Translational AI Center (TrAC) Seminar – Spring 2022

Mark Ryan
February 25 at 12:00 noon (US Central Time)
https://iastate.zoom.us/j/92178103551?pwd=dlNCa2l0ckVBTEVyR1JEN2Y3b21XQT09

Ethical and Societal Considerations for the Development and Use of Agricultural Robots

Abstract

This presentation will examine the social and ethical impacts of using artificial intelligence (AI) in the agricultural sector. It will identify what are some of the most prevalent challenges and impacts identified in the literature, how this correlates with those discussed in the domain of AI ethics, and are being implemented into AI ethics guidelines. This will be achieved by examining published articles and conference proceedings that focus on societal or ethical impacts of AI in the agri-food sector, through a thematic analysis of the literature. The thematic analysis will be divided based on the classifications outlined through 11 overarching principles, from an established lexicon (transparency, justice and fairness, non-maleficence, responsibility, privacy, beneficence, freedom and autonomy, trust, dignity, sustainability, and solidarity).

While research on AI agriculture is still relatively new, this presentation aims to map the debate and illustrate what the literature says in the context of social and ethical impacts. It aim is to analyse these impacts, based on these 11 principles. This research will contrast which impacts are not being discussed in agricultural AI and which issues are not being discussed in AI ethics guidelines, but which are discussed in relation to agricultural AI. The aim of this is to identify gaps within the agricultural literature, and gaps in AI ethics guidelines, that may need to be addressed.

Short Bio

Mark Ryan is a Digital Ethics Researcher at Wageningen Economic Research, focusing on areas or robotics, AI, and digital developments and responsible innovation. Previously, he was a Postdoctoral Researcher at the Department of Philosophy, KTH Royal Institute of Technology, Stockholm. He also worked on two large H2020 projects: the SHERPA project (2018-2021, budget €3 million) focuses on the ethical, social and human rights implications of smart information systems (data analytics and artificial intelligence); and the MARIO project (budget €4 million, 2015-2018), which assessed the difficulties of loneliness and isolation among people with dementia and the possibility of using service robots to ameliorate some these issues. He has published on a wide range of digital ethics topics, such as: smart cities, self-driving vehicles, agricultural data analytics, social robotics, and artificial intelligence.

This is a special seminar jointly organized by AIIRA and COALESCE project