

A photograph of a modern, multi-story building with a glass facade and a red facade, illuminated at night. The building is reflected in a body of water in the foreground. The sky is a deep blue. The text "The TU/e contribution to European Sovereignty in ADR" is overlaid in white on a red semi-transparent background.

The TU/e contribution to European Sovereignty in ADR

November 5, 2024
Robert-Jan Smits, President TU/e

TU/e: the beating heart of the Brainport innovation ecosystem

Eindhoven University of Technology

- 13.500 students and 4.600 staff
- 80 % of new engineers in Brainport come from TU/e
- Worldwide number 1 in cooperation with industry
- Strong in Semicon, AI, Data and Robotics
- Driver of transformation



Education



Research



Valorization

TU/e: the fourth generation university (4GU)

Elsevier report 2024

Towards the 4th generation university

The transformative role of TU/e in
delivering innovation and impact in the
Eindhoven region



TU/e strength in semicon

AI, data and robotics all run on semicon

- Brainport is the heart of The Netherlands semicon ecosystem
- TU/e is pivotal in this ecosystem
- TU/e employs 700 semicon researchers
- TU/e recently closed **largest ever research deal** with ASML
- Substantial growth expected (Beethoven)

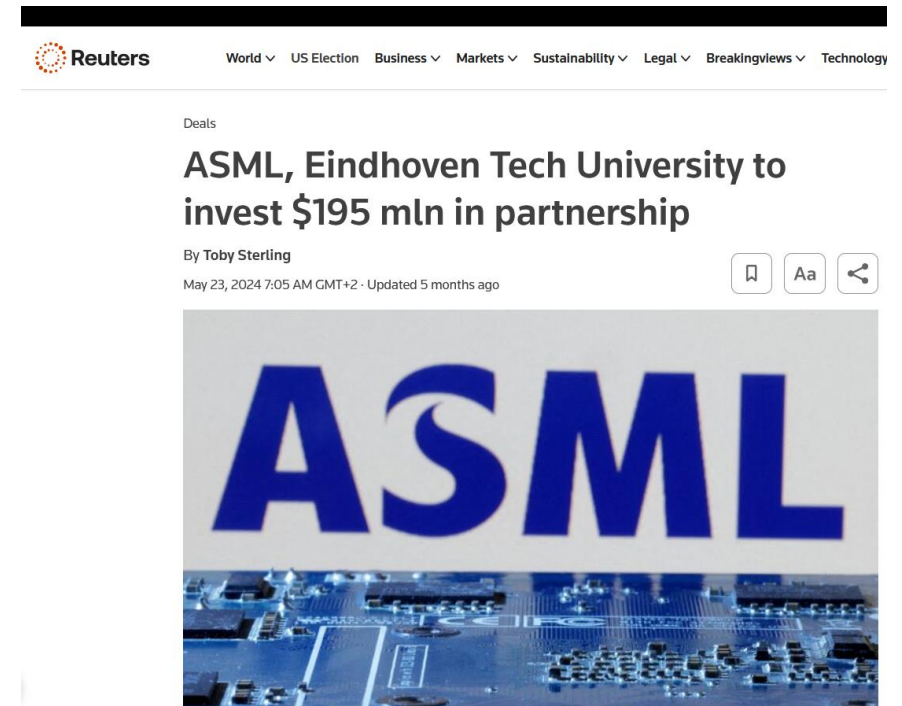


Illustration of the TU/e strength in **robotics**

TU/e robot football team Tech United

- **Fully autonomous** football robots
- 8-time **world champion**
- Strength in robotics and real-world AI
- Knowledge is transferred to industrial and care/service robots



The Eindhoven AI Systems Institute

- 1,200 research staff and PhD candidates in AI
- Human centered 'AI for the real world'
- Strong collaboration with industry
- Proud sponsor of the ADR Forum!

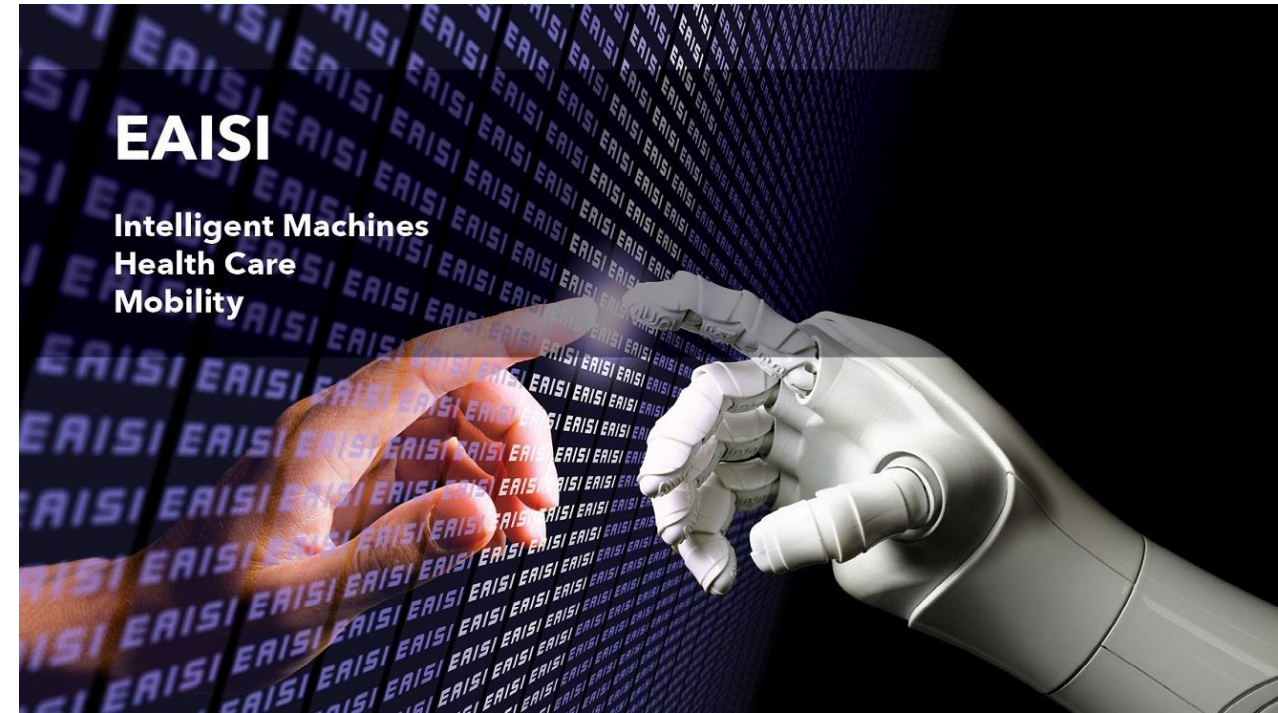


Illustration of the TU/e strength in data science

Wil van der Aalst / Celonis

- Professor Wil van der Aalst created *Process Mining* at TU/e
- His science is the basis of Celonis, one of Europe's rare unicorns
- Celonis is currently valued **at US\$ 13bn**
- Van der Aalst is Chief Scientist at Celonis

ERP TODAY NEWS

AUGUST 24, 2022

Celonis secures \$1bn at \$13bn valuation to tackle supply chain challenges



But...

Lack of European venture capital

- Celonis raised 1,3bn in first four finance rounds
- 10 investors
- 9 from the US, 1 from the UK
- Issue also raised in Draghi report

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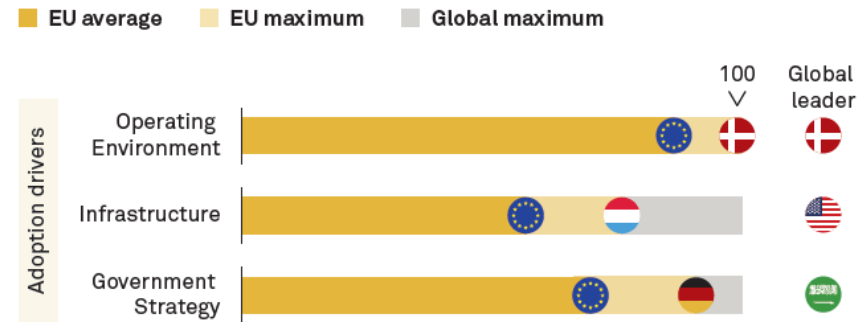


Google report on AI in Europe

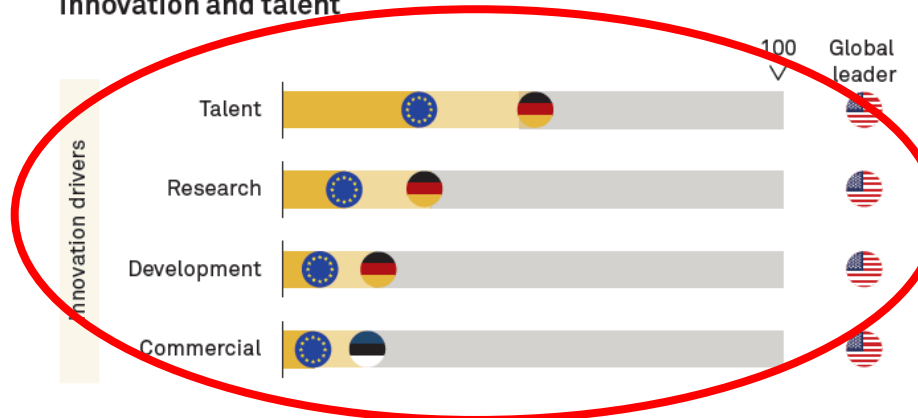


The EU performs well on basic AI adoption drivers but lags behind the US on AI infrastructure ...

The EU's AI capacity according to the Tortoise Global AI Index
Global AI Index, score out of 100 (global leader)



... and is significantly behind the US on AI-related R&D, innovation and talent



Increase investments in universities and their start-ups!



RoboCup final Bordeaux 2023



A photograph of a modern, multi-story building with a glass facade and a red lower section, illuminated at night. The building is reflected in a body of water in the foreground. A semi-transparent red banner is overlaid across the middle of the image, containing the text "Thank you for your attention." in white. In the background, other buildings and a tall, thin tower are visible under a dark blue sky.

Thank you for your attention.