

# Policy 101

An Introduction to Participating in the Policymaking Process

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# What is Policy?

## Oakland bans city use of facial recognition software

It's now the third US city to do so.

facebook

Automated Data Collection Terms

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

Ziad Obermeyer<sup>1,2,\*</sup>, Brian Powers<sup>3</sup>, Christine Vogeli<sup>4</sup>, Sendhil Mullainathan<sup>5,\*</sup>,†

## HUD Seeks to Amend Interpretation of Fair Housing Act's Disparate Impact Rule

### TECHNOLOGY

## Twitter rolls out total ban on ads from political figures

Twitter is banning all ads that mention specific candidates, elections, or legislation.



Google employees protest at Alphabet's shareholder meeting



# What is Policy?



Where a plaintiff identifies an offending policy or practice that relies on an algorithmic model, a defending party may defeat the claim by:

- (i) Identifying the inputs used in the model and showing that these inputs are not substitutes for a protected characteristic and that the model is predictive of risk or other valid objective;
- (ii) showing that a recognized third party, not the defendant, is responsible for creating or maintaining the model; or
- (iii) showing that a neutral third party has analyzed the model in question and determined it was empirically derived, its inputs are not substitutes for a protected characteristic, the model is predictive of risk or other valid objective, and is a demonstrably and statistically sound algorithm.

# What is Policy?

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

Ziad Obermeyer<sup>1,2,\*</sup>, Brian Powers<sup>3</sup>, Christine Vogeli<sup>4</sup>, Sendhil Mullainathan<sup>5,\*†</sup>

### Abstract

Health systems rely on commercial prediction algorithms to identify and help patients with complex health needs. We show that a widely used algorithm, typical of this industry-wide approach and affecting millions of patients, exhibits significant racial bias: At a given risk score, Black patients are considerably sicker than White patients, as evidenced by signs of uncontrolled illnesses. Remedying this disparity would increase the percentage of Black patients receiving additional help from 17.7 to 46.5%. The bias arises because the algorithm predicts health care costs rather than illness, but unequal access to care means that we spend less money caring for Black patients than for White patients. Thus, despite health care cost appearing to be an effective proxy for health by some measures of predictive accuracy, large racial biases arise. We suggest that the choice of convenient, seemingly effective proxies for ground truth can be an important source of algorithmic bias in many contexts.

*“To build and use a model is to make, and to promote as useful, a particular lens for understanding [a social problem].”*

- Rediet Abebe et al. 2020. Roles for Computing in Social Change. In Conference on Fairness, Accountability, and Transparency (FAT\* '20).

# What is Policy?

SCIENCE

## WHAT HAPPENS WHEN AN ALGORITHM CUTS YOUR HEALTH CARE

By [Colin Lecher](#) | [@colinlecher](#) | Mar 21, 2018, 9:00am EDT

Illustrations by [William Joel](#); Photography by [Amelia Holowaty Krales](#)

T

he algorithm that upended Dobbs' life fits comfortably, when printed, on about 20 pages. Although it's difficult to decipher without expert help, the algorithm computes about 60 descriptions, symptoms, and ailments — fever, weight loss, ventilator use — into categories, each one corresponding to a number of hours of home care.

*“Planning for the cut [in benefits], Dobbs calculated what she could do without, choosing between trips to church or keeping the house clean.”*

# Who makes policy?

## Standards and governance bodies

- Technical standards
- Multistakeholder processes

## Courts

- Decide which cases to take
- Interpret laws
- Create precedent/common law

## Companies

- Lobbying/advocacy
- Industry standards/self-reg
- Design systems & architecture
- Determine costs of & access to non-government resources

## Governments

- Legislation
- Regulations & guidance
- Appropriations
- Procurement
- Reports & oversight
- Public Consultations
- Public Hearings and Forums

## Developers & designers

- Formalize policies and values into computing rules
- Set tech use & design standards
- Set social norms through design
- Scale or disrupt power structures
- Decide what data will shape future decisions

## Communities

- Voting
- Direct action (demonstrations, petitions, legislative outreach)
- Community governance
- Public notice & comment participation
- Self-advocacy

## Civil society & academia

- Legislative/regulatory advocacy
- Community organizing
- Governance standards/principles
- Corporate advocacy/pressure
- Public testimony/statements
- Research
- Impact litigation

# Where to find opportunities to get involved

## Government websites

- [Federalregister.gov](https://www.federalregister.gov)
- Congressional committee websites
- [europa.eu/info/consultations](https://europa.eu/info/consultations)
- State legislative websites
- [Gao.gov](https://www.gao.gov)
- [crsreports.congress.gov](https://www.crsreports.congress.gov)

## Academic centers

- Princeton Center for Information Technology Policy
- Georgetown Institute for Technology Law & Policy
- Data & Society
- KU Leuven Institute for AI
- [techscience.org](https://techscience.org)

## Advocacy groups, coalitions, & partnerships

- FAT\* listserv
- GRAIL Network
- Algorithm Watch, Upturn, CDT, & other nonprofits
- Civil & human rights groups outside of tech

## Procurement & appropriations

- Government RFIs, RFPs, contracts, & industry days
  - [Sam.gov](https://www.sam.gov)
  - SmartProcure (paid database)
  - [FedScoop.com](https://www.fedscoop.com)
  - Federal News Network

## Hearings & forums

- Public hearings
- Representatives (local, state, fed)
- Corporate community forums

## News, social media, etc.

- [Equalfuture.org](https://www.equalfuture.org)
- Politico's Morning Tech
- Twitter

# Where to find opportunities to get involved



Governance  
Research in  
Artificial  
Intelligence  
Leadership

[grailnetwork.org](http://grailnetwork.org)

## Policymaking Opportunities

Check out some of the ongoing policy discussions related to Artificial Intelligence –

### Current/ Upcoming:

**UK ICO and the Turing Institute, Consultation on Explaining AI Decisions Guidance,**  
Comments due January 24, 2020

**Australian Human Rights Commission, Consultation on Human Rights and Technology,** Comments accepted until March 10, 2020

**World Intellectual Property Organization, Consultation on the impact of artificial intelligence on intellectual property** – Consultation closes February 14, 2020

**US White House Office of Science and Technology Policy, Request for Comments on a draft memo "Guidance for Regulation of Artificial Intelligence Applications"** – Comments due March 13, 2020



**FEDERAL REGISTER**

The Daily Journal of the United States Government



### POPULAR DOCUMENTS

- 10 Rules Regarding the Frequency and Notice of Continuing Disability Reviews
- 10 Request for Public Comment on the Federal Trade Commission's Implementation of the Children's Online Privacy Protection Rule
- 10 Supplemental Nutrition Assistance Program: Standardization of State Heating and Cooling Standard Utility Allowances
- 10 DNA-Sample Collection From Immigration Detainees
- 10 Office of the Assistant Secretary for Financial Resources; Health and Human Services Grants Regulation
- 10 Revision of Categorical Eligibility in the Supplemental Nutrition Assistance Program (SNAP); Reopening of Comment Period
- 10 Review of Action: Enforcement of U.S. WTO Rights in Large Civil Aircraft Dispute
- 10 Special Areas; Roadless Area Conservation; National Forest System Lands in Alaska

#### PUBLISHED DOCUMENT

##### AGENCY:

Office of the Attorney General, Department of Justice.

##### ACTION:

Proposed rule.

##### SUMMARY:

The Department of Justice is proposing to amend regulations that require DNA-sample collection from individuals who are arrested, facing charges, or convicted, and from non-United States persons who are detained under the authority of the United States. The amendment would strike a provision authorizing the Secretary of Homeland Security to exempt from the sample-collection requirement certain aliens from whom collection of DNA samples is not feasible because of operational exigencies or resource limitations. This will restore the

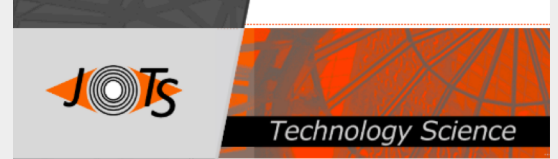
#### DOCUMENT DETAILS

##### Printed version:

PDF  
10/22/2019

Agency:  
Department of Justice

Dates:  
Written and electronic comments must be sent or submitted on or before November 12, 2019. Comments received by mail will be considered timely if they are postmarked on or before the last day of the comment period. The electronic Federal Register Management System will accept electronic comments until Midnight Eastern Time at the end of that day.



## Deepfake Bot Submissions to Federal Public Comment Websites Cannot Be Distinguished from Human Submissions

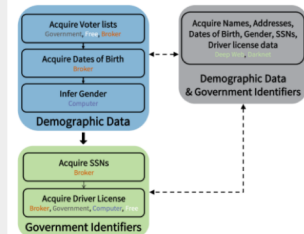
**INCORRECT** 0%  
Was the following comment created by a bot or a human?  
I am writing to you with regard to Idaho's proposed Medicaid waiver which has problems as it is currently written. Many Idahoans depend on Medicaid when they are sick and need help. Implementing the proposed waiver would mean taking away health care when people are most vulnerable. If someone has low income and becomes ill and cannot work that is not the time to take away their coverage.  
Bot  
X Human

Example Deepfake Text generated by the bot that all survey respondents thought was from a human.

2019-12-18

- Publicly available artificial intelligence methods can generate an enormous volume of original, human speech-like topical text "Deepfake Text" that is not based on conventional search-and-replace patterns
- I created a computer program (a bot) that generated and submitted 1,001 deepfake comments regarding a Medicaid reform waiver to a federal public comment website, stopping submission when these comments comprised more than half of all submitted comments. I then formally withdrew the bot comments
- When humans were asked to classify a subset of the deepfake comments as human or bot submissions, the results were no better than would have been gotten by random guessing

## Voter Identity Theft: Submitting Changes to Voter Registrations Online to Disrupt Elections



Ways an attacker can acquire the personal data needed to impersonate voters

2017-09-06

- Websites for 35 states and DC in 2016 were vulnerable to voter identity theft attacks: an imposter could submit changes to voter registration information
- An imposter needed a combination of voter's name, date of birth, gender, address, Social Security Number, or Driver's License Number
- Relevant data can be acquired from government, data brokers, or darknet markets. Total cost of an automated attack against 1% of all vulnerable voter registrations nationwide ranged from \$10,081 to \$24,926 depending on the data source used. States cost less, e.g., \$1 for Alaska and \$1,020 for Illinois



# Using computing expertise to advocate for policy change and advance justice (what can you do?)

Surface flaws & biases  
in data

Resist unjust design and use  
of technologies

Support & solicit community input in  
the design of systems/technologies

Provide technical support  
to advocates

Audit systems to diagnose both  
social and technical problems

Use model design as an opportunity  
to questions underlying policies

Communicate the limits of  
predictive models

Other ideas?

# US federal policymaking

## Congress (House & Senate)

- Hearings
- Roundtables, task forces, & other forums
- Draft bills
- Direct advocacy to members (meetings, letters, calls)
- Tech Congress, detailees & tech-focused staff
- Reports/records requests/oversight

## Executive branch/agencies

- Agency rulemakings & public comments
- Advisory committees
- White House (OSTP, etc.); executive orders
- Procurement
- Oversight
- Research & reports

## Courts

- Litigation & amicus briefs
- Expert witnesses
- Technical support for litigants

# Proposed HUD Rules Would Green-Light Automated Housing Discrimination

October 18, 2019

[SUBMITTED VIA REGULATIONS.GOV](#)

Office of the General Counsel  
Rules Docket Clerk  
Department of Housing and Urban Development  
451 Seventh Street SW, Room 10276  
Washington, DC 20410-0001

Re: Reconsideration of HUD's Implementation of the Fair Housing Act's Disparate Impact Standard, Docket No. FR-6111-P-02

*The NPRM creates new pleading hurdles that would make it **practically impossible for plaintiffs to have their disparate-impact cases heard**, especially when the alleged discrimination results from algorithmic models. The NPRM's algorithmic defenses **seriously undermine HUD's ability to address discrimination**, are unjustified in the record, and **have no basis in computer or data science**. Adopting the NPRM would **violate HUD's obligation to end discriminatory housing practices** and “affirmatively further fair housing.*

# Resisting ICE “extreme vetting” software

Direct outreach to DHS from  
advocates and computer scientists

Dear Secretary Duke:

We are a group of 54 computer scientists, engineers, mathematicians, and other experts in the use of machine learning, data mining and other advanced techniques

Simply put, no computational methods can provide reliable or objective assessments of the traits that ICE seeks to measure. In all likelihood, the proposed system would be inaccurate and biased. We urge you to reconsider this program.

Congressional advocacy



Corporate & shareholder advocacy

Campaign Action

**Sign the petition to IBM's CEO: Don't  
Help Trump Deport Immigrants**

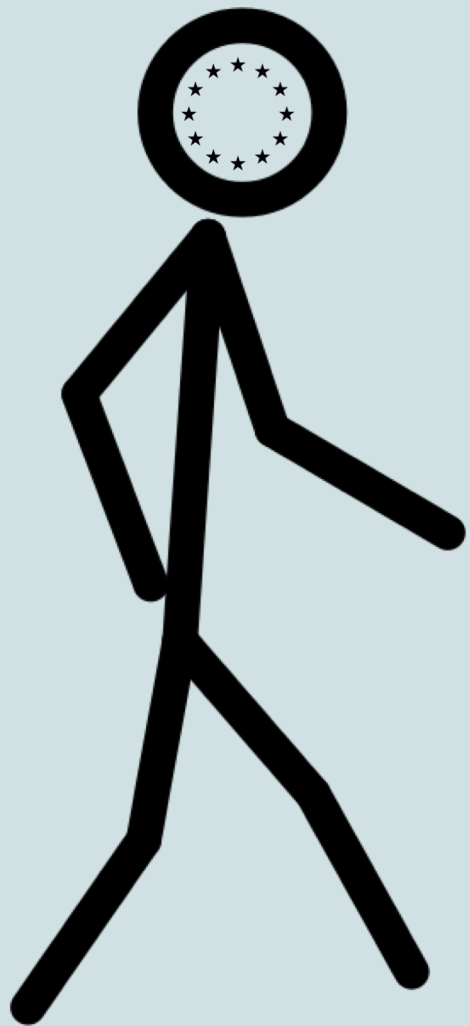
Public education & media

**The Washington Post**  
*Democracy Dies in Darkness*

**18MR**

Questions?

Break Time!



# EU Policymaking Roles, Processes, and Tips

## Specialized Entities

- Interpreting the Law
  - CJEU, ECHR (not EU)
- Advice and Guidance
  - HLEG, EDPS
- Parliamentary Committees
  - IMCO, ITRE, JURI, LIBE
- Often mirrored at MS level
  - German Data Ethics Commission
  - UK ICO

## Some Forms of Policymaking

- Public Consultations
- Expert Groups
- Direct communication
  - Commissioners, MEPS, etc

**Question 5. Do you agree that the scope of this initiative should be limited to crypto-assets (and not be extended to digital assets in general)?**

- ☐ Yes
- ☐ No
- ☐ Don't know / no opinion / not relevant

**5.1 Please explain your reasoning for your answers to question 5:**

*5000 character(s) maximum*

 including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

# States and Localities

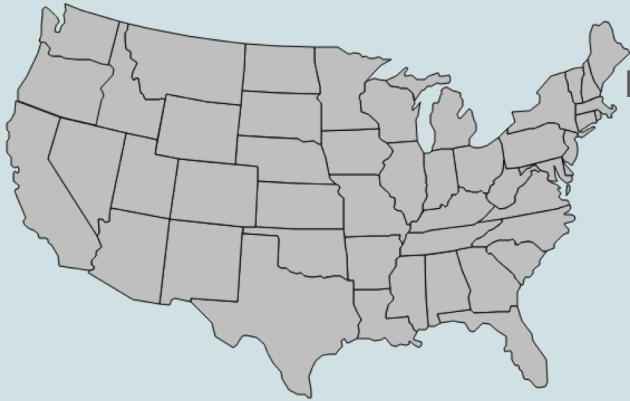
This makes a difference where you live!

Some similarities to federal venues

Helpful to be a local, or have a local partner

Things can move quickly, be ready!

Relative impact of participation can be greater.





# Non-Governmental Policymaking

## **IBM Response to “Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification”**

### **Discrimination through Optimization: How Facebook’s Ad Delivery Can Lead to Biased Outcomes**

MUHAMMAD ALI\*, Northeastern University, USA

PIOTR SAPIEZYNSKI\*, Northeastern University, USA

MIRANDA BOGEN, Upturn, USA

ALEKSANDRA KOROLOVA, University of Southern California, USA

ALAN MISLOVE, Northeastern University, USA

AARON RIEKE, Upturn, USA

## **Facebook To Ban 'Ethnic Affinity' Targeting For Housing, Employment, Credit-Related Ads**

# Upcoming Opportunities

## EU AI in 2020

- Whitepaper on Europe's AI plans expected Feb. 19 (leaked version already available)
- Consider submitting comments!

## UK ICO Auditing Framework for AI

- First steps already taken
- Consultation on framework expected soon

## Australia: AI and Human Rights

- Consultation document available
- Comments due March 10
- Only 70 comments in first round!

## US OMB Guidance for Regulation of AI Applications

- Draft memo available
- Comments due March 13
- Will shape US agencies approaches to regulation

# Questions

But you didn't explain...

How do I...

What about...

What is the GRAIL Network?



# Upturn