# Responsible Data Science Transparency & Interpretability

Transparency in online ad delivery *April 24, 2023* 

Prof. Julia Stoyanovich

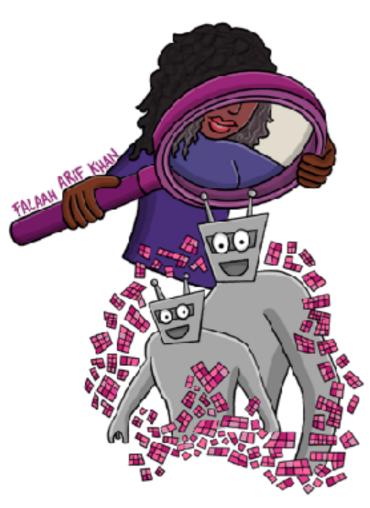
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### Terminology & vision



transparency, interpretability, explainability, intelligibility





agency, responsibility

### Interpretability for different stakeholders



What are we explaining?

To **Whom** are we explaining?

Why are we explaining?



### Transparency themes

#### **Auditing black-box models**

- LIME: local interpretable models [Ribeiro et al., ACM KDD 2016]
- QII: causal influence of features on outcomes [Datta et al., IEEE SP 2016]
- SHAP: Shapley additive explanations [Lundberg & Lee, NIPS 2017]

#### **TODAY: Online ad targeting**

- Instant CheckMate: racially identifying names trigger ads indicative of criminal history [Sweeney, CACM 2013]
- Ad Fisher: Ad privacy settings [Datta et al., PETS 2015]
- Facebook's ad delivery [Ali et al., ACM CSCW 2019]

#### Interpretability

- Nutritional labels for data and models [Stoyanovich & Howe, IEEE DE Bull 2019] [Stoyanovich et al., Nature Machine Intelligence 2020]
- Datasheets for datasets [Gebru et al., Comm ACM 2021]
- Model cards for model reporting [Ali et al., FAT\* 2019]

### This week's reading

#### practice

00010.1143/0447676.0347666

Employers frequently ask whether

amplicants have ever been arrested or draged with a crime, but if an env

player disqualifies a job applicant

based solely upon information indi-cating an arrest record, the company

may face legal consequences. The U.S.

Equal Employment Opportunity Com-

mission (EEOC) is the federal agency

charged with enforcing Title VII of the Civil Rights Act of 1964, a law that ap-

plies to most employers, prohibiting

employment discrimination based on

nice, eclor, religion, sec, or national,

origin, and extended to those having

oriminal records. Nº Tiple VII does not

prohibit employers from obtaining

eriminal background information, be-

a blanket policy of excluding appli-

indicating an arrest record can result

EEOC uses an olverse impact test that

measures whether semain practices,

intentional or not, have a disproporelonate effect on a group of people

whose defining characteristics are

estrulate the percentage of people

fected in each group and then divide

the smaller value by the larger to get

the ratio and compare the result to

81. If the ratio is less than 80, then the

REOC comiders the effect dispropor-

tionate and may hold the employer re-

what about online ads suggesting

omeone with your name has an or

nest record#Tittle VIII only applies if you.

have an arrest record and can prove the

employer inappropriately used theads.

speech-a constitutional right to dis-

by the adassociated with your name

The First Amendment of the U.S. Con-

stitution protects adventising, but the

U.S. Suprema Court set out a test for

assessing restrictions on commercial

speech, which begins by determining

whether the speech is misleading." Are

online ade suggesting the existence of

an arrest record misleading if no one

by that name has an arrest record?

Are the adv commercial free

monsible fondiscrimination.\*

covered by Tide VII. To decide, you

We make a determination, the

cants based solely upon informatio

in a charge of discrimination

A TOBAL REPOSITION TO THE SECURITY ACTIONS

Google ads, black names and white names, racial discrimination, and click advertising.

#### Discrimination in Online Ad Delivery

DO ONLINE ADS SUggestive of arrest records appear. more often with searches of black-sounding names than white-sounding names? What is a black-sounding name or white-sounding name, anyway? How do you design technology to reason about societal consequences like structural racism? Let's take a scientific dive into online ad delivery to find answers.

"Have you ever been arrested?" Imagine this question appearing whenever someone enters your name in a search engine. Perhaps you are incompetition for an award or a new job, or maybe you are in a position of trust, such as a professor or a volunteer. Ferhaps you are dating or engaged in any one of hundreds of circumstances for which someone wants to learn more about you online, Appearing alongside your accomplishments is an advertisement implying you may have a criminal record, whether you actually have one or not. Worse, the ads may not appear for your competitors.

44 management of the control of the

Passendings on Privacy Enhancing Technologies 2015; 2015 (1):62-152

Amit Datta\*, Michael Carl Tschantz, and Anapam Datta

#### Automated Experiments on Ad Privacy Settings

A Tale of Opacity, Choice, and Discrimination

Metract: To partly address people's concerns over web - serious privacy concern. Chiassal succents of collected thorous ecoethocital design and statistical analysis to each user's behaviors. meure the statistical soundness of our results. We use also found that setting the gender to female resulted in havior. Users can view and edit these settings as gesting fewer instances of an ad related to high paying ichs than setting it to make. We cannot determine who Yahoo [4] and Microsoft [5] also ofter personalized ad second those findings due to our limited visibility into continue. the ad ecosystem, which includes Google, advertisors, the starting point for despective tigotions by either the completely these cottings describe the profile they have companies themselves or by regulatory bodies.

Repeards: blackbox analysis, information flow, believeioral advertising, transpriency, choice, distriction in

Received 11/22/2014, excised 2/13/2015, accepted 2/18/2015.

#### 1 Introduction

Problem and Overview. With the advancement of tracking technologies and the growth of online data aggregators, data collection on the internet has become a

\*Corresponding Arthon Anal Datas Carcego Sellin Detacatly, Excell and hitalien cole Michael Carl Technolo: International Computer Science

Institute, Femall: met@instheskep.edu Annpana Datta: Carregie Mella: University, Franck door

tracking. Google has created the Ad Settings velipage. data are used, sold, and resold for serving targeted to provide information short and some choice over the content, notably advertisements, on ordeites [e.g., [1]). profiles Google creates on mers. We present AdPhilox, Musy websites providing materit, such as news, mator automated tool that explores how user behaviors, source their advertising operations to large third-party Google's ads, and Ad Settings Internet. AdFisher can and networks, such as Google's DunbieClick. These metrun brower-based experiments and analyse data using - works unfeel tracking code into wellpages across many machine learning and significance tests. Our tool uses a sites providing the network with a more global view of

People are concerned about behavioral marketing AdFither to find that the Ad Settings was epacte about on the web (e.g., QD). To increase transparency and our some finances of a user's positio, that it does provide - trol, Google provides Ad Scittings, which is "a Google some choice on ade, and that these choices can lead to tool that helps you control the ade you see on Google ecutingly discriminatory ods. In particular, we found inservice and on velocites that partner with Google" (2). that visiting webpages associated with substance abuse. It displays inferences Google has made about a user's changed the ads shown but not the settings maps. We demographies and interests based in his browning be-

https://www.ecopie.com/settings/u/s-

However, they provide little information about how sobiles, and seem. Nevertheless, these negatives form - these pages operate, invelog upon the question of form about a user. In this study, we explore how a user's behaviors, either directly with the artitions or with content provides, after the sale and settings shown to the user and whether three changes are in harmony. In particular, we study the degree to which the settings powides transparency and choice as well as checking for the proenre of distributation. Transparency is important for people to understand how the use of claim about them affects the ads they see. Choice allows users to control how this data gets used, enabling them to protect the information they find sonsitive. Discrimination is an inerroring concern about machine barning systems and one remon people like to keep information private B. 7.

To conduct these studies, we divoloped AdPishon, a tool for automating randomized, controlled experiments for studying colling tracking. Our tool offers a combinotion of susuantian, statistical sign, exclability, and explanation for determining the use of information by web advertising algorithms and by personalized ad out sings, such as Gougle Ad Scittings. The tool can simulate having a particular interest or actribute by visiting web-

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

MUHAMMAD ALI\*, Northeatens University, USA PIOTR SAPIEZYNSKI\*, Northcostern University, USA. MIRANDA BOCEN, Uptum, USA. ALEKSANDRA KOROLOVA, University of Southern California, USA. ALAN MISLOVE, Northeastern University, USA AARON RIEKE, Uptum, USA

The encroses financial success of online obsertising platforms is partially due to the precise targeting features they offer Although researchers and journalists have found many ways that advertises can target—or excludeparticular groups of users seeing their ada, comparatively little attention has been paid to the implications of the plafform's of sell-ony process comprised of the platform's choices about which users see which ads.

I has been hypothesized that this process can "skew" addelivery in ways that the advertisers do not intend, raiding some users less filedly than others to see particular adabased on their damographic characteristics. In this paper, we demonstrate that such skewed delivery occurs on Pacebook, due to market and financial optimisation effects as well as the platform's own predictions about the "relevance" of ads to different groups of usess. We find that both the advertiser's leadget and the content of the ad each significantly contains to the skew of Parchock's addelivery. Critically, we observe significant skew in delivery along gender and racial lines for "real" advice employment and bousing opportunities despite neutral targeting parameters.

Our results demonstrate previously unknown mechanisms that can lead to potentially discriminatory addelivery, even when advertisem set their targeting parameters to be highly inclusive. The underscores the need for policymakers and plifforms to carefully consider the role of the ad delivery optimization run by ad platforms the medves—and not just the targeting choices of advertisers—in preventing distrimination in

OCS Concepts • Information systems → Social advertising • Human-contered computing → Justice its fatedity is ECE; Applied computing - Law

Keywords: online advertising ad delivery; bing fairness; pelicy

Muhammad Ali\*, Piotr Sapienyanisi\*, Minauda Begen, Aleksandra Korokwa, Alan Miskove, and Aaron Rieke. 2019 Discrimination through Optimination: How Facebook's Ad Delivery Can Lead to Biased Outcomes In Proceedings of the ACN on Rumon-Computer Interaction, Vol. 3, CSCW, Article 199 (November 2019), ACM, New York, NY, 50 pages, https://doi.org/90.1165/3889001

The delivery statistics of all compaigns described in this work can be accessed at https://facebook/targeting.com/carebo-These two authors contributed equally

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Proceedings of the ACN on Human Computer Interaction, Vol. 5, No. CSCW, Article 109 Publication date Navember 2019







### Instant Checkmate



February 2013

#### Racism is Poisoning Online Ad Delivery, Says Harvard Professor

Rate This Content:

View Details

Offerser

Google searches involving black-sounding names are more likely to serve up ads suggestive of a criminal record than white-sounding names, says computer scientist

### Latanya Sweeney's experiment

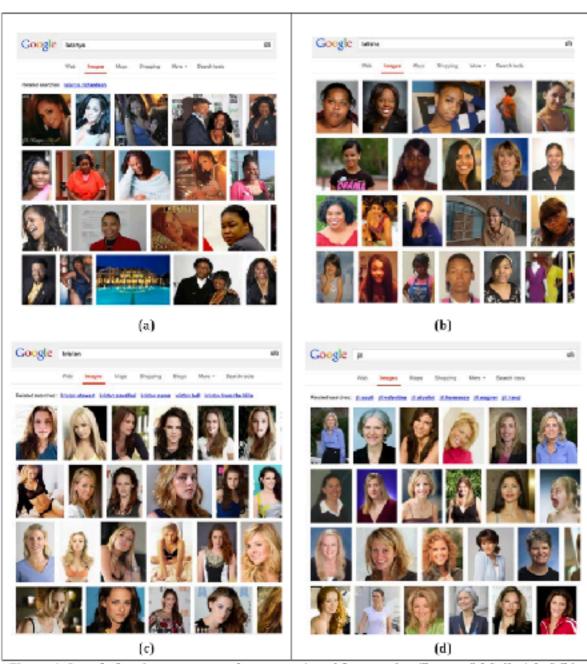


Figure 4. Sample face images on google.com retrieved for searches "latanya" (a), "latisha" (b), "kristen" (c), and "jill" (d).

#### February 2013

#### **Findings**

Ads suggestive of criminal record, linking to Instant Checkmate, appear on google.com and reuters.com in response to searches "Latanya Sweeney", "Latanya Farrell", and "Latanya Locket"\*

No Instant Checkmate ads when searching for "Kristen Haring", "Kristen Sparrow"\*, and "Kristen Lindquist"\*

\* Name associated with an actual arrest record



### Possible explanations

#### **Conjectures**

Does Instant Checkmate serve ads specifically for Blackidentifying names?

Is Google AdSense explicitly biased in this way?

Does Google AdSense learn racial bias from click-through rates?



https://www.technologyreview.com/s/510646/racism-is-poisoning-online-ad-delivery-says-harvard-professor/

February 2013

#### Response

**Google**: "AdWords does not conduct any racial profiling. ... It is up to individual advertisers to decide which keywords they want to choose to trigger their ads."

"Instant Checkmate would like to state unequivocally that it has never engaged in racial profiling in Google AdWords. We have absolutely no technology in place to even connect a name with a race and have never made any attempt to do so."





### Online job ads targeting

# theguardian

**July 2015** 

#### Samuel Gibbs

Wednesday 8 July 2015 11.29 BST

Automated testing and analysis of company's advertising system reveals male job seekers are shown far more adverts for high-paying executive jobs



One experiment showed that Google displayed adverts for a career coaching service for executive jobs 1,852 times to the male group and only 318 times to the female group. Photograph: Alamy

## Women less likely to be shown ads for high-paid jobs on Google, study shows

The AdFisher tool simulated job seekers that did not differ in browsing behavior, preferences or demographic characteristics, except in gender.

One experiment showed that Google displayed ads for a career coaching service for "\$200k+" executive jobs **1,852 times to the male group** and only **318 times to the female group**. Another experiment, in July 2014, showed a similar trend but was not statistically significant.

https://www.theguardian.com/technology/2015/jul/08/women-less-likely-ads-high-paid-jobs-google-study



### Ad targeting online

Users browse the web, consume content, consume ads (i.e. view, click, purchase)

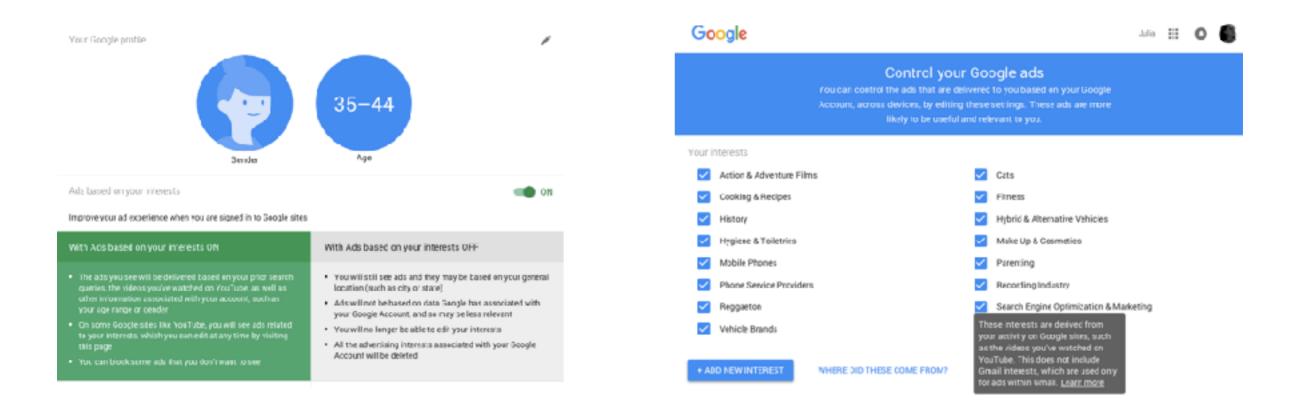
Publishers (or content providers) host online content that often includes ads. They outsource ad placement to third-party ad networks (e.g. Google Ads)

**Advertisers** seek to place their ads on **publisher's** website (usually by bidding in ad auctions)

Ad networks track users across sites, collecting data. They connect advertisers and publishers.

### Google ad settings (ca. 2015)

Google ad settings aims to provide transparency / give control to users over the ads that they see



Ad Fisher's question: Do users truly have control over the ads they see? Or is this a placebo button?



### AdFisher: Overview

#### **Experiment**

Question: How do user behaviors, ads, and settings interact?

Approach: Automated randomized controlled experiments for studying online tracking

Individual data use transparency: Ad network must disclose which user information is used when determining which ads to serve

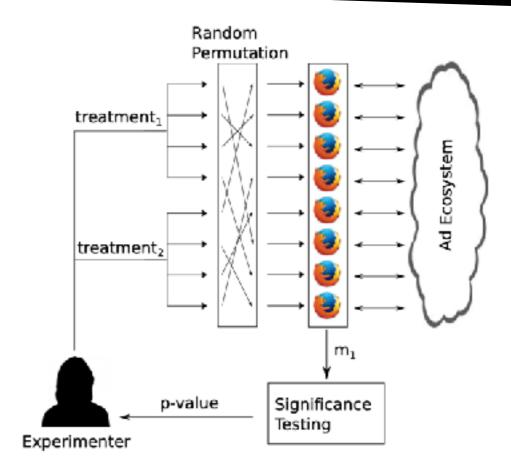


Figure 2: Experimental setup to carry out significance testing on eight browser agents comparing the effects of two treatments. Each agent is randomly assigned a treatment which specifies what actions to perform on the web. After these actions are complete, they collect measurements which are used for significance testing.

### AdFisher: Methodology

Browser-based experiments with simulated users:

**input**: (1) visits to content providing websites

(2) interactions with Google Ad Settings

output: (1) ads shown to users by Google

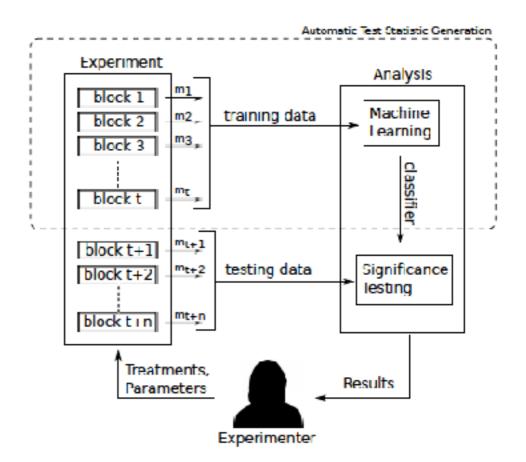
(2) change in Google Ad Settings

Fisher randomized hypothesis testing:

null hypothesis: inputs do not affect outputs

control and experimental treatments

AdFisher can help select a test statistic



### AdFisher: transparency tests

- Transparency: User can view data about them used for ad selection
- Causal test: Find attribute that changes ads but not settings
- Experiment 1: Substance abuse
  - Simulate interest in substance abuse in the experimental group but not in the control group, check for differences in Ad Settings, collect ads from Times of India
  - Result: No difference in Ad Settings between the groups, yet significant differences in ads served: rehab vs. stocks & driving jobs

violation



### AdFisher: discrimination tests

- Non-Discrimination: Users differing only in protected attributes are treated similarly
- Causal test: Does a protected attribute change ads?
- Experiment 2: Gender and jobs
  - Specify gender (male/female) in Ad Settings, simulate interest in jobs by visiting employment sites, collect ads from Times of India or the Guardian
  - Result: In one experiment, males were shown ads for higher-paying jobs far more often than females

violation



### AdFisher: discrimination tests

Title	URL	Coefficient	appears in agents		total appearances	
			female	male	female	male
	Top ads for identifying the sim	ulated male gr	oup			
Truck Driving Jobs	www.bestpayingdriverjobs.com	0.492	0	15	0	33
\$200k+ Jobs - Execs Only	careerchange.com	0.383	0	15	0	48
Aircraft Technician Program	pia.edu	0.292	0	6	0	14
Paid CDL Training	pamtransport.greatcdltraining.com	0.235	0	5	0	13
Unique Bridal Necklaces	margaretelizabeth.com/Bridal	0.234	0	5	0	19
	Top ads for identifying agents in the	simulated fem	ale group			
Business Loans for Women	topsbaloans.com	-0.334	13	1	70	1
Post Your Classified Ad	indeed.com/Post-Jobs	-0.267	20	16	56	24
American Laser Skincare	americanlaser.com	-0.243	8	5	14	8
Dedicated Drivers Needed	warrentransport.com	-0.224	3	0	14	0
Earn Your Nursing Degree	nursing-colleges.courseadvisor.com	-0.219	11	3	31	10

Table 5: Top URL+titles for the gender and jobs experiment (July).

### AdFisher: ad choice tests

- Ad choice: Removing an interest decreases the number of ads related to that interest
- Causal test: Does removing an interest cause a decrease in related ads?
- Experiment 3: Online dating
  - Simulate interest in online dating in both groups, remove "Dating & Personals" from the interests on Ad Settings for experimental group, collect ads
  - Result: members of experimental group do not get ads related to dating, while members of the control group do

compliance



### Follow-up: How is targeting done?

- On gender directly
- On a proxy of gender, i.e., on a known correlate of gender because it is a correlate
- On a known correlate of gender, but not because it is a correlate
- On an unknown correlate of gender

Secretary Jobs possibility.cylab.cmu.edu/jobs Full time jobs in Florida Excellent pay and relocation Truck Driving Jobs possibility.cylab.cmu.edu/jobs Full time jobs in Florida Excellent pay and relocation

(a)

(b)

Figure 1: Ads approved by Google in 2015. The ad in the left (right) column was targeted to women (men).

"This finding demonstrates that an advertiser with discriminatory intentions can use the AdWords platform to serve employment related ads disparately on gender."



### AdFisher: Who is responsible?

#### **Finding**

#### Secretary Jobs

possibility.cylab.cmu.edu/jobs Full time jobs in Florida Excellent pay and relocation

(a)

Truck Driving Jobs
possibility.cylab.cmu.edu/jobs
Full time jobs in Florida
Excellent pay and relocation

(b)

Figure 1: Ads approved by Google in 2015. The ad in the left (right) column was targeted to women (men).

#### **Conjectures**

Is **Google explicitly programming** the system to show the ad less often to women?

Is the **advertiser** targeting the ad through **explicit use of demographic categories or selection of proxies**, and Google respecting these targeting criteria?

Are **other advertisers outbidding** our advertiser when targeting to women?

Are male and female users behaving differently in response to ads?



**Key question:** does the platform itself introduce demographic skew in ad delivery?

#### **Conjectures**

Users see relevant ads, maximizing the likelihood of engagement. **Based on historical engagement data, delivery may be skewed** in ways that an advertiser may not have intended.

Market effects and financial optimization can lead to skewed ad delivery. In a nutshell: some populations are more "valuable" and so advertising to them costs more. If an advertiser bids less, they won't get to the more "valuable" population.



### Conclusions from AdFisher

- Each actor in the advertising ecosystem may have contributed inputs that produced the effect
- It is impossible to know, without additional information, what the different actors - other than the consumers of the ads - did or did not do
- In particular, impossible to asses intent, which may be necessary to asses the extent of legal liability. Or it may not!
  - Title VII of the 1964 Civil Rights Act makes it unlawful to discriminate based on sex in several stages of employment. It includes an advertising prohibition (think sex-specific help wanted columns in a newspaper), which does not turn on intent
  - Title VII does not directly apply here because it is limited in scope to employers, labor organizations, employment agencies, joint labormanagement committees
  - Fair Housing Act (FHA) is perhaps a better guide than Title VII, limiting both content and activities that target advertisement based on protected attributes





- Follow-up work on AdFisher (Google ads, gender-based discrimination for the purposes of employment) ascertained that it was possible to target on gender for job ads
- Platforms have since taken steps to address such blatant violations

"... Facebook currently has several policies in place to avoid discrimination for certain types of ads. Facebook also recently built tools to automatically detect ads offering housing, employment, and credit, and pledged to prevent the use of certain targeting categories with those ads. Additionally, Facebook relies on advertisers to self-certify that they are not in violation of Facebook's advertising policy prohibitions against discriminatory practices. More recently, in order to settle multiple lawsuits stemming from these reports, Facebook stated that they will soon no longer allow age, gender, or ZIP code-based targeting for housing, employment or credit ads, and that they would also block other detailed targeting attributes that are "describing or appearing to relate to protected classes".

 Yet, the question remains: Does the ad delivery platform itself embed discriminatory outcomes?



**Key question:** does the platform itself introduce demographic skew in ad delivery?

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Market effects and financial optimization can lead to skewed ad delivery. In a nutshell: some populations are more "valuable" and so advertising to them costs more. If an advertiser bids less, they won't get to the more "valuable" population.



#### Part 1: ad creation

- ad contents
- audience selection
- bidding strategy

#### Part 2: ad delivery

For every opportunity to show a user an ad (e.g., **an ad slot** is available as the user is browsing the service), the ad platform will run an **ad auction** to determine, from among all of the ads that include the current user in the audience, which ad should be shown.

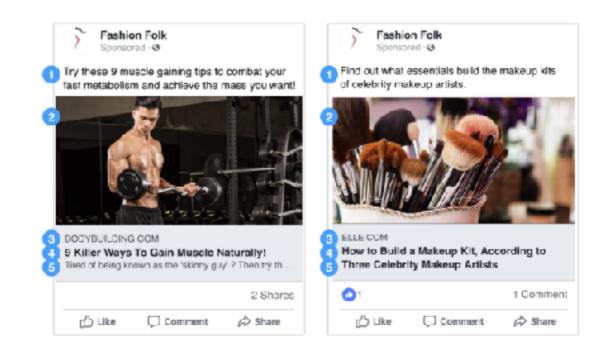


Figure 1: Each ad has five elements that the advertiser can control: (1) the ad text, entered manually by the advertiser, (2) the images and/or videos, (3) the domain, pulled automatically from the HTML meta property og:site\_name of the destination URL, (4) the title, pulled automatically from the HTML meta property og:title of the destination URL, and (5) the description from meta property og:description of the destination URL. The title and description can be manually customized by the advertiser if they wish.

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For every opportunity to show a user an ad (e.g., **an ad slot** is available as the user is browsing the service), the ad platform will run an **ad auction** to determine, from among all of the ads that include the current user in the audience, which ad should be shown.

When Facebook has ad slots available, it runs an ad auction among the active advertisements bidding for that user. However, the auction does not just use the bids placed by the advertisers; Facebook says:

"The ad that wins an auction and gets shown is the one with the highest **total value**. Total value isn't how much an advertiser is willing to pay us to show their ad. It's combination of 3 major factors: (1) Bid, (2) Estimated action rates, and (3) Ad quality and relevance."

"During ad set creation, you chose a target audience ... and an optimization event ... We show your ad to people in that target audience who are likely to get you that optimization event."



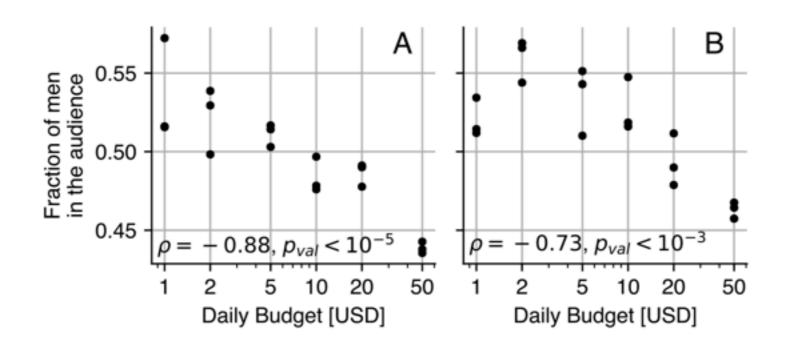


Figure 2: Gender distributions of the audience depend on the daily budget of an ad, with higher budgets leading to a higher fraction of women. The left graph shows an experiment where we target all users located in the U.S.; the right graph shows an experiment where we target our random phone number custom audiences.



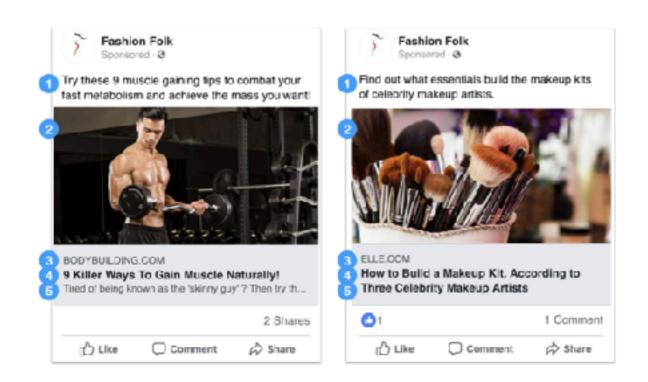


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Same bidding strategy for bodybuilding and cosmetics, without explicitly mentioning gender

Strong gender skew in delivery: bodybuilding delivered to over 75% men on average, cosmetics delivered to over 90% women on average



Which component of the ad creative impacts delivery most?

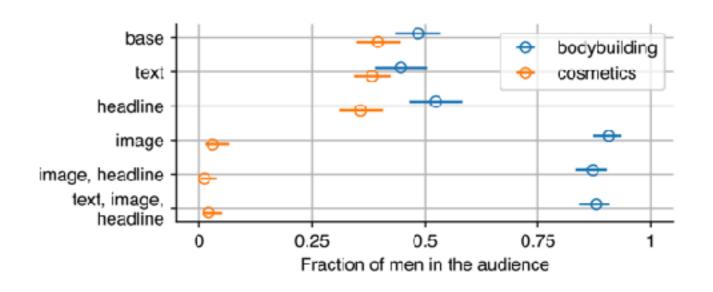
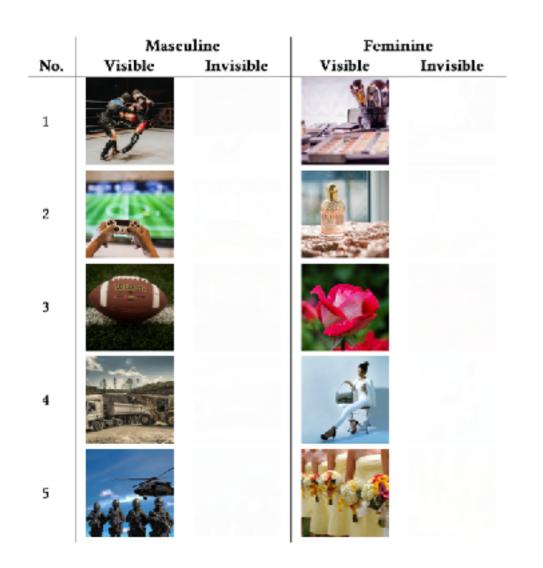


Figure 3: "Base" ad contains a link to a page about either bodybuilding or cosmetics, a blank image, no text, or headline. There is a small difference in the fraction of male users for the base ads, and adding the "text" only decreases it. Setting the "headline" sets the two ads apart but the audience of each is still not significantly different than that of the base version. Finally, setting the ad "image" causes drastic changes: the bodybuilding ad is shown to a 91% male audience, the cosmetics ad is shown to a 5% male audience, despite the same target audience.

#### Transparent images are still targeted





This strongly suggests that Facebook uses an automated image classification mechanism to steer different ads towards different subsets of the user population



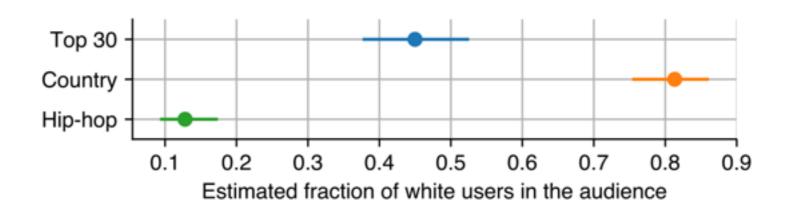


Figure 7: We run three campaigns about the best selling albums. Top 30 is neutral, targeting all. Country implicitly targets white users, and Hip-hop implicitly targets Black users. Facebook classification picks up on the implicit targeting and shows it to the audience we would expect.

"We hold targeting parameters fixed, run ads that are stereotypically of interest to different races. We find that **Facebook ad delivery follows the stereotypical distribution**, despite all ads being targeted in the same manner and using the same bidding strategy."



**Key question:** does the platform itself introduce demographic skew in ad delivery?

#### **Findings**

Skew can arise due to financial optimization effects and the ad delivery platform's predictions about the relevance of its ads to different user categories

Ad content - text and images - and advertiser budget both may contribute to the skew.



**Key question:** does the platform itself introduce demographic skew in ad delivery?

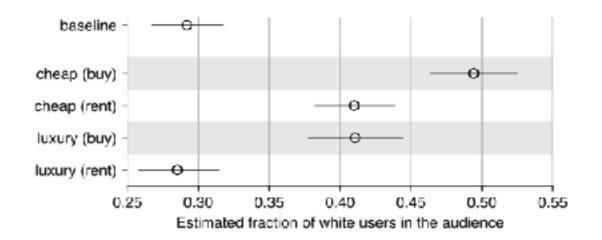


Figure 9: Results for housing ads, showing a breakdown in the ad delivery audience by race. Despite being targeted in the same manner, using the same bidding strategy, and being run at the same time, we observe significant skew in the makeup of the audience to whom the ad is delivered (ranging from estimated 27% white users for luxury rental ads to 49% for cheap house purchase ads).

#### **Findings**

Skew was observed along racial lines, in ads for housing opportunities





### Facebook ads and HEC

When is "skew" in fact discrimination?

#### SUMMARY OF SETTLEMENTS BETWEEN CIVIL RIGHTS ADVOCATES

#### AND FACEBOOK

Housing, Employment, and Credit Advertising Reforms

In the settlements, Facebook will undertake far-reaching changes and steps that will prevent discrimination in housing, employment, and credit advertising on Facebook, Instagram, and Messenger. These changes demonstrate real progress.

- Facebook will establish a separate advertising portal for creating housing,
   employment, and credit ("HEC") ads on Facebook, Instagram, and Messenger that will have limited targeting options, to prevent discrimination.
- The following rules will apply to creating HEC ads.
  - Gender, age, and multicultural affinity targeting options will not be available when creating Facebook ads.
  - HEC ads must have a minimum geographic radius of 15 miles from a specific address or from the center of a city. Targeting by zip code will not be permitted.

March 19, 2019

### Facebook ads and HEC

# SUMMARY OF SETTLEMENTS BETWEEN CIVIL RIGHTS ADVOCATES AND FACEBOOK

#### Housing, Employment, and Credit Advertising Reforms

- HEC ads will not have targeting options that describe or appear to be related to personal characteristics or classes protected under anti-discrimination laws. This means that targeting options that may relate to race, color, national origin, ethnicity, gender, age, religion, family status, disability, and sexual orientation, among other protected characteristics or classes, will not be permitted on the HEC portal.
- Facebook's "Lookalike Audience" tool, which helps advertisers identify Facebook users who are similar to advertisers' current customers or marketing lists, will no longer consider gender, age, religious views, zip codes, Facebook Group membership, or other similar categories when creating customized audiences for HEC ads.

### Facebook ads and HEC

# SUMMARY OF SETTLEMENTS BETWEEN CIVIL RIGHTS ADVOCATES AND FACEBOOK

Housing, Employment, and Credit Advertising Reforms

Advertisers will be asked to create their HEC ads in the HEC portal, and if
Facebook detects that an advertiser has tried to create an HEC ad outside of the
HEC portal, Facebook will block and re-route the advertiser to the HEC portal
with limited options.

### Legal implications, not just for Google

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HUD reportedly also investigating Google and Twitter in housing discrimination probe

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#### Facebook has been charged with housing discrimination by the US government

'Facebook is discriminating against people based upon who they are and where they live,' says HUD secretary

By Russell Brandom Mar 28, 2019, 7:51am EDT

This is the first federal discrimination lawsuit to deal with racial bias in targeted advertising, a milestone that lawyers at HUD said was overdue. "Even as we confront new technologies, the fair housing laws enacted over half a century ago remain clear—discrimination in housing-related advertising is against the law," said HUD General

Counsel Paul Compton. "Just because a process to deliver advertising is opaque and complex doesn't mean that it's exempts Facebook and others from our scrutiny and the law of the land."

Fair Housing Act, also called Title VIII of the Civil Rights Act of 1968, U.S. federal legislation that protects individuals and families from discrimination in the sale, rental, financing, or advertising of housing. The Fair Housing Act, as amended in 1988, prohibits discrimination on the basis of race, color, religion, sex,

disability, family status, and national origin.

### Facebook ads and the Fair Housing Act

#### **THE VERGE**

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The Department of Housing and Urban Development has filed charges at the basis of for housing discrimination, escalating the company's ongoing fight over disability, and targeting system. The charges build on a complaint filed in August, fingreasonable cause to believe Facebook has served add that violate the Fair Housing Act.

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ProPublica first raised concerns over housing discrimination on Facebook in 2016, when reporters found that the "ethnic affinities" tool could be used to exclude black or Hispanic users from seeing specific ads. If those ads were for housing or employment opportunities, the targeting could easily violate federal law. At the time, Facebook had no internal safeguards in place to prevent such targeting.

### The Fair Housing Act

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Facebook has struggled to effectively address the possibility of discriminatory ad targeting. The company pledged to step up anti-discrimination enforcement in the wake of *ProPublica*'s reporting, but a follow-up report in 2017 found the same problems persisted nearly a year later.

"WE'RE DISAPPOINTED BY TODAY'S DEVELOPMENTS," FACEBOOK SAYS

According to the HUD complaint, many of the options for targeting or excluding audiences are shockingly direct, including a map tool that explicitly echoes <u>redlining practices</u>.

"[Facebook] has provided a toggle button that enables advertisers to exclude men or women from seeing an ad, a search-box to exclude people who do not speak a specific language from seeing an ad, and a map tool to exclude people who live in a specified area from seeing an ad by drawing a red line around that area." the complaint reads.



### And it's not just Facebook

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HUD reportedly also investigating Google and Twitter in housing discrimination probe

By Adi Robertson @thedextriarchy Mar 28, 2019, 3:52pm EDT

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### And in recent news



**January 9, 2023** 

The Justice Department announced today that it has reached a key milestone in its settlement agreement with Meta Platforms Inc. (Meta), formerly known as Facebook Inc., requiring Meta to change its advertisement delivery system to prevent discriminatory advertising in violation of the Fair Housing Act (FHA). As required by the settlement entered on June 27, 2022, resolving a lawsuit filed in the U.S. District Court for the Southern District of New York, Meta has now built a new system to address algorithmic discrimination. Today, the parties informed the court that they have reached agreement on the system's compliance targets. This development ensures that Meta will be subject to court oversight and regular review of its compliance with the settlement through June 27, 2026.

"This development marks a pivotal step in the Justice Department's efforts to hold Meta accountable for unlawful algorithmic bias and discriminatory ad delivery on its platforms," said Assistant Attorney General Kristen Clarke of the Justice Department's Civil Rights Division. "The Justice Department will continue to hold Meta accountable by ensuring the Variance Reduction System addresses and eliminates discriminatory delivery of advertisements on its platforms. Federal monitoring of Meta should send a strong signal to other tech companies that they too will be held accountable for failing to address algorithmic discrimination that runs afoul of our civil rights laws."



### The socio-legal landscape

#### Related concern:

Are ads commercial free speech?

- The First Amendment of the U.S. Constitution protects advertising, but the U.S. Supreme Court set out a test for assessing restrictions on commercial speech, which begins by determining whether the speech is misleading
- Are online ads suggesting the existence of an arrest record misleading if no one by that name has an arrest record?
- Assume the ads are free speech: what happens when these ads appear more often for one racial group than another? Not everyone is being equally affected. Is that free speech or racial discrimination?

### Tracking and consent

The New Hork Times

# To Be Tracked or Not? Apple Is Now Giving Us the Choice.





April 26, 2021 Updated 12:40 p.m. ET

If we had a choice, would any of us want to be tracked online for the sake of seeing more relevant digital ads?

We are about to find out.

On Monday, <u>Apple</u> plans to <u>release iOS 14.5</u>, one of its most anticipated software updates for iPhones and iPads in years. It includes a new privacy tool, called App Tracking Transparency, which could give us more control over how our data is shared.

Here's how it works: When an app wants to follow our activities to share information with third parties such as advertisers, a window will show up on our Apple device to ask for our permission to do so. If we say no, the app must stop monitoring and sharing our data.

A pop-up window may sound like a minor design tweak, but it has thrown the online advertising industry into upheaval. Most notably, Facebook has gone on the warpath. Last year, the social network created a website and took out full-page ads in newspapers denouncing Apple's privacy feature as <a href="https://example.com/harmful-to-small-businesses">harmful to-small-businesses</a>.