

Al, Data and Robotics Association

Open Consultation on Metrology for Digital Transformation

Juha Röning, November 9th 2021











TI AI D

The AI, Data and Robotics partnership (2021-2030)

Co-programmed partnerships in Horizon Europe



European CommissionPublic Side

Public Private Partnership

ADR
Association
Private Side



In the MOU signed between Adra and the European Commission, it was agreed to design a number of programs for European companies and raise 2.6 billion euros to fund these:

- Up to 1.3 billion euros of public investment by the European Commission (through Horizon Europe)
- Up to 1.3 billion euros of private investment through Adra for the period 2021 2030



General Objectives



Secure **European's sovereignty over AI, Data and Robotics** technologies and knowhow

Establish European leadership in Al, Data and Robotics technologies with high socio-economic impact





Reinforce a **strong and global competitive position of Europe** in Al, Data and Robotics



Fields of Action

for AI, Data and Robotics.

European focal point

Building a coherent infrastructure

to stimulate deployment and adoption, build up an effective innovation ecosystem and drive excellent research.



Federate and cohere

the communities that underpin European Al, Data and Robotics.

and orient public funding to address the key challenges.

Stimulate private investment Collaboration within the Partnership

will deliver Europe's vision for a human centric and trustworthy use of AI, Data and Robotics.



_

Adra - The AI, Data, and Robotics Association

Overview

What?

Adra (AI, Data and Robotics Association, asbl) is a membership association that establishes the private side of the AI, Data and Robotics Partnership in Horizon Europe.

Adra and the partnership pursue a common and shared vision to boost European competitiveness, societal wellbeing and environmental aspects to lead the world in researching, developing and deploying valuedriven trustworthy AI, Data and Robotics based on fundamental European rights, principles and values.

Who?

Founding members: BDVA, CLAIRE, ELLIS, EurAl

and euRobotics

Elected president: Marina Bill (ABB)











When?

May 21, 2021 Foundation

June 23, 2021 Memorandum of Understanding with the EC

November 25, 2021 Launch Event



Founding Board

Vice Presidents Caj Södergård Morten Irgens Clemens Wasner Thomas Hahn **Renaud Champion** Stefano Stramigioli Anne Rich Walker Emanuela Girardi **Arnold Smeulders** Laure Le Bars Milan Petkovic Fredrik Heintz Juha Röning tbd **Edward Curry** Henk-Jan Vink Jon Agirre Ibarbia Robotics Data





Launch Event





25.11.2021



10:00 - 13:00 (cet)



Keynotes, panel discussions and more... Stay tuned for a lively event involving high-level speakers from EC, industry, research and policy.



Live broadcast



Free Registration





Get in touch





jozef.geurts@inria.fr

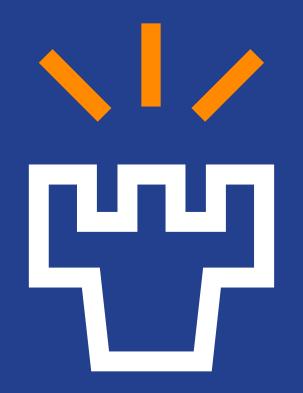


www.linkedin.com/company/adr-association



adr-association.eu





UNIVERSITY OF OULU

Building AI for industry and healthcare

Juha Röning, Jaakko, Suutala, Satu Tamminen, Pekka Siirtola University of Oulu / BISG / DataAl





Why AI, why now?

Data

- Traditional databases
- Social media
- Real-time location data
- Open data

People

- Skills to use data
- Data literacy
- Training

Process

- Data-driven decision making
- Data-driven culture in the organization

Technology

- Easy to access
- Easy to use
- Flexible architectures



Responsible AI

If you torture the data long enough, it will confess to anything.

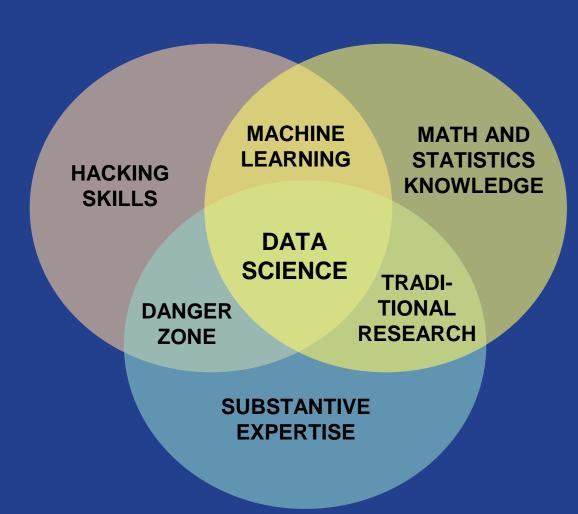


Ronald Coase,
Nobel Prize winning economist





Data literacy



- Ability to read, understand, create, and communicate data as information
- Part of data-driven culture
- To be able to use data in every-day activities
- To be able to use data effectively and responsively



Al and its requirements



DATA

- Infrastructure for data collection and storage
- Data quality (errors, anomalies/outliers, missing data)
- Data integration from different sources (data types, synchronization)
- Privacy and safety

MODELS

- Connections to online and history data
- Finding information in the data
- Presenting the information
- Model training for predictions (static or continual)
- Understandability of results (transparency to black-box)

DOMAIN KNOWLEDGE

- Iterative data collection and model development
- Data and domain understanding
- Collaboration in model understandability improvement

University of Oulu



Contact us!

https://www.oulu.fi/en/biomimetics-and-intelligent-systems-group

Juha.Roning@oulu.fi

Jaakko.Suutala@oulu.fi

Satu.Tamminen@oulu.fi

Pekka.Siirtola@oulu.fi

1/9/2021 Replace footertext if needed University of Out