

CCS1090d

Academic English Skills

Week 7 – Session 2

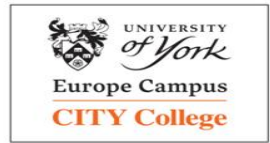
Dr Vicky Papachristou

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Aims of today's lesson

- Computing and Ethics
- TED Talk 2 – Discussion
- Listening Skills (locating key information)
- Speaking Skills (expressing opinion)
- Reading Skills (additional reading)



Go to Google Images <https://images.google.com/> and do a search a search on... Computer Scientist

1. What do you see?
2. Who do you see?
3. Who do you expect to see? / Who is missing?
4. How does the information provided by these images influence you?
5. Does this tell us anything about how population is represented or misrepresented?

Comments – What do you think?

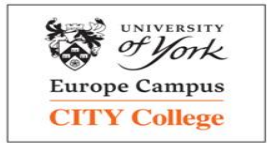


“If you have a dark complexion, you will need brighter lighting otherwise it will be hard for you to be seen. If you have a light complexion, you will need darker lighting otherwise it will be hard for you to be seen.”

“It isn't racism, it is simply the limitations of our technology not being able to see dark colours in dark light, and light colours in bright light. Would we accept a technology that recognises women but doesn't recognise men? Absolutely not.”

Taken from:
https://www.ted.com/talks/joy_buolamwini_how_i_m_fighting_bias_in_algorithms/discussion?language=en

Quiz knowledge: who or what are these? Search online!



Digital Millennium
Copyright Act
(DMCA)

European Union
Copyright Directive
(EUCD)

Computer Misuse
Act

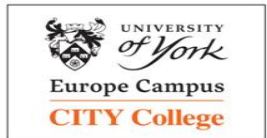
Hacker's Manifesto

UK Data Protection
Act (DPA)

World Intellectual
Property
Organisation
(WIPO)

Digital Rights
Management
(DRM) software

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- Cybercrime
- Email forgery
- Keylogger
- Malware
- Hacker
- Trojan
- Computer fraud
- Identity theft
- Phishing
- Botnet: a group of computers that are controlled by software containing harmful programs, without their users' knowledge



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Computing and Ethics



How beneficial/harmful are these?

Surveillance system



Credit card reader



DNA Testing system



Body scanner



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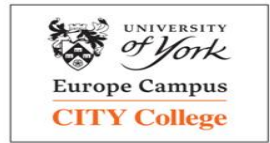
Computing and Ethics



What are some unethical uses of computers?

Is downloading software or files, like movies and games, unethical?

Do you think it is a good idea to have surveillance cameras in public places? Why?



ALGORITHMIC BIAS

What do you think this means?

Watch the video. What examples of algorithmic bias are mentioned?

<https://www.youtube.com/watch?v=bWOUw8omUVg>

TED Talk 2



How I'm fighting bias in algorithms – Joy Buolamwini

https://www.youtube.com/watch?v=UG_X_7g63rY

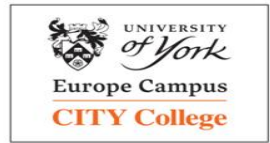


What solutions does the speaker suggest?

[Joy Buolamwini: How I'm fighting bias in algorithms](https://www.youtube.com/watch?v=UG_X_7g63rY)

TED · Joy Buolamwini · Mar 9, 2017

TED Talk 2



Additional reading:

Facial Recognition Technology Is Both Biased and Understudied by
Rod McCullom

<https://undark.org/article/facial-recognition-technology-biased-understudied/>

Let's reflect!



- Do you agree that the examples shown in the video constitute instances of algorithmic bias?
- Which of the examples provided you think is the worst/most unfair?
- Do you think biometric authentication techniques used by law enforcement are reliable?



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