



# Artificial Intelligence in the European Union

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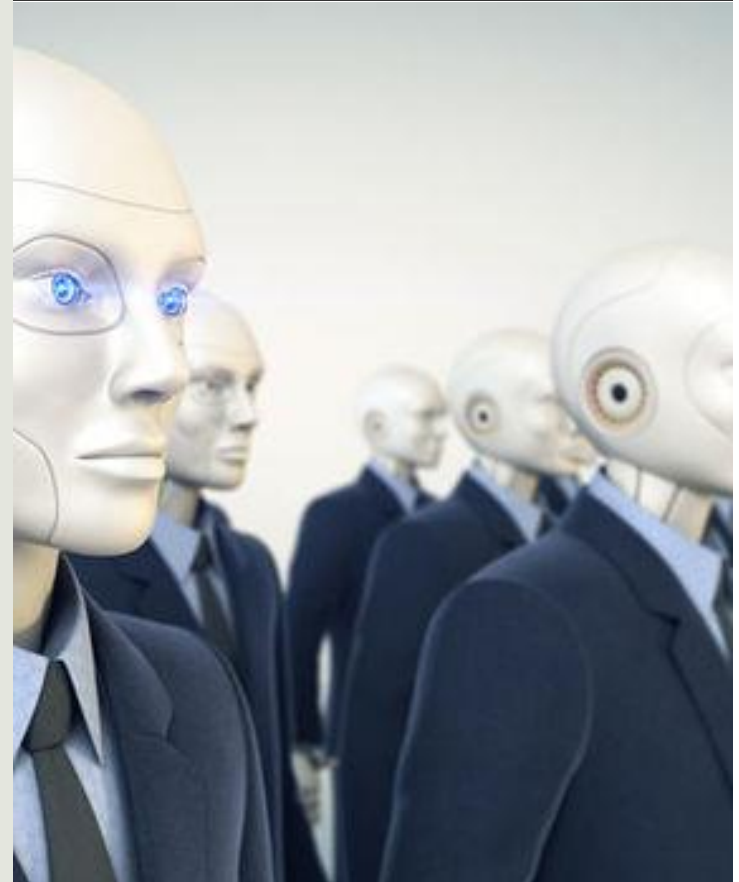
Tallinn University of Technology / Guardtime

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- “Artificial intelligence (AI) refers to systems that display intelligent behaviour by analysing their environment and taking actions – with some degree of autonomy – to achieve specific goals” (AI for EU, COM(2018) 237)

# Why focus on AI?

- Growth in computing power + amount and availability of data + progress of algorithms = **most strategic technologies of the 21<sup>st</sup> century**
- AI is transforming our societies, e.g.
  - Treating chronic diseases
  - Reducing fatality in traffic accidents
  - Fighting climate change
  - Anticipating cybersecurity threats



# EU & AI

- April 2018: 24 MSs and Norway signed a declaration of cooperation
- Coordinated plan by end of 2018
- Lagging behind in both public and private investment in AI
  - R&D 4-5 billion EUR in 2017

# Why EU's ambition

- EU wants to be a global leader in AI development
- World class researchers and labs
- Strong industry, robotics
- Digital Single Market common rules
- Large amounts of data from industrial, research and public sector
  - Re-use of data

# EU goals (1)

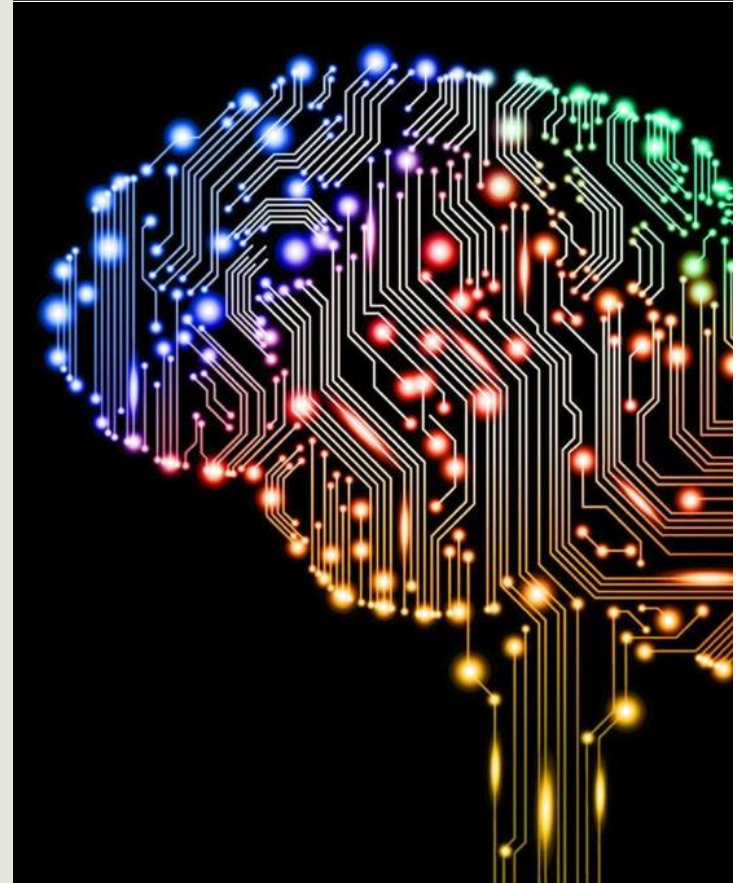
- Boost the EU technological and industrial capacity and AI uptake across the economy
  - Aiming for 20 billion EUR per year
  - Making more data available
- Maximise the impact of investment
  - Support research and innovation from the lab to the market
  - Testing and experimentation, regulatory sandboxes
- Available for all
  - Bring AI to SME and potential users

# EU goals (2)

- Create synergies, encourage cooperation
  - Support research excellence centres
  - Digital Innovation Hubs
  - AI-on-demand for sharing best practices
  - Pan-EU coordinated plan by end of 2018
  - European AI Alliance to be created
  - 52 experts in a High-Level Expert Group on Artificial Intelligence
- Prepare for socio-economic changes
  - Transformation of the jobs market
  - Education
  - Focus education on AI
- Ensure an appropriate ethical and legal framework

# Legal challenges (1)

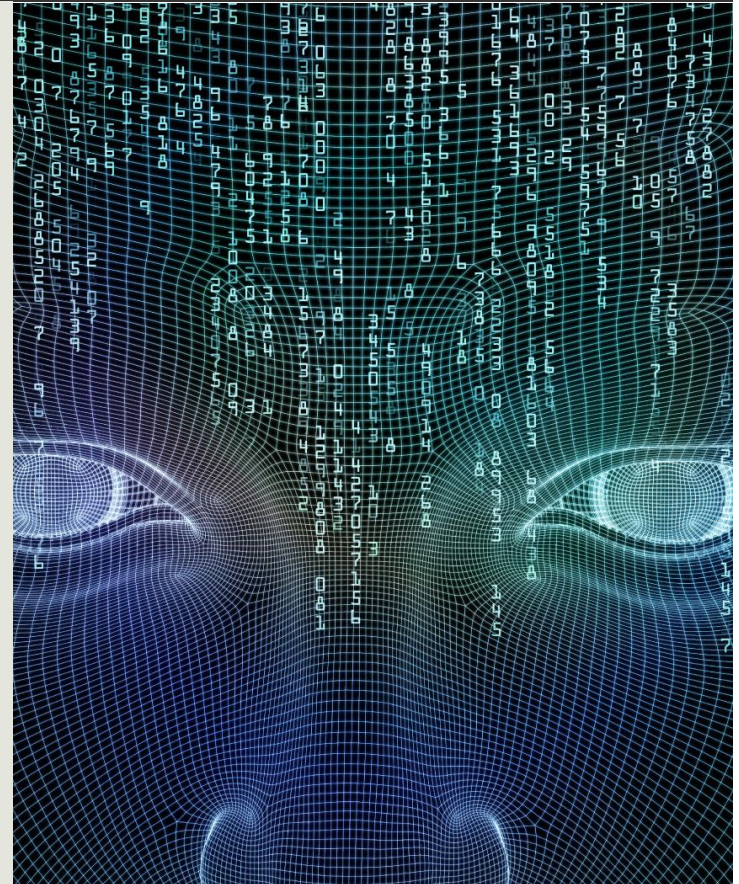
- ❑ Needed to build trust and social acceptance of these technologies
- ❑ Innovation & fundamental rights
- ❑ Protection of personal data
  - ❑ GDPR: right to be provided meaningful information/ explanation about the logic involved in decision-making
- ❑ Safety and product liability
- ❑ Potentially biased decision-making





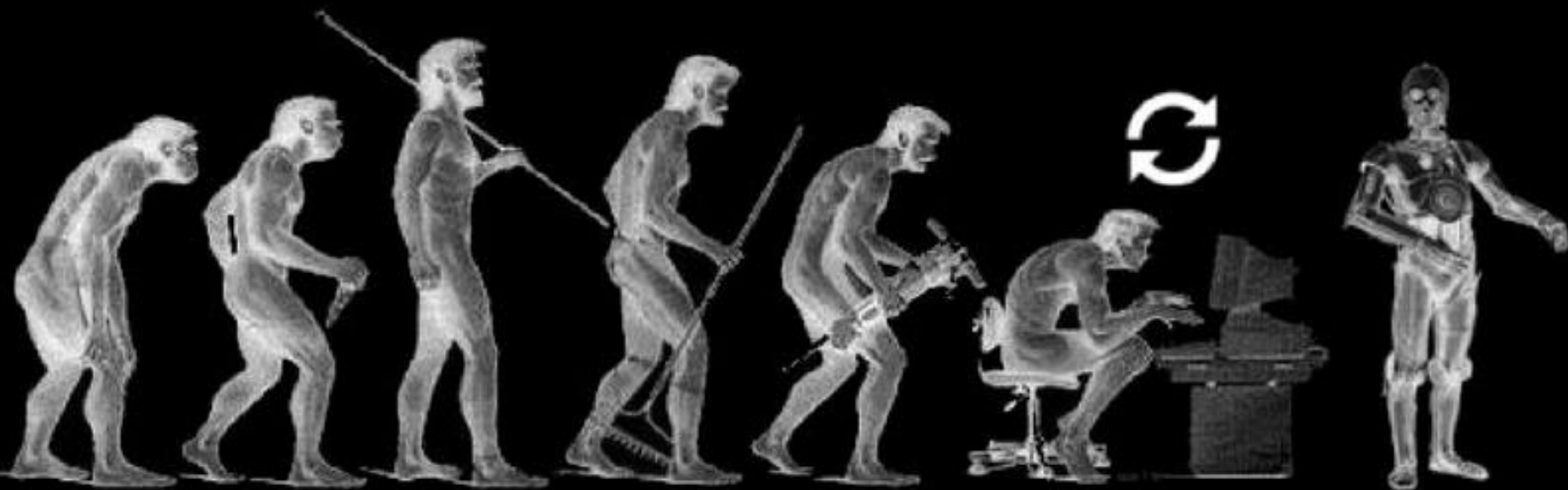
# Legal challenges (2)

- ❑ Safety and product liability
  - ❑ EU safety framework, standardisation
  - ❑ Assessment taking place, guidance document and report by mid-2019
- ❑ Potentially biased decision-making



# Updating regulation

- Directive on public information sharing
- Recommendation on access to and preservation of scientific data
- Proposals such as ePrivacy regulation, free flow of non-personal data, Cybersecurity Act
- Ethics guidelines, draft by 2018
- MSs encouraged to have an AI strategy (France, Germany, Finland)



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