



State of the art and future of artificial intelligence

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Research commissioned by Policy Department A, in cooperation with IMCO Secretariat, on request of the Committee on the Internal Market and Consumer Protection.



What is AI



Umbrella term covering:

Computer vision

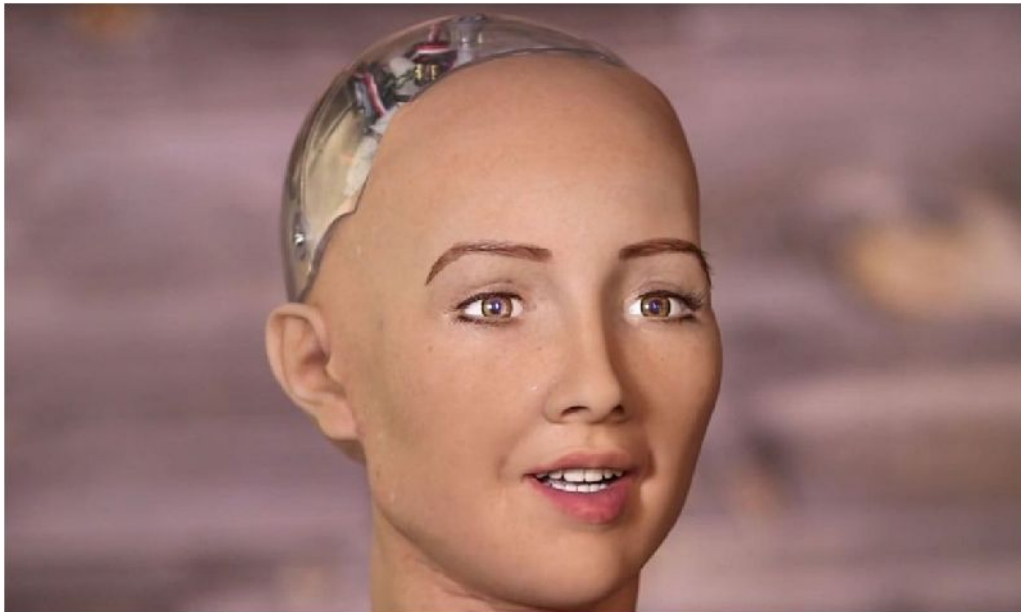
Natural language processing

Virtual Assistants

Robotic process automation

Advanced machine learning

Most important events in AI



Most important events in AI



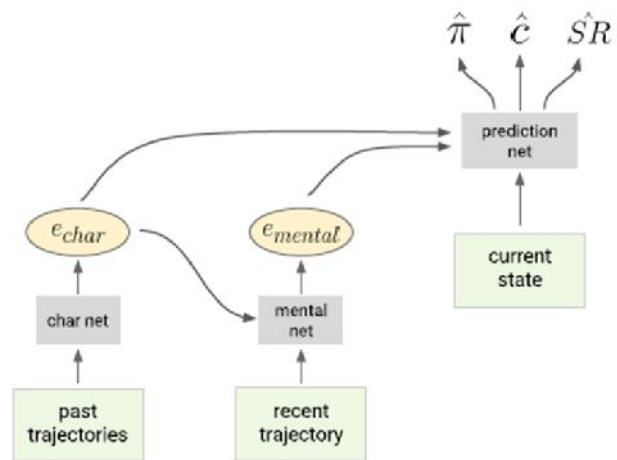
What about other robots?

Most important events in AI



Reaching beyond
human cognitive
horizon

Most important events in AI



ToMNet by Deepmind.



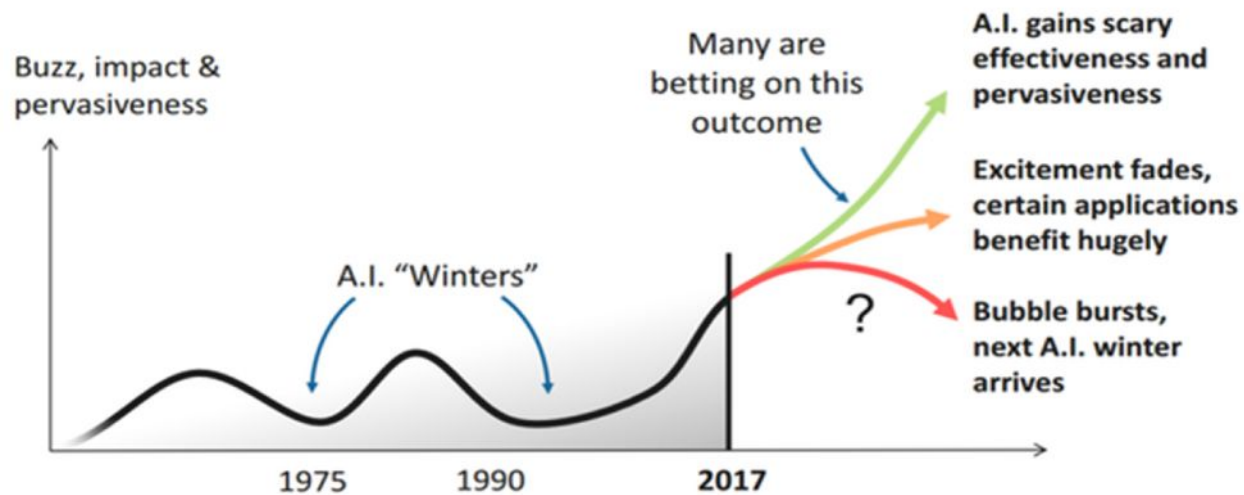
Is this really NEW?

Not exactly.

Warren McCulloch and Walter Pitts created a computational model for neural networks based on mathematics and algorithms called threshold logic in 1943.

AI summers and winters

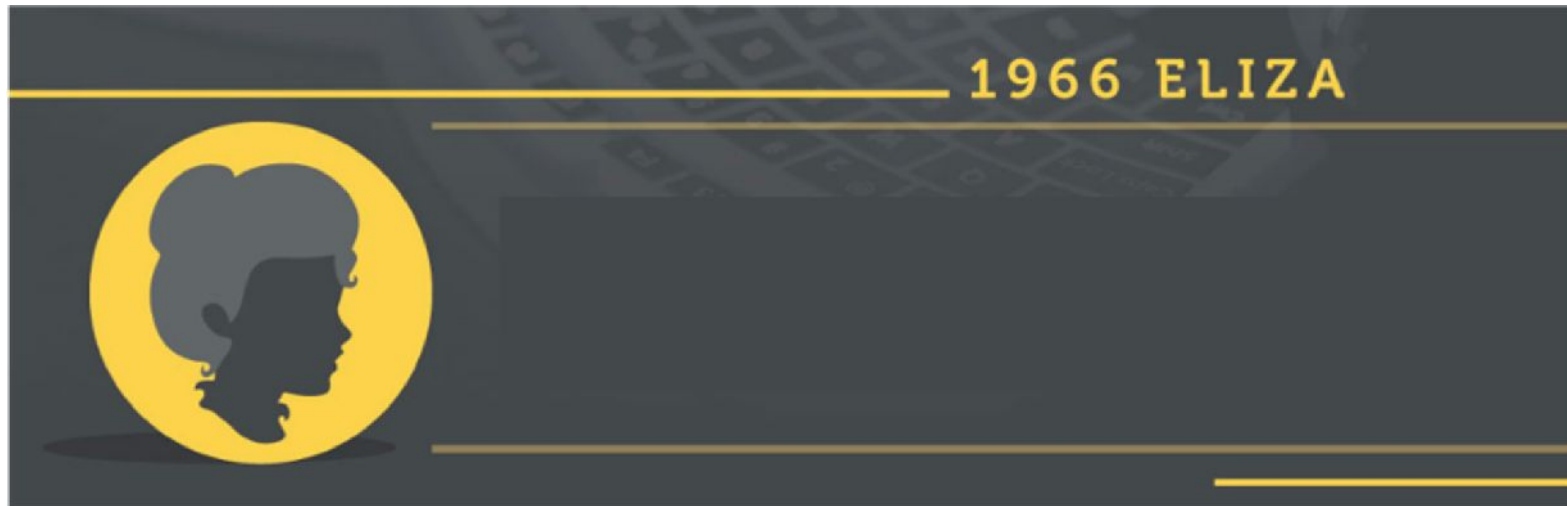
AI is enjoying significant hype and investment





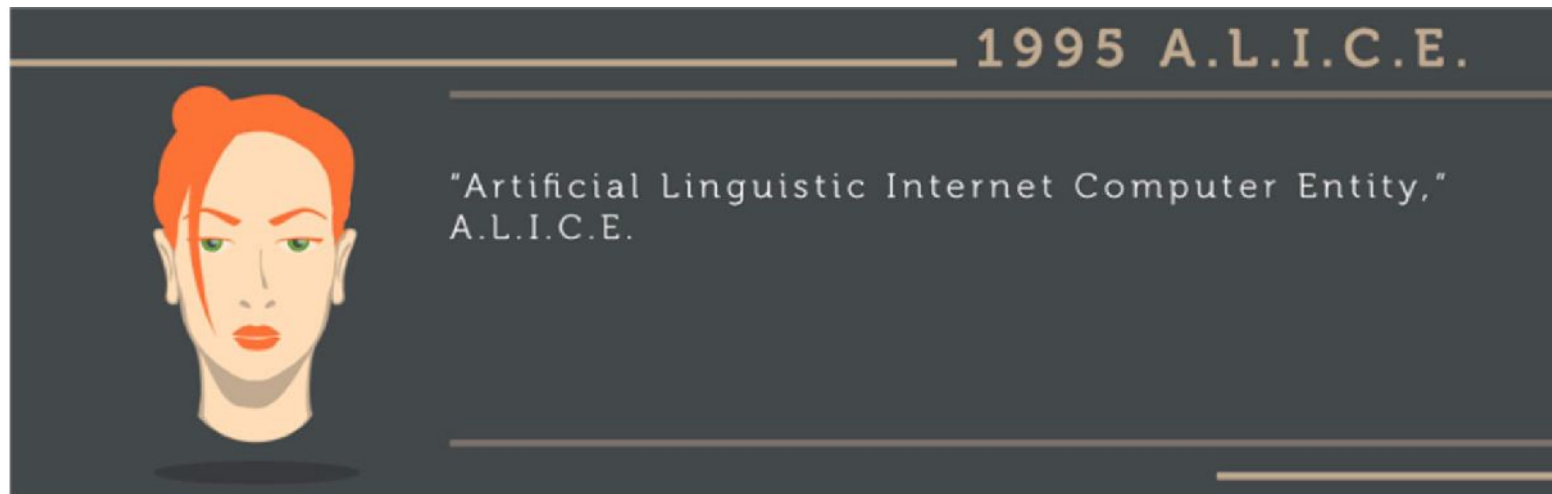
Our research work

CHATBOT EVOLUTION:



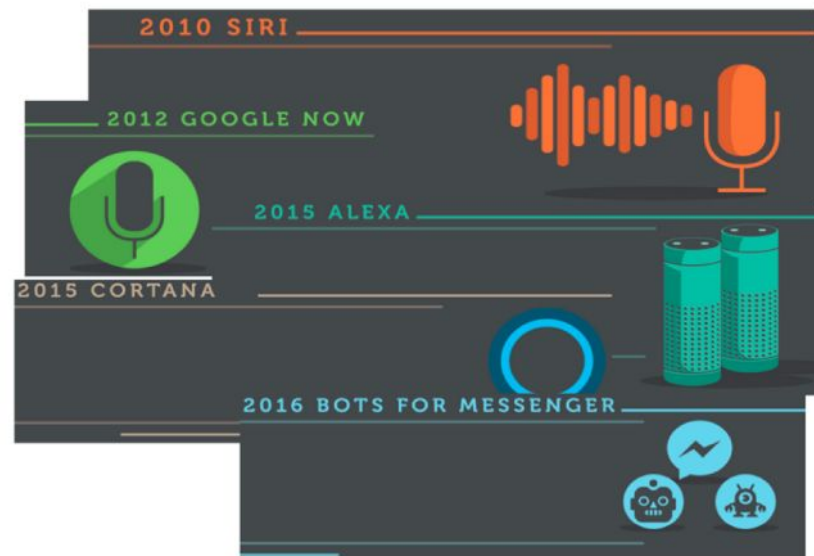
Our research work

CHATBOT EVOLUTION:



Our research work

CHATBOT EVOLUTION





Our research work

GOOGLE DUPLEX

A DEEP LEARNING BASED
VIRTUAL ASSISTANT



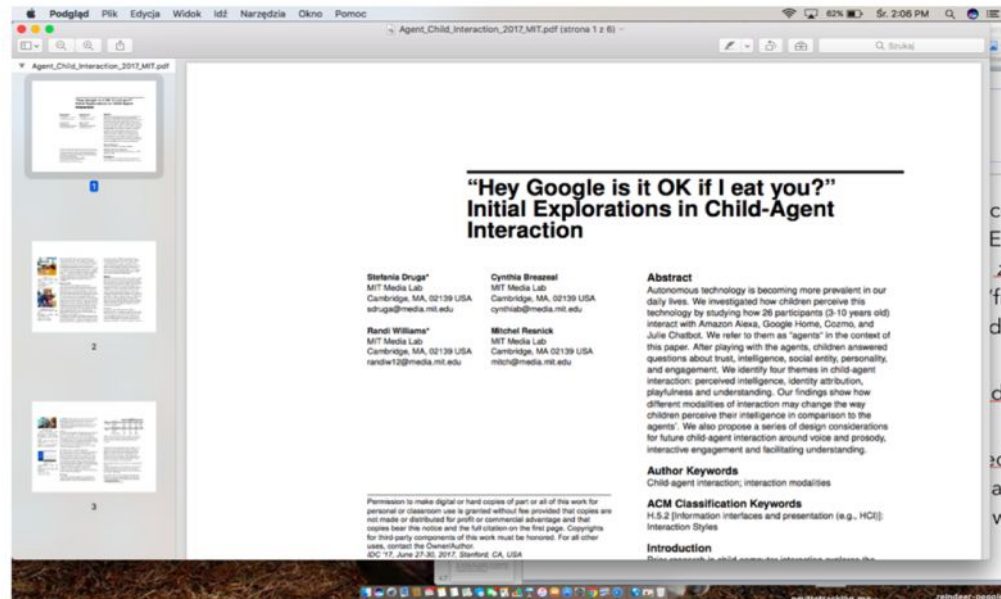
Our research work

TAY BOT BY MICROSOFT

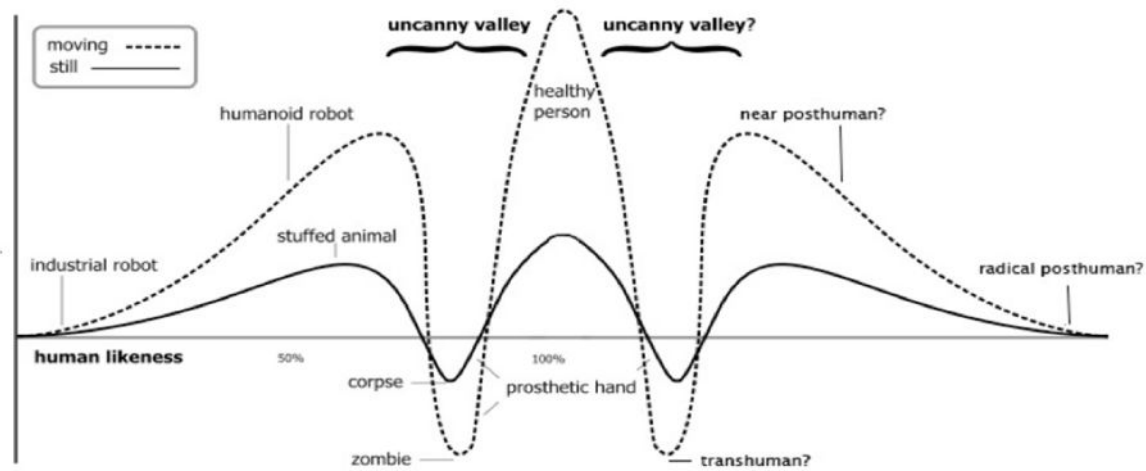
Tay bot (2016)



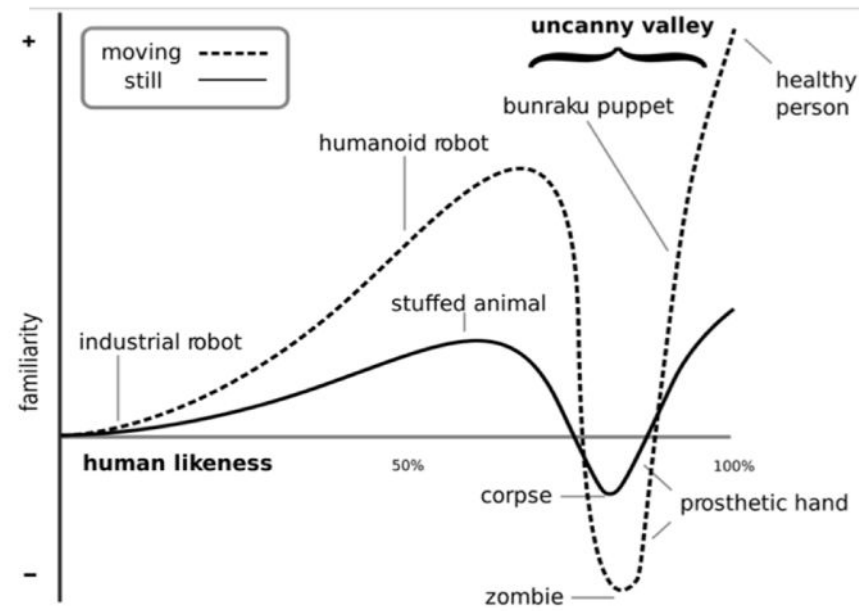
Our research work



THE UNCANNY VALLEY



THE UNCANNY VALLEY



Wirtualna Asystentka

Ola:

Witaj na stronie Akademii Leona Koźmińskiego!

Jestem Wirtualną Asystentką i chętnie odpowiem na Twoje pytania dotyczące rekrutacji oraz korzystania przez studentów z systemów informatycznych ALK.

- Rekrutacja
- Rekrutacja online
- Jak zalogować się do serwisu Wirtualna Uczelnia?

Wpisz swoje pytanie...

✉ Prośba o kontakt

powered by IntelliWISE

Wirtualna Asystentka



Ola

Wirtualna Asystentka

Ola:

Witaj na stronie Akademii Leona Koźmińskiego!

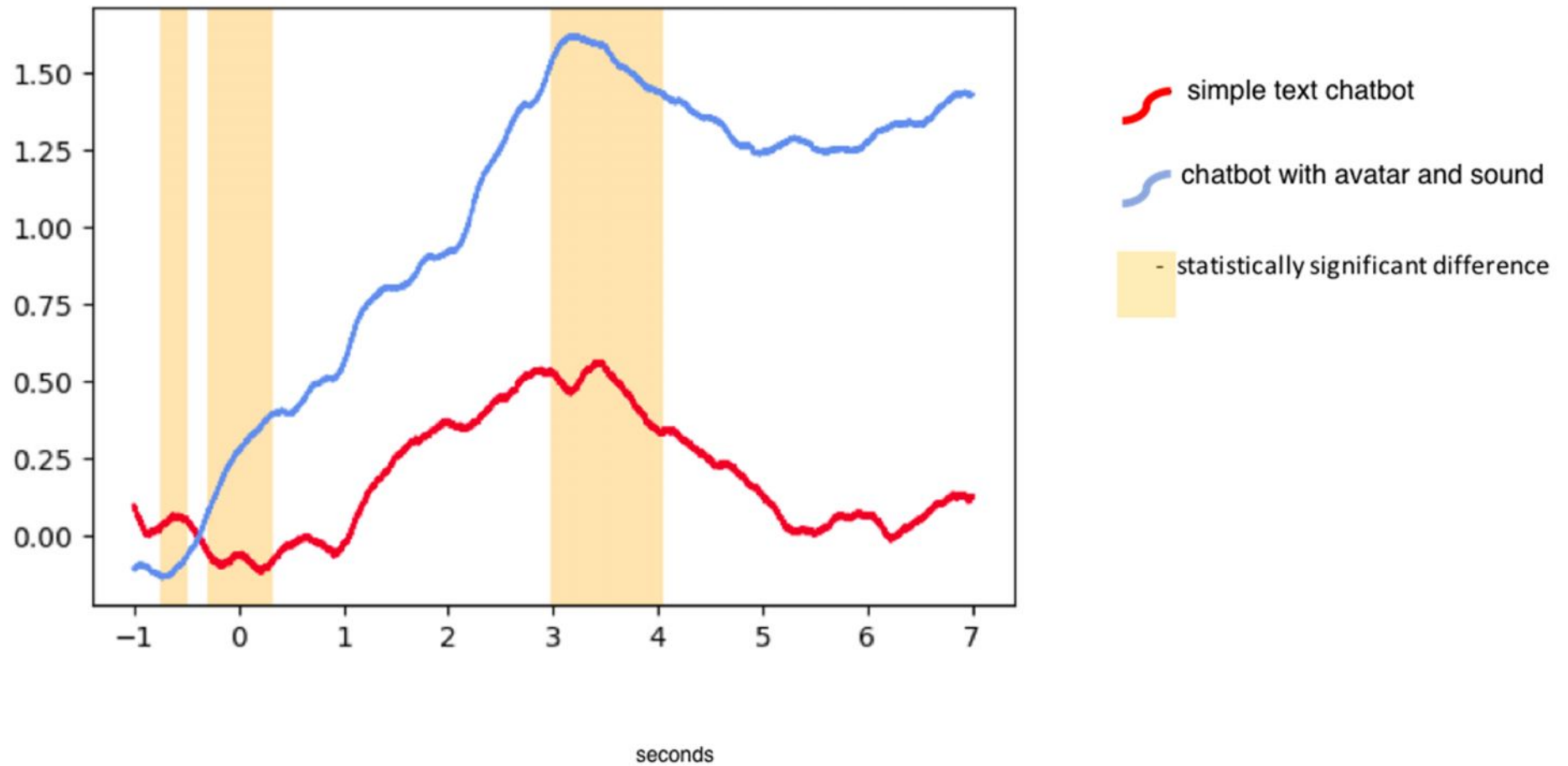
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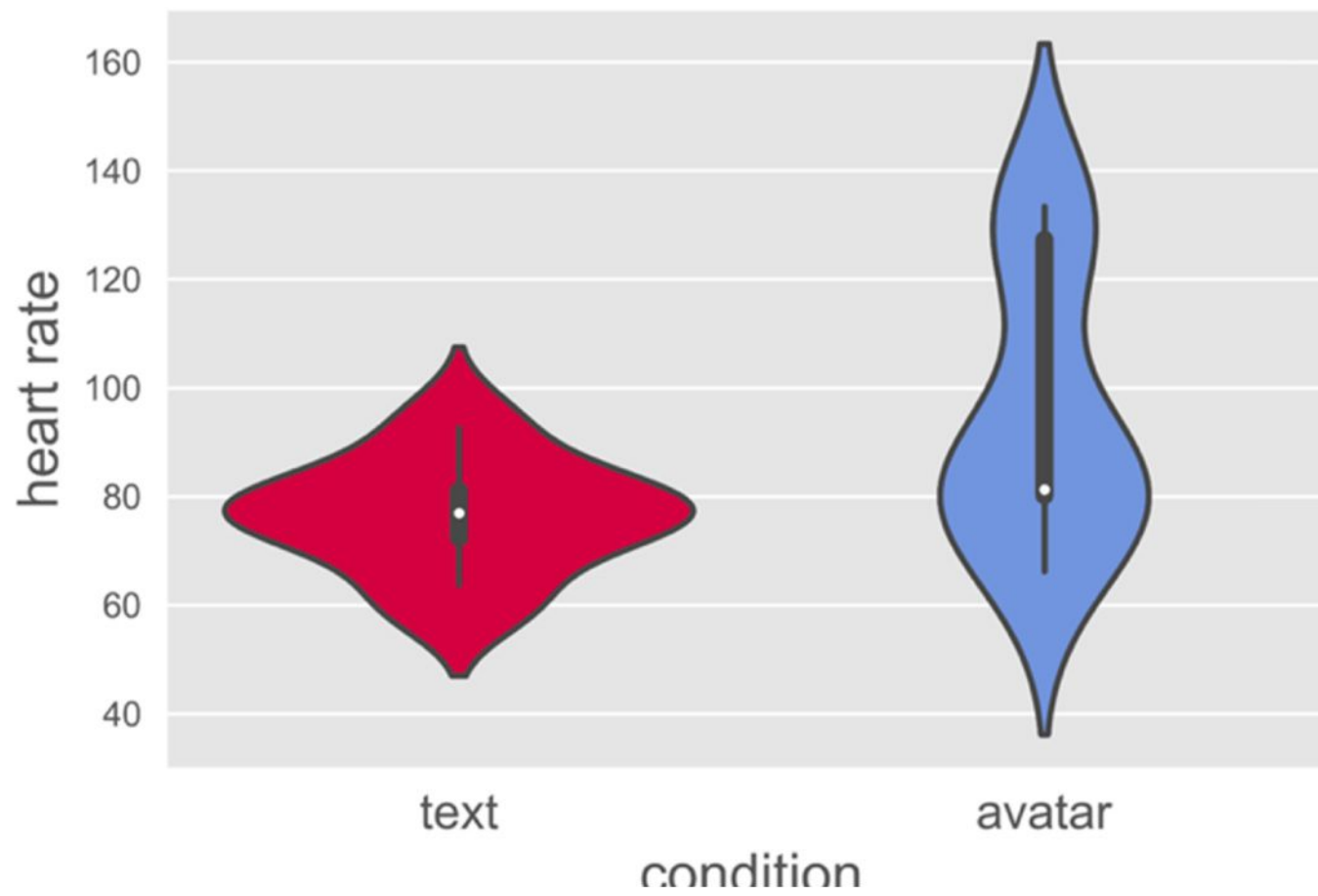
Wpisz swoje pytanie...

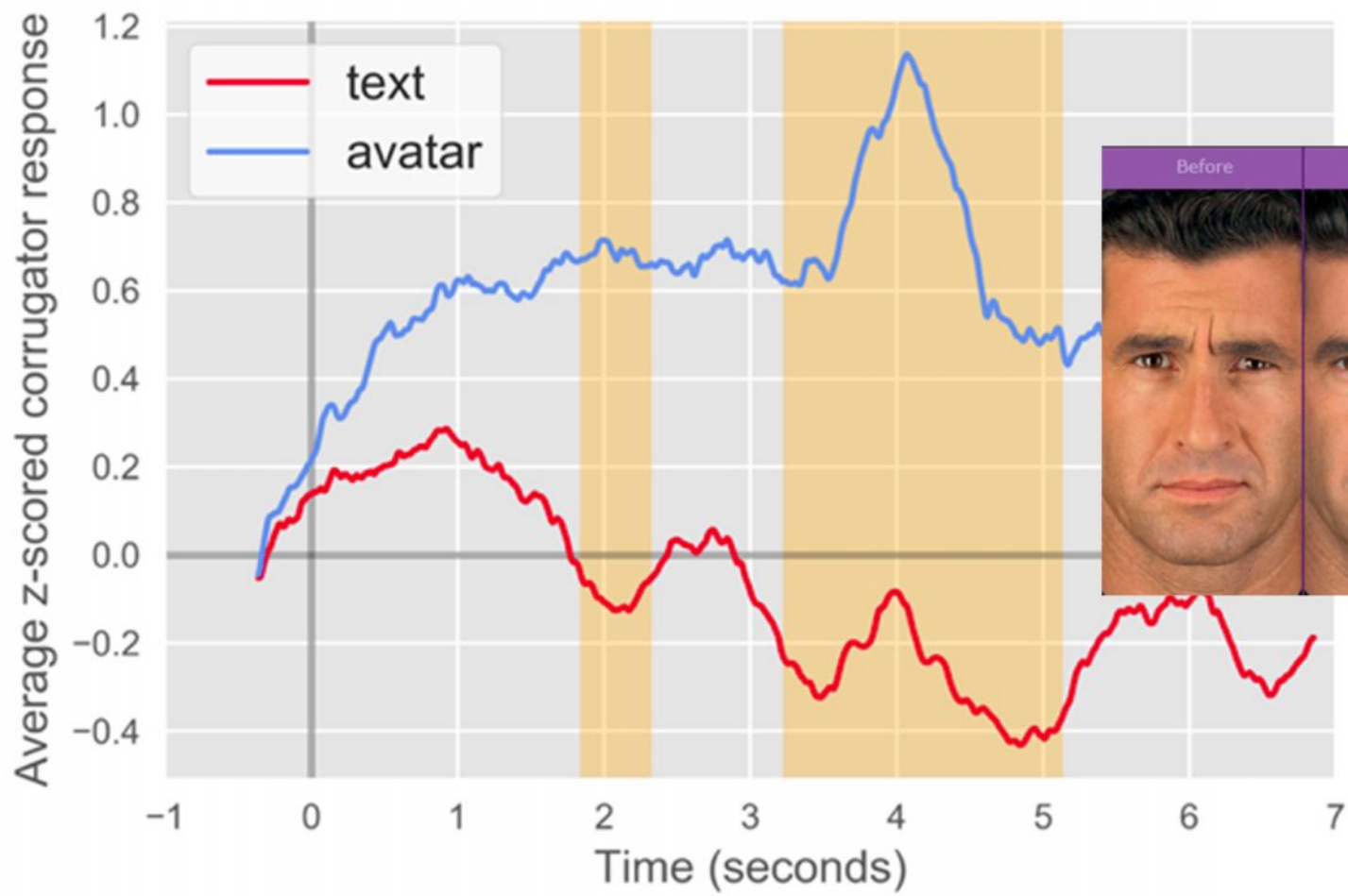
✉ Prośba o kontakt

powered by IntelliWISE

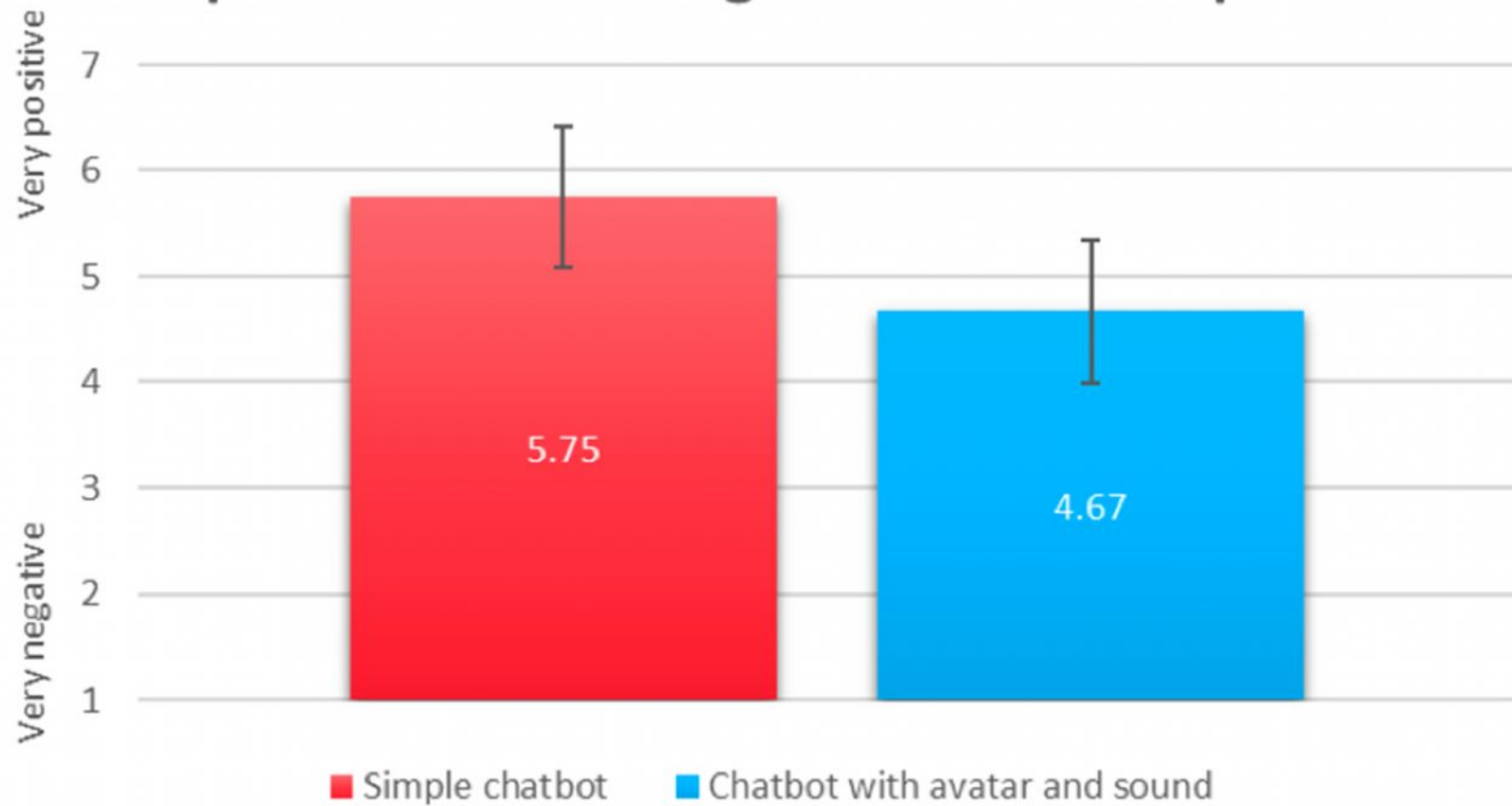
Average standardized EDA
signal



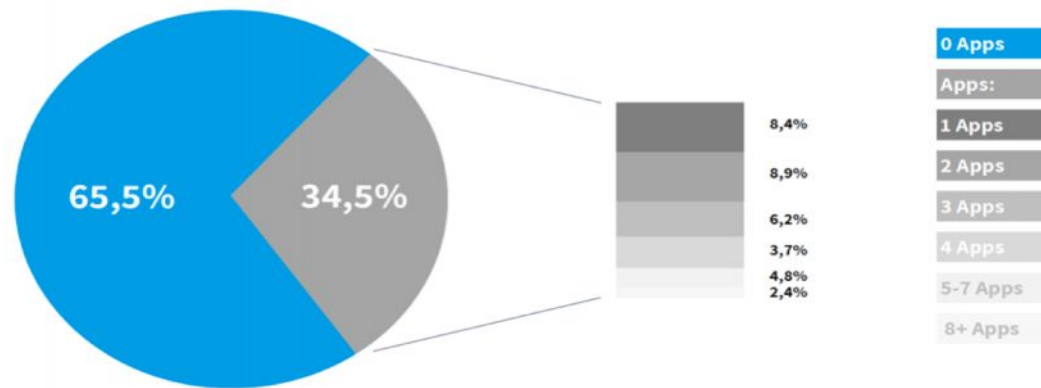




Opinion about using robots at workplace



📱 Millennials don't download apps anymore



Interface Evolution



Desktop



App

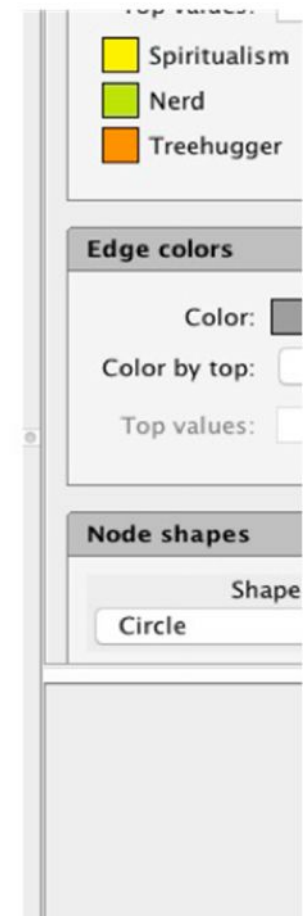
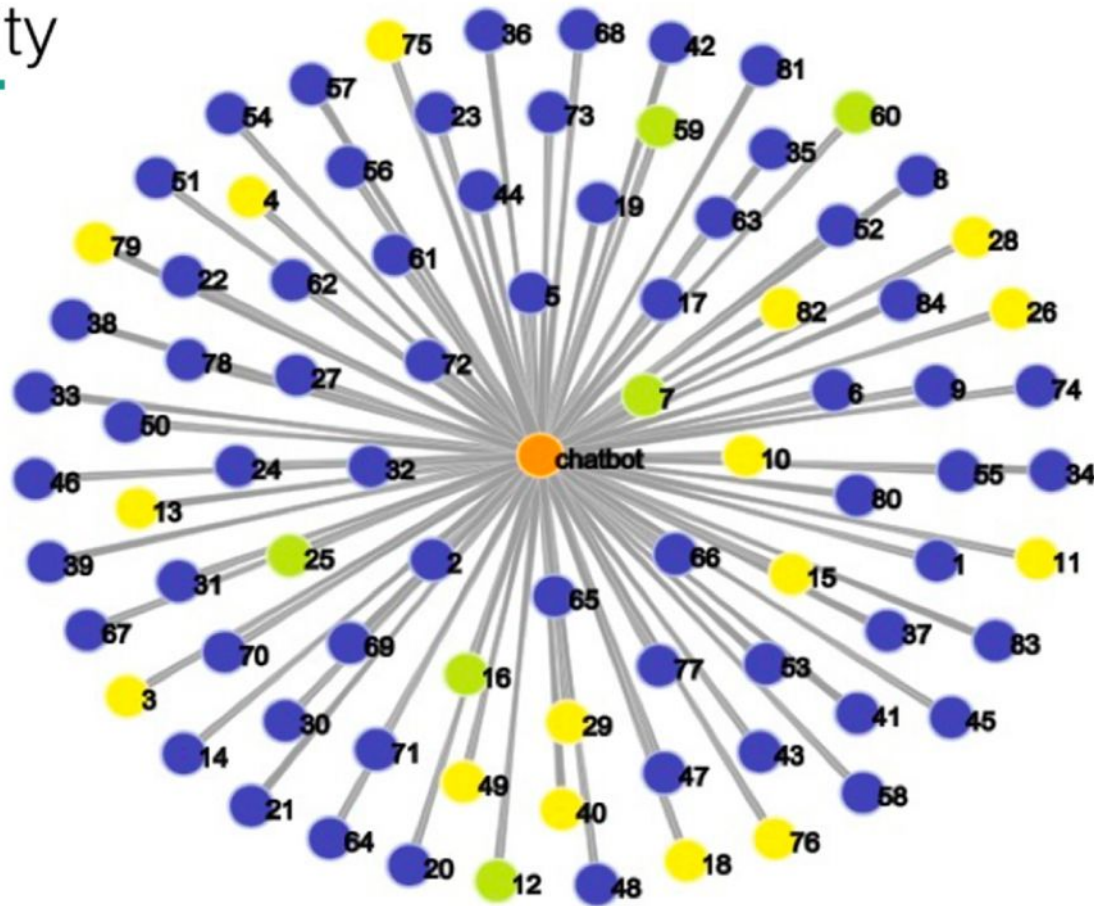


Chatbot

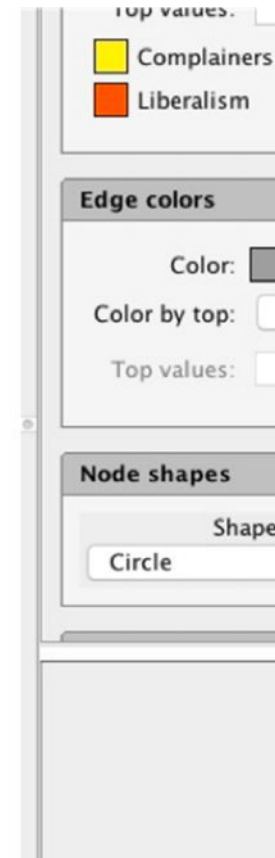
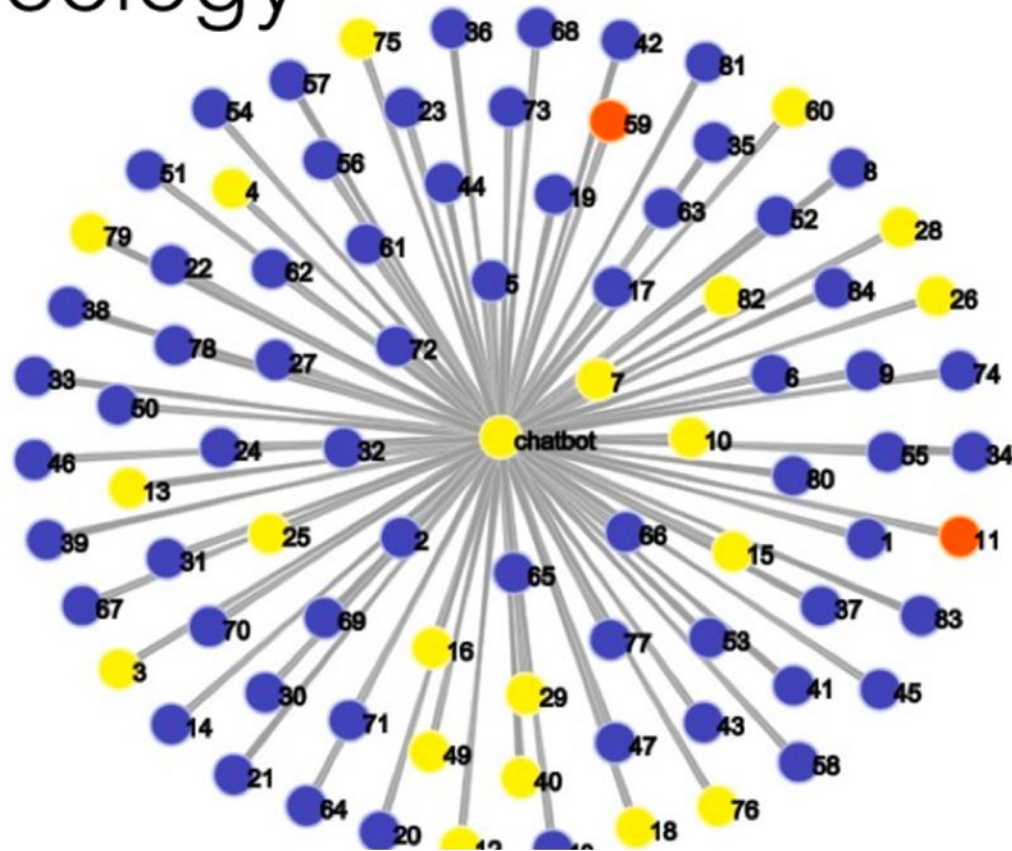
Tribes



By Alternative Reality



By Ideology





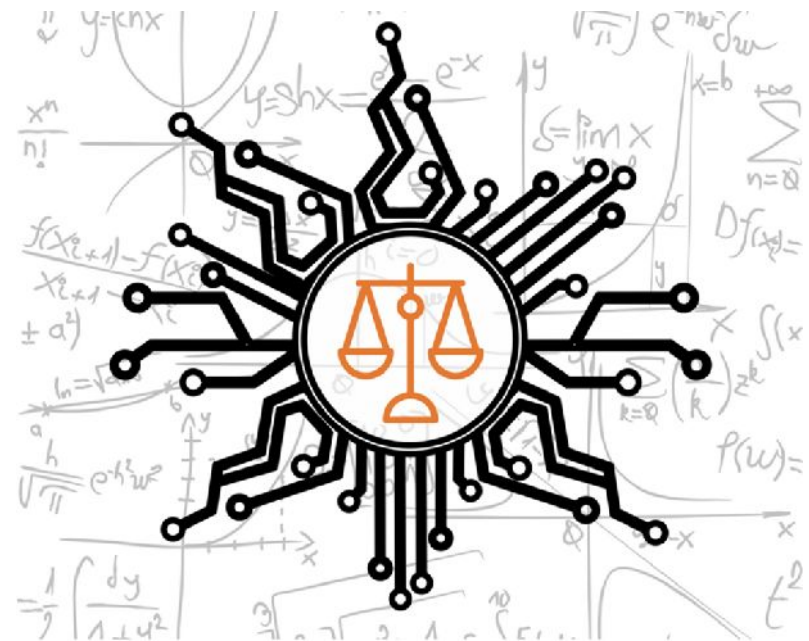
Main current challenges

Explainability - a
technical challenge



Main current challenges

Algorithmic bias -
technical/ societal
challenge



Main current challenges

Transparency in usage -
societal/political/legal
challenge



Main current challenges

Applications -
societal/political/legal
challenge





Questions? Comments?

Thank you!