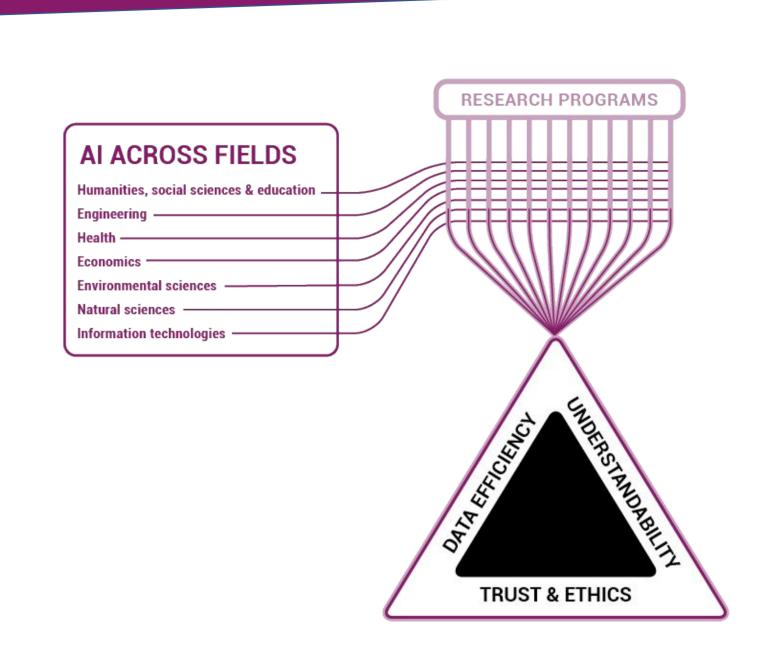


## AI in society (Research Program R7)

FCAI Research Program R7 focuses on social and ethical dimensions of AI. It studies both the preconditions for trustworthy and socially acceptable AI and the consequences of uses of AI. The program brings together AI research and human sciences to better understand how AI works in organizations and society.



## Program objectives

Al in Society started in October 2019. Our research themes are designed to be inclusive: we wish to bring together a wide network of researchers from different disciplines.

# 1. The design and domestication of Al and their unintended consequences

- Who participates in the design of AI systems? What are their goals and values, how does the process work?
- How different user groups domesticate the AI systems? (local modification, repurposing, selective avoidance, etc.)
- What unintended consequences the adoption of AI systems have for organizations, social relations, and society in general?

#### 2. Understandability of Al for different audiences/stakeholders

- What is understandability for different AI stakeholders and what are the concerns that motivate them?
- How understandability is related to explainability, intelligibility, and justification?
- How understandability for AI is different from understandability for humans and organizations?

#### 3. Foresight and responsibility in Al decision-making and robotics

- In what sense AI systems could be legally or morally responsible for their actions? If they are not responsible, who is?
- What kind of principles should be used in the responsible development of AI in society?
- Is it possible to develop procedures for identifying and dealing with unanticipated consequences?

# 4. Legitimacy and social acceptability of AI – the institutional arrangements for accountability and trust

- What determines the legitimacy and social acceptability of Al systems?
- What is bias? What are legitimate means to counter it?
- What kinds of institutional arrangements (transparency, auditing, etc.) facilitate long term trust in AI systems?

#### 5. The governance, politics and political economy of data

- Who owns the data? Who should have rights to it?
- Who is responsible for the privacy, security and accuracy of data?
- How should the data economy be governed and regulated nationally and internationally?

## Methodology

The research program brings together researchers from humanities, social sciences, law, education, cognitive science, computer science, and philosophy. The research is highly interdisciplinary and it combines many different methods, from philosophical analysis to ethnography and computer simulation.

Case studies of real world AI development and application are of special interest to us. They inspire theoretical and philosophical reflection, but also provide an empirical anchor to discussions about the future AI in society.

## Organizational goals for 2021

Increased number of research projects

Developing collaboration between Projects and with other FCAI Research Programs and Highlights.

### Ongoing projects

- Algorithmic systems, power, and interaction, Kone Foundation, 2018–2021
- Robots as ethical agents, Finnish Cultural Foundation & Kone Foundation, 2019–2022
- Algorithmic Cultures, Kone Foundation, 2019–2022
- Ethical Al for the Governance of the Society (ETAIROS),
   Strategic Research Council, 2019–2022
- Morals of intelligent machines, Academy of Finland, 2019–2023
- AlgoT Potential and Boundaries of Algorithmic Transparency, Academy of Finland, 2019–2023
- Human-centric data economy fact or fable? Kone Foundation, 2020–2024
- Re-humanizing automated decision-making, Academy of Finland, 2020–2024
- Ethical risks and responsibility of robotics and artificial intelligence, Academy of Finland, 2020–2024

### **Coordinating professor**

#### Petri Ylikoski

Professor of Sociology (Science and technology studies)
University of Helsinki
petri.ylikoski@helsinki.fi









