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Smart AI: Artificial Intelligent Ethical Framework in using ChatGPT

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ABSTRACT

Nowadays, artificial intelligence and data mining are trending fields. Many systems and applications have used artificial intelligence that can help humans in their daily work. In fact, every job can be done quickly and properly. In every inch of work such as education, healthcare and industries are all rely on artificial intelligence systems. But to what extent can artificial intelligence systems and applications help us in taking care of work if there are no guidelines or ethics in their use. The purpose of this research is that to introduce the user of any AI system and application as long as they can in line with the governance and implement a right procedure when using the system. Therefore, an approach in terms of an ethical framework for the use of artificial intelligence systems and applications is produced to help humans manage work using AI systems. The methodology used is in a qualitative approach where an application called Smart AI is developed to help users to manage their daily work with ethics and integrity. For a start the application can be used and deployed at higher learning institution as most of the students rely on the generative artificial intelligence such as ChatGPT. This research can provide input for Higher Learning Institution (HLI) in term of the usage of AI system in their environment and for the future use ever.

1. Introduction

The fields of artificial intelligence and data mining are currently in high demand. Artificial intelligence has been utilized by many systems and applications to aid humans in their daily work. To be honest, every task can be completed quickly and properly. In every aspect of work, such as education, healthcare, and industries, artificial intelligence systems are relied upon. If there are no guidelines or ethics in their use, how can artificial intelligence systems and applications assist us in taking care of work? This research aims to educate the user of any AI system or application about governance and how to follow proper procedures when using the system.

With the arrival of OpenAI's ChatGPT and other artificial intelligence (AI) text generators (TGs), writing studies finds itself at a critical inflection point concerning policies related to academic

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integrity, assessment, and access. According to Matthew *et al.*, [1], while research across fields on AI literacy is still nascent, a growing body of work in communication, technology policy, and computer science has led to insights involving the tension between legal and ethical action and how the deployment of ethical frameworks for AI governance lacks the mechanisms for compliance. Scholars have started to track the recent uptake of regulatory initiatives on AI across the globe, but particularly in Europe, Northern America, and Asia [2] analyzing regulatory measures and investments while foregrounding ethics as a normative framework [3]. While this rise of ethical guidelines may reflect a strategic move by the corporate sector to escape actual regulation, it also informs educational tools and policies for governance [1].

In the educational space, ethical frameworks have so far focused on personalized instruction, a dependency on data, biases in training data, academic integrity, and the lack of creativity among students [4]. Open AI's recent guidebook for instructors and the U.S. Department of Education have considered broader frameworks, while the MLA/CCCC Joint Task Force on Writing and AI has provided pointed recommendations [5,6]. These guidelines provide important value in understanding the ethical dimensions of AI in the classroom. However, there is a need for a more ecological understanding of how AI ethics might emerge, one that takes into account the negotiation of AI on the ground level between teacher or lecturer and student [7,8].

Therefore, an ethical framework has been developed to aid humans in managing work through the use of AI systems and applications. This study is being proposed to fill the gap caused by the lack of ethical guidelines for using ChatGPT, particularly for students or lecturers in higher education institutions. The use of AI applications for work, particularly in education, is significant in today's world. This study will provide an introduction to the ethical framework that serves as a guide for conducting ChatGPT. The purpose and objective of the studies will be determined accordingly.

2. Methodology

Even though at the end of the research we want to come out with an application which is to store the information related to ethical conduct in using generative AI technology such as ChatGPT, in a preliminary study that we conducted, we are searching the related papers and articles first from several sources. The data sources for these studies included from year 2020 until 2025. A comprehensive selection of papers published in recognized academic journals and conference proceedings, covering major research contributions to the fields of artificial intelligence, ethical use, and higher education [9,10].

In term of data sources and databases which is to ensure the inclusion of high-quality studies, we conducted searches across several reputable electronic databases, including IEEE Xplore, Springer Link, ScienceDirect, Taylor & Francis, Scopus, and Google Scholar [11,12]. These sources were selected for their extensive coverage of technology and education research, particularly in the areas of artificial intelligence (AI) and ethical studies.

In the keywords and search strategy, the following search terms were used in our technique to ensure comprehensive coverage which such as:

TITLE-ABS-KEY ((“Artificial Intelligence Ethics” OR “ChatGPT” OR “AI in Education” OR “Responsible AI”)
AND (“Bias” OR “Transparency” OR “Data Privacy” OR “Accountability”)
AND (“Higher Education” OR “University” OR “Teaching and Learning”))

The Boolean operators were applied to refine search results, and filters were set to include only peer-reviewed journal articles and conference papers published in the last five years (2020–2025).

3. Results

The result can be categorized into two parts which is the first part in term of data extraction and analysis and the second part is application development. For the first part, the selected papers were analysed using qualitative content analysis to identify key themes, challenges, and best practices in AI ethics. The findings were categorized according to the SMART AI ethical framework, providing a foundation for case studies and practical guidelines. Table 1 illustrate the initial steps for the result of the studies.

Table 1
Initial steps for the framework

#	Process	Detail
Step 1	Initial Screening	Titles and abstracts were reviewed to eliminate irrelevant papers
Step 2	Full-Text Review	Selected papers were assessed in detail for relevance and methodological rigor
Step 3	Thematic Coding	Qualitative content analysis was applied to categorize key findings under the four ethical dimensions.
Step 4	Framework Development	Extracted insights were synthesized into the SMART AI Ethical Framework, guiding recommendations and case studies.

The data extraction and review process involved multiple stages to ensure a comprehensive and rigorous analysis of the selected literature. In the first stage, the titles and abstracts of the retrieved papers were reviewed to eliminate studies that were not relevant to the ethical implications of AI in education. Papers that did not specifically address issues related to bias, transparency, data privacy, or accountability in the context of ChatGPT and other AI tools were excluded. Additionally, only peer-reviewed journal articles and conference proceedings were considered, while opinion pieces, non-academic sources, and duplicate studies were removed.

In the second stage, a full-text review was conducted on the shortlisted papers. Each study was assessed based on its relevance, methodological rigor, and contribution to the discussion on AI ethics in education. Papers that lacked empirical evidence, were not grounded in a strong theoretical framework, or did not provide substantial insights into ethical concerns were excluded. This step ensured that only high-quality research contributed to the development of the SMART AI Ethical Framework.

Following the full-text review, qualitative content analysis was performed to identify key ethical concerns and best practices related to AI implementation in education. A deductive coding approach was employed, where findings were categorized into four predefined ethical dimensions: bias, transparency, data privacy, and accountability. The NVivo software was used to facilitate systematic coding and organization of themes. This approach allowed for the extraction of patterns, challenges, and solutions that informed the ethical framework. The insights obtained from the literature review were synthesized into the SMART AI Ethical Framework, which provides guidelines for the responsible use of ChatGPT in educational settings. To ensure the validity and robustness of the proposed framework, an expert review process was conducted. AI ethics specialists and education professionals were consulted using the Delphi method**,** where iterative rounds of feedback were collected and analysed to refine the framework. This expert validation helped enhance the credibility, applicability, and completeness of the ethical guidelines.

The second component of the initial outcome and result was the implementation of design for the ethical guidelines' apps. The screen description and sketch of the design in the application can be seen in Table 2 and Figure 1 accordingly.

Table 2
Screen description

Screen	Description	User Action	Outcome
Splash Screen	App logo with a brief loading animation.	Auto transition.	Navigates to Home Screen.
Home Screen	Displays six main menu buttons.	Tap a button.	Redirects to the selected section.
Framework Overview	Text & infographic explaining AI ethics.	Scroll or tap back.	Navigate or return to Home.
Ethical Principles	Sections for Bias, Transparency, Privacy, Accountability.	Tap on a principle.	View details & guidelines.
Case Studies	List of AI ethical dilemmas with solutions.	Select a case.	Read the scenario & learn outcomes.
Interactive Assessment	Quiz with multiple-choice questions on AI ethics.	Answer questions.	Get instant feedback & score.
Expert Insights	Video snippets & articles from AI ethics experts.	Browse content.	Watch/read & engage.
Settings	Personalize UI, notifications, and language.	Adjust settings.	Save user preferences.

Fig. 1. Initial apps sketch/design

4. Conclusions

According to Lu *et al.,* [13], in recent years, global interest and investment in artificial intelligence (AI) technology have reached unprecedented levels. The rapid integration of AI technologies, such as ChatGPT, into education presents significant opportunities for enhancing learning experiences. Unfortunately, it also raises ethical concerns that must be carefully addressed. This study proposed the SMART AI Ethical Framework, which focuses on four key ethical dimensions: bias, transparency, data privacy, and accountability. By conducting a systematic literature review and incorporating expert validation, this framework should provide practical guidelines for ensuring the responsible use of AI in educational settings.

The findings highlight that bias in AI-generated content can impact student learning outcomes, making it essential to develop fair and inclusive AI models. Transparency plays a crucial role in helping students and educators comprehend AI's limitations and potential biases. The study also emphasizes the importance of data privacy, ensuring that student interactions with AI systems remain secure and

compliant with ethical standards. Lastly, accountability must be established to prevent the misuse of the AI-generated content and maintain academic integrity.

To reinforce ethical AI adoption, institutions should implement AI literacy training, enhance human-AI collaboration, and establish clear policies for AI usage in education. Future research should explore the evolving role of AI in pedagogy, assess the long-term effectiveness of ethical frameworks, and consider regulatory developments in AI governance.

By fostering responsible AI implementation, educational institutions can maximize the benefits of ChatGPT while mitigating risks, ensuring that AI serves as an ethical and effective tool for learning and academic growth.

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