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Artificial Intelligence and Ethical Practices: A Study in the Realm of Translation

Suad Abdulaziz Khalil Al-Kadery
Assistant Professor of English Literature, Department of English, Ibb University, Yemen
kaderysuad@gmail.com

Mohammad Moghim G Almotiry
Master's Degree of Translation Studies, Department of English, College of Science and Humanities, Dawadmi, Shaqra University, Saudi Arabia
mal-mutairi@su.edu.sa

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Abstract

Of late, translation work has occupied pride of place in businesses and professions and other activities carried out by humans due to increasing global interaction for various reasons such as globalization, tourism (adventure, travelling and pilgrim tourism being the most popular ones) becoming a passion and quest to know other peoples' living styles and their cultures, and visit historical places and monuments preserved as heritage. With every journey and every deal, translation powers the global exchange, proving that language is the ultimate connector. Said differently, translation has occupied a very important place in business professions and other activities due to increasing global interaction. Artificial Intelligence has been drafted to help in translation work with its LLM tools. Bias in AI, data privacy, transparency, and the impact that AI will have on professional translations and its professionals are key concerns in contemporary times. The study aimed to investigate and determine the optimal integration of AI within the translation industry, addressing potential biases of LLMs. The study employed mixed methods as it used a survey with 112 professional translators followed by semi-structured interviews to gather data on six factors that have come into prominence in the era of AI tools in translation. Results indicated that though AI tools are seen as a great aid in translation, Saudi translators use them with great caution, especially in the business translation domain given the many caveats that such translation comes with. Also, evident that cultural and regional sensitivity is a major onus of the translation professionals, AI tools are not viewed as fully reliable in this context and human intervention alongside AI tools in translation is preferred. The study concludes with recommendations pertinent to translation professionals, teachers, policymakers, and business houses. Ethical concerns, however, remain a major concern for professionals as data privacy is not assured in their use.

1. INTRODUCTION

With the growth of machine translation (MT) and the development of subtasks such as text preparation for translation and post-editing, artificial intelligence (AI henceforth) and machine learning technologies have had an impact on the language mediation business (Al Sawi & Allam, 2024). The impact of machine translation (MT) on the translation profession is now

greater than that of MT on the translation profession (Matarazzo & Torlone, 2025). However, technological advancements continue to improve, and in the interpreting industry today, fully automated machine interpretation and AI-based computer-assisted interpreting (CAI) systems are becoming more and more prevalent (Jiwasiddi et al., 2024). However, there are several moral concerns around data security and privacy when using AI and big data for interpretation. Bias in any form can deny merit, support nepotism and favoritism, and reward sycophants (Mumtaz, 2025). Bias in language translation marginalizes lesser-used languages. Bias in translation also projects context in bad colors if done with malice and without due consideration of culture. Presentation of truths in incorrect language projects ethical concerns. Bias is, therefore, one of the primary ethical challenges in LLMs-driven translation technology. These models are trained on extensive databases, often taken from the internet, which may contain/display cultural, gender, and racial biases (Kleinberg et al., 2022). Such biases can manifest in translation, leading to misrepresentation or offending outputs. For example, a model might perpetuate stereotypes or fail to recognize non-binary gender pronouns. Addressing bias in LLMs is crucial as ensuring fair and accurate translation is essential, hence ethical. There is a requirement for diverse and representative datasets and for the implementation of bias identification and removal techniques during model training and evaluation. Ethical AI development must prioritize inclusivity, ensuring that the concerns and perspectives of marginalized groups are adequately represented in training data (Aljabr & Al-Ahdal, 2024). This way, the LLMs can produce more equitable and respectful translations, supporting better cross-cultural communication and understanding.

2. LITERATURE REVIEW

Large language models (LLMs) have been produced through innovations. These models have created a revolution in the machine (AI) produced translations world. These models possess high speed and display great accessibility. Their developments are conditioned by ethical considerations that must be addressed to ensure responsible use of translations. This literature review is an essential exercise for exploring key ethical issues in LLMs-driven translation technology, focusing on bias, privacy, transparency, and the impact on the translation profession.

Sarkar and Sarkar (2024) examine the ethical issues surrounding AI by defining ethics, setting it apart from morality, and emphasizing how dynamic ethical principles are. The study then moves on to applied ethics, which addresses real-world moral conundrums in fields like genetic engineering, the effects of AI on employment, and environmental issues. After that, the study turns to ethics related to AI, making a distinction between "Ethics of AI" and "Ethical AI." While "Machine Ethics" focuses on giving AI systems the ability to make moral decisions,

"The Ethics of AI" offers a paradigm for AI development that considers more general ethical challenges. By placing a strong emphasis on user trust, bias reduction, and responsibility, ethical AI seeks to bring AI systems into line with moral principles. The study explores several ethical concerns related to AI, including responsibility, autonomy, intentionality, data security, privacy, and transparency. It provides a thorough explanation of these problems, emphasizing their applicability and the difficulties they pose in the field of AI. Additionally, it talks about how ethical issues affect society, especially in the areas of accessibility, democracy, and civil rights, as well as automation and job displacement. It emphasizes the necessity for fair internet access, the possible effects of AI-driven automation on jobs, and the moral issues surrounding civil liberties and governance in the context of AI's impact. In conclusion, this essay offers a thorough analysis of AI ethics, including basic ethical principles, ethics unique to AI, the significance of Ethical AI, and the moral dilemmas associated with AI development and its effects on society. It is a useful tool for comprehending AI's ethical implications. A similar endeavor is the highlight of Bostrom and Yudkowsky (2025), which explored the potential of AI and Ethics related to this.

Ahmadova (2025) explores the moral dilemmas of translating, emphasizing the difficulties in upholding precision, cultural awareness, and professional ethics. The ethical use of machine translation technology, impartiality, secrecy, and fidelity to the original text are important areas of focus. The study also looks at how translators should be treated fairly, stressing the value of fair pay, respectable working conditions, and professional recognition. By tackling these complex problems, the study emphasizes how important ethical standards are to building confidence, guaranteeing cultural relevance, and upholding high standards in the translation industry.

Taivalkoski (2018) explores the fundamental ethical concerns that need to be considered when implementing or customizing technical tools for literary translation. Recent research on translation technology and the application of machine-assisted translation for literary language is incorporated into the ethical problems discussion. Based on a comprehensive understanding of translation quality, an argument for sustainable progress in literary translation is presented, along with an assessment of the effects of the recent surge in technological advancements on both literary and non-literary translation. The concept of voice is used as an illustration of the unique difficulties associated with translating literary language, which have not yet been adequately considered in machine-assisted literary language translation research. Finally, the concept of noise is used to demonstrate cutting-edge aesthetic perspectives and applications of machine translation.

The ethical issues faced by the employment of AI in general and in interpreting specifically are examined in Horvath (2022), which first looks at the various tools already available and how

AI can be utilized in interpreting. Saif and his colleagues' 2024 paper explores how major publishers, such as Elsevier, Wiley, and Springer, are changing their restrictions on the usage of generative AI in academic articles. Despite publishers' increasing interest in AI, policy differences reflect continuous discussions about responsibility, transparency, and the moral implications of content produced by AI. The impact of AI on education for researchers and students is also covered, with a focus on the necessity of critical assessment and assistance for up-and-coming scientific authors. The conclusion stresses the significance of comprehending and appreciating AI's limitations while acknowledging the technology's revolutionary potential in scientific research. In a time when technology breakthroughs are shaping research practices more and more, it is imperative to strike a balance between the advantages of AI and ethical issues. AI has quickly permeated many facets of society, including academia.

Recent years have seen tremendous advancements in AI that have an impact on many facets of life. This has affected text machine translation, lowering or eliminating human involvement. This has led to the widespread availability of translation software models based on AI, such as Google Translate, Bing, Microsoft Translator, DeepL, Reverso, Systran Translate, and Amazon Translate. There are also several computer-aided translation (CAT) tools available, including MemoQ, Trados, Smartcat, Lokalise, Smartling, Crowdin, TextUnited, and Memsource (Mahdy, Samad & Mahdi, 2020). AI has been used more recently to create programs like ChatGPT, ChatSonic, GPT-3 Playground, Chat GPT 4, and YouChat that more closely resemble human interactions by simulating conversational answers to researchers' questions (Alowedi & Al Ahdal, 2023). To explore the possibility that there is no longer a distinction between human and AI translation in the legal domain, Moneus and Sahari (2024) identified any lingering differences between the two. The study also looked at concerns about whether the need for human translators will decrease as AI advances and started to determine whether people working in the legal industry will ever be able to rely only on machine translation. This was accomplished by selecting a set of legal documents from different contracts, assigning them to legal translators, and then putting them through AI translation systems. Thus, by employing a contrastive methodology, the study investigated the distinctions between AI and human translation, analyzing the advantages and disadvantages of each strategy and going over the circumstances in which each may work well.

To provide a theoretical framework for the governance of ethical issues related to AI and the creation of a regulatory framework for it, Li (2025) addresses the ethical concerns raised by the field's rapid development and offers solutions. A systematic search of a variety of literature sources, including news stories, and academic, organizational, and government grey literature sources, was used to conduct a literature review. The material published or released in 2010 was given priority. Nowadays, a variety of ethical concerns have arisen because of AI's quick

development. The ongoing innovation in AI technologies necessitates that ethical debates stay current. The only AI that can genuinely assist people in building a better future is that which develops under standardized and acceptable limits.

The primary ethical issues brought about by the quick growth of AI are examined in this study, particularly from the viewpoints of "environmental ethics," "gender ethics," and "social ethics," and appropriate solutions are suggested. To offer theoretical references for the development of a normative framework for AI ethics and to positively contribute to the advancement of ethical governance of AI, this study examines the primary issues from three perspectives, namely "environmental ethics," "gender ethics," and "social ethics," and proposes appropriate solutions. It combines three distinct viewpoints—"gender ethics," "environmental ethics," and "social ethics"—to examine the most recent significant ethical challenges originating from AI from a fresh angle. Because it addresses the problems brought forth by AI from three distinct angles—"gender ethics," "environmental ethics," and "social ethics"—and suggests appropriate solutions, this study is novel.

Kimera, Kim, and Choi (2024) examined the ethical issues surrounding AI in neural machine translation (NMT) systems. The study highlights the need for developers to guarantee equity and cultural awareness. We look at the ethical competency of AI models in NMT, looking at ethical issues including permission, data ownership, privacy, and management at every level of NMT development. We use empirical research to pinpoint and resolve ethical problems. These include using Transformer models to translate from Luganda to English and using sentence mini batching to increase efficiency. Supplementary research that improves data labeling methods and optimizes BERT and Long former models for social media content analysis in Luganda and English. Literature from websites like GitHub and databases like Google Scholar was examined as well as how humans and AI systems share accountability, highlighting the critical role that human monitoring plays in maintaining NMT ethical norms. Using a biblical framework, the researchers addressed the effects of NMT on society and the larger moral obligations of developers, holding them responsible as stewards for the effects of their work on society.

Large language models (LLMs) have been produced through innovations. These models have created a revolution in the machine (AI) produced translations world. These models possess high speed and display great accessibility. Their developments are conditioned by ethical considerations that must be addressed to ensure responsible use of translations. The following section is an essential exercise for exploring key ethical issues in LLMs-driven translation technology, focusing on bias, privacy, transparency, and the impact on the translation profession.

2.1. Bias and its representation in LLMs

Machine, that is, AI is also not immune to bias. Translators and users of translated versions are concerned with bias entering the machine processes of translating texts. This concern is well-documented, particularly in LLMs used for translation purposes. The researchers have found that these LLMs models which are trained on vast datasets downloaded from the internet often reflect and perpetuate societal biases related to race, gender, and culture. Bender et al. (2021) conducted a study to find bias and argued that biased training data could lead to biased translation outputs thus affecting the quality and fairness of translations. They emphasize the need for diverse and representative datasets to minimize these biases. Similarly, Blodgett et al. (2020), after their investigation, stated that there was a need to press in-service techniques for the removal of current bias. Machine-generated translations do get infected with biases and this is its limitation that has to be eliminated or minimized. They have also suggested that more comprehensive approaches were required to be adopted to remove/tackle systemic biases ingrained in language models, and LLMs.

2.2. Privacy and data security

Privacy and data security are significant concerns in training LLMs and concerns relate to the use of personal data violating personal liberty and the right to keep things/data to self. In the USA, there is a Privacy Act in force to protect the (personal) privacy of each citizen. Indeed, large datasets which are very often extracted from sources that are openly/publicly available can include sensitive information through inadvertence. Bartneck et al. (2021) studied this issue and stated that there are practices for collecting data to give an undertaking/promise for keeping data/source anonymous and, in almost all cases, consent is obtained from the entity/person concerned. This is being done while collecting data for LLMs (AI Models). Xu, Baracaldo, and Joshi (2021) also examined this privacy and ethics issue in-depth and came out with suggestions on the need for innovating necessary robust data governance frameworks to collect and store data for making sure that user privacy is ensured, and data breaches in any way are not allowed. They concluded by advocating for putting in place transparency in data handling practices to assure sources on this count; such practices based on concrete systems would help in building trust between users and AI service providers.

2.3. Transparency

Like good governance at political and corporate levels, transparency in the AI (LLMs) is essential at the process level of decision-making. It is crucial to make a bedrock foundation to build trust and accountability. According to the views of Raji et al. (2020), many LLMs are reported to work in such a manner as to call them “black box,” operators in darkrooms where secrecy is maintained and nobody can be sure whether there is transparency and full disclosure in their working. Outsiders cannot see and understand how specific translations are generated.

Lacking transparency can lead to mistrust and misunderstanding, especially when translations are not accurate or contain offense of any kind which is generally abhorred and condemned. Raji et al. held discussions after their study to express their view that there are AI (XAI) techniques in place that aid in enhancing transparency in LLMs.

2.4. Disclosure

AI models should be designed in such a manner as to provide explanations for their outputs that would enable users to understand the logic behind each translation, more so in the case of specific translations. In the same way, Doshi-Velez and Kim (2017) explored the role of 'interpretation' in learning on the machine. They put forth arguments to convince that transparency is key to ensuring accountability in AI applications.

2.5. Implications for the Translation Profession

There are significant implications with the rise of LLMs-driven translation technology for the translation profession. Despite these models offering efficiency and scalability, they are responsible for threatening to replace human translators. They do so in cases of a routine nature and where data tasks are large. Mohamed et al. (2024) studied the issue and arrived at the assertion that there is a potential impact of AI on the translation industry. They pointed out specifics in their study: some translators may be left unemployed because the machine has great, consistent speed and no fatigue. The authors do not leave explaining this issue at that. They hold out a positive note in saying that other translators may get engaged in new role sets – in quality assurance and AI training. The authors opine that the evolving dynamics need a collaborative approach: human translators' expertise functions as a complement to AI capabilities. In another study, Pym (2013) held discussions on the ethical implications of translations turned over through machines and advocates in favor of the integration of human translators for ensuring quality and contextual accuracy, especially in sensitive fields identified as legal and medical translation.

2.6. Research questions

With a keen eye on the ongoing debate and the experiences and conclusions of previous research, the current study aims to answer the following questions:

1. What are the specific concerns of translators about the possibility of bias creeping into AI-generated translations?
2. What are the primary needs of the translation industry vis-à-vis translation dynamics especially in the business domain?
3. How can AI be best integrated into the translation practices ensuring its cons are kept at bay?

3. METHODOLOGY ADOPTED

3.1. Data Collection

The study took a mixed methods approach by having quantitative and qualitative datasets that were later triangulated to arrive at conclusions.

3.1.1. Survey

In order to gain a comprehensive understanding of the ethical implications of the LLMs in translation, data were collected from a random selection of 112 professional translators. The aim was to gather perspectives on issues such as (a) bias; (b) data privacy; (c) transparency; and (d) the impact the AI has on the translation profession. This diverse set of factors ensured that the ethical considerations were well-rounded and inclusive. The survey data was later analyzed to identify prevailing ethical concerns and areas where there may be consensus or disagreement. The survey responses were analyzed using descriptive statistics for summarizing the data (collation) and identifying common ethical concerns among the main stakeholders. This analysis provided quantitative insights into the prevalence of the specific ethical issues and the level/degree of concern expressed by translators on the use of AI.

3.1.2. Content analysis based on interviews

Systematic content analysis of data gathered via semi-structured interviews helped identify recurring ethical themes, patterns, and issues related to LLM-driven translation, centering around ethical challenges, such as bias, privacy, and accountability and served as an aid in understanding their frequency and significance in the context of translation technology.

4. DATA ANALYSIS AND FINDINGS

In all, six factors formed the basis of the questionnaire: Bias concerns (2, 3, 11), challenges in business translation (4), cultural sensitivity in translation (5), benefits of AI as a translation aid (6, 11), concerns about the impact of AI on translation (1, 6, 7), role of humans in integrating AI in translation (8, 9), and faith in ethical integration of AI (10). All responses except demographic information (profession, gender, years of experience in the translation industry), were on the five-point Likert Scale with 1 indicating complete disagreement with the question or statement and 5 indicating complete agreement. Means for all responses to each item were computed and items loading onto the same factor were analyzed together. Table 1 summarizes the findings of the survey.

Table 1: the perception of professional translators to the potential biases of LLMs.

No.	Statement	Mean
1	The impact of AI-generated translation on the accuracy and quality of the output is not necessarily positive	3.8
2	Human editing can nullify AI-generated biases in translation	4.6
3	There is a need for safeguards to reduce AI-generated biases	4.2

4	In the business translation domain, please rate your perception of the quantum of the challenge	4.1
5	Cultural sensitivity or appropriacy in translation is very important	4.8
6	The usefulness of AI integration into translation cannot be disputed	4
7	Concerns about the potential negative impact of AI tools in translation are misplaced	1.1
8	As far as quality of translation goes, human translators complement the machines	3.1
9	Human translators need to be engaged with the translation process even when AI tools are in use	4.2
10	Ethical concerns such as data privacy are ensured when AI tools are integrated into translation practices	2.5
11.	There is a possibility of a reduction in human effort when AI tools are used	4.3

As is evident from the survey data (112 respondents), bias concerns in the use of AI tools in translation are very highly rated (4.6, 4.2, 4.3) indicating awareness of and inhibition in the use of AI tools in translation owing to the possibility of biases. This is particularly true of language pairs where one or both the languages concerned do not have a very large database in the language model being used. Languages that have a lesser number of users, whether in real life or on the internet, are likely to have less than proficient datasets, leading to unreliable translations. Similarly, challenges in business translation are also rated high by the respondents. These results were supported by the semi-structured interviews. Interviewees shared that issues of legal compliance, the need for cultural sensitivity, and the maintenance of brand consistency were clients' main concerns. As a result, there were potential dangers in translators resorting to AI tools. Several respondents cited the examples of Chinese product manuals in Arabic that were clearly translated using AI tools and the outcomes were even hilarious more than once. They added that such misuse of AI tools even affected the status of the brand, at times even to the extent of the complete disappearance of the product from the foreign market. It is notable that a very high mean of 4.8 (5) in response to the importance of cultural sensitivity in translation indicates the highly responsive attitude of Saudi translators to the issue of language appropriacy in translation in the business domain. During the interviews, as many as seven of the 12 interviewees expressed that they often felt inadequacy of their education as far as cultural awareness went, two of them adding that the limitations on international exposure in the country were to blame for this. At the same time, they felt proud of their Arabic heritage but expressed the need for greater globalization in translation curricula and training. Yet, no field

or occupation can remain untouched by technology in contemporary times, and the judicious use of AI can be a great strength in the translation industry. This was reflected in responses to items 6 and 11 which dealt with the need for AI in translation. These responses were, however, complemented by items 8 and 11 that elicited perceptions on the role of humans in integrating AI in translation. High mean values of these responses indicate that these professionals are at the cusp of the human-to-AI transition and are clear advocates of human moderation in AI translation outputs. Concerns about the impact of AI on translation (1, 6, 7), and the translators' faith in the ethical integration of AI (10) were the remaining two factors in this analysis. A low mean of 1.1 to item 7 indicates general unanimity that AI tools in translation have not yet gained the translators' confidence and the latter would rather use them with much caution. Similarly, debates about data privacy are forever rife as far as AI tools are concerned and the translators also concur in the general fear of the same. Interviews also revealed that rather than decreasing, there is an increasing belief that AI tools act as two-way conduits of information and in the long run, may not be trustworthy aids.

5. DISCUSSION

The finding highlights the inescapable concerns surrounding bias in AI translation tools. Notably, the high mean ratings of 4.6, 4.2, and 4.3 across multiple questions about bias demonstrate a profound concern among translators regarding the use of AI. This anxiety is particularly marked in language pairs where one or both languages lack extensive datasets within the AI model, leading to potential inaccuracies and unreliability. This can be found mostly in the presence of gender, racial, and cultural biases in AI language models. This finding is in alignment with the findings of Bender et al. (2021) and Xi et al. (2025).

This anxiety about the deficiency of AI is particularly marked in language pairs where one or both languages lack extensive datasets within the AI model, leading to potential inaccuracies and unreliability. In this line, Guo et al (2024) stressed that LLMs suffer from several issues such as "the lack of multilingual datasets annotated by experts, concerns regarding the accuracy and reliability of generated content, challenges in interpretability due to the 'black box' nature of LLMs, and ongoing ethical dilemmas" (p. 1). This concern is further validated by the high ratings assigned to challenges in business translation, a finding supported by semi-structured interviews. Interviewees expressed client anxieties regarding legal compliance, cultural sensitivity, and brand consistency, emphasizing the potential for detrimental outcomes when AI is employed without thorough human revision. The illustrative examples, such as the flawed Chinese product manuals in Arabic, underscore the tangible risks of AI misuse, including brand damage and market exclusion.

Furthermore, the exceptional responses of the participants showed that there is a very strong concern regarding cultural sensitivity in translation, which signifies a strong commitment to language appropriateness and contextual relevance within the Saudi translation landscape. This notion was strongly recognized by Zhou (2024), who claimed that when using AI the security of using ChatGPT, there should be respect for the aspects of bias, ethics, falsehood, misuse of language, attacks and privacy. Regrading the interview, data revealed a nuanced perspective; while translators expressed pride in their Arabic heritage, they also acknowledged perceived limitations in their cultural awareness due to restricted international exposure, advocating for a more globally oriented curriculum and training.

Despite these concerns, the survey data also indicates a recognition of AI's potential benefits. High mean values which addressed the necessity of AI in translation, suggest a willingness to embrace technological advancements. However, this acceptance is associated with an emphasis on human moderation. This reflects a preference for a collaborative human-AI model, where human expertise complements and refines AI outputs. These notions are consistent with what was found by Zhang, Xu, and Wei (2024), who stressed humans refining the output of AI.

Conversely, a low mean of 1.1 for the statement 'Concerns about the potential negative impact of AI tools in translation are misplaced', reveals a prevailing doubt and a preference for cautious implementation. This lack of trust is combined with concerns regarding data privacy, a sentiment echoed in the interviews: this goes in the same vein as Faisal (2024) when he said cautious utilization of LLMs in academia should be maintained due to their potential challenges and limitations.

Participants expressed anxieties about AI tools acting as "two-way channels" of information, potentially compromising data security and long-term reliability. The collective data, therefore, portrays a profession navigating the complexities of AI adoption, carefully balancing the potential advantages of technology with the imperative of maintaining cultural sensitivity, ethical integrity, and human oversight.

6. CONCLUSION

Because AI offers previously unheard-of capabilities in data processing, predictive modeling, and literature review, it has become an essential component of scientific research. The complex effects of AI on research methods, scholarly discourse, and ethical issues are examined in this article. In domains like biomedicine and the social sciences, the use of AI in scientific research simplifies data collection, speeds up analytical processes, and enables predictive modeling. However, significant thought must be given to the ethical implications of AI in academic writing. Fundamentally, AI is the replication of human intelligence in machines that have been carefully designed to possess cognitive capacities and learn information like that of humans. These include mental processes including language comprehension, artistic expression,

strategic planning, and cognitive analysis. Numerous possibilities have emerged from the application of AI in research, including complex data processing, prognostic modelling, and more. AI could greatly increase the effectiveness, accuracy, and scope of research projects thanks to these amazing characteristics. A new era of data analysis, literature evaluation, and general knowledge advancement has been brought about by AI. But like any potent instrument, its promise is both intriguing and rife with moral dilemmas. There is an impressive and wide range of applications of AI in scientific research. Through the simplification of data collecting and the speeding up of analytical processes, AI has repeatedly shown that it is capable of radically altering the approaches used in scientific research.

Furthermore, AI systems have demonstrated the ability to predict future patterns and trends by utilizing historical data, providing previously unheard-of insights into the direction of research activities. In the field of biomedicine, the application of AI-powered algorithms makes it possible to thoroughly examine large datasets and find complex patterns and connections that are beyond human cognitive abilities. As a result, this promotes the development of tailored medicine and expedites medication discovery. Parallel to this, in the social sciences, AI systems process and analyze enormous amounts of data to glean insightful information on human behavior, economic patterns, and social changes. The creation of publications, which are essential channels for sharing scholarly knowledge, has unavoidably been impacted by AI's influence on academic discourse. In the current digital age, the exponential growth of academic articles is greater than any person's computational ability to read, much less analyze. The use of AI tools, such as literature review assistants and content summarizers, has increased recently. By successfully interfering with the review process, these tools have made it possible for a more methodical and effective approach.

The world is home to hundreds of thousands of languages, tongues, and cultures with different lifestyles and habits. It is here that translation has made its appearance all over the world, and the need for professional translators is keenly felt. AI has been drafted to help in translation work with its LLM tools. These LLMs are capable of handling repetitive and large volume translation tasks thereby freeing human translators from bulk translation work handling, but meanwhile keeping them to focus on content that is either more complex or containing nuances.

Recommendations

It is hoped that the conclusion of the research will present the dire need for an ethical roadmap for the responsible development and use of LLM-driven translation technology. It is recommended that key ethical principles and guidelines, including the need for bias removal, data privacy protection, transparency in AI decision-making, and accountability for translation errors in AI be identified through rigorous research so that remedies may be develop. It is also recommended that best practices for collaboration between AI developers, translators, and

policymakers be framed in order to create a balanced approach that leverages the strengths of both AI and human expertise.

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