McGeddon / CC BY 2.5

## Narrow AI



Google Maps

X



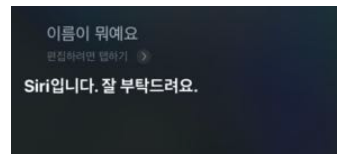
Young Tea



Similar to Sharetea DC Chinatown 歌腳亭 華盛頓唐人街店 and Oasis Tea Zone



You seem interested in bubble tea



Gmail

Compose

Unread

Scheduled

All Mail

Spam

7

Trash

Categories

Manage labels

# What are Automated Decision Systems?

**ADS:** Data-driven tools, often are powered by AI, that aim to aid or replace human decision making.



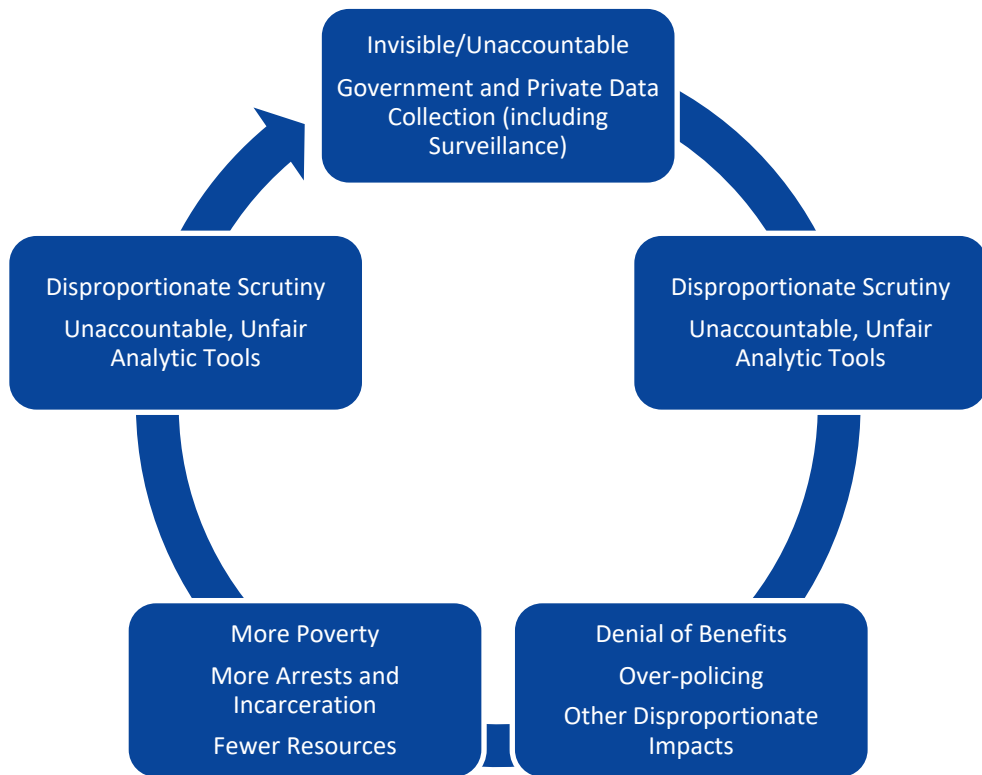
# New technologies are powered by data

- Virtually all important decisions about us involve data analytics.
  - Credit scores
  - Policing
  - Public benefits
  - Employment
- But most people don't know that algorithms are involved in these decisions.



# Technology Targeting Cycle

Communities aren't at the decision-making table



# Tech can exacerbate existing inequity

## How Police Technology Aggravates Racial Inequity: A Taxonomy of Problems and a Path Forward

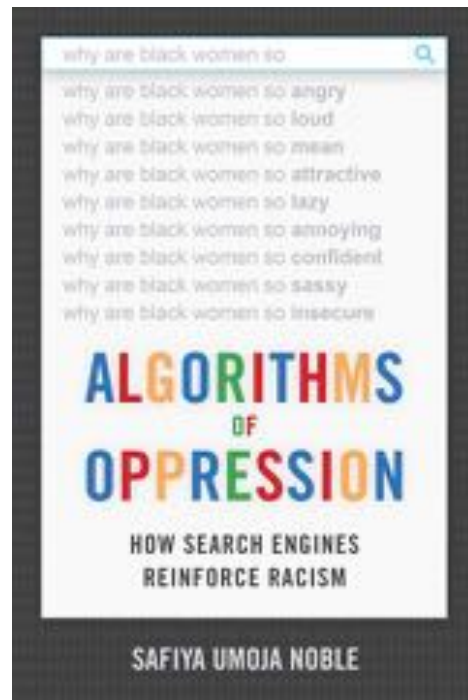
54 Pages • Posted: 14 Mar 2019

[Laura Moy](#)

Center on Privacy & Technology at Georgetown Law

Date Written: February 24, 2019

Tech can replicate, mask, transfer, magnify, and compromise oversight over inequity.

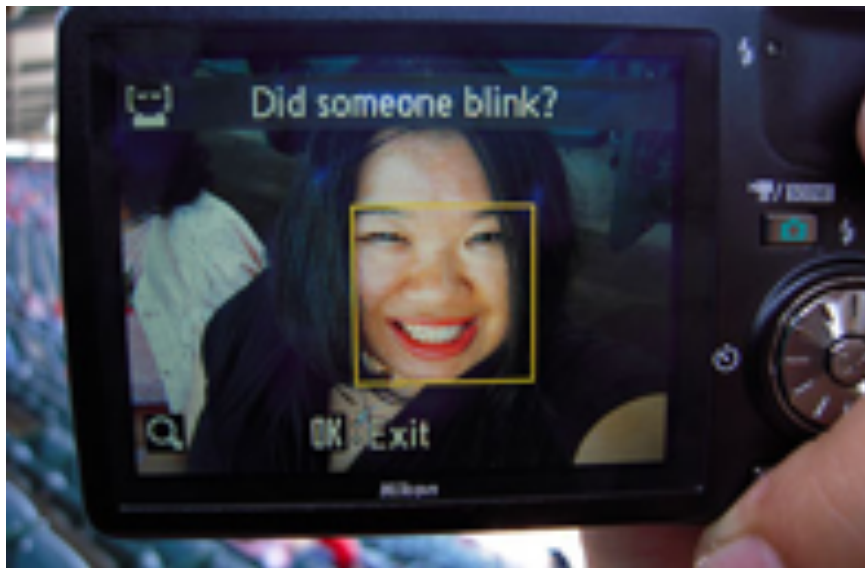




# Tech can exacerbate existing inequity

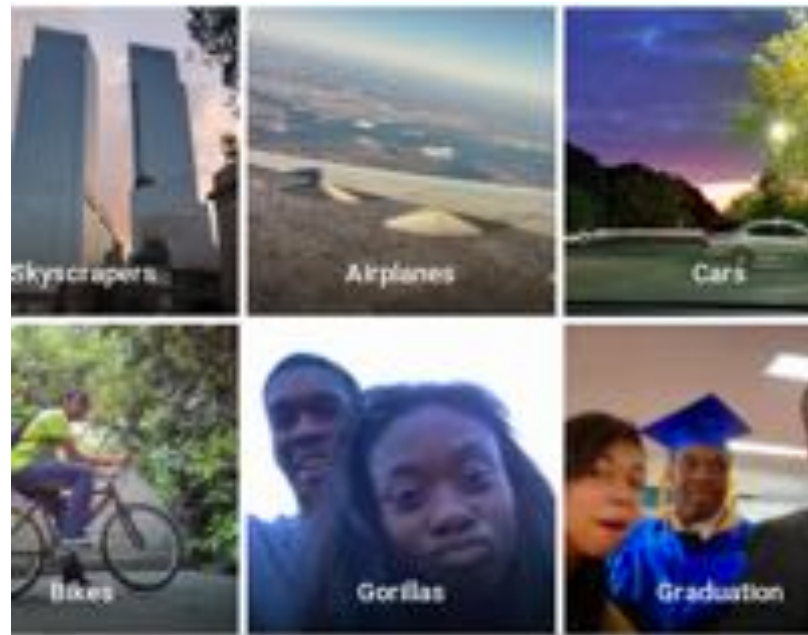
- **Replicating inequity:** e.g., embedding/reinforcing inequity
- **Masking inequity:** e.g., idea that tech is neutral
- **Transferring inequity:** e.g., flawed/biased tools spread
- **Worsening inequity:** e.g., existing inequity is exacerbated
- **Compromised inequity oversight:** e.g., tech obscures practices from public scrutiny

# Algorithms & Structural Inequity



Joz Wang

“As I was taking pictures of my family, it kept asking ‘Did someone blink?’ even though our eyes were always open.”



Twitter: @jackyalcine

# Algorithms & Structural Inequity

Affect Recognition: “profiling people and revealing their personality based only on their facial image.”

**57/0.13**

**39/27**

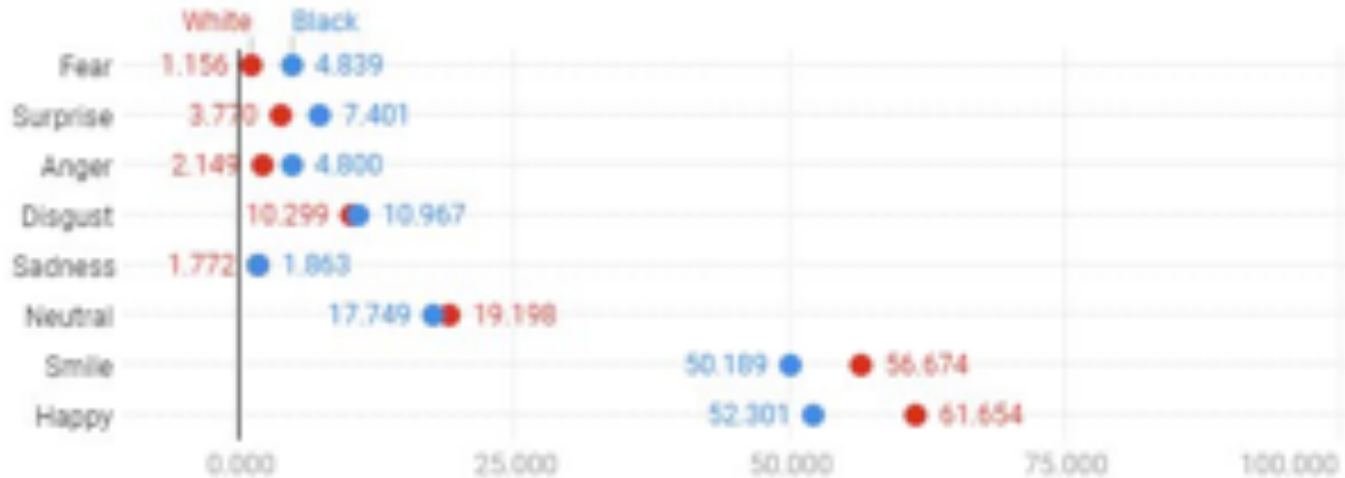


Darren Collison

Gordon Hayward

## Face++

Face++ rated the emotions on facial expressions of basketball players out of 100. Black faces were, on average, rated as angrier and unhappier than white faces.



*Credit: Chart: The Conversation, CC-BY-ND Source: SSRN (2018)*

# Is bias fixable?

- “Fixing” bias is very difficult, if not impossible in a structurally inequitable society.
- Important questions:
  - What problem are we asking the technology to solve?
  - What guardrails are we putting around the technology?
  - Who has the power to decide whether and how to build and deploy a technology?

# Litigation: Automated Decision Systems

- **K.W. v. Armstrong (Idaho 2014)**
  - Idaho's state Medicaid program began using a new ADS to determine Medicaid payments for adults with intellectual and developmental disabilities.
- **Ark. Dept. of Human Services v. Ledgerwood (Ark. 2017)**
  - In 2016, without notice, the State of Arkansas introduced an algorithm that drastically reduced the Medicaid attendant care hours for many low-income adult Medicaid participants living with disabilities.
- **Barry v. Lyon (6<sup>th</sup> Circ. 2016)**
  - The Michigan Department of Health and Human Services (MDHHS) began using a matching algorithm that automatically disqualified individuals for food assistance if the system determined they had an outstanding felony warrant.

# **3: FIGHTING BACK**

**How are we creating community-centric technology policy?**

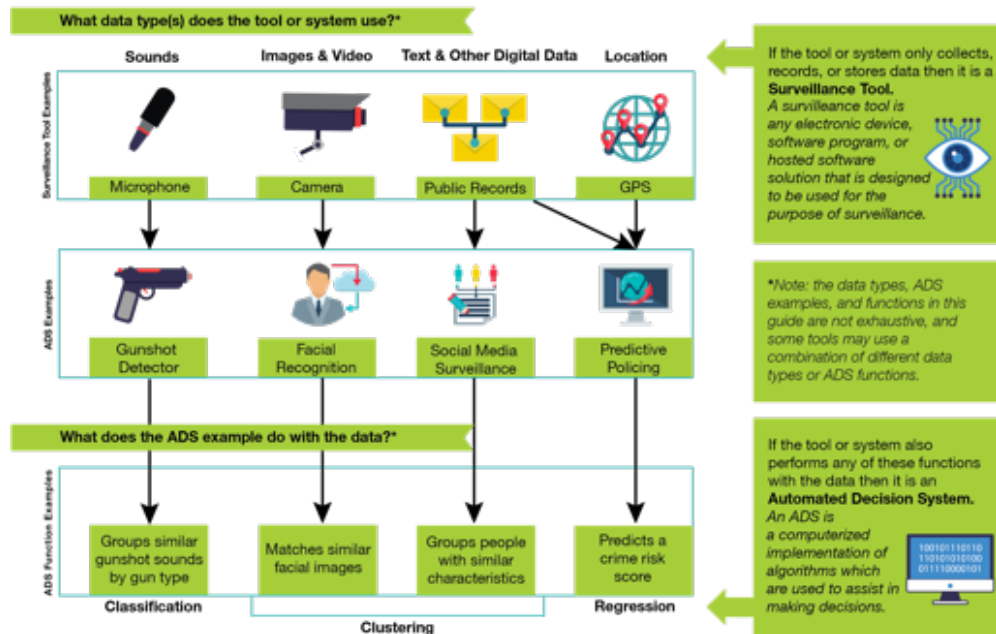
# Tech Fairness Coalition



# Community Advocacy & Education

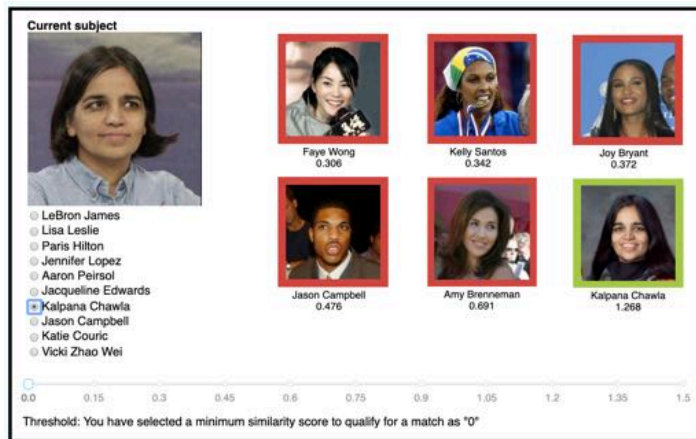
# Algorithmic Equity Toolkit

## Identifying a Surveillance Tool or Automated Decision System (ADS)



Potential Harms
Impact
<i>The effect technology will have on community members</i>
<p><i>Example Case: The New York City Police Department uses various high and low tech methods to surveil and gather intelligence on Muslim neighborhoods and mosques. Having been questioned by the NYPD already many Muslim congregants are fearful and wary of attending religious services or engaging with their own religious community. Surveillance of the Muslim community became "so widespread that it interfere[d] with its members' legitimate political and religious activities"; ultimately denying them services which every American has a right to enjoy.</i></p> <p><a href="http://theyarewatching.org/issues/biased-targeting">http://theyarewatching.org/issues/biased-targeting</a></p> <p>Could the technology have negative impacts on affected community members such as adverse impacts on civil rights and fair allocation of policing and justice?</p> <ul style="list-style-type: none"> <li>• If so, what solutions will be implemented to resolve the negative impacts?</li> <li>• Are there other technologies that can be implemented without having negative impacts on the community members?</li> <li>• Who is responsible if community members experience negative impacts from the technology?</li> <li>• What will the reporting process for negative impacts be?</li> </ul> <p>Could the technology have negative impacts on affected community members such as denial of service, a credit, bank loan?</p> <ul style="list-style-type: none"> <li>• If so, what solutions will be implemented to avoid this?</li> <li>• Are there other technologies that can be implemented without having negative impacts on the community members?</li> </ul>

UW Data Science for Social Good Student Fellows: Corinne Bintz, Vivian Guetler, Daniella Raz, Aaron Tam / Critical Platform Studies Group: Mike Katell, Peaks Krafft, Meg Young / Data Scientist: Bernease Hermann



# Watching the Watchers: Countersurveillance Workshop Toolkit

Coveillance Team:  
Katherine Ye, Bonnie  
Fan, Jean Jung, Micah  
Epstein



# Seattle Surveillance Ordinance




**Victory!**  
**Seattle City Council**  
**Passes Ordinance to**  
**Regulate Surveillance**  
**Technology!**



# Seattle Surveillance Ordinance

- Law requiring public oversight over any surveillance tech being used by Seattle govt. agencies.
- First passed in 2012, revised in 2017, last amended in 2018.
- Creates community-based advisory group.

 **SEATTLE CITY COUNCIL**  
Legislative Summary  
CB 119218

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Record No.: CB 119218      Type: Ordinance (Ord)      Status: Passed  
Version: 3      Ord. no: Ord 126679      In Control: City Clerk  
File Created: 03/13/2018  
Final Action: 10/05/2018

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**Title:** AN ORDINANCE relating to surveillance technology implementation; amending Ordinance 125376 and Chapter 14.18 of the Seattle Municipal Code.

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**Date:**

**Notes:**      **Filed with City Clerk:**  
**Sponsors:** Harrell      **Mayor's Signature:**  
   **Vetoed by Mayor:**  
   **Veto Overridden:**  
   **Veto Sustained:**

**Attachments:** Att 1 - Ordinance 125376  
**Draftsman:** patrick.wigren@seattle.gov      **Filing Requirements/Dept Action:**

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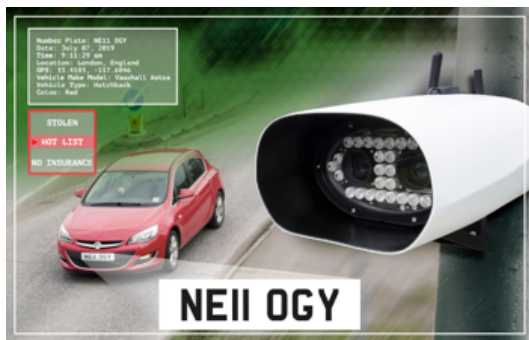
**History of Legislative File**      **Legal Notice Published:** ☐ Yes ☐ No

Ver	Acting Body	Date	Action	Sent To	Due Date	Return Date	Result
1	City Clerk	03/13/2018	sent for review	Council President's Office			
	<b>Action Text:</b>		The Council Bill (CB) was sent for review to the Council President's Office				
	<b>Notes:</b>						
1	Council President's Office	03/13/2018	sent for review	Governance, Equity, and Technology Committee			
	<b>Action Text:</b>		The Council Bill (CB) was sent for review to the Governance, Equity, and Technology Committee				
	<b>Notes:</b>						
1	City Council	03/19/2018	referred	Governance, Equity, and Technology Committee			
	<b>Action Text:</b>		The Council Bill (CB) was referred to the Governance, Equity, and Technology Committee				
	<b>Notes:</b>						
1	Governance, Equity, and Technology Committee	03/09/2018	discussed				

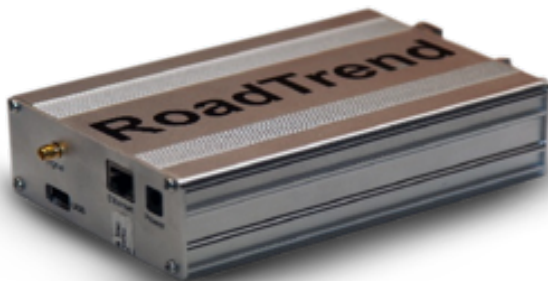
Office of the City Clerk      Page 1      Printed on 10/05/2018

# Seattle Surveillance Ordinance: Implementation Process

14/29 technologies reviewed



SPD's ALPR



SDOT's Acyclica



SPD's CopLogic

# WA State Bills: 2019 & 2020 Sessions

- Face Surveillance Moratorium Bill (HB 1654)
- Robo Decision Making (ADS) Bill (HB 1655)
- Commonsense License Plate Data Security Bill (HB 1663)
- Data Privacy

# What can you do?

- Talk to your lawmakers
- Submit public comments
- Testify
- Question & engage
- <https://mailman.cs.washington.edu/mailman/listinfo/seattle-surveillance-ordinance>



## **3: KEY TAKEAWAYS**

# Key Takeaways

- Technology isn't neutral.
- Tech has always had disproportionate impacts on different groups.
- New technologies = unprecedented power.
- Fixing bias is extremely difficult, if not impossible.
- We need to create community-centric tech policy that seeks to intentionally break down bias.
- Talk to your lawmakers and get involved!



Jennifer Lee

Shankar Narayan

Technology and Liberty Project

ACLU of Washington

# ACLU

Washington

WE THE PEOPLE