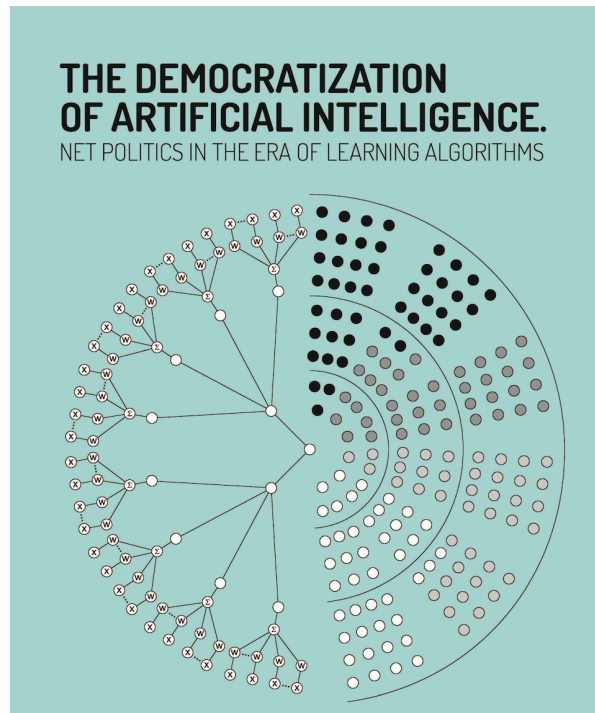


CALL FOR PAPERS

International Book Publication on the Politics of AI



Our Internet-based digital culture is increasingly being determined by diverse forms of Artificial Intelligence (AI). Above all, the machine learning methods (ML) of so-called Deep Learning (DL) are significantly involved in the current transformation of information technologies. The latest successful implementations of DL have led to noteworthy advances in AI, but DL itself is not new at all. It has been known for decades under the connectionist paradigm of Artificial Neural Networks (ANN).

While for decades ANN were considered a dead end in AI research, recent advances in computational capacities coupled with new implementations have consistently led to breakthroughs in a number of applications. For example, in 2012 Krizhevsky, Sutskever and Hinton were able to use ANN/DL methods to reliably train computers to semi-autonomously recognize and classify large numbers of images. This breakthrough serves as the bedrock for much work on machine vision and only became possible with cheap, fast, and powerful GPUs.

These new applications of ANN/DL methods have vast technical, ethical, economic, social, and political implications that are increasingly being negotiated in public discourse. They are now deployed for identifying potential terrorists through vast surveillance networks, for producing sentencing guidelines and recidivism risk profiles in criminal justice systems, for demographic and psychographic targeting of bodies for advertising, propaganda, or other forms of state intervention, and more generally for automating the processing of natural language, written and spoken, photographs and images, and motion pictures. All of these applications have been debated in public discourse, most notably in the recent Congressional hearings in the United States with Facebook founder and CEO Mark Zuckerberg.

As the latter example clearly shows, AI technologies are also crucial to understanding the medial and political developments and transformations of the Internet. Conversely, technologies with regard, for instance, to the access to large (correctly) labeled data sets are heavily dependent on Internet platforms, applications, and technologies (e.g. program libraries such as TensorFlow or crowd-sourcing platforms such as Amazon Mechanical Turk).

The aim of the book is to discuss the diverse political dimensions of Internet and AI technologies. Two perspectives, which are closely related to each other, are at the center: On the one hand, there is the question of how AI approaches, not least with regard to their connections to the Internet, can be characterized as black box

technologies. Here we are interested in the entanglement of ANN/DL algorithms with the source of their datasets, most often large international digital platforms like Facebook, Google, Alibaba, Amazon, Weibo, etc. These data sets are often comprised through illicit or invisible opt-in user agreements that gather vast amounts of our personal data to feed proprietary ANN/DL algorithms. Here the collection, transmission, storage, and processing of data – including ANN/DL algorithms – are obscured from users both *de facto* by their complexity and *de jure* by corporate secrecy practices. On the other hand, there is the question of whether potential open-source, government-sponsored, non-profit and/or industrial-scientific collaborative research projects – an important example being OpenAI – can achieve their common missions like democratizing AI.

The project therefore not only wants to critically examine the claims of such companies and projects with regard to their concrete manifestations. Rather, it is about illuminating the media configurations and constellations of the production of these technologies in an interdisciplinary manner as well as placing them in a theoretically and historically appropriate way, especially with regard to their political implications, functions, and effects. Among others, the following questions can be addressed:

- What does it mean to critically investigate efforts of net politics in the age of learning algorithms?
- How is it even possible to explore the political aspects of modern machine learning approaches if many experts in the field of Computer Science consider ANN/DL technologies as a black box, fundamentally opaque to human understanding? In what way does such an assumed opacity of ANN/DL approaches affect questions of accountability and political agency?
- Are technological strategies of an Open or Explainable AI already able to reduce the opacity of AI methods? What political and/or critical concepts guide the technological process of making modern AI technology more accessible?
- And how can we think about suitable ways of democratizing AI beyond abstract aspects of transparency or accountability?
- Beyond these rather specific questions, however, contributions can also be submitted that deal in general with problems concerning the political dimension of artificial intelligence.

The book is a follow-up to the conference of the same name, which took place in Bochum from September 6-7, 2018. For more information on the scope of this conference, follow this link:

<https://www.cais.nrw/veranstaltungen/demokratie>

Important note: This call is primarily addressed to non-German authors. The majority of the conference participants were speakers from Germany and German-speaking countries, most of whom will also participate in the book project. For this reason, we are primarily interested in including some more contributions by "international authors".

The book project is interdisciplinary. Scientific contributions from such diverse disciplines as computer science, philosophy, social sciences, physics, biology, medicine, science and technology studies, literature and media studies are therefore very welcome.

Deadlines/ Time line:

- Submission deadline for abstracts and short bio: October 25, 2018
- Decision of acceptance for abstracts: November 10, 2018
- Deadline for first draft submissions: March 1, 2019
- Preliminary acceptance of full-text submissions: March 15, 2019
- Time slot for revisions: March 16 – March 30, 2019
- Deadline for final full-text submissions: March 31, 2019
- Acceptance of final full-text submissions: April 15, 2019

The book will be published by the German publishing house transcript in 2019. transcript is one of Europe's leading independent academic publishers. They focus on publishing in cultural studies and the social sciences, in history, philosophy, and in cultural management. They offer more than 100 series and release about 400 new German- and English-language titles every year. Their backlist catalogue includes more than 3,500 titles in print and digital formats.

For more information: <https://www.transcript-verlag.de/en/become-a-transcript-author>

Please submit texts in English only. Abstracts should be between 250 to 500 words, the short bio about 150 words. Please include a title with your abstract. The text length of final essays should not exceed 5,000 words, including sources and footnotes. For inquiries and submissions, please contact/ send your documents to: PD Dr. Andreas Sudmann, Institute for Media Studies at Ruhr University Bochum, Germany, email: andreas.sudmann@rub.de.