



**Vilnius  
University**

# **Non-discriminatory artificial intelligence – mission impossible?**

**Presented by: Aurelija Šerniūtė**

**Commentators: Prof. Urs Gasser, Dr Yaniv Benhamou**

**Geneva Digital Law Research Colloquium  
June 19, 2020**

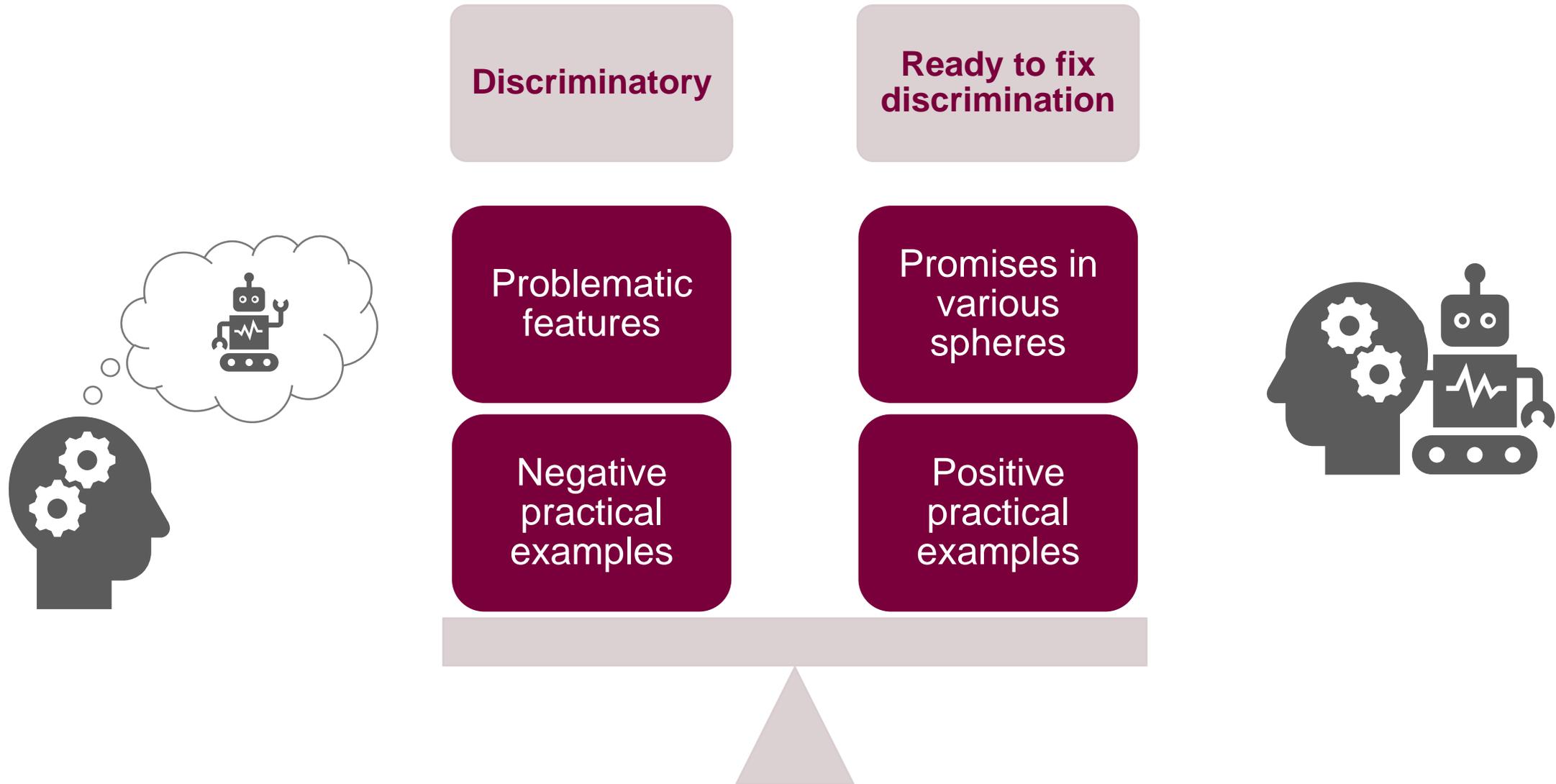


# Aurelija Šerniūtė

Research field – the interaction between emerging technologies & human rights

- ✓ **PhD Student** at Vilnius University, Faculty of Law (supervised by Prof. Tomas Davulis)
- ✓ **Junior Assistant** at Vilnius University, Faculty of Law, Department of Private Law
- ✓ **Project Coordinator** at Vilnius University Tech Hub

# Artificial intelligence



# What is our goal behind the idea of artificial intelligence?

ARTIFICIAL HUMAN



ARTIFICIAL  
SUPERINTELLIGENCE



SUPER-INTELLIGENT  
HUMAN



# What is our goal behind the idea of artificial intelligence?

## ARTIFICIAL HUMAN

**AI = HUMAN  
INTELLIGENCE**

**Idea:** resembles human intellectual abilities

**Talking point:** strong AI

## ARTIFICIAL SUPERINTELLIGENCE

**AI > HUMAN  
INTELLIGENCE**

**Idea:** focuses on the optimal performance of the tasks

**Talking point:** singularity

## SUPER-INTELLIGENT HUMAN

**AI as a way to  
HUMAN INTELLIGENCE+**

**Idea:** expands human capacities

**Talking point:** transhumanism

# Regulatory options

## 1 Ethical principles, guidelines

“Diversity, non-discrimination, fairness”

## 3 Technology-specific legal provisions

“The producer should be strictly liable for defects in emerging digital technologies even if said defects appear after the product was put into circulation, as long as the producer was still in control of updates to, or upgrades on, the technology. A development risk defense should not apply.”

## 2 A new set of rules for the AI

Due to exceptionally high risk of discrimination, the use of artificial intelligence is prohibited in situations: [x], [y], [z].

## 4 Self-regulation

$$r(x) \geq \frac{b_{00} + c_{10}}{b_{00} + b_{11} + c_{01} + c_{10}} \\ = c_{\text{det}}/b_{\text{crime}}.$$

# Regulatory options

## 1 Ethical principles, guidelines

- + balanced interests of multiple stakeholders
- lack of detail

## 3 Technology-specific legal provisions

- + additional certainty to the current regulatory landscape
- disregarded technological neutrality

## 2 A new set of rules for the AI

- + space for creativity, clear protective limits
- potential unawareness of positive future examples

## 4 Self-regulation

- + highly adaptable standards created by industry participants
- values decided by a relatively small group of people



**Vilnius  
University**

---

# Discussion

I am looking forward to your feedback!

Please do not hesitate to contact:  
[aurelija.serniute@tf.vu.lt](mailto:aurelija.serniute@tf.vu.lt) or

