

Call for Abstracts:

“AI for decision support: What are possible futures, social impacts, regulatory options, ethical conundrums and agency constellations?”

TATuP Special topic in issue 1/2024

Deadline for submitting your abstract: 02 May 2023

Background: The use of artificial intelligence (AI) systems in general, and of AI systems for decision support in particular, could cause a plethora of serious and far-reaching repercussions to individuals, groups, institutions, associations, companies, and of society. Since AI systems, like other technologies, are embedded in and inseparable from social contexts, research on the impacts of AI – i.e., technology forecasting and foresight, technology assessment and evaluation – necessarily must be interdisciplinary in nature. Research methods drawn from, among others, informatics, social sciences, humanities, and, of course, technology assessment (TA) itself should be combined. Since the impact of AI will not be confined to nation-states, a transnational or even global perspective is paramount. The use of AI systems for decision support therefore requires problem-oriented research that enables the provision of fact-based, objective information for advice at the micro-, meso-, and macro-levels. In addition, it is important not only to deal with different AI systems, their functions, and different fields of application but also to reflect on their possible integration into human decision-making processes. The contributions to this TATuP Special topic are intended to provide information that can help scientists, policy makers and citizens develop informed political opinions about the ubiquitous proliferation of AI systems.

What is it about? In public discussions about AI, extreme scenarios are often conjured up in which AI systems either subjugate humanity, e.g. in science fiction films since the early days of AI– or solve all of humanity’s pressing problems, from climate change to combating pandemics and diseases in general to the crucial question of which partner suits you best. The recent discussion on ChatGPT also follows this pattern. A fundamental problem of referring to such opposing extreme scenarios is that it obscures the actual opportunities and risks of using AI. Furthermore, the narrative of “falling victim to technology” obscures the view on the agency of societal actors. This makes it difficult to discuss AI objectively and, for example, to make professional and/or political decisions based on sound information and rational arguments. An example of this is the sometimes quite emotional debate about (AI-based) decision support systems in medicine, social work, and other professional fields of activity that are strongly shaped by human interactions between clients and professionals.

AI systems that can or even should make decisions that have a major impact on the lives of those affected, and not just in the event of a mistake (such as AI systems in the detection of child welfare risks or in the assessment of job applicants or the unemployed), have rightly received a great deal of attention in the recent past. Both technical and social challenges of this kind of AI use are already likely to be significant. However, algorithms alone are not the reason for the major concerns about the use of AI in such use cases. Rather, the major ethical, legal, and social challenges arise when AI systems are used to make decisions that were previously the responsibility of humans. The contributions to the Special topic should therefore primarily focus on those application areas where human interactions are challenged by the deployment of AI-based decision support systems (e.g., in health and social care, public administration, law enforcement, or transportation and logistics); references to existing AI-based decision support systems, implementation into their system, clients and users are welcome.

Expected contributions

On this background, the TATuP Special topic “AI for decision support: What are possible futures, social impacts, regulatory options, ethical conundrums, and agency constellations?” addresses four key research questions. Contributions to the Special topic should therefore address at least two of these four topics:

- **Possible futures:** How and to what extent might AI systems be used for decision support in the future? Has the view of their use in specific application areas changed and, if so, what can be concluded from this for the future and the discourse on AI systems for decision making? Informed estimates of the use of AI systems for decision support, regardless of the application domain, should be made for a period of the next 10+ years. In this context, country comparisons or comparisons between the different sectors mentioned above or historical comparisons are explicitly welcome.
- **Social impacts:** What social impacts will AI decision support systems have? To what extent are different stakeholders affected by decisions made by AI systems? We invite contributions that deal with the assessment of impacts on individuals, groups, organizations, politics, society, or the environment, provided that these impacts arise directly from the use of AI systems for decision support.
- **Regulatory options:** What are the specific challenges related to the regulation of AI for decision making? What (new) challenges arise when AI is used to support decision making? Do new actors come into play? What are the implications for the design of the science-policy interface? Given the potential negative effects of unregulated use of AI, calls for regulatory intervention are growing louder. However, as with global communications networks and ecosystems such as the internet or social media platforms, questions arise about the feasibility of regulating AI systems. We seek contributions that discuss existing proposals and concepts for regulating AI regarding decision support systems.
- **Ethical conundrums and agency constellations:** What is the relationship between the common good and individual rights, the relationship between evidence and individual cases, when it comes to the use of AI systems in decision making? To what extent can social and human agency be prevented from being ignored? This concerns not only the programming behind the AI algorithms, but also, for example, the decision-making responsibility of the users of the system. Questions concerning the ethical evaluation of AI systems for decision support arise, among other things, because the interests of different stakeholders collide or different moral claims and values compete with each other. The contributions to this Special topic are intended to shed light on the diversity of values, stakeholders, interests, and conflicts and, where appropriate, identify possible solutions.

We are particularly looking for contributions that address these four sets of questions in the areas of health and social care, public administration, law enforcement, and transportation and logistics – i.e., in areas where decisions are routinely made by humans as part of administrative action that can directly lead to potentially far-reaching consequences. The prerequisite for the contributions is that this administrative action can or will be taken over or at least supported by AI systems in the future.

Special topic guest editors

- Diana Schneider, M.A., Fraunhofer Institute for Systems and Innovation Research ISI, Competence Center Emerging Technologies, Diana.Schneider@isi.fraunhofer.de
- Karsten Weber, Prof. Dr., OTH Regensburg, Institute for Social Research and Technology Assessment, Karsten.Weber@oth-regensburg.de (corresponding guest editor)

Submissions

- Please write an E-mail your abstract to redaktion@tatup.de by 02 May 2023 at the latest;
- Length of the abstract: max. 1.5 pages;
- The editorial office will correspond with the author submitting the abstract;
- Please state full names, e-mail addresses, and institutional affiliations of all co-authors of the abstract.

Editorial process

2. May 2023	Deadline for submitting your abstract.
June 2023	Decision on inviting authors to submit a full manuscript.
August 2023	Deadline for submitting your full manuscript, followed by a double non-blind review process.
October 2023	Feedback from the reviewers, followed by authors' revisions
November 2023	Feedback on revisions.
December 2023	End of revision period.
March 2024	Publication (print and online).