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Algorithms in Society: Proposal for Candidate Thesis

Background

Classification and valuation in today's society is increasingly done by computer systems and algorithms (Fourcade and Healy 2017). For example, algorithms are used to automatically identify people in surveillance (Neyland 2018), to calculate the risk of disease transmission (Lee 2017), and to assess the risk of recidivism (Kirkpatrick 2016). But algorithms do not create passive depictions of phenomena, they also change how things are classified, valued and handled in practice. For instance how new understandings of the progress of a disease are created when algorithms are used to analyze an infection: The veracity of AIDS patients' stories can be questioned when their accounts are compared to an algorithmically calculated "normal" disease progression (Lee et al. 2019). Algorithms thus not only depict phenomena in society, but also change how they are understood and handled. Algorithms are performative (Introna 2011).

The research project

The thesis is linked to the research project "<u>AI: A New Scientific Revolution</u>?" which is part of the <u>Digital STS Hub</u> and the <u>Wallenberg Autonomous Systems Program—Humanities and Society</u>. The research project investigates how new digital tools and methods create a growing flood of Big data. In order to manage this growing flood of data, many data-driven research projects are turning to new analytical methods using AI. As a result, we are currently experiencing an explosive introduction of AI in all parts of society. AI seems to promise a whole new way of producing knowledge about the world.

The thesis

The proposed thesis would investigate how algorithms and AI is changing society. Examples of subjects that could be written are:

- Al and algorithms in organizational change
- AI and algorithms in disease surveillance
- AI and algorithms in security surveillance
- AI and algorithms in healthcare
- AI and algorithms in hiring processes
- AI and algorithms in police work

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