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Understanding the ethical concerns related to the use of Artificial Intelligence in Humanities.

Priti. Samar. Sawale

Asstt.Professor & Head

Dept. of Political Science

B.K. Birla College, Kalyan, Maharashtra, India

Abstract : The human race is currently standing on the intersection of technology and morality. In the technology driven world of artificial intelligence(AI), the natural intelligence, mentality and morality of mankind are at stake. Though the human mind created AI tools for convenience of its tasks and data management, AI is still not a completely foolproof and inherently safe technology. In fact, AI is termed as a 'Disruptive Technology'. The blind use of AI across all the disciplines including humanities leads to the rise of ethical questions which are out of technological and scientific domain. As far as the discipline of humanities is concerned, we find that the teachings of Humanities essentially are based on natural intelligence of the human beings and provide substantial knowledge about human rights and values, preserving the culture and upholding high moral standards with prime focus on ethical considerations. The present paper makes an attempt to look into AI driven technology through the lens of humanities. The paper is based on the historical -legal approach to study the framework related to the ethical use of AI. The paper focusses on the different ways AI is used by the people in humanities and attempts to find out its impact on the ethical and moral foundations of the discipline of humanities.

IndexTerms **- Artificial Intelligence, ethics, human values, humanities.**

I. INTRODUCTION

Human beings are the only species on earth with the ability to think, speak and apply their intelligence in a constructive way. In fact, the social intelligence of human beings (Refer: Edward Thorndike, Intelligence and its uses, 1920) separates humans from other species. Social intelligence is today recognised as the significant aspect of human existence which is based on emotional intelligence, social empathy, social cognition and social competition. The field of Human Knowledge which is largely based on social intelligence is the field of Humanities. Humanities apply natural intelligence and social intelligence of human beings to study the complex social relationships, understand and interpret the human experiences in various fields of human life across different time periods, cultures and contexts and fortify the human experiences with the strong foundations of ethics and morality.

The discipline of humanities provide insights into the nature of human value, moral values and standards and pursuit of the highest good.(Refer: Emmanuel Kant). Ethics are the integral part of Humanities structured by the application of Human Intelligence through conscience. Many ethicists, humanities scholars and philosophers said that all the human inventions including the invention of Artificial Intelligence needs to be protected by ethical considerations, so that it sustains human life and adds quality to human existence and well -being.

Norbert Weiner, the great mathematician and philosopher who is known for his work on cybernetics, emphasized on the fact that all the technological innovations and technological developments should be supported by ethical considerations .(Refer: Norbert Weiner, The Human Use of Human Beings, 1950).

Joseph Weizenbaum, a computer scientist and philosopher wrote extensively about the ethical dimensions of artificial intelligence and computer technology.(Refer: Weizenbaum, Computer Power and Human Reason: From Judgement to Calculation, 1976).

There are many scientific and engineering organizations like Institute of Electricals and Electronic Engineers (IEEE), the world's largest technical profession organization in USA and the Association of Computing Machinery(ACM), world first scientific and educational computing society established in USA, have developed their codes of ethics for responsible considerations in technology driven fields.

Many scholars in the contemporary world, from the field of humanities, science and commerce recognized the potential impact of technology on individuals, societies and the environment and therefore stressed on ethical considerations. The ethical responsibility of inventors, innovators and policymakers in guiding technological development towards beneficial outcomes is the need of the hour today's AI driven world. Here, the humanities can play a decisive role by contributing in building strong foundations of ethics and morality.

2. NEED OF THE STUDY.

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There is a need to identify the key ethical challenges associated with the use of AI in humanities and to see how responsible innovation could be promoted in this context.

3.RESEARCH METHODOLOGY

The primary objective of this research is to comprehensively understand the ethical considerations associated with the utilization of artificial intelligence (AI) in the domain of humanities, focusing solely on secondary data sources and literature review.

The literature review was conducted to identify and analyse existing scholarly articles, books, conference proceedings, reports, and other relevant publications related to AI ethics, humanities, and interdisciplinary studies. Ethical frameworks, principles, guidelines, and case studies, laws and regulations for AI developed by the Governments at national and international level, specific to AI applications in humanities disciplines such as literature, political science, geography, economics, sociology, psychology,history, philosophy, art, and culture amongst others.

4. Ethical Challenges and issues of AI For Humanities: The use of AI in humanities needs to be carefully and intrinsically drafted taking into consideration the political nature of the society, the socio-economic background of all the people including the marginalized communities, the cultural diversity and ethos of the nation. The following ethical challenges of AI are seen in the humanities:

4.1 Bias and Fairness: The algorithmic bias and its implications for humanities applications is a cause of concern. There is a need to examine biases in training data and algorithmic decision-making processes. There are instances of bias in AI applications in humanities. The caste, communal, regional and lingual variations and biases of a nation like India could be overlooked by AI.A few Hypothetical case studies illustrating instances of bias in AI applications in humanities:

4.1.1 Text Analysis Bias in Literature Studies:

Scenario: A research team develops an AI-powered tool for analyzing literary texts to identify themes, motifs, and stylistic elements. However, the tool consistently misinterprets texts written by authors from marginalized communities, leading to skewed analyses and misrepresentation of their work.

Bias: The AI tool exhibits bias in its interpretation of literary texts, favoring canonical works by authors from dominant cultural backgrounds while struggling to recognize and appreciate the nuances of literature produced by marginalized communities.

Impact: The biased analysis perpetuates existing inequalities in literary studies by reinforcing stereotypes, overlooking diverse perspectives, and marginalizing underrepresented voices in the humanities.

4.1.2 Historical Data Bias in Digital Archives:

Scenario: A cultural heritage institution digitizes its archival collections and employs AI algorithms to categorize and annotate historical documents. However, the algorithms are trained on biased datasets that prioritize documents related to dominant historical narratives, thereby excluding or misrepresenting the contributions of marginalized groups.

Bias: The AI algorithms exhibit bias in their classification and interpretation of historical documents, privileging narratives that align with mainstream perspectives while neglecting or distorting alternative viewpoints and experiences.

Impact: The biased representation of historical data perpetuates stereotypes, erases marginalized histories, and reinforces hegemonic narratives, limiting the accessibility and inclusivity of digital archives for researchers, educators, and the public.

4.1.3 Artificial Intelligence Bias in Artistic Creativity:

Scenario: An AI-powered platform generates art pieces based on historical artistic styles and techniques. However, the platform's training data predominantly consists of artworks created by artists from Western, Eurocentric traditions, resulting in the reproduction of familiar styles and themes while neglecting diverse cultural expressions and aesthetic traditions.

Bias: The AI platform exhibits bias in its generation of artistic content, prioritizing Western-centric aesthetics and perspectives while marginalizing non-Western artistic traditions and cultural heritage.

Impact: The biased output perpetuates cultural hegemony, reinforces stereotypes, and diminishes the diversity and richness of artistic expression in the humanities, limiting opportunities for cross-cultural dialogue and appreciation.

4.1.4.Bias in Political Data

Scenario: An AI-powered political news recommendations prioritize content that aligns with users' existing beliefs or preferences. AI-powered political surveys and opinion polls are conducted.

Bias: AI -powered political news can exacerbate echo chambers and polarization, further entrenching biases in political systems and beliefs.Biases can arise from the way political data is collected and sampled. If political surveys or opinion polls disproportionately sample certain demographic groups or geographic regions, the resulting data may not accurately represent the diversity of political opinions and preferences within the population, leading to biased AI predictions and analyses.
Impact: The biased political AI output will create chaos in the society and unrest amongst the people. Without proper oversight or accountability measures, AI biases can lead to political unrest amongst the people.

4.2 Transparency and Accountability:

There is a need to analyse the opacity of AI systems and study the challenges in understanding the decision-making processes Importance of transparency for building trust and accountability in AI applications in humanities such as text analysis or cultural preservation, needs to be considered to ensure transparency and accountability in AI.

4.3 Privacy and Data Protection:

In humanities, an individuals privacy rights are of utmost importance. Exploration of privacy concerns arising from the collection and analysis of personal data in humanities applications of AI -driven data processing and profiling of an individual's data requires conscious efforts on the part of AI programmers. The privacy-preserving techniques and regulatory frameworks for protecting individual privacy rights should be designed first before implementing AI software for the humanities.

4.4 Cultural Preservation and Representation:

There is a dire need of consideration of the impact of AI on cultural heritage preservation, interpretation, and dissemination of cultural information. An hypothetical case study is given as follows:

4.4.1 AI for Digitizing and Restoring Cultural Artifacts and Artefacts:

Scenario:

A cultural heritage institution houses a diverse collection of historical artifacts, including manuscripts, artworks, and archaeological relics. Many of these artifacts are fragile, deteriorating, or at risk of damage due to environmental factors or neglect. To preserve and promote access to the cultural heritage collection, the institution collaborates with AI researchers and conservationists to develop an AI-driven platform for digitizing and restoring cultural artifacts.

Use of AI:

The AI platform employs computer vision algorithms to digitize and analyse high-resolution images of cultural artifacts, capturing fine details, textures, and colors with precision. Additionally, machine learning algorithms are trained on historical data to automatically detect and repair imperfections, such as tears, stains, or missing sections, in digital reproductions of artifacts.

Ethical Considerations:

Authenticity and Integrity: The AI restoration process respects the authenticity and integrity of cultural artifacts, avoiding over-editing or misrepresentation that may compromise their historical significance or artistic value.

Cultural Context: If the project does not engages with cultural experts, historians, and community representatives, then it will create cultural bias and intolerance. But if it does engage with all experts to ensure that AI algorithms are sensitive to the cultural context, symbolism, and significance of artifacts, respecting indigenous knowledge systems and cultural protocols then it will definitely lead to national integration and will make the strong cultural bond with the people.

Access and Repatriation: Digital reproductions of cultural artifacts are made accessible online, allowing broader public access and engagement while respecting ethical considerations related to repatriation, ownership, and cultural sovereignty.

Impact:

The AI-powered platform facilitates the preservation, documentation, and dissemination of cultural artifacts, enabling researchers, educators, and the public to explore and interact with the cultural heritage collection in innovative ways, if carefully designed and implemented with ethical considerations. By leveraging AI for artifact digitization and restoration, the project enhances cultural appreciation, fosters interdisciplinary collaboration, and promotes the sustainable stewardship of cultural heritage for future generations.

5.Strategies to promote transparency and accountability in the use of AI in humanities:

A combination of technical, organizational and regulatory measures are required to promote transparency and accountability in the use of AI in humanities. The following strategies needs to be implemented

5.1 **Explainable AI (XAI) Techniques:**

Employ XAI techniques to enhance the transparency of AI systems by providing insights into their decision-making processes. Techniques such as feature importance analysis, model visualization, and interactive explanations can help users understand how AI algorithms arrive at their conclusions, particularly in humanities applications such as text analysis or cultural heritage preservation.

5.2 **Documentation and Reporting:**

Document the development and deployment of AI systems in humanities, including data sources, preprocessing steps, algorithm selection, and performance metrics. Provide clear and comprehensive reports that explain the rationale behind AI decisions, potential limitations, and uncertainties. Make these reports accessible to stakeholders, including researchers, practitioners, and end-users.

5.3 **Algorithmic Audits:**

Conduct regular audits and evaluations of AI systems to assess their performance, fairness, and ethical compliance. Independent auditing bodies or interdisciplinary review panels can scrutinize AI algorithms and methodologies to identify biases, errors, or unintended consequences. Publish audit reports and recommendations to promote transparency and accountability.

5.4 **Stakeholder Engagement and Participation:**

Involve diverse stakeholders, including humanities scholars, domain experts, community representatives, and end-users, in the development and evaluation of AI systems. Facilitate stakeholder consultations, workshops, and feedback sessions to gather insights, address concerns, and ensure that AI applications in humanities align with societal values and ethical principles.

5.5 **Ethical Guidelines and Standards:**

Domain-specific ethical guidelines tailormade for each subject in humanities should be developed. These guidelines should emphasize transparency, fairness, privacy, and accountability considerations. Incorporate principles from existing AI ethics frameworks, such as the IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems or the Montreal

5.6 **Declaration for Responsible AI:**

Regulatory Oversight and Compliance:

Establish regulatory frameworks and oversight mechanisms to govern the use of AI in humanities, ensuring compliance with legal and ethical standards. Regulators, policymakers, and professional associations can enforce transparency and accountability requirements through laws, regulations, codes of conduct, and certification programs.

5.7 **Education, Training and awareness:**

Provide education and training programs for AI developers, researchers, and practitioners in humanities, focusing on ethical considerations, transparency, and accountability. Foster a culture of responsible AI development through awareness-raising campaigns, workshops, and interdisciplinary collaborations. The policy makers, the government, stakeholders should create general awareness about AI amongst the entire public. The school, college and university curricula should contain topics related to proper and value-based use of AI for fostering ethical AI considerations in the minds of the young people.

5.8 **Interdisciplinary Collaborations:**

There should be interdisciplinary collaboration between technologists, ethicists, humanities scholars, psephologists, psychologists, philosophers and stakeholders. This will help to integrate diverse perspectives and expertise in AI development and deployment

By implementing these strategies, stakeholders can enhance the transparency and accountability of AI in humanities, fostering trust, fairness, and ethical integrity in the development and deployment of AI technologies.

6.**Conclusion:**

There is a need for continuous research, dialogue, debate, discussion dn action to address ethical challenges and promote responsible and virtue ethics based innovations in AI. Overall, interdisciplinary and multidisciplinary approach is required in navigating the complexities of AI in humanities.

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