# THE STUDY OF MORAL DIMENSIONS OF ARTIFICIAL INTELLIGENCE (AI)

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**Abstract**
Artificial Intelligence (AI) is creating systems capable of tasks typically requiring human intelligence, such as natural language understanding, decision-making, and pattern recognition. With the rise of AI technologies, ethical considerations have become paramount that addressing the principles that govern their development and use. Key issues include fairness and bias, data privacy, and the potential societal impacts of AI, including its role in decision-making and autonomous systems. The rapid advancements in generative AI present unique challenges, such as the spread of misinformation, viral false video and many more. These concerns underscore the urgent need to ensure that AI systems align with human values, promote social welfare and prevent harm. The moral Considerations in AI that can lead to healthy and Safe development in AI and How AI can be used for betterment of humanity and not Spreading False Information and raising a Socio-political War or a war of the automated armed Force.
**Keywords:** Artificial Intelligence, Moral Dimensions, Data Privacy, Data Security.

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**Introduction**
Artificial Intelligence (AI) is a cutting-edge interdisciplinary field of computer science that seeks to create machines and systems capable of performing tasks that typically require human intervention and intelligence. These tasks include understanding natural language, recognizing patterns, making decisions, learning from experiences, and adapting to new situations.
Ethics in AI refers to the principles, guidelines, and moral considerations that govern the design, development, deployment, and use of artificial intelligence technologies. It involves addressing the moral and societal implications of AI systems to ensure that their creation and utilization align with human values, promote fairness, avoid harm, and respect individual rights and well being.
The emergence of AI has brought about a range of ethical concerns due to its potential to influence various aspects of our lives, from decision-making algorithms to autonomous systems.
The major ethical considerations in AI include Fairness and Bias, Data Privacy and Security, Social benefits, etc
With the emergence in this field, the major concerning questions also Arrive in front of us, Can AI even cause a War? Can the development in robotics AI support Automated Armed Forces?
The Rapid use of AI technology in the society can cause various Local ethical issues such as

spreading false information due to the increase in the use of Generative AI

In the current Scenario, Generative AI has been proving a Slight threat to Society as People tend to generate false contents and thus leading to political dispute e.g. Viral Video of Ukrainian President Surrendering to Russia has been proven false and thus generated using Generative AI techniques

This paper tends to find out the moral Considerations in AI that can lead to healthy and Safe development in AI and How AI can be used for betterment of humanity and not Spreading False Information and raising a Socio-political War or a war of the automated armed Force.

## Need and Significance of the Study

Today, AI technologies are seamlessly integrated into our daily lives. Virtual assistants like Siri and Alexa understand natural language, self-driving cars navigate complex environments, recommendation systems suggest personalized content, and AI-powered medical diagnostics aid in disease detection. Businesses leverage AI for predictive analytics, customer service automation, and process optimization.

Thus, There is a need to understand the potential risks of using AI Applications. AI is the technology of the future but it is not 100% Trustworthy, There is a need for considering ethics in AI which will help humanity to adapt and survive in the future.

## Literature Review

This paper tries to find out the ethics in the Artificial Intelligence Field and the Applications which use various AI techniques. Many Researchers and Working Professionals in the AI field have studied the ethical consideration in the Artificial Intelligence Field. The findings of the past researchers can be used as a reference to understand this paper properly.

1) Weiyu Wang and Keng Siau (ERF, 2018), in this paper Researcher states that addressing Ethical and Moral issues in AI is still in a very Early Stage. The Author explains that Ethics in AI is not a simple problem about "right or wrong" or "good and bad". They say that it is not even a problem that can be solved by a small group of people. They suggest learning more about human Ethics and Apply it into Ethics in AI. Their work educates potential users of AI to treat Artificial general Intelligence ethically.

2) Alexa Hagerty and Igor Rubinov (CU, 2019), this paper discusses the social impacts of AI. The researcher finds that AI can be expected to have critical social impacts around the world, and these impacts will have significant regional variation. They suggest that "As AI principles and AI practices travel around the world we thinkers and makers must travel with them, we must closely engage with them, we must track them at every step from design to daily use, paying attention to how they are translated, understood and implemented". Their Paper helps to develop a socio-geographical view in usage and development of Artificial Intelligence Applications.

3) Leila Ouchchy, Allen Coln and Veljko Dubljevic (springer, 2020), this paper concluded that the articles about AI and ethics are written by authors with insufficient knowledge of AI technology or ethics. Therefore, a multifaceted approach to handling the social, ethical and policy issues of AI technology is needed. This could include increasing the accessibility of correct information to the public in the form of fact-sheets and ethical value statements on trusted webpages to make sure the public is well informed. In their Findings they find a number of recommendations found regarding regulation of AI, a clear government policy or regulatory framework for AI technology in the US and other countries are urgently needed.

4) Sarah Bankins and Paul Formosa (MU, 2023), in this paper the Author discusses the three paths

of AI deployment (replacing tasks, "tending the machine" and amplifying) in detail. The researcher concludes that AI has potential to make work more meaningful for some workers by undertaking less meaningful tasks for them and amplifying their capabilities, but it can also make work less meaningful for others by unfairly distributing the benefits of AI away from less-skilled workers. They explained that AI's future impacts on meaningful work will be both significant and mixed.

5) Mengyi Wei and Zhixuan Zhou (2022), the researcher in this paper, discusses the social media ethics and Database incidents in AI ethics. They concluded that to understand how AI ethical issues occur in the real world, it is important to analyze the proportion of AI ethics issues in each Application area. The author states the basic ethical issues like language/vision models have been inappropriate use, racial discriminations and gender discriminations are very common in an AI application. The authors relate the AI ethics incident to AI ethics guidelines, and provide a perspective for guideline makers to formulate more operable guidelines by analyzing real-world incidents corresponding to the rules.

## Objectives of the Study
The Objectives of the study to describe the potential risks in the Artificial intelligence Field and to find the possible Solution to apply ethical and moral values in Artificial Intelligence Applications. The Paper attempts to include all the possible current circumstances of AI application and to suggest measures to make AI applications more useful and efficient.

## Hypothesis
H0: There is no need for Moral Consideration in Artificial Intelligence Applications.
H1: There is a need for Moral Consideration in Artificial Intelligence Applications.

## Data Collection
Primary data are collected by providing Questionnaires and surveys in the form of Google Forms. The surveys were given to people who have an intrusive knowledge about the field of AI. Sample size for the study is 100.

The secondary data are collected from the secondary sources, these sources which record an event or happening that was never actually witnessed by the researcher. In other words, secondary sources are steps away from the real fact, replete with interpretations. The secondary data are available from the Records on historical rather chronological developments of the organization or event, Orally transmitted materials, Printed material like books, periodicals, papers and literature, Audio-visual records, reports, As in confirmation with the above, the first part of Secondary data has been gathered by the researcher from the- Reference books, Journals, Relative Thesis, Computer (Internet) etc., Reports, Magazines, newspaper, and reference books.

## Data Analysis: Techniques and Presentation
For the study, data collected were duly edited, classified and analyzed statistical techniques. The data were presented through simple classification and graphical representation. The data were analyzed and hypotheses were tested at 10% level of significance.

**Descriptive Statistics of the Data**

Table 1.1: Experience of Respondent of the Survey

| Experience of employee | Frequency | Percent | Valid Percent | C.F. (%) |
|---|---|---|---|---|
| 0-7yrs | 31 | 31 | 31 | 31 |
| 8-14yrs | 43 | 43 | 43 | 74 |
| 15-22yrs | 16 | 16 | 16 | 90 |
| 23yrs and above | 10 | 10 | 10 | 100.0 |

Table 1.2: Gender of Respondent

| Gender of Employee | Frequency | Percent | Valid Percent | C.F. (%) |
|---|---|---|---|---|
| Male | 56 | 56 | 56 | 56 |
| Female | 44 | 44 | 44 | 100.0 |

Table 1.3: Education Qualifications of Respondent

| Education Qualification | Frequency | Percent | Valid Percent | C.F. (%) |
|---|---|---|---|---|
| High School | 6 | 6 | 6 | 6 |
| Bachelor's Degree | 59 | 59 | 59 | 65 |
| Master's Degree | 28 | 28 | 28 | 93 |
| PH.D or Higher | 7 | 7 | 7 | 100.0 |
| Total | 100 | 100.0 | 100.0 | |

Table 1.4: Occupation of Respondent

| Occupation | Frequency | Percent | Valid Percent | C.F(%) |
|---|---|---|---|---|
| Student | 25 | 25 | 25 | 25 |
| Professional | 34 | 34 | 34 | 59 |
| Researcher | 4 | 4 | 4 | 63 |
| Educator | 15 | 15 | 15 | 78 |
| Other | 22 | 22 | 22 | 100 |

Table 1.5: Age of the Respondent

| Age | Frequency | Percent | Valid Percent | C.F(%) |
|---|---|---|---|---|
| 18-24 | 28 | 28 | 28 | 28 |
| 24-30 | 40 | 40 | 40 | 68 |
| 31-37 | 21 | 21 | 21 | 89 |
| 38-45 | 9 | 9 | 9 | 98 |
| 45 Above | 2 | 2 | 2 | 100 |
| Total | 100.0 | 100.0 | 100.0 | |

**Descriptive Statistics for Need of Ethical Considerations in AI**

The major ethical considerations in AI can be interpreted as follows:



Table 1.4: Issues Due to Introduction of AI in the Society
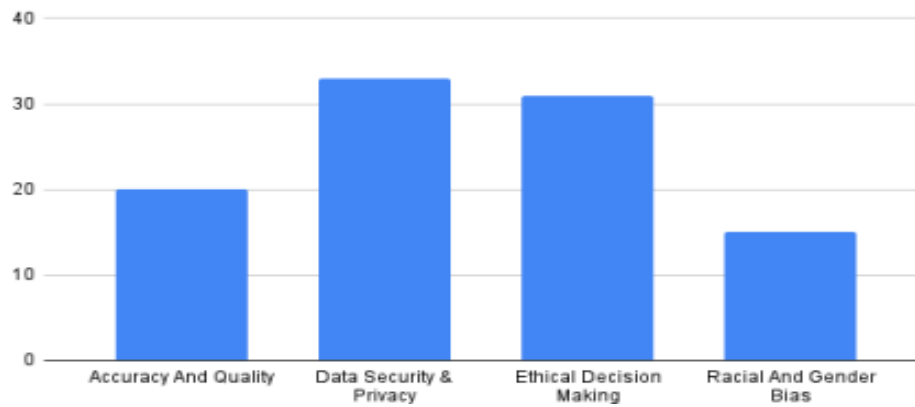
| Issue | Frequency | Percent | Valid Percent |
|---|---|---|---|
| Unemployment | 35 | 35.0 | 35 |
| Data Security | 27 | 27.0 | 27 |
| Data Privacy | 22 | 22.0 | 22 |
| Decrease in human accuracy | 16 | 16 | 16 |
| Total | 10 | 100 | 100 |



We can make the following Contingency table to prove the developed hypothesis

| | Moral Consideration Needed | Moral Consideration Not Needed | Total |
|---|---|---|---|
| Respondents Agree | 36 | 24 | 60 |
| Respondents Disagree | 17 | 23 | 40 |
| Total | 53 | 47 | 100 |

Table for Expected Value Calculation

|  | Expected Value for Moral Consideration Needed | Expected value for Moral Consideration Not Needed |
|---|---|---|
| Respondent Agree | 31.8 | 28.2 |
| Respondent Disagree | 21.2 | 18.8 |

Calculation of Chi-Square

| Observed Value | Expected Value | (O-E) | (O-E)2 | (O-E)2/E |
|---|---|---|---|---|
| 36 | 31.8 | 4.2 | 17.64 | 0.55 |
| 17 | 21.2 | -4.2 | 17.64 | 0.83 |
| 24 | 28.2 | -4.2 | 17.64 | 0.62 |
| 23 | 18.8 | 4.2 | 17.64 | 0.93 |
| Total |  |  |  | 2.93 |

The Table Value for the 10% of Significance is 2.706
Hence, we reject the Null Hypothesis and Accept the Alternate Hypothesis. Which means there is a need for ethical consideration in AI

**Conclusion**
In the wake of the technological revolution that Artificial Intelligence (AI) has ushered in, our study sought to investigate a critical and often overlooked aspect of this transformation: the need for Moral Considerations in AI. Our research journey took us through a comprehensive analysis of AI's ethical implications, its potential for both immense benefit and subtle harm, and the pressing demand for ethical safeguards.
The foundation of our study was a hypothesis, challenging the status quo, positing the necessity of AI ethics. Throughout our data collection and analysis, it became evident that our society faces a pivotal juncture. The convergence of AI's rapid advancement, increasing integration into our daily lives, and the ethical dilemmas it introduces calls for a concerted effort to address these challenges. Our research substantiates the assertion that there is, indeed, a compelling need for Ethical Considerations in AI.

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