#### ITM Bachelor 6. Sem. 9672 Seminar Arbeitswelt und Tourismus

Artificial Intelligence and Tourism Labour Market Development



### How can A.I. technology make a difference in the future job market?

- Technology lowers the cost of production by displacing human (labor) by robots and machines.
- The labour participation in the manufacturing sector already decreased in recent years in the USA by 25% in favour of robots, while the amount of production soared up by 70% in the last twenty years.
- With A.I. robots do not need to be programmed for each new task, they LEARN how to reprogram themselves.

# How can AI technology make a difference in the future job market?

Pepper The Robot works as a Receptionist in Japanese supermarkets.

George Clooney, who used to be the global face of Nespresso has been replaced by Pepper the Robot, a chatty android robot. Pepper asks the customer "How do you like your coffee?".

Pepper has been distributed to 1,000 stores and is able to understand 80% of the conversation. The cost of Pepper is around 1,250 €, while George Clooney got paid 40 Million US\$.



Pepper's main task is collecting information regarding the customers' preference in respect to the taste and quality of coffee.

Source: The Guardian Dec 1, 2014

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- Nao the Robot is employed as a Receptionist by the Mitsubishi Bank of Tokyo.
- Nao, a 58 cm robot equipped by sensors is able to answer the customers' Inquiries in English, Japanese, and Chinese.
- Furthermore, an important role waits for Nao the Robot in Tokyo 2020 Olympics. Source: IBTIMES

Nadia, an A.I. programme, works for an Australian bank, "she" can recognize emotions on the face of the user (if a webcam is used) and react to them.





### How can AI technology make a difference in the future job market?

The hot question, can A.I. replace humans completely in the job market?

Common answer until recently: No, they are limited to their algorithms meaning that they are not able to cope with unexpected situations, they rather enter into *error* status and stop operating.

They can learn how to play Chess (limited number of moves, clear hierarchies), but not Go (unlimited number of moves, no clear hierarchy)

However, thanks to Deep Learning, A.I. learned how to best every human at Go.

Only advantage (some) humans still have: Higher level of Creativity.

#### How can A.I. reshape the labour market in the tourism industry?



#### What do you think?