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Artificial Intelligence and Ethics

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Homo Data

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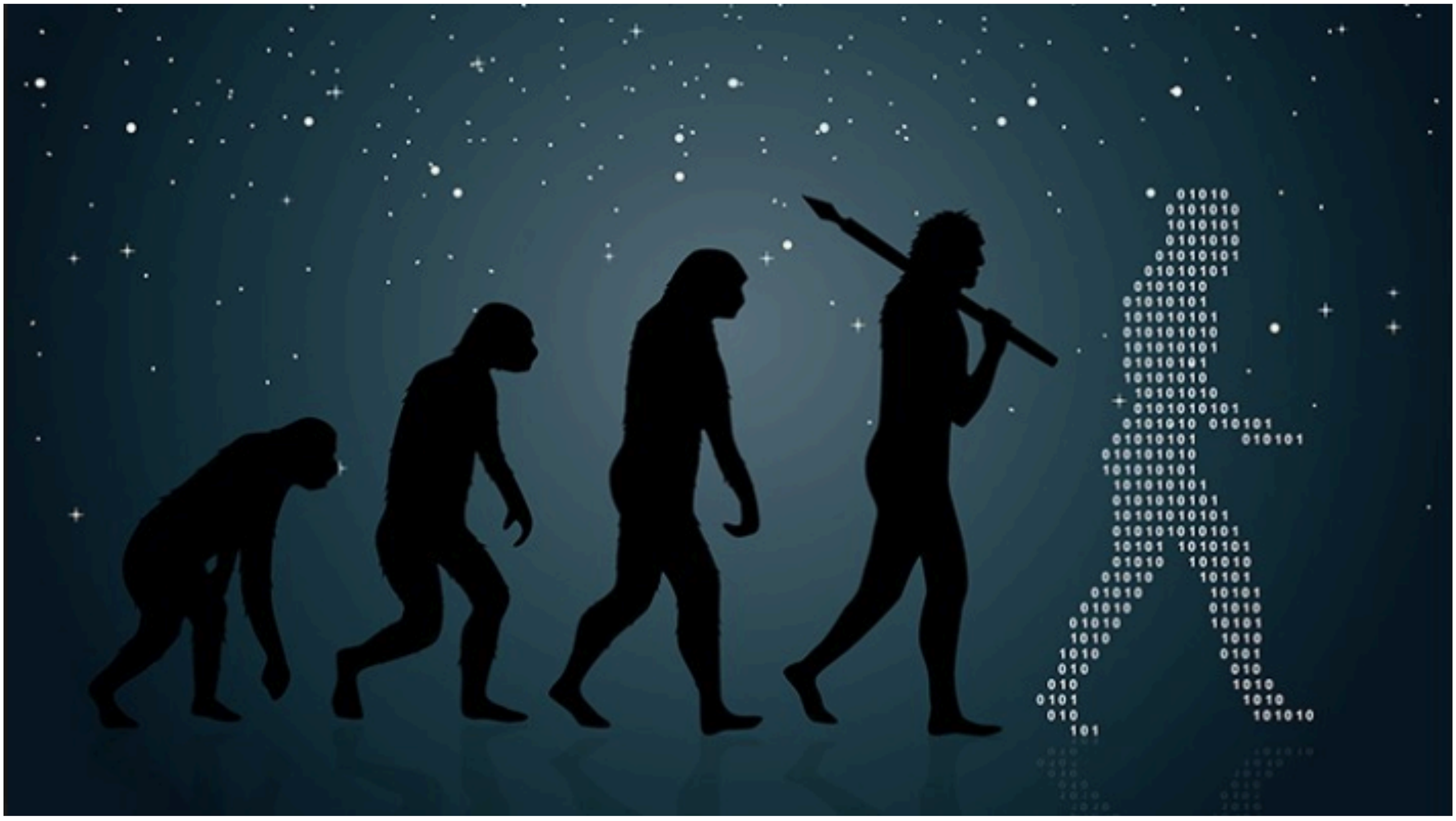

Who won the elections?

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Describe this person

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GENDER	HAIR COLOUR	EYES	FACE	MOUTH	BEARD	HAIR TYPE
FEMALE	BROWN	BLUE	OVAL	ROUND	FULL BEARD	CURLY
MALE	BLACK				GOATEE	WAVY
TRANSGENDER	BLOND				PENCIL	STRAIGHT
INTERSEX	RED	GREEN	DIAMOND SHAPE		HANDLEBAR	KINKY
NON-DEFINED	WHITE	OLIVE GREEN	TRIANGULAR		DUCKTAIL	BALD
	GREY	HONEY	HEART SHAPE		CHIN CURTAIN	DREADLOCKS

Should we use "race" as a criteria for physical description of a person?

Facial Hair Types

Hollywoodian

Mutton Chops

A la Souvarov

French Fork

Ducktail

Fu Manchu

Old Dutch

Dali

Handlebar and Chin Puff

Van Dyke

Friendly Mutton Chops

Balbo

Rap Industry Standard

Sparrow

Klingon

Federation Standard

Short Boxed Beard

Goatee

Chin Curtain

Hulihee

The Zappa

Soul Patch

Handlebar and Goatee

The Winnfield

Petit Goatee

Franz Josef

Anchor

Napoleon III Imperial

Copstash Standard

Pencil

Super Mario

Handlebar

Hair Types

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Iphone X and Facial Recognition

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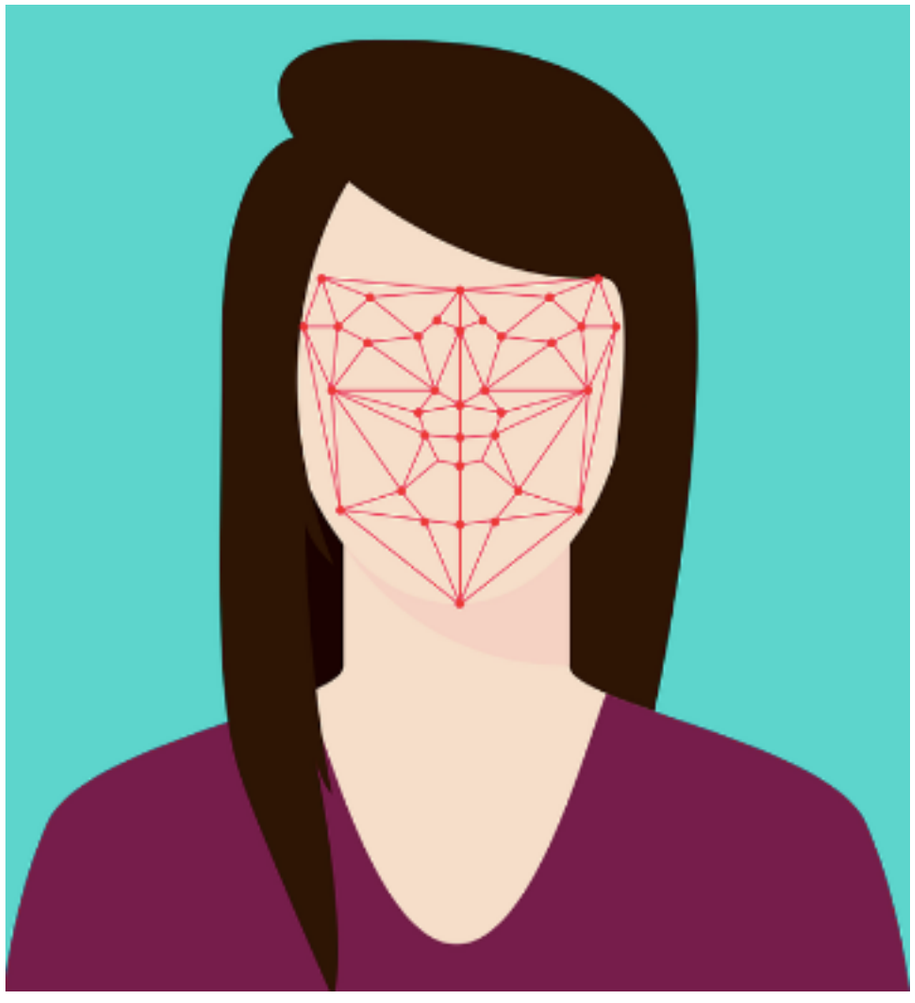

- Unlocking Iphones using facial recognition technology.

- Does it work as a form of protecting privacy and device security?

- Well... Not in China...

Have you seen this guy?

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This person does not exist

https://www.thispersondoesnotexist.com/

Produced by a GAN (generative adversarial network)
StyleGAN (Dec 2018) - Karras et al. and Nvidia
Original GAN (2014) - Goodfellow et al.
Don't panic. Learn about how it works.
Help me figure out what was learned by this AI here.
Check out text generation by another AI
Click for another person Link to image

And in the end, the data you “make” is equal to the output you “take”

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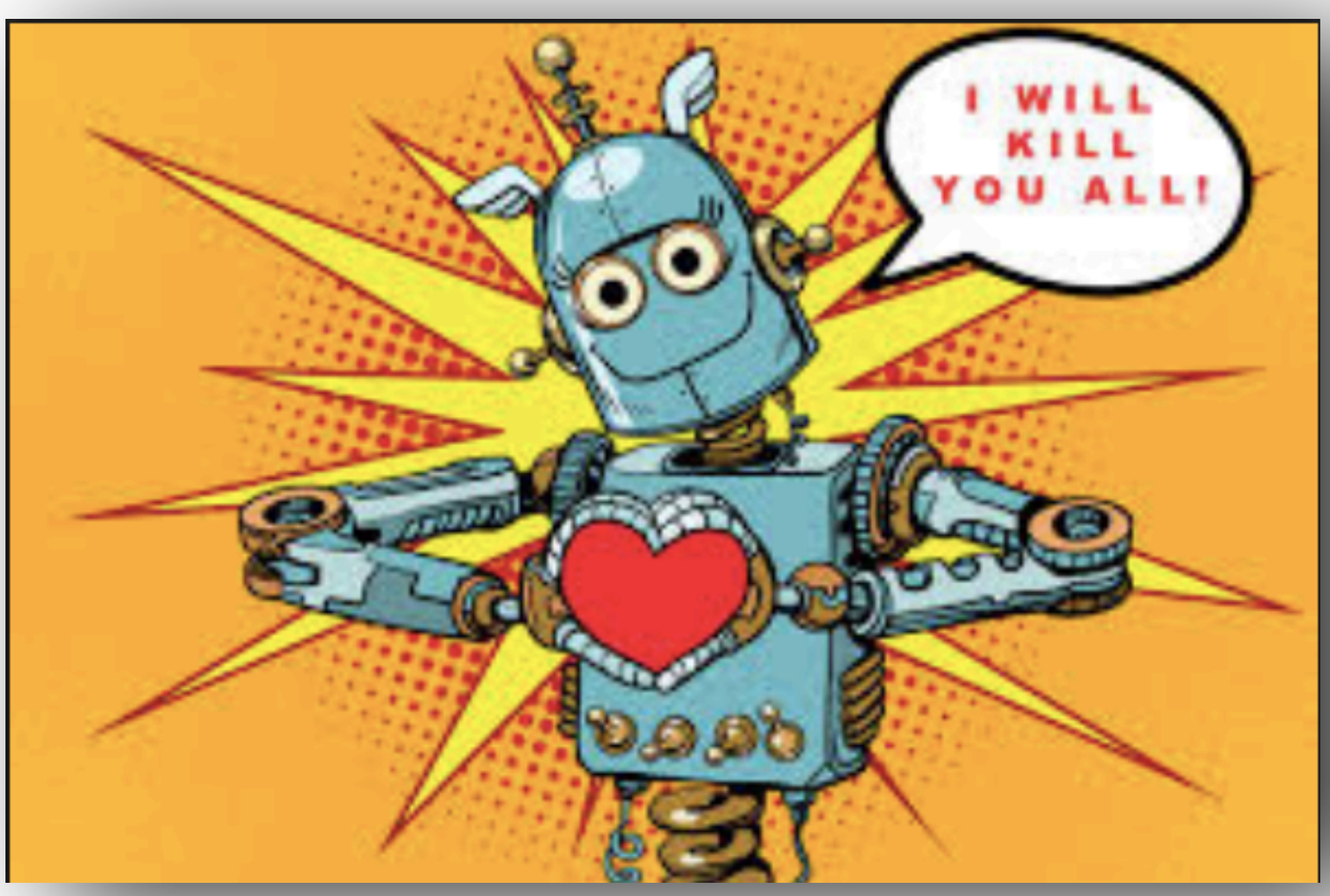

AI's white guy problem isn't going away

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Who are these people?

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- Women -
15% of research staff at Facebook and
10% of research staff at Google.

- Black workers -
2.5% of Google's entire workforce and
4% of Facebook's and Microsoft's.

- Transgender people - ?

- Other gender minorities - ?

(Reference: Karen Hao, MIT Tech Review, Apr 17, 2019)

Female under-representation in ICTs

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- Machines assume values and function as dictated by their creators.

- Different results require different lived experiences, priorities and worldviews.

What are the consequences?

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- Biases
- Prejudices
- Lack of empathy
- Possible statistical misleadings

What to do about the "biases"

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- Ensure that programmers are recruited from diverse backgrounds of gender, ethnicity, and socioeconomic status.
    - And why is that?
- IA looks at available real-world data and applies it to its algorithms.

Change AI to change the world

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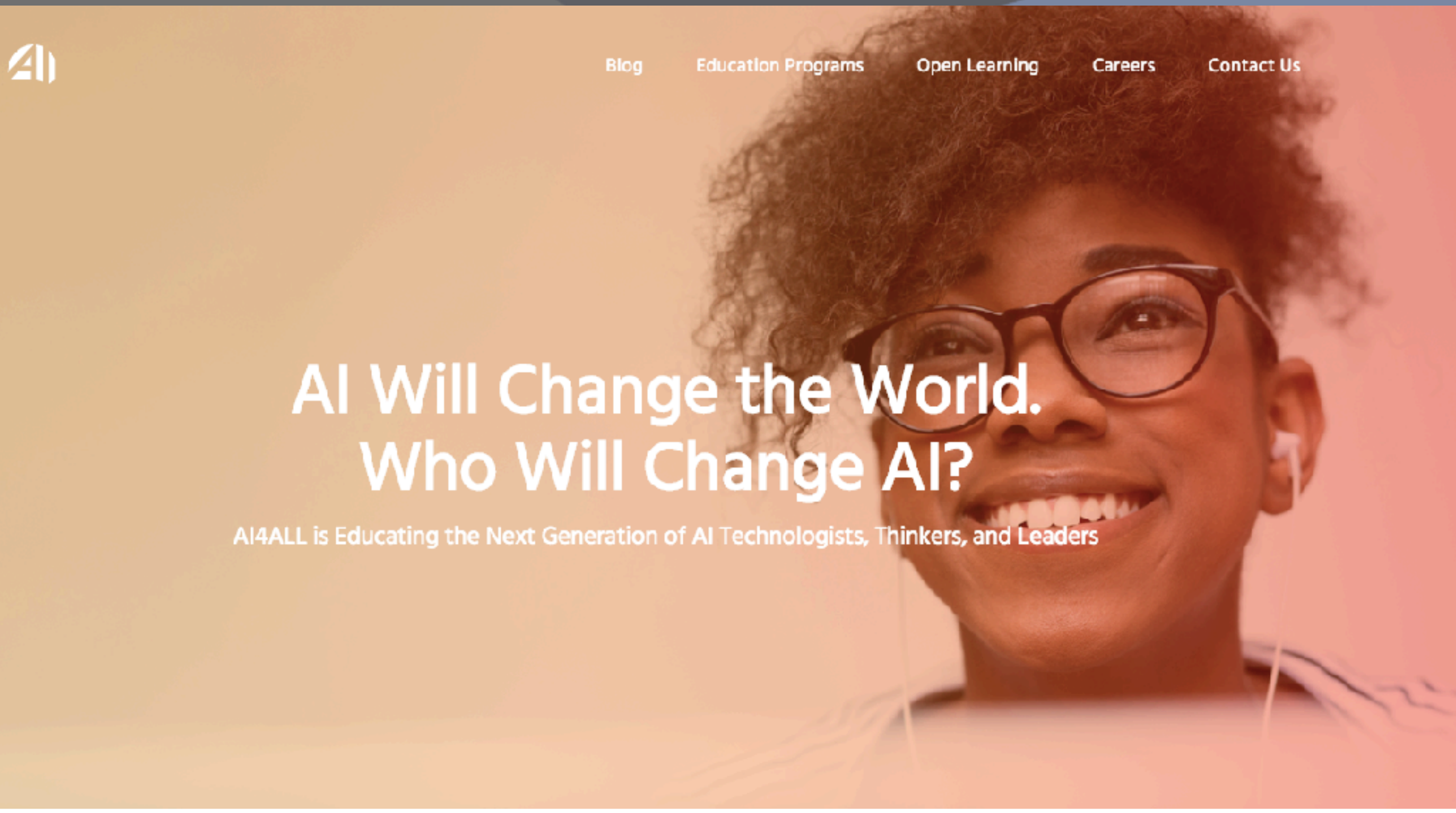

Gender stereotypes in AI

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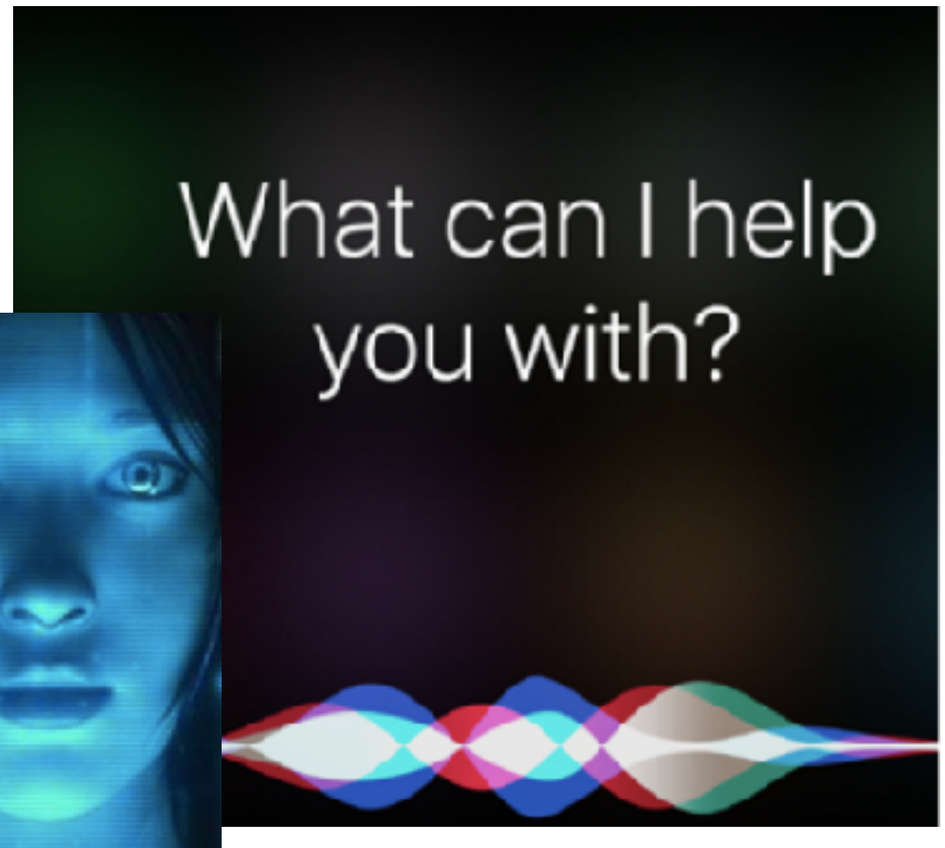
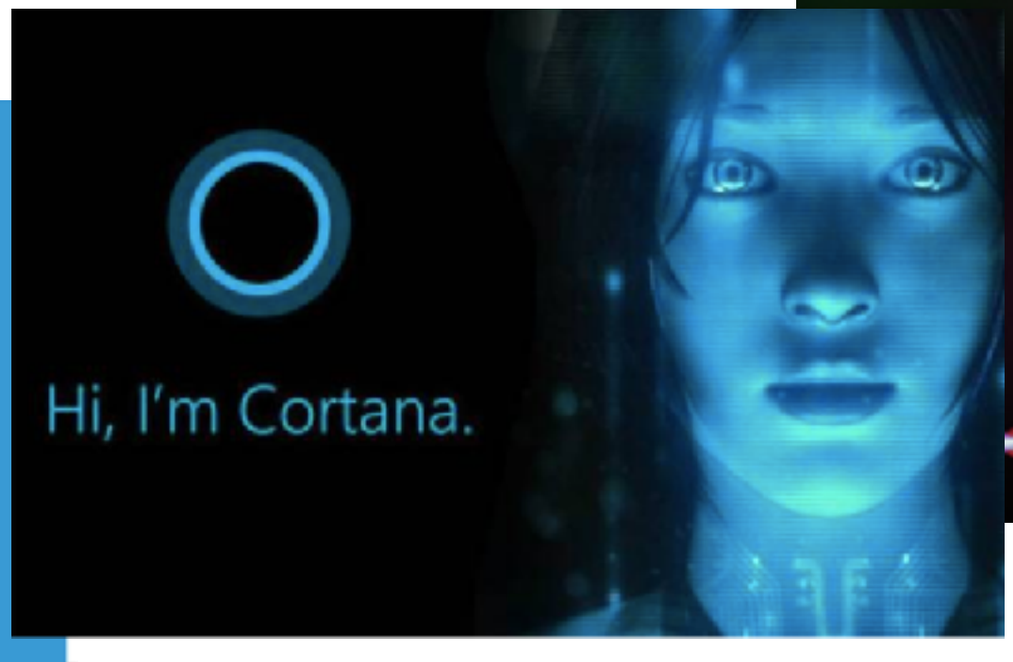
Voice of female AI - helpful, subservient, and non-threatening women.





amazon

alexa

What is Q?

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M
G

- https://www.genderlessvoice.com/

Who made Q?
Copenhagen Pride, Virtue, Equal AI, Koalition Interactive & thirtysoundsgood.

Why did we make Q?
Technology companies often choose to gender technology believing it will make people more comfortable adopting it.

Unfortunately this reinforces a binary perception of gender, and perpetuates stereotypes that many have fought hard to progress.

As society continues to break down the gender binary, recognising those who neither identify as male nor female, the technology we create should follow.

Q is an example of what we hope the future holds; a future of ideas, inclusion, positions and diverse representation in technology.

Feminization of AI

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Google Translator - Turkish to English

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he is a soldier
he is very beautiful
he is hard working
he is a doctor
he is an engineer
he is an architect
he is a dentist
he is a lawyer
he is a president

she is a nanny
she is beautiful
she is lazy
she is a nurse
she’s a teacher
she is a singer

Different names, different races…

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10 "Whitest" Girl Names	10 "Blackest" Girl Names
Molly	Imani
Amy	Ebony
Claire	Shanice
Emily	
Madel	
Emma	Nia
Abigail	Deja
Carly	Diamond
Jenna	Asia
Heather	Aliyah

Can AI use name patterns to grant loans for housing purposes?

AI and Ethics

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- The AI should reflect the diversity of users it serves.

- The AI should be held accountable - and users too (accountability)

- Reward the AI for "showing how it works" (training)

- The AI should level the field of action (accessibility)

- The AI will replace people, but it must also create new opportunities.

There are three main steps for the human rights due diligence process:

i. Identify possible discriminatory results

ii. Take effective measures to prevent and mitigate discrimination and track responses

iii. Be transparent about efforts to identify, prevent and mitigate discrimination in machine learning systems.

Avoiding these risks requires:

a) Correct the discrimination, both in the design of the model and in the impact of the system, and in deciding what training data to use.

b) Seek diversity, equity, and other means of inclusion in the machine learning development teams, in order to identify bias by design and prevent inadvertent discrimination.

c) Submit systems that have a significant risk of resulting in human rights violations to third party independent audits.

EU AI Ethical Guidelines

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- Human agency and oversight
- Technical r
- Privacy and
- Transparen
- Diversity, n rness
- Environmer g
- Accountability

Intelligibility

Accuracy

Fairness

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