SDG 16 and Transformational Governance: Fighting Climate Change Fake News using AI and Big Data

by Walter Seböck | Thomas J. Lampoltshammer | Bettina Biron | Martin Boyer | University for Continuing Education Krems | University for Continuing Education Krems | University for Continuing Education Krems | AIT Austrian Institute of Technology GmbH

Trust is a cornerstone of European democracies. Without it, peaceful and inclusive societies, as promoted by SDG16, are not possible. It is the level of public trust that enables us to drive sustainable development, including effective, accountable, and inclusive institutions. Parts of these institutional entities are public and private media. These media play an essential role in the dispersion of information, and thus directly influence public opinion and decision-making on an individual, but also institutional level. This high level of influential power makes media a target for disinformation campaigns. Further adding fuel to this situation, the transformation of media in the past decades from classical print outlets towards diverse online sources enables mass manipulation of citizens via fake news and disinformation on an unprecedented scale. Especially topics with high levels of polarity, both from a political and individual perspective, are prone to be exploited. One example of such a topic is the debate regarding climate change and its global impact. This contribution thus presents the defalsif-AI project (Detection of Disinformation via Artificial Intelligence), dedicated to tackling fake news and misinformation via audio-visual media forensics, text analysis, and the multimodal fusion of the former, powered by artificial intelligence and machine-learning approaches. Presenting the core components of the defalsif-AI system, the contribution demonstrates how fake news detection in the context of climate change can be achieved. Furthermore, the skills and competencies – technical and non-technical – concerning usage of the system, interpretability and comprehensibility of results in the context of decision-making will be discussed, as well as the responsibility of higher educational institutions (HEIs) in this context as to how they can contribute to stability in society beyond the third mission, the fourth mission of HEIs, so to speak.