

Cultivating Responsible AI: For Cultural Heritage Preservation in India

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Abstract : Artificial intelligence (AI) has great potential and can be used as a powerful tool of application in various domains and sectors. But with the application of AI, there comes a wide spectrum of concerns around bias, accountability, transparency, and privacy. Hence, there is a need for responsible AI, which can uphold ethical and accountable practices to ensure that things are transparent and fair. The paper is a combination of AI and cultural heritage preservation, with a greater focus on India because of the rich cultural legacy that it holds. India's cultural heritage in itself contributes to its identity and the economy. In this paper, along with discussing the impact culture holds on the Indian economy, we will discuss the threats that the cultural heritage is exposed to due to pollution, climate change and urbanization. Furthermore, the paper reviews some of the exciting applications of AI in cultural heritage preservation, such as 3-D scanning, photogrammetry, and other techniques which have led to the reconstruction of cultural artifacts and sites. The paper eventually moves into the potential risks and challenges that AI poses in cultural heritage preservation. These include ethical, legal, and social issues which are to be addressed by organizations and government authorities. Overall, the paper strongly argues the need for responsible AI and the important role it can play in preserving India's cultural heritage while holding importance to value and diversity.

Keywords : responsible AI, cultural heritage, artificial intelligence, biases, transparency

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