



Strokovna konferenca MUNERA 3

»Veščine na moji vseživljenjski karierni poti«

Laško, 12.12.2019



EVROPSKA UNIJA
EVROPSKI
SOCIALNI SKLAD
NALOŽBA V VAŠO PRIHODNOST



REPUBLIKA SLOVENIJA
MINISTRSTVO ZA IZOBRAŽEVANJE,
ZNANOST IN ŠPORT



AI in Education

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Photo CC-BY Martin Hamilton

Jisc

1. Education 4.0

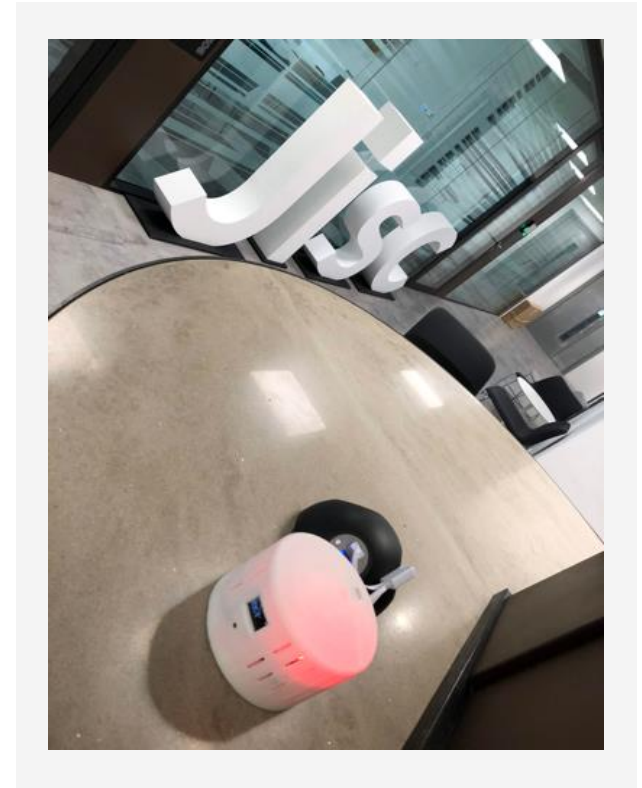
**2. AI in education
case studies**

3. What's next?



Who are Jisc?

- Not-for-profit company delivering digital infrastructure and services for research and education
- We started in the UK but now have more than 18 million users in over 50 countries
- We run Janet, the UK's national research and education network (like ARNES in Slovenia)
- We help universities and colleges exploit the potential technologies like artificial intelligence, augmented and virtual reality



1. Education 4.0

Industry 4.0 – all change!

“New technologies and approaches are merging the physical, digital, and biological worlds in ways that will fundamentally transform humankind”

“The extent to which that transformation is positive will depend on how we navigate the risks and opportunities that arise along the way”

“The changes are so profound that, from the perspective of human history, there has never been a time of greater promise or potential peril”

from *The Fourth Industrial Revolution*
by Klaus Schwab, founder of the World Economic Forum



(photo CC BY-NC OECD)

Introducing Education 4.0



It's time to reimagine education



2. AI in education case studies

AI in action – ADA at Bolton College

AI underpinning Education 4.0

Teaching transformed – how should human teachers focus their efforts if AI and other technologies become used to their full potential in the university experience

Personalised adaptive learning – an individualised approach that takes learner diversity, performance and behaviour into account

Assessment re-imagined – can AI, digital experiential learning and micro-credentials replace high stakes summative tests?

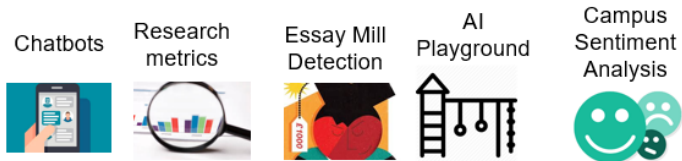
Intelligent digital and physical estates – which work together and are responsive to student journeys and interactions

Photo credit:
Natalie_4.o VR
experience
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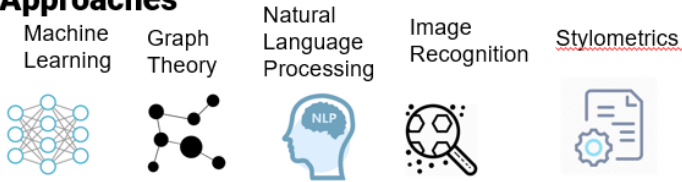


Jisc AI research and development

Current Projects



Approaches

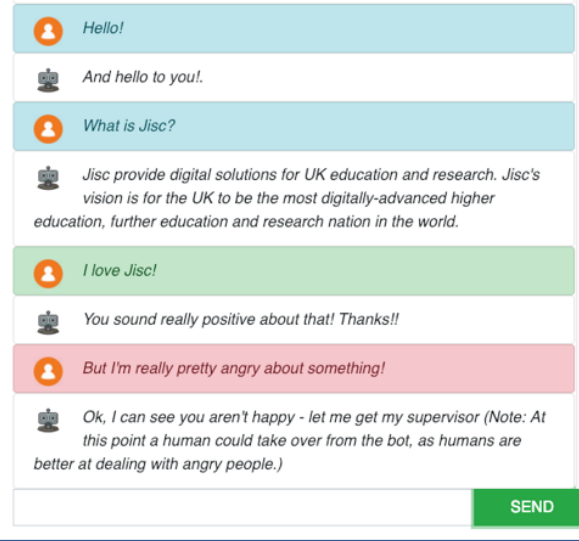


Technology



JiscBot – sentiment aware chatbot

The text is colour coded to show what we think the sentiment is - green (positive), blue (neutral) or red (negative)



3. What's next?

Near future industries

Asteroid mining

Drone engineering

DNA editing

Robot wrangling



Near future industries

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Near future industries – robot wrangling

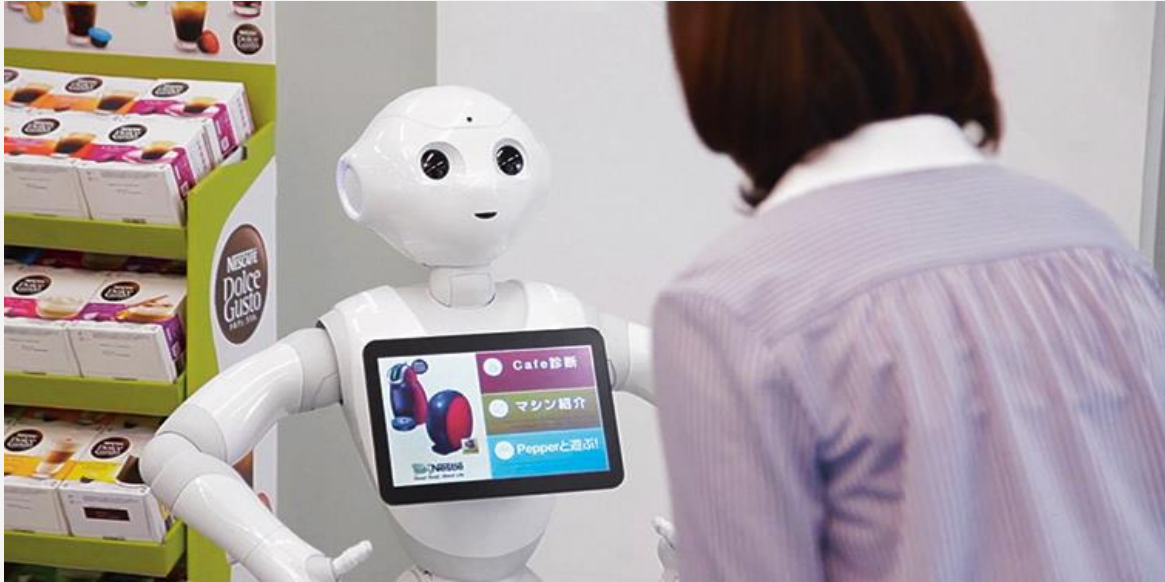


Photo CC BY-NC Flickr user nestle

- Pepper works in 140+ SoftBank stores in Japan
- Nestlé planning to introduce in 1000+ sales outlets

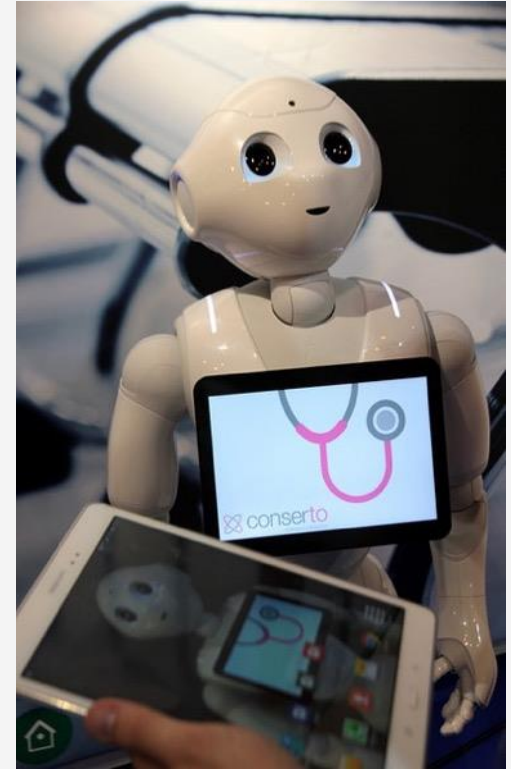
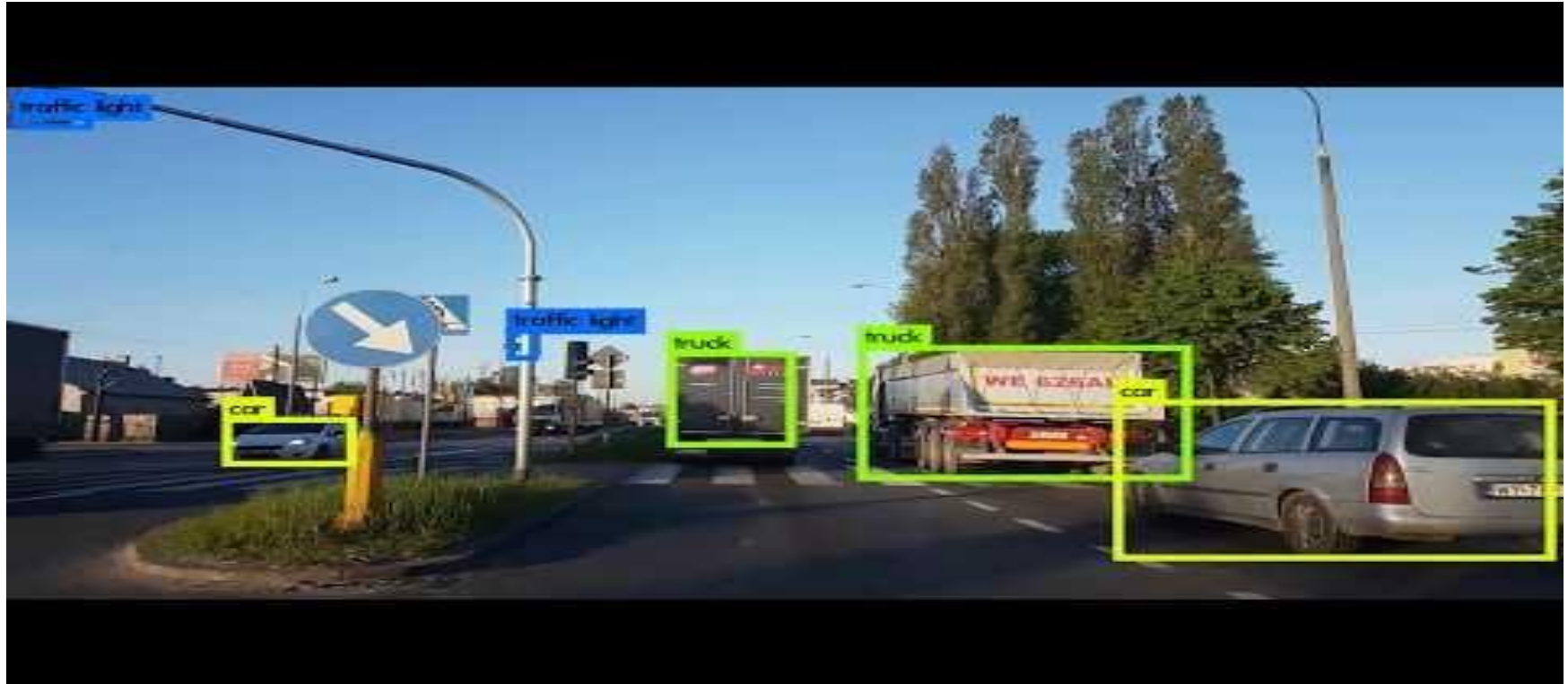


Photo CC BY-NC Flickr user feuillu

Near future industries – autonomous vehicles



Object detection using Darknet neural network, by Karol Majek

Conclusions

Conclusions

- AI is not magic, but if used carefully it can give you “super powers”
- Some AI technologies are already part of the apps and services we use every day
- AI for education is still in its infancy, but looks set to be a key part of Education 4.0
 - Know your risk appetite!
- AI skills are in high demand and command a premium in the labour market

Photo credit:
Natalie_4.o VR
experience
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Mr Shadow – song composed by Sony CSL Research Laboratory's AI

Many thanks!

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