Participatory Approaches in Al Development and Governance

Ambreesh Parthasarathy*¹, Aditya Phalnikar*², Dhruv Somayajula², Ameen Jauhar², Gokul S. Krishnan¹, Balaraman Ravindran¹

Al technologies affect behaviours and make decisions that may affect people in their day to day lives. While they offer significant benefits by improving accuracy and efficiency, they also have the potential to cause harm, both to individuals and on a societal level. A relatively cost-efficient way of mitigating these harms is to consult affected stakeholders before the deployment of given AI systems. In this context, the benefits of a participatory approach lie in enhancing the fairness of the process – ensuring that stakeholders' interests and consideration are accounted for prior to the roll out of any Al-based system that will impact them. This also helps enhance the efficiency and accuracy of such Al systems. For example, the healthcare sector is increasingly exploring Al solutions such as large language models (LLMs) - which are complex deep learning models trained on extensive textual data. They use self-supervised learning methods to identify statistical associations and produce text tokens in response to the inputs they receive. LLMs are used to generate patient summaries, aid diagnosis and operate chatbots. Implementing LLMs effectively requires a participatory approach, involving key stakeholders like doctors, patients, and legal teams. Such an approach can be useful to address sector-specific challenges including access to reliable data for training algorithms, addressing legal and ethical concerns, and ensuring decision-making transparency, thereby enhancing technology acceptance and reducing biases in healthcare applications.

¹ Centre for Responsible AI, Wadhwani School of Data Science and AI, Indian Institute of Technology Madras. ² Vidhi Centre for Legal Policy, New Delhi