

Hybrid Intelligence for Contestation and Self-Reflection

Keynote by Catholijn Jonker (TU Delft)

The European view on the use and role of artificial intelligence is one in which human and societal values are at its core. In line with that view, we present the notion of Hybrid Intelligence (HI) as the combination of human and machine intelligence, expanding human intellect instead of replacing it. HI takes human expertise and intentionality into account when making meaningful decisions and performing appropriate actions, together with ethical, legal and societal values. In this talk, I will discuss how the notion of Hybrid Intelligence has initiated a movement among the researchers of the Hybrid Intelligence Centre of The Netherlands from a focus on Explainable AI for HI towards the study of dialogues between and deliberation of humans and artificial intelligence. In the opinion of myself and my direct colleagues, Hybrid Intelligence provides a value-based perspective on the development of AI to support the governments of democracies. I will use examples of Urban AI to show how a HI approach can help to a) contest AI, b) create Contestability by Design, and c) develop AI to support Contestation. On a higher level of abstraction, this culminates into what I propose to call Self-Reflective Hybrid Intelligent Systems.

