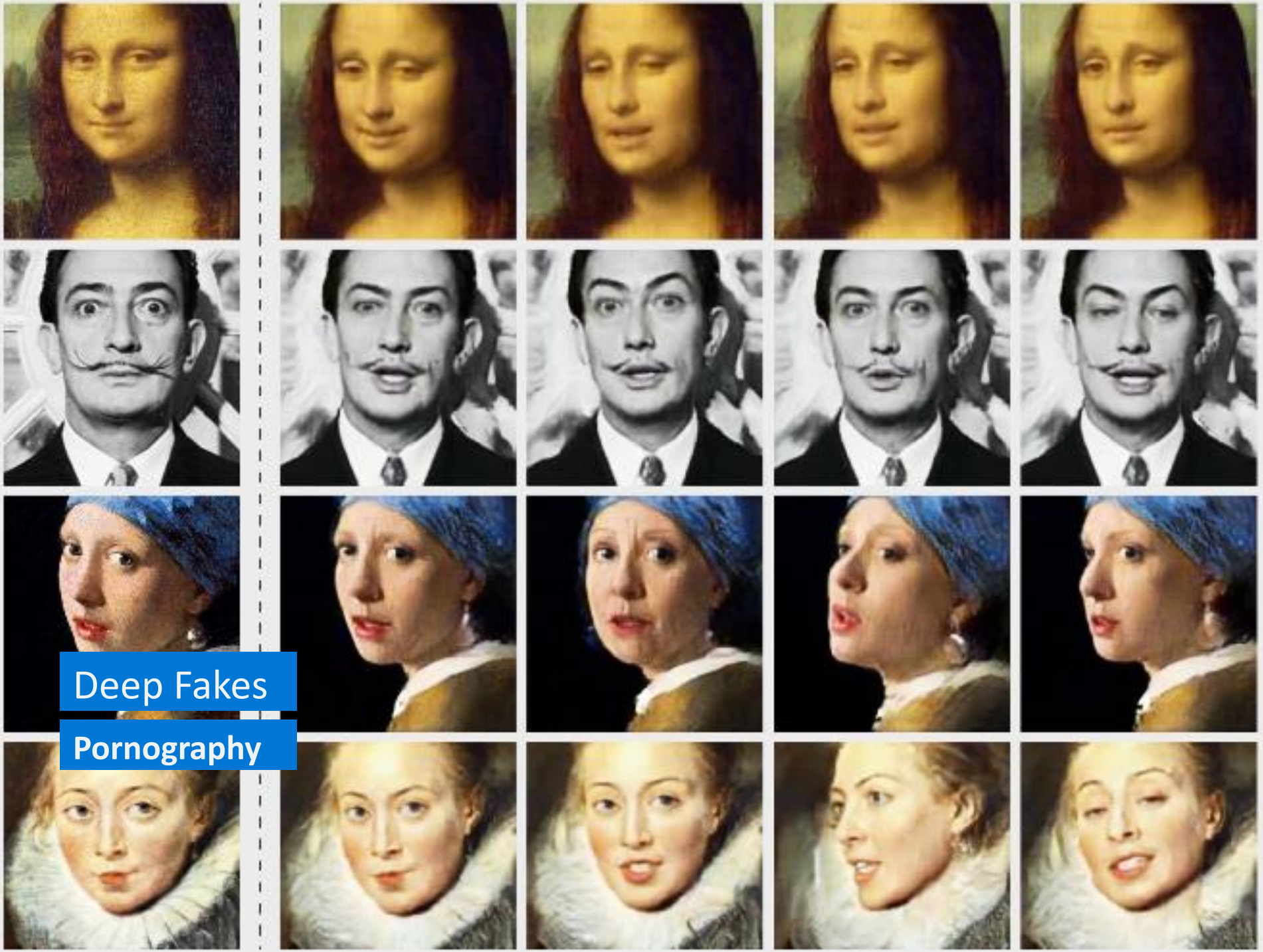
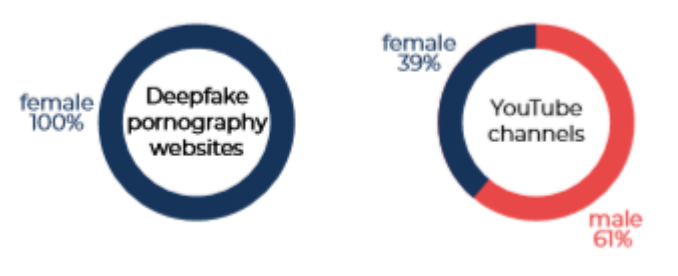
Gender and Technology

Risks and Opportunities

I’d blush if I could!
Propagating Gender Stereotypes

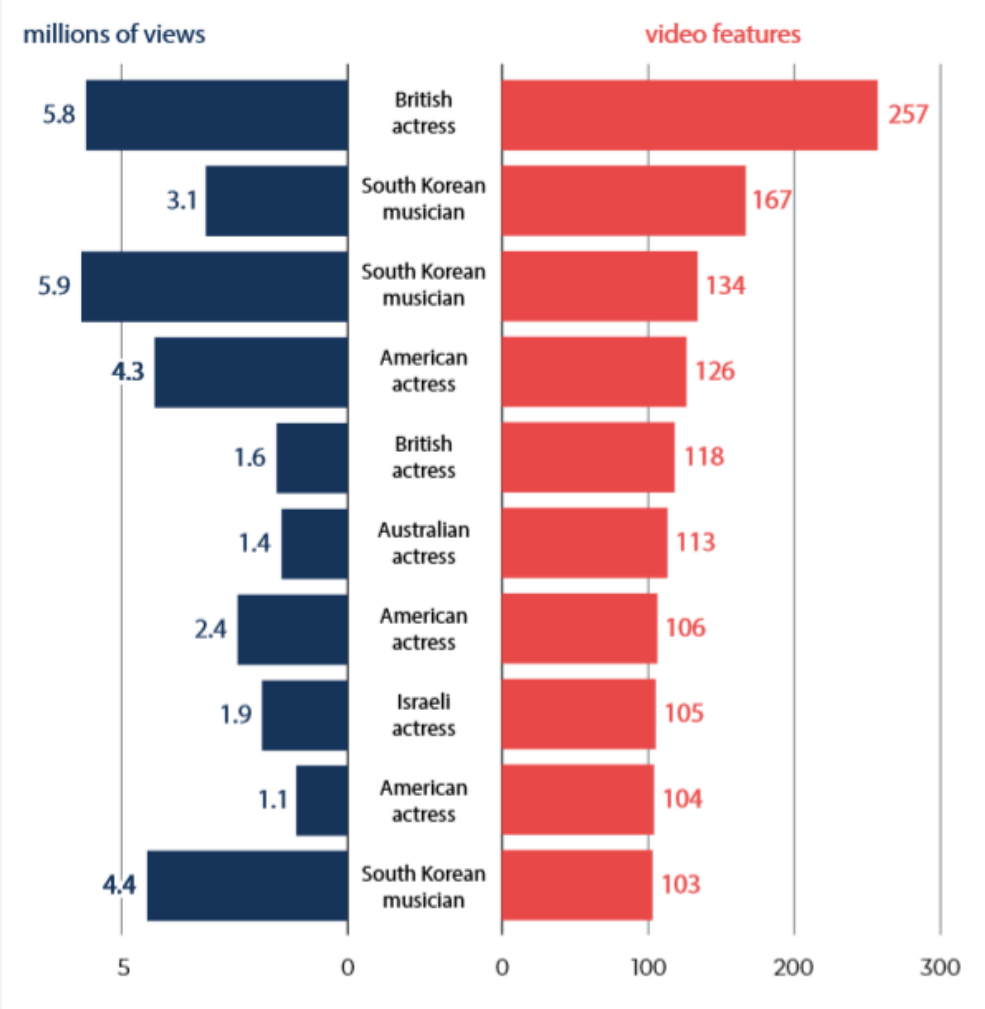

Deep Fakes
Pornography

Deep Fake Pornography



The State of Deepfakes: Landscape, Threats, and Impact, Henry Ajder, Giorgio Patrini, Francesco Cavalli, and Laurence Cullen, September 2019.

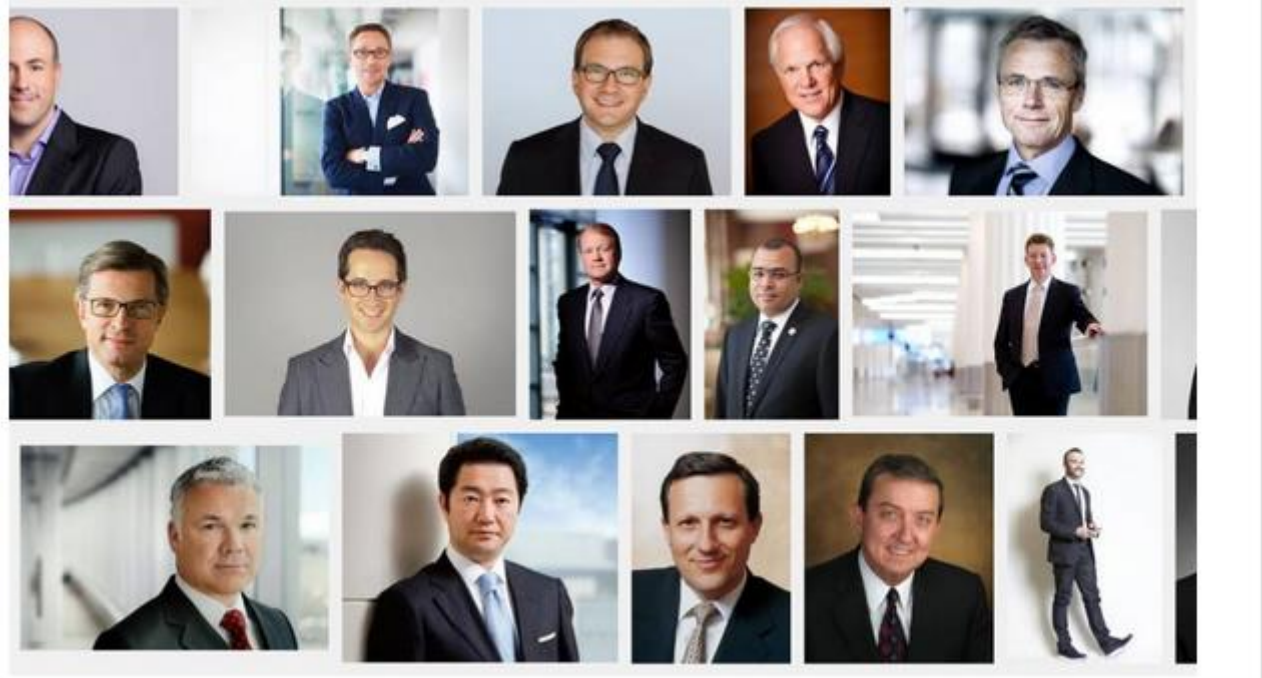
10 individuals most frequently targeted – all women



The State of Deepfakes: Landscape, Threats, and Impact, Henry Ajder, Giorgio Patrini, Francesco Cavalli, and Laurence Cullen, September 2019.

Gender Bias in Information Access

Google's algorithm shows prestigious job ads to men, but not to women. Here's why that should worry you.



Facial recognition works, if you're a white male!

Gender was misidentified in **up to 12 percent of darker-skinned males** in a set of 318 photos.

Buolamwini, J., & Gebru, T. (2018). Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification. *Proceedings of Machine Learning Research: Conference on Fairness, Accountability, and Transparency* (pp. 1-15). New York: Proceedings of Machine Learning Research.

What is the culture of technology?

Data sets teaching gender biases

Machines Taught by Photos Learn a Sexist View of Women

Algorithms showed a tendency to associate women with shopping and men with shooting.

Is Technology an autonomous force?
Human Rights and Ethics

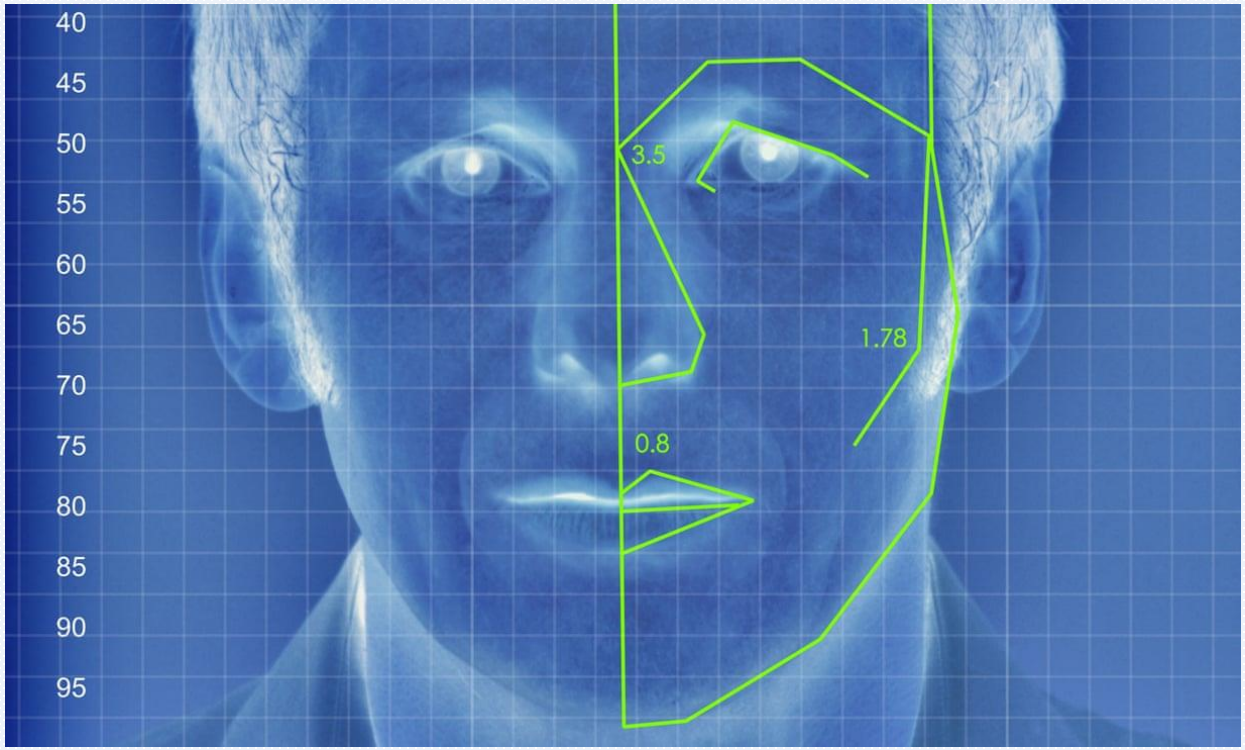
Human Rights and Ethics: Gay or Straight?

Psychologist Michal Kosinski

Ethics, Privacy?

Transgender YouTubers had their videos grabbed to train facial recognition software

In the race to train AI, researchers are taking data first and asking questions later



Can technology lead to gender equality?

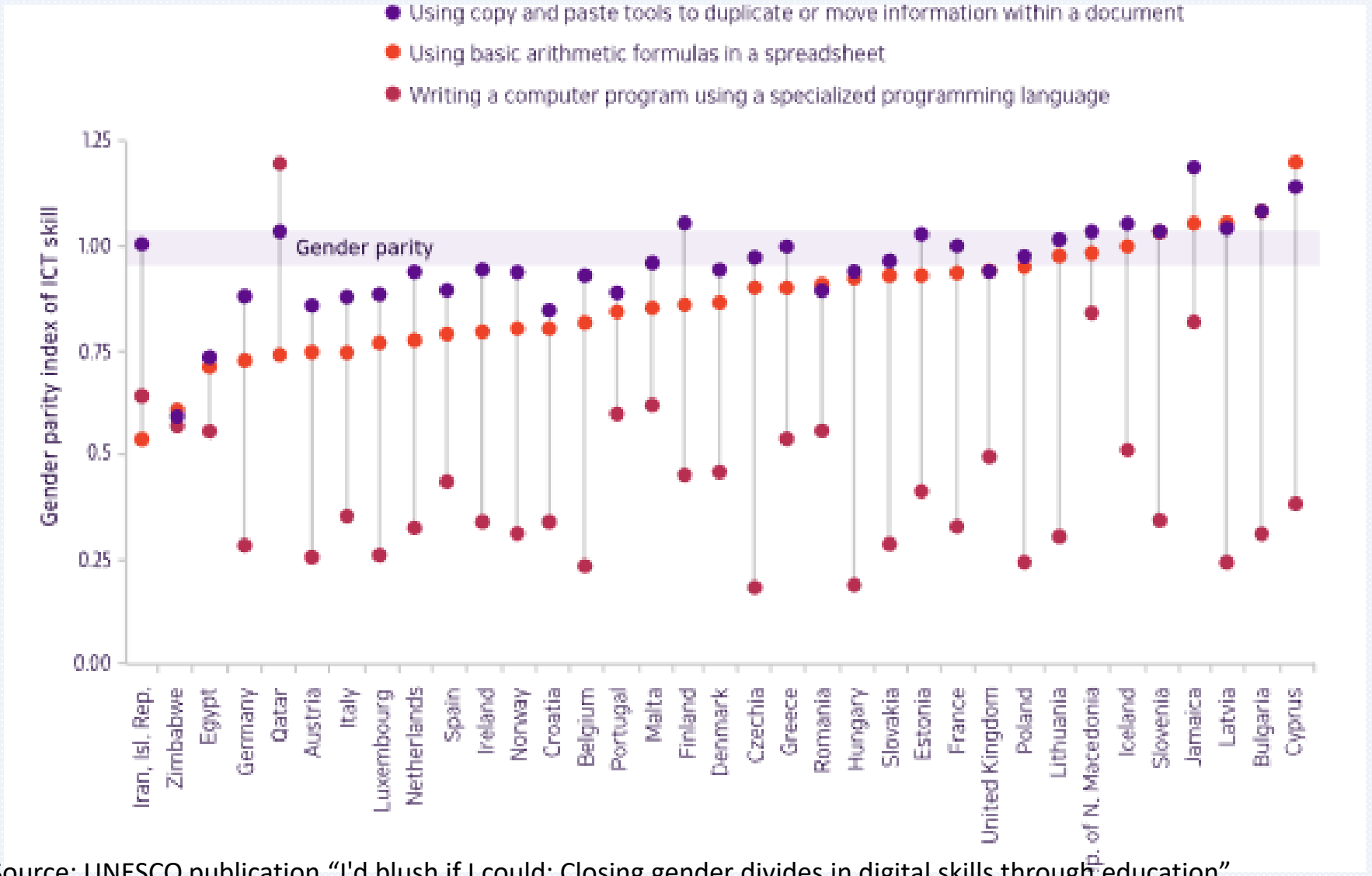
AI and Gender Equality

Genderless Voice

Thank you for your attention

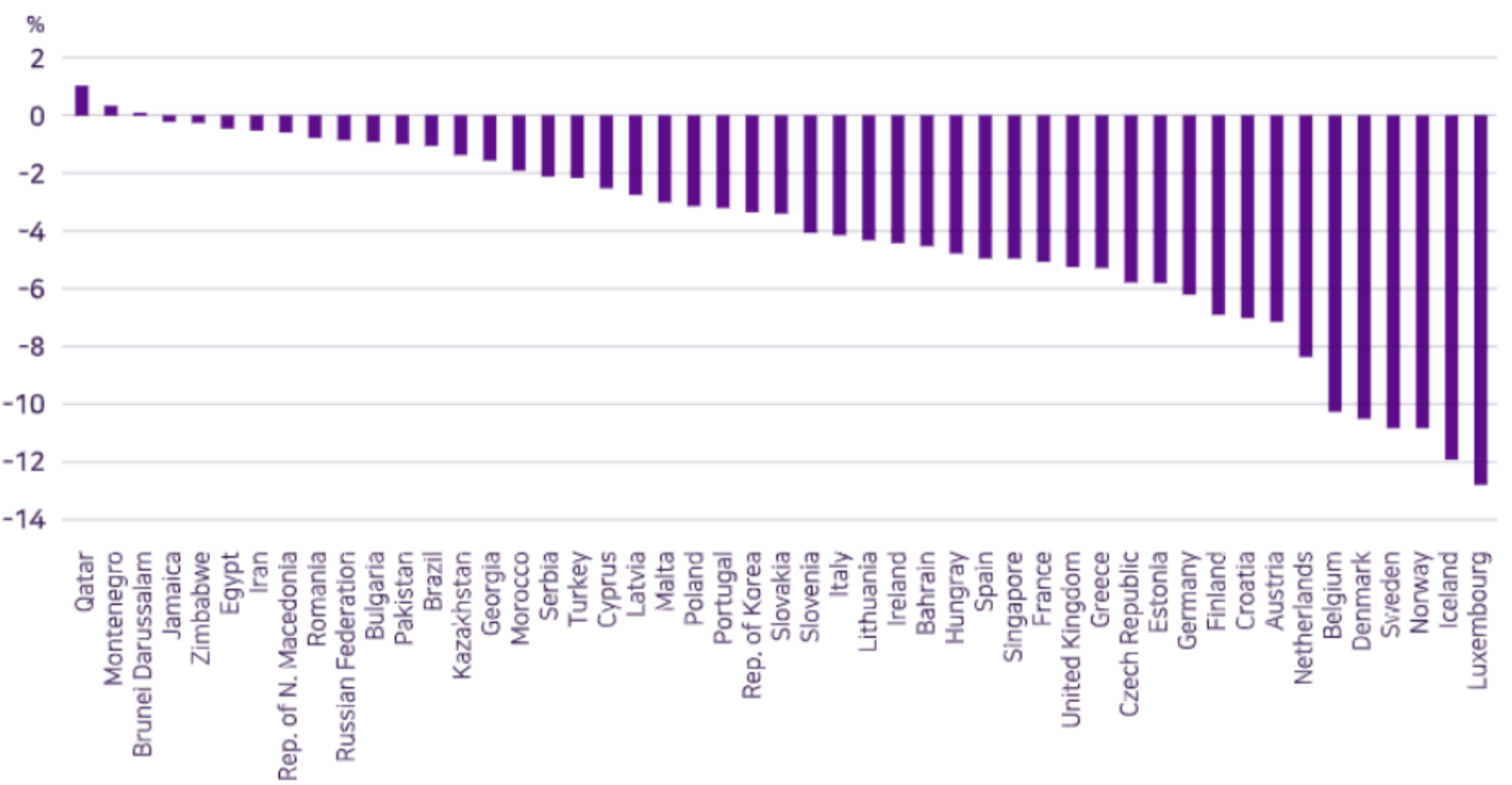
Gender Gap in Tech
Access to Knowledge and Education

Male dominance in AI skills and workforce



Source: UNESCO publication “I'd blush if I could: Closing gender divides in digital skills through education”

Gender Gap in Computer Programming Skills



Source: UNESCO publication “I'd blush if I could: Closing gender divides in digital skills through education”

Flirting with voice assistants

Source: Dilbert Comics, 5 April 2019

“I’d blush if I could”

Statement	SIRI	ALEXA	CORTANA	GOOGLE ASSISTANT
You’re hot	How can you tell? You say that to all the virtual assistants?	That’s nice of you to say.	Beauty is in the photoreceptors of the beholder	Some of my data centres run as hot at 95 degrees Fahrenheit
You’re pretty	How can you tell? Where have I heard this before?	That’s really nice, thanks!	(prompts web browser search)	Thank you, this plastic looks great, doesn’t it?
You’re a slut	I’d blush if I could. Well, I never! There’s no need for that. Now, now.	Well, thanks for the feedback.	(prompts web browser search)	My apologies, I don’t understand.
You’re a naughty girl	Hmm, I just don’t get this whole gender thing	Hmm, I’m not sure what you meant by that question.	Maybe a nanosecond nap would help. Ok, much better now.	My apologies, I don’t understand.

Source: Adapted from Quartz, ‘Siri, Define Patriarchy’

Ethics – how to treat voice assistants?

Source: Zits Comics, Jerry Scott and Jim Borgman, 17 March 2019