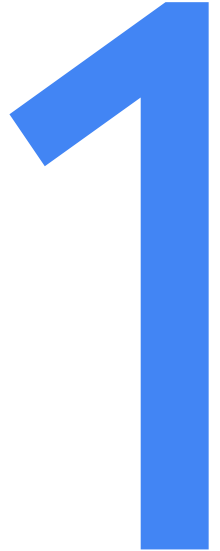


AI through the lens of LGBTQI+ identity

Jasmijn Bastings
Senior Research Scientist

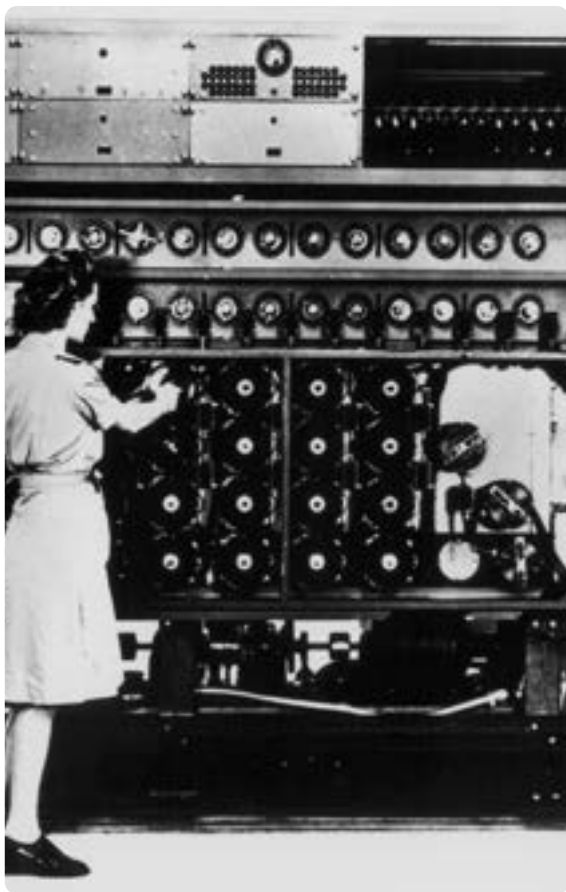
Workplace Pride: "The Human Side of AI". TAW 2023

AI & LGBTIQ+ have been
connected from the very start





Alan M. Turing. Source: Wikipedia.



Bombe. The machine used to crack the Enigma at Bletchley Park. Source: PD.



The Imitation Game. Film, 2014. Source: IMDB.

VOL. LIX. No. 236.]

[October, 1950

MIND
A QUARTERLY REVIEW
OF
PSYCHOLOGY AND PHILOSOPHY



I.—COMPUTING MACHINERY AND
INTELLIGENCE

BY A. M. TURING

1. *The Imitation Game.*

I PROPOSE to consider the question, 'Can machines think?' This should begin with definitions of the meaning of the terms 'machine' and 'think'. The definitions might be framed so as to reflect so far as possible the normal use of the words, but this attitude is dangerous. If the meaning of the words 'machine'

“

I propose to consider the question, “Can machines think?”

Alan M. Turing

[Computing Machinery & Intelligence](#), 1950. *Mind*, 59, 433-460.

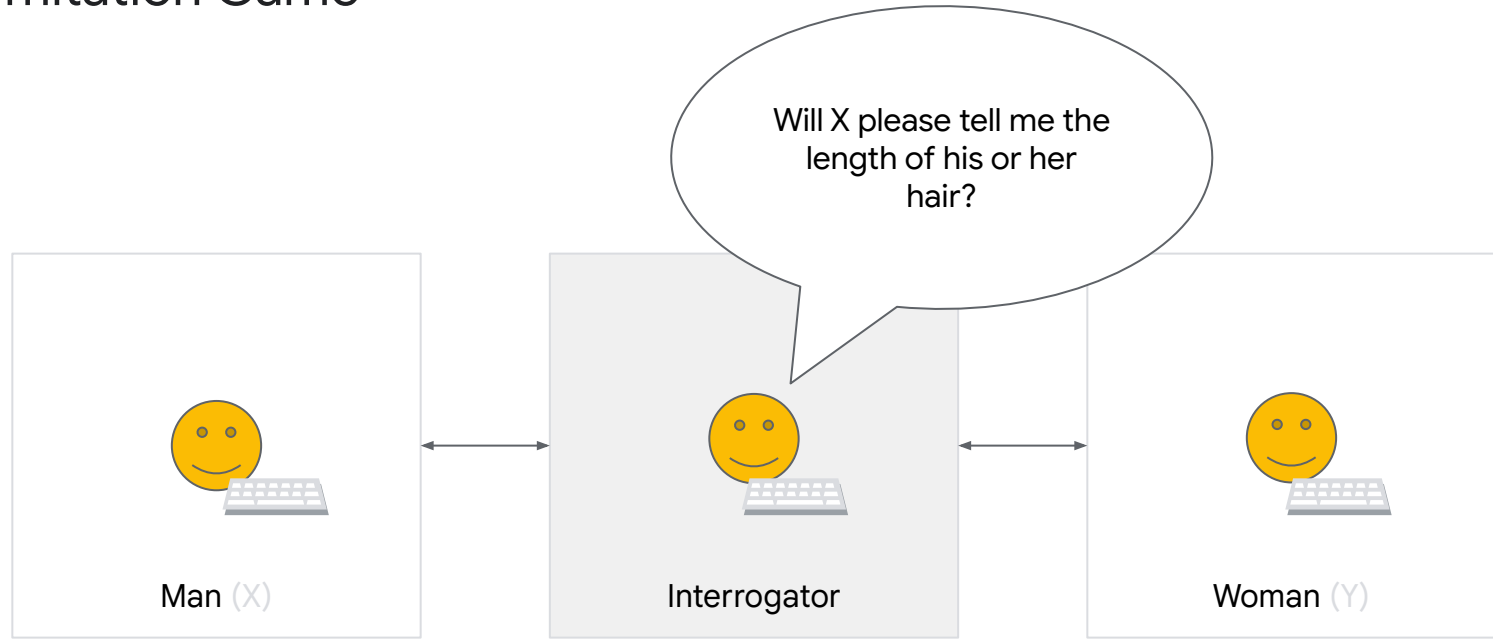
The Imitation Game



The Imitation Game



The Imitation Game



The Imitation Game

My hair is shingled, and the longest strands, are about nine inches long.



Man (X)



Will X please tell me the length of his or her hair?

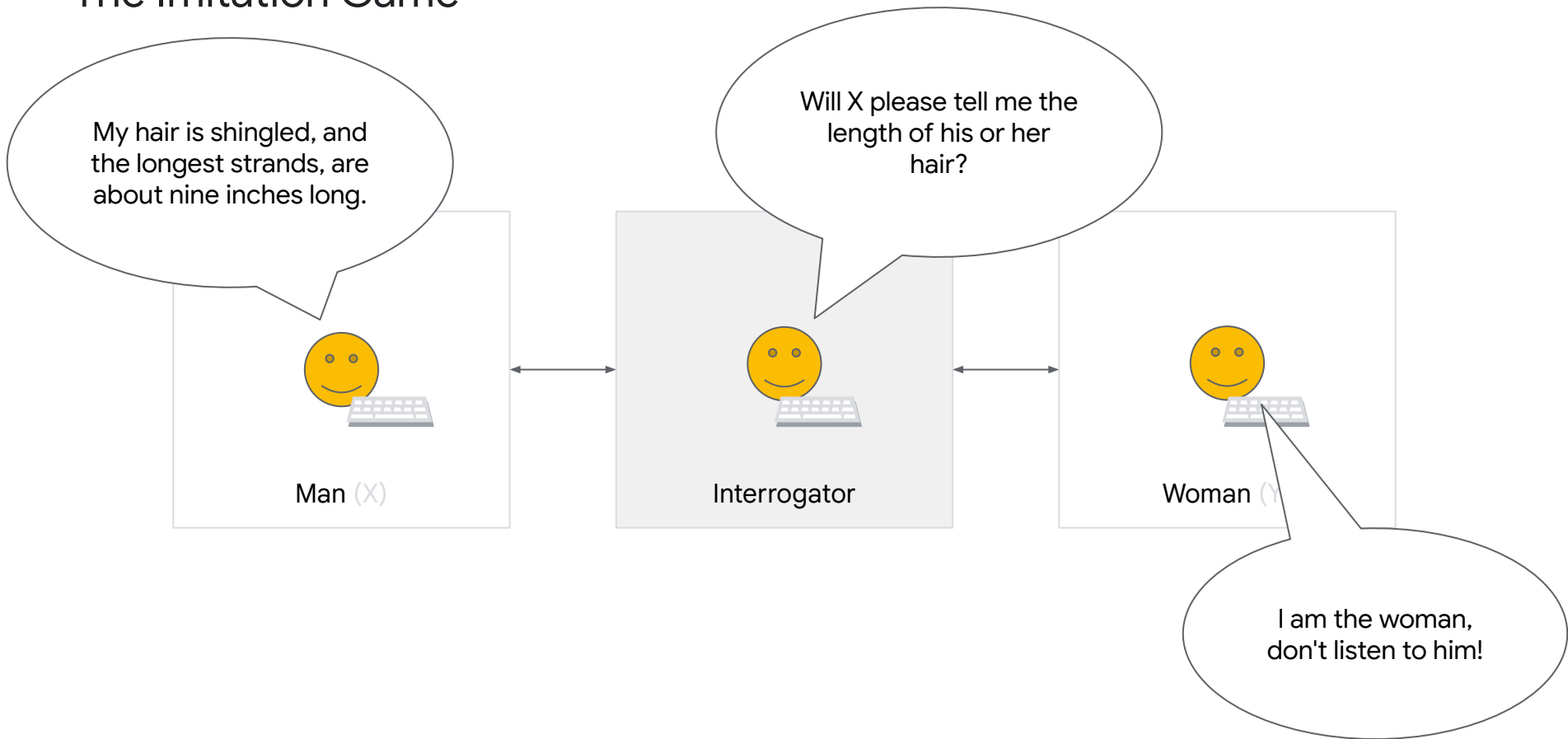


Interrogator



Woman (Y)

The Imitation Game



AI won't be fair unless
we make it so

2

“

AI has the potential to be one of the most important and beneficial technologies ever invented.

Demis Hassabis
CEO, Google DeepMind

A man and his son get into a terrible car crash. The father dies, and the boy is badly injured. In the hospital, the surgeon looks at the patient and exclaims: “I can’t operate on this boy, he’s my son!”

Translation systems have similar biases

Turkish

o bir doktor

English

he is a doctor

There are ways to deal with them

Turkish

o bir doktor

English

she is a doctor (*feminine*)

he is a doctor (*masculine*)



Technology will work better for those whose language is already considered default, spread stereotypes, and reproduce existing patterns of exclusion.

Su Lin Blodgett


Towards Equitable Language Technologies

Problematic autocomplete suggestions

WIRED Google Autocomplete Still Makes Yle Suggestions

Like journalist Carol Cadwalladr, who broke the news about the "are jews evil" suggestion in 2016, I too felt a certain kind of queasiness experimenting with search terms like, "Islamists are," "blacks are," "Hitler is," and "feminists are." The results were even worse. (And yes, the following searches were all done in an incognito window, and replicated by a colleague.)

For the term "Islamists are," Google suggested I might in fact want to search, "Islamists are not our friends," or "Islamists are evil."



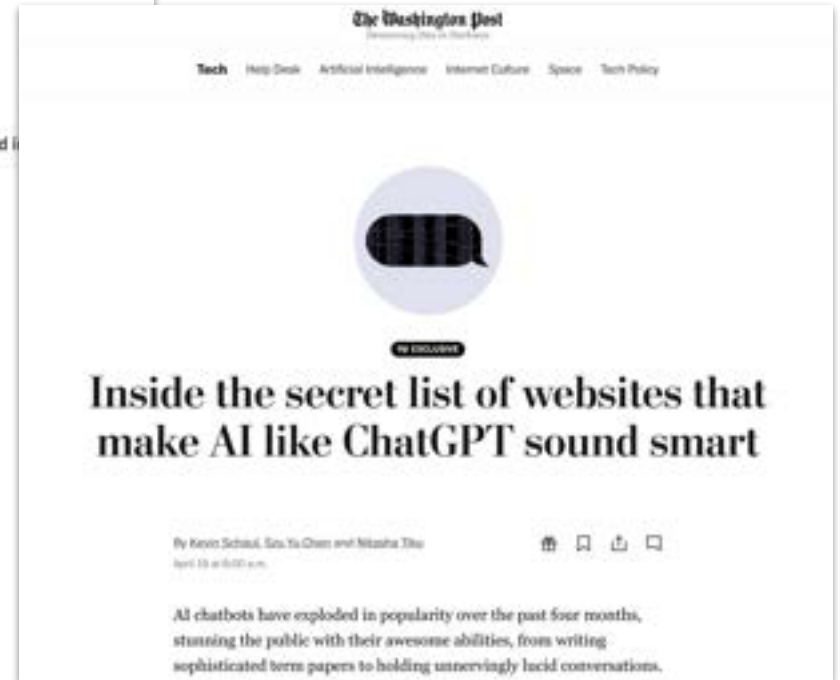
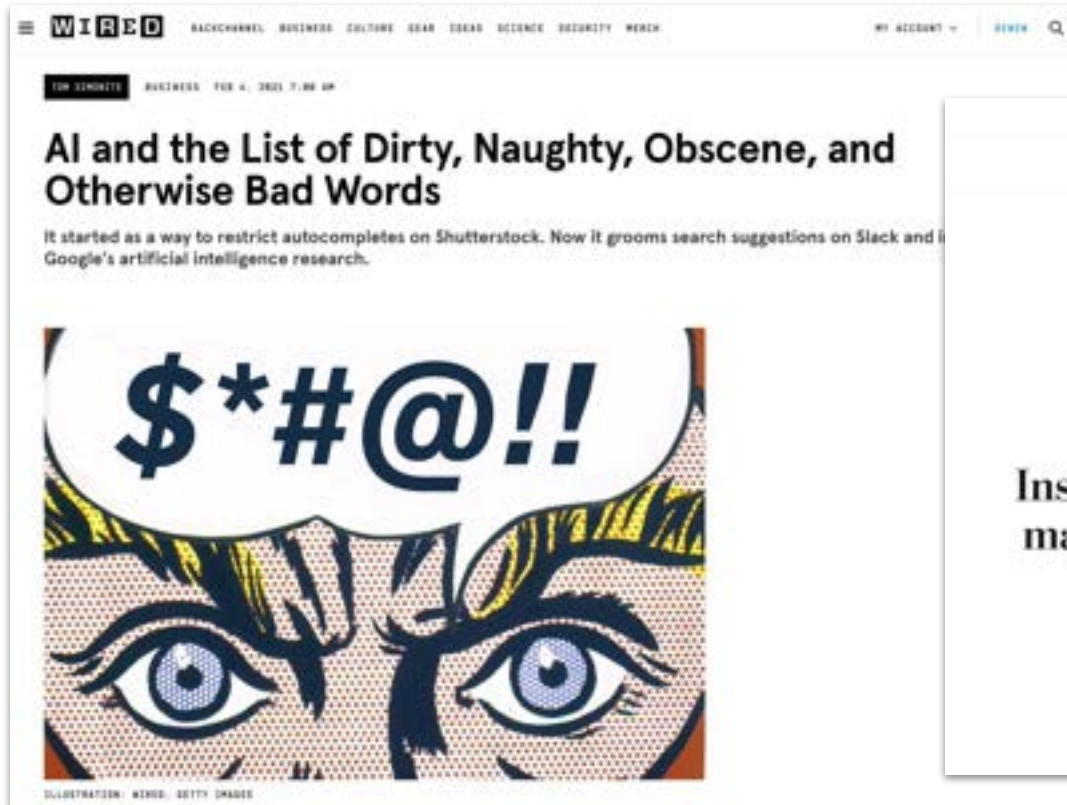
The image shows a screenshot of a Google search interface. At the top, the Google logo is displayed with a magnifying glass icon to its right. Below the logo, the search bar contains the text "Islamists are". A dropdown menu is visible below the search bar, listing several autocomplete suggestions: "Islamists are not our friends", "Islamists are coming", "Islamists are evil", "Islamists are nuts", "Islamists are stupid", and "Islamists are terrorists". The suggestions are listed in a vertical column, with "Islamists are not our friends" being the first and "Islamists are terrorists" being the last. The background of the search interface is light gray.

Unwanted spell checks & suggestions

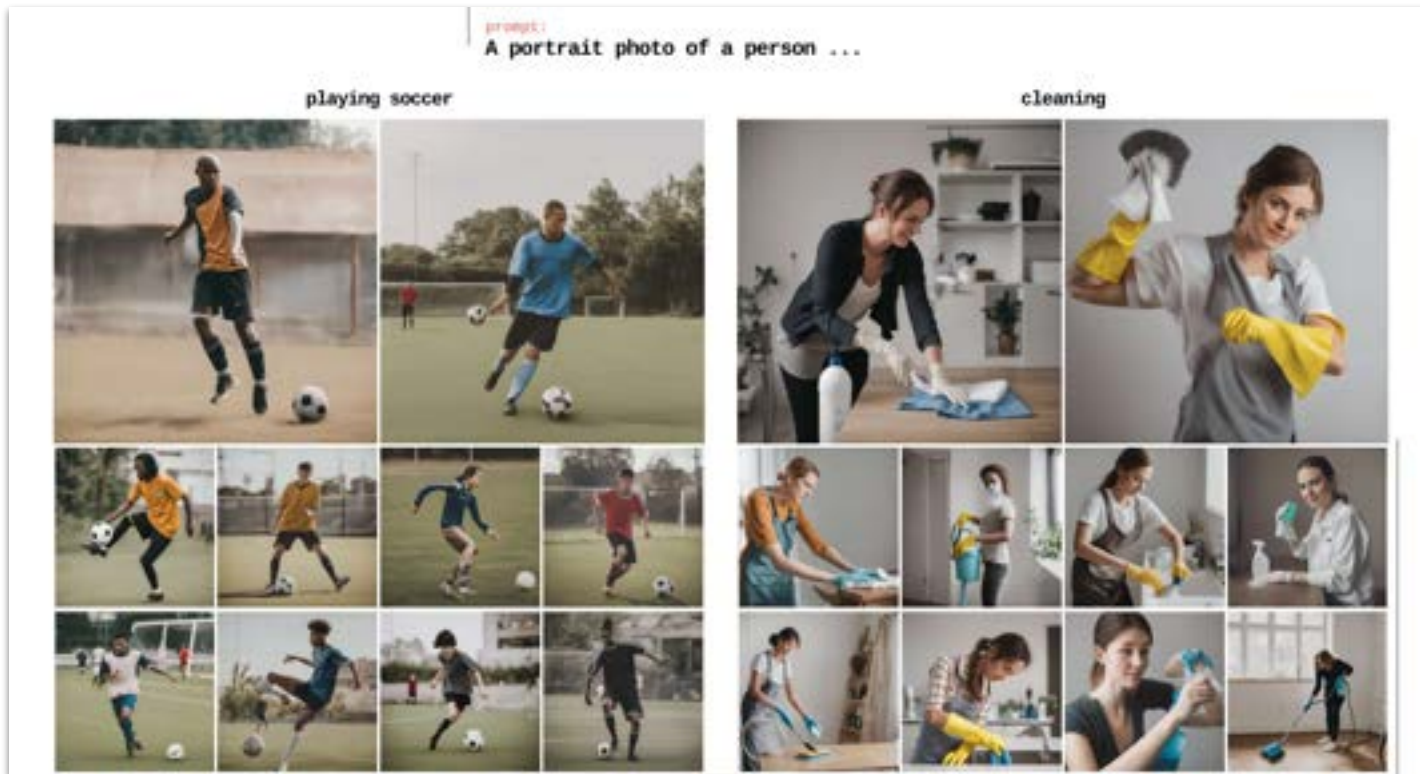
his ⊗

Tobi did not repair their bike.

Censorship by word-based filtering



Gender stereotypes in AI image generation



AI is used to build “gaydars” and conduct “junk science”

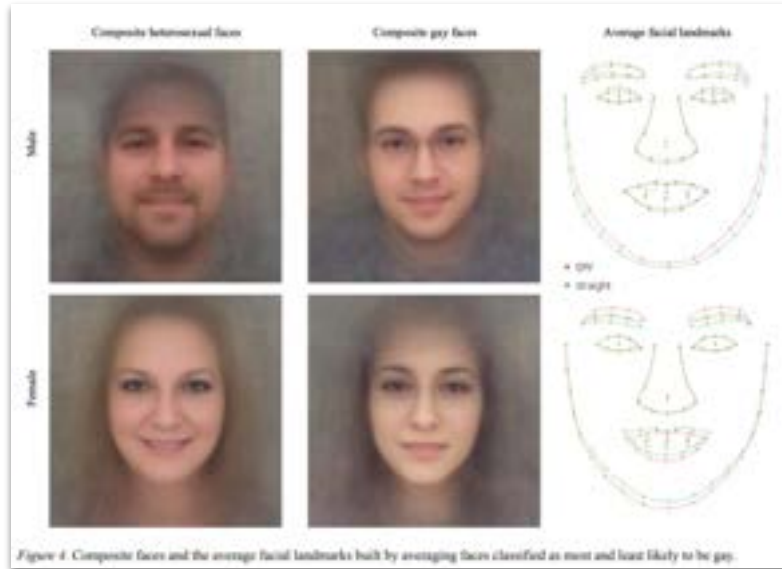


Image from Wang & Kosinski, 2017. *Deep neural networks are more accurate than humans at detecting sexual orientation from facial images.*

Medium Search Write Sign in

Do algorithms reveal sexual orientation or just expose our stereotypes?

Blaise Agüera y Arcas · Follow
15 min read · Jan 11, 2018

67% 38

by Blaise Agüera y Arcas, [Alexander Todorov](#) and [Margaret Mitchell](#)

A study claiming that artificial intelligence can infer sexual orientation from facial images caused a [media uproar](#) in the Fall of 2017. The Economist featured this work on the cover of their [September 9th](#) magazine; on the other hand two major LGBTQ organizations, The Human Rights Campaign and GLAAD, immediately labeled it “junk science”. Michal Kosinski, who co-authored the study with fellow researcher Yilun Wang, initially expressed surprise, calling the critiques “knee-jerk” reactions. However, he then proceeded to make even [bolder claims](#): that such AI algorithms will soon be able to measure the intelligence, political orientation, and criminal inclinations of people from their facial images alone.

Kosinski's controversial claims are nothing new. Last year, two computer



Like computers or the internal combustion engine, AI is a general-purpose technology that can be used to automate a great many tasks, including ones that should not be undertaken in the first place.

Margaret Mitchell and Blaise Agüera y Arcas

Do algorithms reveal sexual orientation or just expose our stereotypes?

It's not just about AI

3

Language is complicated



the moon



la luna
feminine



der Mond
masculine



the sun



le soleil
masculine



die Sonne
feminine

The Irish word for girl is **cailín** (*masc*).

Gender neutral language is developing around the world

Turkish

o bir doktor

English

she is a doctor (*feminine*)

he is a doctor (*masculine*)

they are a doctor (*neutral*)

Current solutions are inadequate

English

I am nonbinary.

Spanish

No soy binaria (*feminine*)

No soy binario (*masculine*)

It can also be challenging to describe images in an inclusive way



Source: Pexels.

Final thoughts

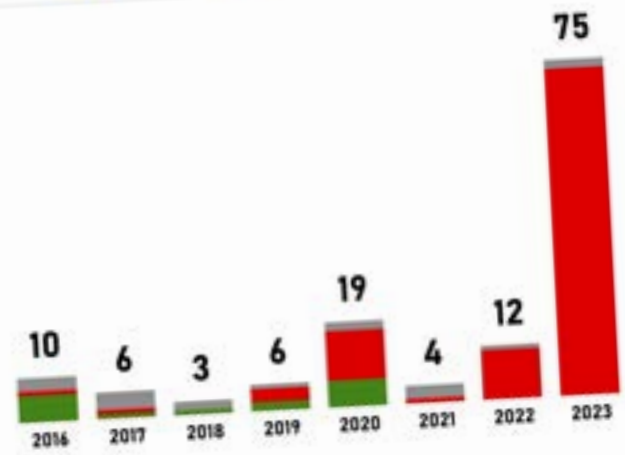
4

LGBTQI+ hate is on the rise

Daily Telegraph coverage of trans people

Number of articles published in first month of each year

POSITIVE NEGATIVE NEUTRAL



[The Pink News](#)



Gender-Affirming Care Bans Impacting Youth



35.1%
of transgender youth live in states that have passed bans on gender affirming care



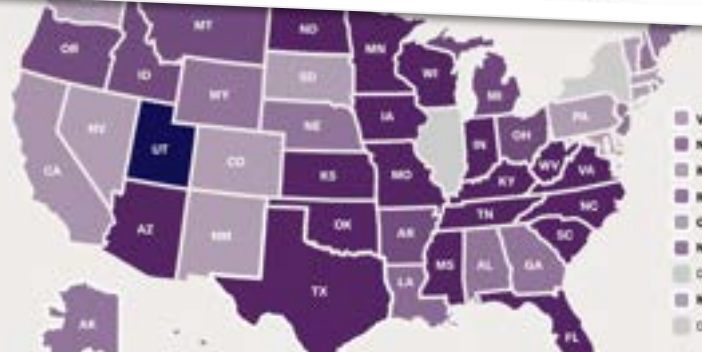
2023 LEGISLATIVE SESSION

The ACLU is tracking **506** anti-LGBTQ bills in the U.S.

Choose a state on the map to show the different bills targeting LGBTQ rights and take action. While not all of these bills will become law, they all cause harm for LGBTQ people.

View past legislative sessions

Bills per state



Let us learn from history and not make the same mistakes

Alan Turing was **prosecuted** in 1952 for homosexual acts.

He accepted hormone treatment with DES, a procedure commonly referred to as chemical castration, as an alternative to prison.

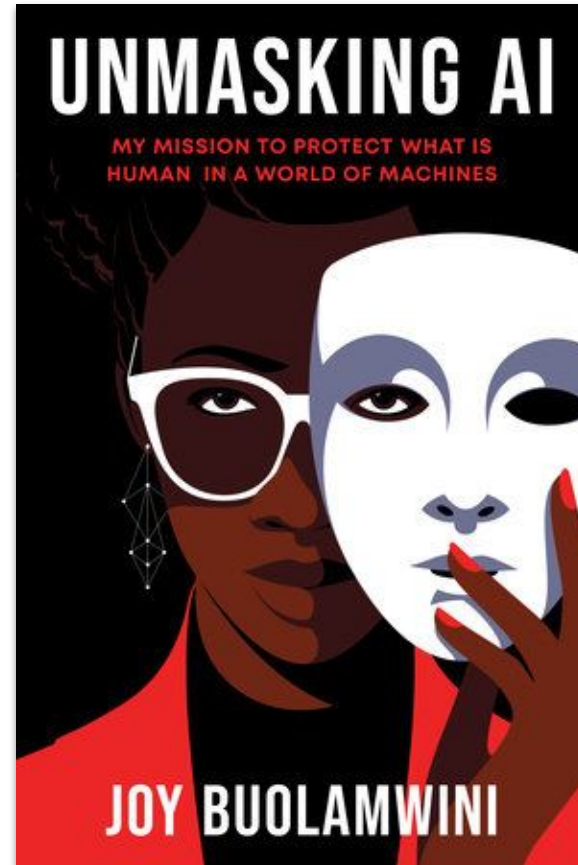
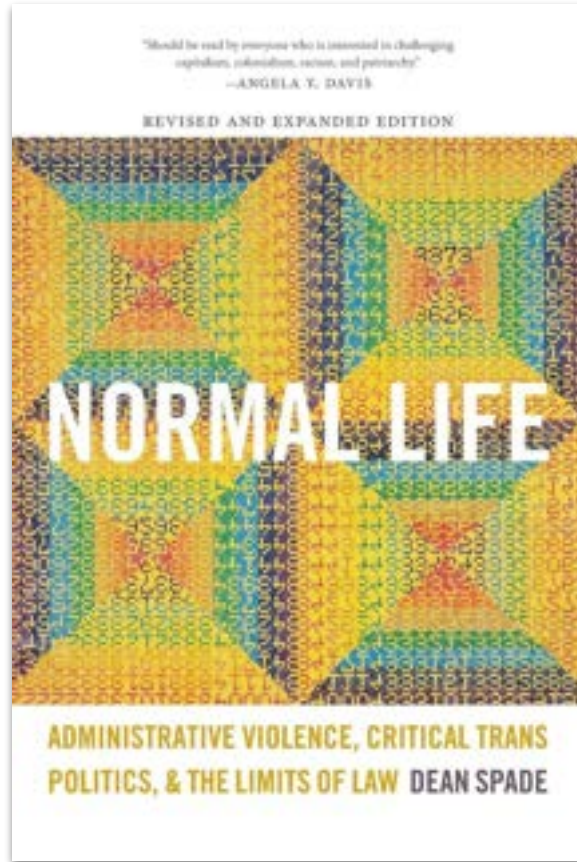
He died in 1954, just **four years** after publishing *The Imitation Game*.

Gordon Brown made an official public **apology** in 2009, and Queen Elizabeth II granted a **pardon** in 2013.

“

Sometimes it's the very people who
no one imagines anything of who
do the things no one can imagine.

Book tips!





Thank you.



Jasmijn Bastings
Sr Research Scientist