

Absract

The disruptive effects of the Fourth Industrial Revolution (IR4) have the capacity to rapidly alter the course of India's social and economic progress. For the healthcare sector, plagued by poor infrastructure and latency, advances in big data computing and Machine Learning (ML) can have a transformative impact. However, in a socio-political landscape marred by historic hierarchies of exclusion and disparity, the data-driven technology of ML may serve to mechanise and automate social divergence based on class, caste, sex, religion or region.

The research frames the issue of medical ML in India as one of lethal biases and data privacy. Through an analysis of the two, the ecosystem of such technology has been brought to light. As instances of bias in ML systems reveal more about social hierarchy and discrimination than they do technological prowess, the dissertation aims to evaluate the ethical dimensions of medical ML in India.

Technology is found to not only mediate the actions of individuals but also power dynamics of human and nonhuman actants within the social whole. Notwithstanding the challenges of integrating medical ML in India, the research highlights the ethics of design and the ethics of use to ameliorate the risks of machines with lethal consequences. With a focus on the Indian subaltern, the research on encoding ethics into machines reveals confrontations on agency and accountability in attempts to *materialise morality* in the critical industry of healthcare.