

CODED BIAS



ACTIVIST TOOLKIT

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TABLE OF CONTENTS

1. LETTER FROM THE FILMMAKER	03
2. ABOUT THE FILM	05
3. USING THIS GUIDE	07
4. GLOSSARY OF TERMS	08
5. START A CONVERSATION	11
6. DECLARATION OF DATA RIGHTS	16
7. ADVOCATE FOR CHANGE	18
8. TACTICS FOR ACTIVISTS	22
9. JOIN AN ORGANIZATION	25
10. LEARN MORE	27

1

LETTER FROM THE FILMMAKER

Thank you for promoting algorithmic justice through the film Coded Bias. As a filmmaker, I'm grateful to use my film Coded Bias to celebrate our universal human rights at a powerful time. I can hear protesters outside my Brooklyn window and across the country who have taken to the streets in the largest civil rights movement that we've seen in 50 years. I'd like to express my solidarity in their defense of the inherent value of Black life and the basic universal human rights of all. I want to thank the people in the streets outside my window and around the world for risking their lives to create a culture of human rights for all.



This is a moment of collective grief. This moment is asking us to drop into a deeper place in our humanity to lead. I'm so grateful to the cast of my film who have shown me how to lead from a more empathetic place in our humanity.

It's never been more clear that the people who have been systematically missing from the conversation have the most to share with us about the way forward.

I want to thank the whole brilliant, badass cast of Coded Bias for schooling me and giving us all an education about what the battle for civil rights and democracy looks like in the 21st century. IBM said it would not develop and sell facial recognition technology. Microsoft said they would also not sell facial recognition technology. Amazon said it would press pause for one year on police use of facial recognition.

This massive sea change is happening because of the groundbreaking research of the genius women in Coded Bias.

Now we've seen what social change looks like when informed scientists, unencumbered by corporate interests, have the bravery to speak truth to power, and when engaged citizens take the streets to push politicians to act. We are seeing a massive sea change that we never thought possible and the power balance of big tech is coming back to the hands of the people. While I celebrate these wins, they are not enough. The cement is still drying on invasive surveillance technologies.

This is a moon-shot moment to push for inclusive, transparent, democratic uses of these technologies. It's really up to us to prioritize civil rights and to reign in the power of big tech.

We've compiled this guide to help you use your power to galvanize conversation, lead discussion, and create engagement online and offline. Thank you for choosing to host a screening of Coded Bias and to shine a light on a more humane use of technologies of the future.

*Onwards,
Shalini Kantayya
Director, Coded Bias*

2

ABOUT THE FILM

**MODERN SOCIETY SITS AT THE
INTERSECTION OF TWO CRUCIAL
QUESTIONS:**

**WHAT DOES IT MEAN WHEN
ARTIFICIAL INTELLIGENCE
INCREASINGLY GOVERNS OUR
LIBERTIES? AND WHAT ARE THE
CONSEQUENCES FOR THE
PEOPLE AI IS BIASED AGAINST?**

When MIT Media Lab researcher Joy Buolamwini discovers that many facial recognition technologies fail more on darker-skinned faces and the faces of women than, she delves into an investigation of widespread bias in artificial intelligence. As it turns out, algorithms, data, and computers is not neutral, and women are leading the charge to ensure our civil rights are protected.



MIT Media Lab researcher Joy Buolamwini, Coded Bias

3

USING THIS GUIDE

The Coded Bias Action Toolkit invites viewers of the film to become advocates for algorithmic justice.

This guide sets you up with some basic information and tools to get you started on a path of advocacy. Everyone from concerned citizens to tech professionals can find recommendations on ways to start a discussion, create change, and learn more.

The content included in the Coded Bias Action Toolkit is heavily influenced by the groundbreaking research and advocacy of the Algorithmic Justice League (AJL), the ACLU, Big Brother Watch UK, and the brilliant and badass cast of the film.

4

GLOSSARY OF TERMS

You do not need to be a tech expert to advocate for algorithmic justice. These basic terms are a good foundation to inform your advocacy.

For a more detailed breakdown of how facial recognition works, see the guide titled *Facial Recognition Technologies: A Primer* from the AJL.

For more on surveillance, see the *Community Control Over Police Surveillance: Technology 101* guide from the ACLU.

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- **Algorithm.** A set of rules used to perform a task.
 - **Algorithmic justice.** Exposing the bias and harms from technical systems in order to safeguard the most marginalized and develop equitable, accountable, and just artificial intelligence.
 - **Benchmark.** Data set used to measure accuracy of an algorithm before it is released.
 - **Bias.** Implicit or explicit prejudices in favor of or against a person or groups of people.



- **Artificial intelligence (AI).** The quest to give computers the ability to perform tasks that have, in the past, required human intelligence like decision making, visual perception, speech recognition, language translation, and more.
- **Big data.** The mass collection of information about individuals who use personal technology, such as smartphones
- **Biometric technology.** Uses automated processes to recognize an individual through unique physical characteristics or behaviors

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- **Black box.** A system that can be viewed only through its inputs and outputs, not its internal process.
 - **CCTV.** Closed-circuit television cameras are used by institutions to record activity on and around their premises for security purposes.
 - **Civil rights.** A broad set of protections designed to prevent unfair treatment or discrimination in areas such as education, employment, housing, and more.
 - **Code.** The technical language used to write algorithms and other computer programs.
 - **Data rights.** Referring to the human right to privacy, confidentiality, and ethical use of personal information collected by governments or corporations through technology.
 - **Data set.** The collection of data used to train an algorithm to make predictions.
 - **Due process.** The right not to be deprived of life, liberty, or property without proper legal proceedings, protected by the Fifth and Fourteenth Amendments to the US Constitution.
 - **General Data Protection Regulation (GDPR).** A data rights law in the European Union that requires technology users consent to how their data is collected and prohibits the sale of personal data.
 - **Facial recognition.** Technologies - a catchall phrase to describe a set of technologies that process imaging data to perform a range of tasks on human faces, including detecting a face, identifying a unique individual, and assessing

demographic attributes like age and gender.

- **Machine learning.** An approach to AI that provides systems the ability to learn patterns from data without being explicitly programmed.
- **Racism.** The systematic discrimination of people of color based on their social classification of race, which disproportionately disadvantages Black and Indigenous people of color.
- **Recidivism risk assessment -** Automated decision making system used in sentencing and probation to predict an individual's risk of future criminal behavior based on a series of data inputs, such as zip code and past offenses.
- **Sexism.** The systematic discrimination of women and girls based on their social categorization of sex, which intersects with racism for women and girls of color.
- **Social credit score.** An AI system designed by the Communist Party of China that tracks and analyzes an individual's data to assess their trustworthiness.
- **Surveillance.** The invasive act of monitoring a population to influence its behavior, done by a government for law and order purposes or by corporations for commercial interests.
- **Value-added assessments.** Algorithms used most commonly to evaluate teachers by measuring student performance data.
- **Voice recognition.** An application of AI technology that interprets and carries out spoken commands and/or aims to identify an individual based on their speech patterns.

5

START A CONVERSATION

**Building awareness is a first step to
creating change.**

**The film Coded Bias is a tool you can
use to educate your community
members about the issue.**



Joy Buolamwini at the Congress, Coded Bias

Host a screening and discussion in your school, workplace, or community to bring the conversation directly to advocates and decision makers that can create change.

First, submit a screening request to the film team at [**codedbias.com/screen**](https://codedbias.com/screen) to receive information about accessing the film.

Invite local organizations to partner on the event and find speakers knowledgeable about local initiatives to create change.

Promote the event widely to your intended audience using promotional text from the film's **press kit** and **social media graphics**.

Include at least one opportunity to take action at your event to activate viewers immediately after watching the film. For example, you could collect signatures for the Coded Bias Declaration of Data Rights—or choose from any number of actions listed in this guide or at [**codedbias.com/takeaction**](https://codedbias.com/takeaction).

Have a sign-in sheet at the event to collect information about attendees so you can follow up with them about advocacy opportunities. Make sure to inform them about how you plan to use their data before they sign up.

Discuss the issue with others by raising the questions below in online conversations, with friends and family, or in a panel discussion at a film event

- **When was the last time you were aware of an interaction with an algorithm?**
- **What does the AI you interact with nudge you to do?**
- **What data did AI use to decide what you see?**
- **What choices did the AI take away?**
- **How can AI be used in an equal and ethical manner?**
- **What are you willing to do to protect your privacy and autonomy?**

Post on social media about the film and the issues, and share content from thought leaders to help build their audiences.

#codedbias

Instagram @codedbias

Facebook @codedbiasmovie

Coded Bias Director Shalini

Kantayya on Twitter and Instagram:

@ShaliniKantayya

Twitter handles for thought leaders in the film:

Joy Buolamwini @jovialjoy, Timnit Gebru @timnitGebru, Inioluwa

Deborah Raji @rajiinio, Cathy

O'Neill @mathbabedotorg, Silki

Carlo @silkicarlo, Safiya Umoja

Noble @safiyannoble, Ravi Naik

@ravina1k, Zeynep Tufekci @zeynep,

Virginia Eubanks @poptechworks,

Meredith Broussard @merbroussard,

Amy Webb @amywebb

Social media handles for relevant organizations:

@AJLUnited

@BigBrotherWatch @ACLU

@AINowInstitute @ConMijente

@FightfortheFtr @ColorofChange

@Data4BlackLives @DataSociety

@EPICprivacy @EFF @GLBlackFutures

More hashtags to use: EquitableAI

#AccountableAI #InclusiveAI

#ResponsibleAI #EthicalAI #Albias

#Alharms #MachineBias

#ArtificialIntelligence #InclusiveTech

#TakeCTRL #NoTechforICE

#StopHateforProfit

DECLARATION BUOLAMWINI REVISION - Took out citizen

We, the people of a democracy, declare data rights fundamental to civil and human rights.

As artificial intelligence is being used as a gatekeeper to opportunity in employment, healthcare, housing, education, and policing, we, the people, refuse to have our liberties limited and opportunities denied by artificial intelligence.

We, the people, refuse to have our faces and personal information be subject to invasive surveillance. Personal data should be processed lawfully, fairly, and transparently.

We refuse corporations profiting off the limitless use of our data without wilful consent.

We demand the right to restrict how our data is used and limit its sale to third party data brokers or others. We demand the right to be informed about who processes, store, disseminates and receives our data, for how long, and for what purposes. Data collection should always be for a specified, explicit, and legitimate use.

We demand the right to access our data from those that have collected it, correct inaccuracies, and, if needed, erase our data.

We have the right to object to the processing of our personal data, biometric data or other sensitive data. Access to basic services and our freedom to move should not be denied to use based on our unwillingness to share our data.

We demand a prohibition on collecting biometric and other special categories of personal data without our affirmative consent, especially data that reveals our racial or ethnic origins, political opinions, sexual orientation, or religious beliefs.

We demand a moratorium on the use of racially biased and invasive surveillance technologies like facial recognition by all law enforcement agencies - including police, FBI, and ICE . We the people must democratically determine if and how any such tools are used and ban uses that breach fundamental human and civil rights.

We demand algorithmic systems be vetted for accuracy, bias, and non-discrimination , evaluated for harms and capacity for abuse, and subject to continuous scrutiny.

We refuse for other people's data to be used to make assumptions about who we are and to discriminate against us by association.

We demand the right to legal recourse and to file suit in court if our data rights are violated or artificial intelligence robs us of opportunity. The protection of citizens' data rights must be governed by elected leaders. Transparency is meaningless without being able to hold big tech companies accountable.

We, the people demand to be seen as more than data - as human beings with inherent value and inalienable rights.

We, the people declare data rights fundamental to civil and human rights.

6



A Universal Declaration of Data Rights as Human Rights

*Add your signature to the film's declaration of data rights at **codedbias.com/takeaction** and we'll deliver the message to U.S. lawmakers in Congress. If you are hosting a screening event for Coded Bias, you can read the declaration at the beginning of your film discussion and invite your attendees to sign on.*

We, the people, declare data rights fundamental to civil and human rights.

As of a democracy, we refuse to have our faces and personal information be subject to invasive surveillance.

We will not have our identities misidentified and our liberties and opportunities denied by artificial intelligence that knows nothing of our humanity.

We refuse to be of other people's data, used to make assumptions about who we are and to discriminate against us by association. We refuse corporations profiting off the limitless use of our data without our willful consent.

Personal data should be processed lawfully, fairly, and transparently.

We have the right to be informed about who processes, stores, disseminates and receives our data, for how long, for which purposes and on which legal basis. Data collection should always be for a specified, explicit, and legitimate use.

We have the right to access our data from those that have collected it, correct inaccuracies that are found and ultimately, if needed, erase our data.

We have the right to restrict how our data is used and limit its sale to third party data brokers.

We have the right to object to the processing of our personal data, especially biometric data or other sensitive data. Access to basic services and our freedom to move should not be denied to us based on our unwillingness to share such data.

We demand a prohibition on collecting biometric and other special categories of personal data without our affirmative consent, especially data that reveals our racial or ethnic origins, political opinions, sexual orientation, or religious beliefs.

We have the right to transparency in fully or partly automated decision-making. Artificial intelligence is being used as a gatekeeper to opportunity in employment, healthcare, housing, education, finance, and policing. All training data should be vetted for accuracy and bias to make certain that an algorithm will not have unintended harms.

Compliance to these rights must be controlled by an independent authority. Transparency is meaningless without being able to hold those in power over our data accountable.

We have the right to legal recourse and to file suit in court if our data rights are violated.

We demand a moratorium on the use of racially biased and invasive surveillance technologies like facial recognition by all law enforcement agencies—including police, FBI, and ICE—until there is government oversight.

We demand to be seen as more than data—as human beings with inherent value and inalienable rights.

*When you sign on at **codedbias.com/takeaction**, your name and zip code will be collected to share with elected officials and your email address will be collected to send you updates related to the film Coded Bias.*



7

ADVOCATE FOR CHANGE

Demand transparency about government use of surveillance technology.

You have the right to know how local police departments use surveillance technology in your community. In **New York City**, for example, activists succeeded in passing the Public Oversight of Surveillance Technology (POST) Act, which requires public input before surveillance technology can be acquired by the NYPD. Check out the **Community Control Over Police Surveillance (CCOPS)** map to see if the ACLU has already launched an oversight campaign near you. If not, you can start by filing a Freedom of Information Act (FOIA) request with your local government. Mijente's **Take Back Tech** toolkit and MuckRock's **Know Your Rights** guide can walk you through the FOIA process. MuckRock also keeps a database of **FOIA requests** already filed by citizens and Just Futures Law has launched the **Covid-19 Freedom of Information Act Project** to track surveillance during the health crisis. For public officials seeking to adopt technology responsibly and transparently, the ACLU's **Making Smart Decisions About Surveillance** guide offers helpful advice.

Speak out against biased algorithms used in policing and sentencing.

Crime data skewed by racist policing is being used to train algorithms to “predict” criminal activity. Advocates have successfully halted the use of **predictive policing** algorithms in Los Angeles and Chicago, according to the Brennan Center for Justice. In the courts, however, judges are increasing their use of recidivism risk assessments following the latest round of criminal justice reforms. Read the **comment letter** from the Leadership Council on Civil & Human Rights to learn more, and see how **recidivism risk assessments** are used in your state from the Electronic Privacy Information Center (EPIC). The ACLU's **Algorithmic Equality Toolkit** is a practical guide for government officials making decisions about the public use of algorithms.

AT WORK

Pressure your company to adopt an ethical framework for AI development.

If you work for a tech company, find ways to change the culture and policies from within. For example, **Google employees** successfully pressured the company to drop its US military contract for visual recognition software used in drones, and **Amazon workers** helped convince the company to pause its sale of facial recognition technology to law enforcement. The Association of Machinery Computing offers a **code of ethics** that your company can adopt to guide decision making.. For technical recommendations, check out IBM's open source **AI Fairness 360 Toolkit** and review **works** by researcher Inioluwa Deborah Raji, who is featured in the film. Your company can also **request an audit** of its AI from the AJL.

Request a professional training at your office.

Organizations of all types are rapidly adopting AI to review resumes, recognize faces in security footage, automate production, and determine customer service. For example, **credit scores** tainted by racial and gender bias are used widely by companies to predict trustworthiness in everything from hiring employees to screening housing applications. Speak to your workplace human resources department about training staff on how to responsibly assess the use of AI in their work and stay compliant with new data rights laws, such as the **GDPR**, which applies to any company doing business online with Europeans.

In addition to hosting a **screening** of Coded Bias at your office, you can also contact the AJL for professional **educational workshops**.

Support inclusive hiring and investments in communities affected by AI bias.

The people most harmed by racist and sexist tech are overwhelmingly missing from the rooms where decisions about technology are made. And as a result, their families and communities have been excluded from the wealth and power generated by the tech industry. **Black in AI**, **Latinx in AI**, **Women in Machine Learning**, and **Black Girls Code** are a few of the groups working to increase opportunities and support for those under-represented in the tech industry. Project Include provides **recommendations** for tech executives in need of improving diversity and inclusion among their engineering workforce. And **Silicon Valley Rising** advocates for living wages and affordable housing for those that hold up the tech industry, including contractors, janitors, cooks, and gardeners—the majority of whom are Black and Latino.

AT SCHOOL

Ask your college to teach tech ethics curriculum as foundational coursework in science, technology, engineering, and math (STEM) degree programs. See if your school has a class listed in the open source **tech ethics curriculum database** collected by Casey Fiesler. You can also browse the winners from the **Responsible Computer Science Challenge** hosted by the Mozilla Foundation. For curriculum resources that center race within tech ethics, see the **Critical Race Digital Studies** recommendations compiled by Lori Kido Lopez and Jackie Land.

Hold tech companies accountable for ethics when they recruit on campus.

Colleges often invite tech companies to campus for career fairs and recruitment events to find new talent from the student body. These visits are a good opportunity to educate student recruits and hold companies accountable for the harms caused by their products. For example, students at **16 universities** in the US and UK handed out flyers and held teach-ins to inform students about the tech company Palantir's work with ICE to track down immigrants for deportation. See the **No Tech for ICE** campaign from Mijente to learn more, and check out its **Student Organizing Toolkit** for tips on activating your campus.

Monitor how your school uses student data and surveillance technology.

Schools around the country are unwittingly subjecting students to AI bias under the banner of campus safety and student services. In **New York**, the ACLU is petitioning the state to pull funding for school biometric surveillance systems used to scan students as they enter the building. In **St. Paul**, advocates from the Coalition to Stop the Cradle to Prison Algorithm successfully pressured public officials to abandon a data-sharing initiative that would have flagged students as "at-risk" and subject them to increased surveillance. For advice on how public institutions can use data more responsibly, see the toolkit for **Centering Racial Equity Throughout Data Integration** from the Actionable Intelligence for Social Policy (AISP) at the University of Pennsylvania.

AT HOME

Resist biometric security and surveillance technology in housing - especially in public and affordable housing. The **Brooklyn** tenants profiled in the film successfully stopped the installation of facial recognition technology in their apartment complex by collecting signatures from 300 of their neighbors and filing a complaint with the state housing authority. Their complaint got the attention of landlords and lawmakers alike, and a few months later, their Congresswoman, Rep. Yvette D. Clarke of Brooklyn, along with Sen. Cory Booker of New Jersey, introduced the **No Biometric Barriers Housing** Act of 2019, which would halt the use of facial recognition technology in public housing.

8

TACTICS FOR ACTIVISTS

**What happens when decision makers do not respond to requests for change?
Be prepared to turn up the pressure.**

These recommended tactics, many used by advocates featured in the film, have worked to shift the conversation about AI and apply pressure to both government and corporate decision makers.


Organize a lobby day or week by inviting fellow advocates to make coordinated calls to elected officials about a proposed bill. To increase participation, provide people with everything they need to make calls and write letters, including phone numbers, addresses, and a **sample script**. Don't be afraid to encourage participants to make contact multiple times in multiple ways during your designated day or week of action.

Start a petition addressed to a decision maker you are trying to pressure to create change. Petitions are most effective when they target a local decision maker that you can sway, like an elected official, police chief, or a chairperson of a board of directors. Try **organizefor.org**, a petition making platform from Color of Change, and see examples of petitions from **Michigan** and **New York**.

Create a video public service announcement. Reach more people by making informative and creative media like **"Dear Tech Companies"** recorded by Buolamwini and colleagues in response to an IBM super bowl commercial.

Write an Op-Ed for a newspaper or online publication. Opinion pieces are effective when they include a personal story that connects to the larger issue. For example, in this opinion piece, **"When the Robot Doesn't See Dark Faces"** Buolamwini talks about her personal experience using the software that led her to become an advocate.

Make art. Creative resistance using visual arts, music, film and other media helps to generate the cultural change that can motivate social and political change. For example, Buolamwini's spoken word poetry **"Al, Ain't I a Woman?"**, AJL's **"Voicing Erasure"** and Mijente's **Take Back Tech** comic (also available in **Spanish**) are creative ways to reach new audiences.



Run a facial recognition test on local decision makers you are trying to convince and see if any are falsely matched. Inaccurate results, for example on your state legislature, may make the issue more personal for lawmakers. Read how the ACLU **tested photos** of members of Congress.

Speak at a public meeting, such as a city council meeting or a state budget hearing. Most government meetings are open to the public and have time on the agenda designated for public comments. Prepare a short statement, under five minutes, and sign up to read it at the meeting. You can watch Buolamwini's **testimony to Congress** for inspiration.

Host #DRAGVSAI a virtual or in-person hands-on workshop that explores identity, gender presentation, face surveillance, artificial intelligence, and algorithmic harms. Participants will use a privacy first online tool to see for themselves how AI reads their faces. Reach out to the Algorithmic Justice League to request training or DIY materials to host this creative consciousness raising event.

Host a hackathon to develop innovative solutions that address racism, sexism, and other injustices. Invite advocates, coders, and data scientists to pitch ideas and work together to build the tech to make them happen. See the event **Hacking Discrimination** organized by Black Alumni of MIT as an example.

Practice civil disobedience in a way that is safe for you. Protesters for Black Lives Matter, Indigenous land rights, Immigrant rights, and the Women's March are all applying public pressure on decision makers to act against racism, sexism, and injustice. Before joining a protest, review the **Protest Surveillance: Protect Yourself** toolkit from Surveillance Technology Oversight Project (S.T.O.P.) for safety recommendations.

Organize a boycott of companies that use algorithms to profit off of racism and sexism. For example, Color of Change organized groups to quit placing Facebook ads in its **#StopHateforProfit** boycott. Even if you cannot make a significant dent in a company's profits, this tactic can be effective for getting people's attention about an issue.

9

JOIN AN ORGANIZATION

Organizations offer support networks to assist members in creating change. These groups are all working on the issue in different ways.

To get started, familiarize yourself with their work to find which organization is the right fit for you, and get involved by subscribing to their updates and participating in their calls to action.

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- <https://www.ajl.org> - Algorithmic Justice League (AJL) combines art and research to illuminate the social implications and harms of AI.
 - <https://www.aclu.org/issues/privacy-technology> - American Civil Liberties Union (ACLU) works on the issue of privacy and technology to ensure that civil liberties are enhanced rather than compromised by technological innovation.
 - <https://ainowinstitute.org> - AI Now Institute at New York University is a research center dedicated to understanding the social implications of AI.
 - <https://www.fightforthefuture.org> - Fight for the Future is a group of artists, activists, engineers, and technologists advocating for the use of technology as a liberating force.
 - <https://bigbrotherwatch.org.uk> - Big Brother Watch UK is an independent civil liberties group fighting to reclaim privacy and defend freedoms during a time of technological change.
 - <http://colorofchange.org> - Color of Change is an online racial justice organization that helps people respond effectively to injustice in the world, including hate speech online.
 - <http://d4bl.org> - Data for Black Lives is a movement of activists and mathematicians using data science to create change in the lives of Black people.
 - <https://datasociety.net> - Data & Society is a nonprofit research group that looks at the impact of AI and automation on labor, health, and online disinformation.
 - <https://www.eff.org/pages/face-recognition> - the Electronic Frontier Foundation (EFF) is a nonprofit organization defending civil liberties in the digital world.
 - <https://mijente.net> - Mijente is a Latinx and Chicanx fighting for racial, economic, gender, and climate justice—and against high-tech immigration enforcement.
 - <https://www.odbpproject.org> - Our Data Bodies is a human rights and data justice organization.
 - <https://www.stopspying.org> - Surveillance Technology Oversight Project (S.T.O.P.) is a nonprofit organization working to end discriminatory surveillance primarily in New York.
 - <https://stoplapdspying.org> - Stop LAPD Spying fights police surveillance in Los Angeles.

10

LEARN MORE

ARTICLES

Short reads from advocates in the film and more.

"We Must Fight Surveillance to Protect Black Lives" by Joy Buolamwini of the AJL on Medium, June 3, 2020.

"We Will Not Allow the Weaponization of Covid-19 Data" by Yeshimabeit Milner of Data for Black Lives on Medium, May 18, 2020.

"When Binary Code Won't Accommodate Nonbinary People" by Meredith Broussard. Slate, October 23, 2019.

"Regulation would be a life raft for live facial recognition—we need a ban" by Silkie Carlo of Big Brother Watch on Medium, August 23, 2019.

"Think you're discreet online? Think again" by Zeynep Tufekci. New York Times, April 21, 2019.

"Tech workers must unite to defeat America's deportation machine" by Marisa Franco of Mijente. Guardian, July 26, 2018.

"We created poverty. Algorithms won't make it go away" by Virginia Eubanks. Guardian, May 13, 2018.

"We're taking on Cambridge Analytica in a legal fight for data rights" by Ravi Naik. Guardian, March 23, 2018.

"Personality Tests are Failing American Workers" by Cathy O'Neill. Bloomberg, January 1, 2018.

"Bias Manifest" by Y-vonne Hutchinson for Project Include on Medium, August 24, 2016.

REPORTS

Medium-length reads featuring research by academics, advocates, and journalists.

"Surveillance During Covid 19: Five Ways Government and Corporations are using the Health Crisis to Expand Surveillance" by Just Futures Law, June, 2020.

"Facial Recognition Technologies in the Wild: A Call for a Federal Office" by Erik Learned-Miller, Joy Buolamwini, Vicente Ordóñez, and Jamie Morgenstern. AJL, May 29, 2020.

"How China Uses High Tech Surveillance to Subdue Minorities" by Chris Buckley and Paul Mozur. New York Times, May 22, 2019.

"America Under Watch: Face Surveillance in the United States" by Clare Garvie and Laura M. Moy. Center on Privacy & Technology at Georgetown Law, May 16, 2019.

"Garbage In, Garbage Out: Facial Recognition on Flawed Data" by Clare Garvie. Center on Privacy & Technology, Georgetown Law, May 16, 2019.

"Face Off: The Lawless Growth of Facial Recognition in UK Policing" by Big Brother Watch, 2018.

"Disability, AI, and Bias." by Meredith Whittaker, et all. AI Now Institute at New York University, November, 2018.

"Who's Behind ICE? The Tech and Data Companies Fueling Deportations" by Empower, LLC for Mijente, the National Immigration Project, and the Immigrant Defense Project, August 23, 2018.

"Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification" by Joy Buolamwini and Timnit Gebru. Proceedings of Machine Learning Research, February, 2018.

Actionable Auditing: Investigating the Impact of Publicly Naming Biased Performance Results of Commercial AI Products" by Inioluwa Deborah Raji and Joy Buolamwini. Proceedings of the 2019 AAAI/ACM Conference on AI, Ethics, and Society, January, 2019

"Machine Bias: There's a software used across the country to predict future criminals. And it's biased against Blacks." by Julia Angwin, Jeff Larson, Surya Mattu, and Lauren Kirchner. ProPublica, May 23, 2016.

BOOKS

Long reads by authors in the film and more can also be found at your local Black-owned bookstore, independent audiobook seller, or public library ebooks.

Design Justice: Community-Led Practices to Build the Worlds We Need by Sasha Costanza-Chock. MIT-Press, 2020.

The Big Nine: How The Tech Titans and Their Thinking Machines Could Warp Humanity by Amy Webb. Public Affairs Books, 2019.

Algorithms of Oppression: How Search Engines Reinforce Racism by Safiya Umoja Noble. NYU Press, 2018.

Artificial Unintelligence: How Computers Misunderstand the World by Meredith Broussard. MIT Press, 2018.

Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor by Virginia Eubanks. St. Martin's Press, 2018.

Race After Technology: Abolitionist Tools for the New Jim Code by Ruha Benjamin. Polity Press, 2019.

Twitter and Teargas: The Power and Fragility of Networked Protest by Zeynep Tufekci. Yale University Press, 2017.

Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy by Cathy O'Neil. Crown Books, 2016.

VIDEOS

Short film content to watch and share.

"Q&A / CODED BIAS / Human Rights Watch Film Festival New York", Human Rights Watch on Vimeo, 2020.

"100 Days of Lockdown in the UK" Big Brother Watch on YouTube, 2020.

"Facial Recognition: Last Week Tonight with John Oliver (HBO)", Last Week Tonight with John Oliver on YouTube, 2020.

"How Big Tech is Helping ICE Do its Job" by NowThis on YouTube, 2019.

"D.R.E.A.M. Debugging Bias in Artificial Intelligence with Margaret Mitchell" by Mozilla on YouTube, 2019.

"Gender Shades" featuring Joy Buolamwini, MIT Media Lab on YouTube, 2018.

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