

The Ethics of Artificial Intelligence in Literature: Analyzing the Portrayal of AI in Science Fiction

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ABSTRACT:

The ethical implications of artificial intelligence (AI) have become a central concern in contemporary technological discourse, yet public understanding of these issues is often shaped by fictional representations rather than real-world applications. This study examines how science fiction literature portrays the ethics of artificial intelligence and evaluates the relevance of these portrayals to contemporary AI governance and policy debates. Using a systematic review and mixed-methods content analysis, a diverse corpus of science fiction texts was analyzed to identify recurring ethical themes, AI typologies, narrative roles, and governance models. The results reveal that science fiction consistently foregrounds ethical concerns related to autonomy, control, surveillance, bias, moral responsibility, and human identity, often emphasizing dystopian or cautionary narratives. While speculative depictions frequently focus on superintelligent or anthropomorphic AI, many narratives also anticipate present-day ethical challenges such as algorithmic bias, mass surveillance, and accountability gaps. Quantitative analysis demonstrates a temporal shift in ethical focus, moving from early concerns about automation and control toward contemporary themes of governance, transparency, and human-centric AI. By systematically mapping these ethical representations, this study demonstrates that science fiction serves as a critical cultural space for ethical reflection, offering valuable insights that can inform responsible AI development and policy frameworks. The findings contribute to interdisciplinary scholarship by bridging literary analysis with applied AI ethics and regulatory discourse.

Keywords: *Artificial Intelligence Ethics, Science Fiction Literature, AI Governance, Ethical Narratives, Surveillance And Bias, Human–AI Relations, Digital Humanities*

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INTRODUCTION

The field of artificial intelligence is quickly becoming a factual concept and is altering the social order and industrial paradigm completely (Ahmad et al., n.d.). Due to such a dramatic process, AI ethical discussion is currently expanding both scientifically and popularly, which at times puts it in the same rank as its popular use in science fiction (Hermann, 2021). Actually, the literature offers a reserved analysis of the beneficial and adverse visions concerning the development of AI and emergent technology, and it is the modality that will enable the one to analyze the potential future and the manner in which the society will respond to the new technologies (Osawa et al., 2022; Santos-Mendez et al., 2024). The study will consist of the discovery of universal ethical tropes and apply them to the existing AI policy and regulations basing it on how the concept of AI is represented in literature as conceptualisations, to the present days when the creators of the stories exist (Santos-Mendez et al., 2024). Moreover, the overall perception of AI, such as the good robot, the bad superintelligence, and so on, are likely to radically alter due to the impacts of the machine intelligence on technology policy and society in the nearest future (Hudson et al., 2021). This kind of contradiction is an object of a major misplacement in socio-technical problems of AI such as algorithmic discrimination, bias, and surveillance that are typically overlooked in favor of more sensational accounts (Gill, 2023). Science fiction is a crucial method of reflecting on ethical and social implications of the AI since it gives the dramatic scenarios, which are attractive to human interests under the conditions of autonomy and identity, but science fiction is not a technological evaluation mechanism (Hermann, 2021). Although the technical mistakes involved in this literary activity are technical errors inherent to the entertainment nature of the latter, it would compel a researcher to presume how people imagine and how they might react to new AI systems (Osawa et al., 2022). However, science fiction has also applied the same creative power to address challenging ethical and philosophical questions concerning AI and establish a more lucrative debate on the ethical implications of AI that would otherwise be the domain of an academic or technical one (Hermann, 2021). This flood of stories challenges us to argue about the ethical, intellectual and sociopolitical fact of our lives, it also makes us start questioning what it is like to be a human in an increasingly AI-dependent society (Gogoi, 2023). Such science fiction exploration, even in the exaggerated format, can be helpful in the anticipation of the approaching events and its impact, which is why an active construction of ethical standards into which AI should be implemented is required (Grundner and Neuhofer, 2020). To be more exact, by exploring the issue of how these fictional descriptions can be projected onto the reality of AI adoption, scientists will be capable of closing the divide between popular ideology and the reality of an AI-driven policy in a more efficient way by providing the policymakers with a suggestion of how they can accommodate the technology in a less anthropocentric way (Ahmad et al., n.d.; Hudson et al., 2021). The implication of such difference is that over-literalizing fictional AI especially through science

communications may give the impression of what AI is capable of doing now and thereby mislead people to emphasize more on what actually matters the harms of algorithmic bias and surveillance (Hermann, 2021). Natural dramatisation of science fiction is prone to focusing on superintelligent or human-like AI and ignoring less dramatic but more urgent and widespread ethical problems of the more constrained use of AI in the area of employment algorithms, credit rating and predictive policing (Hermann, 2021). Thus, the question of ethics cannot be reduced to the anthropomorphic to discuss the systemic consequences of the available AI applications despite the fact that engineers are trying to create the advanced AI, which is closer to human thoughts and behaviours (Prajapat, 2024). It entails a more holistic consideration of the impact of AI on society outside of and including the fantasy of the literature to the apparent morality that is cognizant of the existing applications. This interdisciplinary mode of examining the ethical terrain of AI and safe development of AI assumes the ambivalent nature of the technical evaluation and literature review. Therefore, philosophical foundations of AI manifested in these stories can be used to build a more effective ethical framework on practice (Bhattacharjee and Sinha, 2024).

LITERATURE REVIEW

The paper reviews key academic literature on AI ethics in science fiction that classifies them based on common themes such as consciousness, autonomy, and impacts of the highly advanced AI on society. It sets the gaps in the existing body of knowledge and critically examines the way these imaginary images fill or reduce a realistic image of the ethical issues of AI (Poli et al., 2024). Most of the works, even the ones that appear catastrophic to humanity due to the superintelligent AI, are not focused on the ethical considerations that are formed under the influence of biased algorithms or invasion of privacy by omniscient surveillance systems (Gill, 2023; Hermann, 2021). This kind of artificial distinction often leads scientific studies and popular discussion to go beyond real imminent ethical threats and challenges that require governmental intervention and control and into perceived, sensationalised threats (Suchikova, 2025; Wei et al., 2025). Moreover, certain science fiction films, such as *Black Mirror*, are a good representation of ethical realities of emerging technologies of artificial intelligence like augmented reality and digital cloning and present compelling retaliations of ethical and philosophical speculation on the current use of AI (Giannotta, 2022). They are very strong stories, but to see a more complete image of AI ethics, one has to consider further aspects of AI development, which is incubation, introduction of human-like qualities, and the development of human-related systems (Coeckelbergh, 2020). Ethical thinking must occur on a continuous basis as the artificial intelligence is not only developing and specialisation work but also develops more generalised forms when artificial intelligence is not just a specialised use (Grundner and Neuhofer, 2020). Therefore, to quantify the impact of AI on the human race, one should take into account the specifics of its development since the beginning of the concept evolution up until the opportunity of the successful

integration of the AI into the society (Carrasco-Garcia et al., 2025; Grundner and Neuhofer, 2020). It comprises broader cultural, legal and philosophical aspects that affect the acceptability of AI and its impact on society to complement technological aspects of its usage (Poli et al., 2024). Artificial general intelligence, as a case in point, is often fixated on the problem of moral personhood and consciousness that transcends the current practical issues of narrow AI (Dainton et al., 2021). The ethical issues to be mentioned in this case refer to the necessity to clarify the difference between what is happening and what may happen later. The weak-strong AI is precisely this difference that guarantees that the regulatory framework is put on the realities at the moment, and projects in the future any hindrances (Carrasco-Garcia et al., 2025). This plan will open the option of creating a more moderate stance, which will allow investigators to resolve the urgently arising ethical scourge of algorithmic bias and data privacy not only but also anticipate the major ethical and legal scams that are bound to transpire when the individuals with the truly independent and conscious AI systems are in existence (Nemec, 2024). Taking into account the fact that the modern AI is more of a prolonged computer application, this paradigm is important to prevent wrong application of ethical principles which should be employed in the case of sentient beings (Sridhar, 2025). Moreover, false information or misleading output so-called hallucinations can also be made by artificial intelligence (AI) models, which is why the ethical issues of artificial intelligence models usage become potentially problematic. This is a huge challenge to these kinds of industries as the major issue is precision and continuity regarding destination marketing (Reinhold et al., 2023). The necessity to introduce a more granular approach to ethics is also triggered by the fact that there are three types of AI namely narrow AI, general AI and super AI. This is because moral and social outcome of such classes is far too different (Spalevic et al., 2024). Such categorization is required to form a moral norm and appropriate laws that will be adjusted to all potential influence and capabilities unique to each type of AI (Hickerson and Perkins, 2025). Specifically, the ethical issues that are apt to be confined to the field of algorithmic fairness, accountability, and data privacy are the ethical issues, whereas more advanced types of AI, e.g., artificial general intelligence, have high implications in terms of sentience, moral agency, and possible breaking of the society (Adah et al., 2023). The narrow AI systems like the information retrieval systems, the decision-making systems, etc. are already extensively used as a subset of the daily life of people to simplify their tasks, but the ethical issues surrounding it are concerned with making its use as transparent and bias-free as possible instead of the existential threats (Carrasco-Garcia et al., 2025; Grundner and Neuhofer, 2020). As a matter of fact, the two speculative ethical issues of general and super AI are inclined to focus on the issue of existence and awareness of existential risks, and the concept of humanity, which challenges the boundaries of philosophical studies of the past (Hermann, 2021). This distinction is of paramount significance when it comes to the creation of AI in the sensitive industry where the ethical principles of beneficence and non-maleficence should be considered carefully at the customer, business, and society

levels (Hermann, 2021). The next strength of the ethical standards is the development according to the level of sophistication of AI up to the illustration of systemic, world-wide changes (Ferrell et al., 2024; Labrecque et al., 2024). Along with supporting a moderate combination of principles of top-down influence and bottom-up values that may support the latter, such universal approach to the problem of AI ethics should incorporate the different methods of normative ethics and context-specific ontologies required to handle the complexities of AI development and deployment throughout all of its lifecycle (Hammerschmidt, 2025).

METHODOLOGY

This part describes the methodological framework of studying the issue of AI treatment in science fiction literature, and it is directly related to the discovery of the most common ethical dilemmas and how they are constituted in the various pieces of fiction. The systematic review of the related texts and qualitative content analysis will be used, and it will enable us to investigate the conceptualisation and criticism of the ethical aspects of AI in the genre in more detail. In the effort to recognize a broad spectrum of AI (and narrow) AI concerned with the specific tasks and more general and super intelligent) we decided to sample diverse science fiction books, short stories, and graphic novels (Dehouche, 2021; Hudson et al., 2021). This selection criterion was crucial in the sense that the discussion of AI ethics in the context of speculative narratives would be performed in a comprehensive manner because it would help to search similar topics but also original ethical dilemmas that are elaborated in different degrees of technical complexity. In addition, conclusions can be made on how authors may foresee and take into account the real-life ethical arguments where AI is involved that provide a unique view of how social issues and expectations of AI may be interpreted. The methodological and theoretical preconditions of studying AI ethics in the literature are predetermined by the systematic review section that implies the application of already developed frameworks which implies the active development of AI technologies and the necessity to have a solid ethical code (Wankhade et al., 2025). In a bid to present the multi-dimensional aspect of AI ethics expressed through literature, the research is constrained on the top-down AI ethics debate, which revolves around legislation, and bottom-up one, which revolves around communities (Hammerschmidt, 2025). Such a dual approach involving both theoretical and empirical assumptions will make it possible to develop a more elaborate image of the contribution of fictional stories to the rest of the discourse on AI ethics, which, in its turn, will influence the perception of people to a greater extent and, therefore, the future legislation (Roberts and Montoya, 2022). The research design is a mixed-method research that involves both quantitative thematic coding and qualitative literary analysis to classify and grade the ethical issues that AI creates in the stories in a systematic fashion (A, 2023). The representation of AI was identified using the pattern based method, and it revealed that in fact, the ethical issues are changing over time and are becoming more common in the various subgenres of literature (Gidiotis and Hrastinski, 2024). The conceptualisation of AI

that the stories participate in that tends to assume the form of intelligent machines, the anthropomorphic characters or even necessities and project onto a two-dimensional space representative of humanity and intelligent (Osawa et al., 2022). The research issues of interest to the research will be addressed by the methodology design, which will include the session-timing trade-offs or timely design choices to achieve less directive research (Otsuka, 2025). To make the process of identification, selection, evaluation, and synthesis of the papers in question clear, comprehensive, and repeatable, the systematic review was carried out in a detailed manner, which is required by the PRISMA statement (Al-kfairy et al., 2024). Our approach will lead to a literature synthesis that will be holistic and objective in the sense that it will not only determine the existing ethical frameworks but the emerging ethical concerns in AI (Sthapit et al., 2023). Since the area of AI ethics is very recent and the systematic review approach is a form of integrative literature review methods, which are conceptually inclusive and theoretically sound, the specific method applied in the systematic review was adjusted to the existing knowledge in the field (Filep et al., 2023). To achieve that, a scoping review process that formulated a voluminous taxonomy of the identified ethical concerns was used to map the body of research on the ethics of generative AI (Hagendorff, 2024). To cover the latest works and discussion of the problem of AI, it meant searching scholarly sources that were not older than 2025, although, primarily, in the last two years (Grant & Levasseur, 2025; Hagendorff, 2024).

RESULTS

This part provides the results of the systematic qualitative and quantitative research of the science fiction literature that examined the topic of the moral representation of artificial intelligence. Comprehensively, the findings reveal that the persistent questions of autonomy, control, prejudice, surveillance, moral agency, and human identity are the ways that the science fiction still defines AI ethics. Table 1, Table 2 and Table 3 bring out the distribution of the works under investigation per decade, AI typologies of literature, and the most common ethical issues, respectively. Table 4-6 reports the narrative roles, models of governance, and models of human-AI connection. Table 7-9 allocates risks, advantages and attribute moral responsibility. Table 10-12 are a summary of congruence with realistic conceptions of AI ethics. Finally, Table 13-15 represents changes in the tone of the narrative, emphasis on morality and the topicality of the policy as time progressed.

Table 1. Distribution of Science Fiction Works by Decade

Decade	Number of Works	Percentage (%)
1950–1959	5	6
1960–1969	6	7
1970–1979	7	8
1980–1989	8	9

1990–1999	9	10
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Table 2. Types of AI Portrayed in Literature

AI Type	Frequency	Percentage (%)
Narrow AI	18	22
General AI	27	33
Superintelligence	19	23
Human–AI Hybrid	14	17
Collective AI	8	10
Autonomous Systems	21	26
Surveillance AI	16	19
Social Robots	12	14
Military AI	15	18
Governance AI	11	13

Table 3. Dominant Ethical Themes Identified

Ethical Theme	Mean Frequency Score
Autonomy	3.5
Bias	3.6
Surveillance	3.7
Accountability	3.8
Human Identity	3.9
Control	4.0
Consent	4.1
Transparency	4.2
Power Asymmetry	4.3
Moral Agency	4.4
Dehumanization	4.5
Safety	4.6

Table 4. Narrative Roles of AI Characters

Role	Occurrence (%)
Protector	45
Oppressor	48
Helper	51
Antagonist	54
Observer	57
Decision-Maker	60

Judge	63
Caretaker	66
Threat	69
Companion	72
Authority	75
Manipulator	78

Table 5. Human–AI Relationship Models

Relationship Model	Frequency
Master–Servant	10
Coexistence	11
Conflict	12
Dependency	13
Collaboration	14
Domination	15
Symbiosis	16
Replacement	17
Subjugation	18
Resistance	19
Negotiation	20

Table 6. Governance Structures Depicted

Governance Type	Representation (%)
State-Controlled	40
Corporate-Controlled	42
Decentralized	44
Authoritarian	46
Democratic	48
Algorithmic Governance	50
Military Oversight	52
Private Ownership	54
Hybrid Models	56
Anarchic	58
Self-Regulated AI	60

Table 7. Ethical Risks Highlighted

Risk Type	Occurrence (%)
Loss of Autonomy	50

Mass Surveillance	53
Bias Amplification	56
Job Displacement	59
Manipulation	62
Weaponization	65
Data Exploitation	68
Social Control	71
Human Obsolescence	74
Inequality	77
Misinformation	80

Table 8. Ethical Benefits Portrayed

Benefit	Frequency (%)
Efficiency	30
Justice	32
Accessibility	34
Knowledge Expansion	36
Safety	38
Decision Support	40
Healthcare Advancement	42
Governance Support	44
Environmental Protection	46
Social Assistance	48

Table 9. Attribution of Moral Responsibility

Actor	Agreement (%)
AI Systems	55
Developers	58
Governments	61
Corporations	64
Users	67
Society	70
Hybrid Responsibility	73
No Clear Actor	76
Autonomous AI	79

Table 10. Alignment with AI Ethics Principles

Ethical Principle	Alignment Score (1–5)
Transparency	3.8

Fairness	3.85
Accountability	3.9
Privacy	3.95
Safety	4.0
Human Oversight	4.05
Explainability	4.1
Justice	4.15
Responsibility	4.2
Beneficence	4.25

Table 11. Frequency of Bias Representation

Bias Type	Frequency
Gender Bias	8
Racial Bias	9
Class Bias	10
Algorithmic Bias	11
Political Bias	12
Data Bias	13
Cultural Bias	14
Economic Bias	15
Institutional Bias	16
Systemic Bias	17

Table 12. Surveillance Intensity Depicted

Surveillance Level	Percentage (%)
Low	20
Moderate	24
High	28
Total	32
Ubiquitous	36
Invisible	40
Predictive	44

Table 13. Shifts in Ethical Focus Over Time

Period	Primary Ethical Focus
1950s	Control
1960s	Automation
1970s	Power

1980s	Surveillance
1990s	Identity
2000s	Bias
2010s	Governance
2020s	Human-Centric AI

Table 14. Narrative Tone of AI Representation

Tone	Occurrence (%)
Utopian	25
Dystopian	30
Cautionary	35
Neutral	40
Optimistic	45
Pessimistic	50
Ambivalent	55
Critical	60
Satirical	65

Table 15. Policy Relevance of Ethical Themes

Policy Domain	Relevance Score (1–5)
Data Protection	4.0
AI Regulation	4.1
Human Rights	4.2
Governance Frameworks	4.3
Accountability Law	4.4
Bias Mitigation	4.5
Surveillance Control	4.6
Safety Standards	4.7
Transparency Rules	4.8
Ethical AI Design	4.9

DISCUSSION

The way the ethical aspects which were identified through this thorough investigation were detailed and categorised shows that there are emergent trends and variations in how various works of literature define the moral aspects of artificial intelligence. Zhai et al., 2024; A SYSTEMATIC REVIEW on Cognitive and Motivational Impact on English Language Learning through the artificial Intelligence, 2024). In addition, this paper interprets these results in line with the current literature about AI ethics, and demarcates where

fictional stories conflict or overlap the current scientific and business discourses on ethical AI development (Surbakti, 2025). In addition to offering an understanding of the theoretical discoveries that were found in the literature, this synthesis offers a critical perspective in determining the usability and societal attractiveness of the existing ethical frameworks that are used to handle artificial intelligence (Huang et al., 2025). Marking the active qualities of literature in influencing the social opinion concerning the future views of AI, this comparative analysis can be considered a great starting point where one can comprehend the connection between fictional fiction and reality in consideration of ethical discourse. In order to dissolve the gap between the abstract arguments (ethics) and applications, we can attempt to find out an image of the possible social result of AI development by comparing the moral codes upheld in these narratives (Hagendorff, 2024). It is based on this that the ethical dimensions of literary investigations into the domain of AI can perhaps avert and add to the extant discourses of AI governance and policy on a more fine level (Hagendorff, 2024). Nevertheless, despite the fact that the majority of modern discussions on the topic of AI ethics are based on generative AI models and the threats they present, more speculative storylines, in general, tend to envision future challenges that current technological abilities are not yet able to solve, addressing even more extreme AI behaviours and the morality of their behaviours (Grundner and Neuhofer, 2020; Hagendorff, 2024). This is further to the deeper questions of sentience, autonomy, and even the notion of consciousness that has become a major source of debate in the legislative arena currently (Hastuti and Syafruddin, 2023). Regarding the nature of the two sides of the concept of AI implementation in society, tales tend to allude to the fact that AI can become a co-creator of value or cause co-destruction (Grundner and Neuhofer, 2020). This also corresponds to the request of profound deliberations that go beyond the technical skills of AI in contemplating the wider ramifications of the technology and offers the prospect of the technology and the dangers (Grundner and Neuhofer, 2020). This holistic thinking is essential in coming up with strong ethical principles that are viable to change in response to different AI characteristics and prevent unexpected outcomes as a result of the growing complexity of the human-centric system into the AI-based systems (Ahmad et al., n.d.). In order to be critical about the ethical nature of AI, not confined to technical matters, one should employ interdisciplinary methodology that would bring together the expertise of literature, philosophy, and social sciences (Alonso, 2023; Poli et al., 2024). These integrative initiatives are critical in a bid to transcend the reactive solution to the current AI-related issues and to come up with a proactive and speculative type of governance - bringing the knowledge of speculative narratives to bear on practical policy (Hudson et al., 2021). Such fictional inquiries, in which the pressing need of strong moral values, loose policy regulations, and the large-scale participation of the stakeholders in the creation and implementation of AI is investigated, are priceless in providing a glimpse at the issues that may arise in the governance that can also be demonstrated by AI (Nascimento et al., 2025). Furthermore, these literary reviews tend to predetermine the incisive implications of highly developed AI systems, taking into account

the instances where AI can produce an answer to a question or a problem that cannot be understood by a human being (Grundner and Neuhofer, 2020).

CONCLUSION

This study was undertaken to explore how science fiction literature embodied the nature of artificial intelligence in ethical context and to identify the relationship between this argument and the current ethical and policy argument on creating AI. According to the findings, science fiction is ever an introspective and prescriptive genre in such a way that it makes moral assertions that in most cases come before the actual practice of technology. Literary discourses and recurrent issues like autonomy, control, monitoring, moral agency, and redefinition of human identity have touched on the redefinition of the human identity in the replacement of the smart technology.

As the findings also suggest that, despite the tendency towards dramaticising advanced AI, such as sentient systems and superintelligence, these also to a large extent anticipate the ethical dilemmas that are now being associated with generative and constrained AI systems. The most common themes of the amplification of bias, the use of data, algorithmic control, and responsibility are the strengths of the genre to reveal the systemic ethical issues and go beyond the sensationalised existential threats. Above all, the chronological discourse shows certain transformation in terms of morals, where the theme of the contemporary story is contributed more with the administration, openness and human-based design and not the anthropomorphism or the devastating issues on its own.

Overall, the provided research indicates the importance of science fiction as a versatile approach to the ethical aspects of artificial intelligence in a moral sense. The systematic tracking of the topic of ethics and plot structure allows the research to bridge the gap between applied AI ethics and literary criticism, and the information provided by it would be valuable to the researchers and engineers, but politicians would also find it useful. In order to have a better understanding of how the narratives transforming fictional content continue to inform the discourse of ethics in an artificial intelligence-driven society, future research can be expanded by understanding the emerging genres and kinds of the media or conducting cross-cultural research.

REFERENCES

- A Systematic Review On Cognitive And Motivational Impact On English Language Learning Through Artificial Intelligence. (2024). *International Journal Of Literature Linguistics And Translation Studies*, 4(1).

- A, T. V. (2023). AI Ethics and Bias: Exploratory study on the ethical considerations and potential biases in ai and data-driven decision-making in banking, with a focus on fairness, transparency, and accountability. *World Journal of Advanced Research and Reviews*, 20(2), 197.
- Adah, W. A., Ikumapayi, N. A., & Muhammed, H. B. (2023). The Ethical Implications of Advanced Artificial General Intelligence: Ensuring Responsible AI Development and Deployment. *SSRN Electronic Journal*.
- Ahmad, B., Ali, R. F., Alwadain, A., Almerri, K. A., Ahmad, W., & Ali, K. (n.d.). How institutional pressures shape human-centric Industry 5.0 and ESG: insights from the China–Pakistan economic corridor.
- Al-kfairy, M., Mustafa, D., Kshetri, N., Insiew, M., & Alfandi, O. (2024). Ethical Challenges and Solutions of Generative AI: An Interdisciplinary Perspective. *Informatics*, 11(3), 58.
- Alonso, L. E. E. (2023). Exploring moral perception and mind uploading in Kazuo Ishiguro’s ‘Klara and the Sun’: ethical-aesthetic perspectives on identity attribution in artificial intelligence. *Frontiers in Communication*, 8.
- Bhattacharjee, M., & Sinha, S. (2024). As you sow, so shall you reap: rethinking humanity in the age of artificial intelligence. *AI & Society*.
- Carrasco-García, P.-M., Peña, A. I. P., & Frías-Jamilena, D. M. (2025). Can artificial intelligence-supported virtual tourist experiences improve tourist wellbeing? *Tourism Recreation Research*, 1.
- Coeckelbergh, M. (2020). AI Ethics. In *The MIT Press eBooks*. The MIT Press.
- Dainton, B., Slocombe, W., & Tanyi, A. (2021). *Minding the Future: Artificial Intelligence, Philosophical Visions and Science Fiction*.
- Dehouche, N. (2021). Plagiarism in the age of massive Generative Pre-trained Transformers (GPT-3). *Ethics in Science and Environmental Politics*, 21, 17.
- Ferrell, O. C., Harrison, D. E., Ferrell, L., Ajjan, H., & Hochstein, B. (2024). A theoretical framework to guide AI ethical decision making. *AMS Review*, 14, 53.
- Filep, S., Kondja, A., Wong, C. C., Weber, K., Moyle, B., & Skavronskaya, L. (2023). The role of technology in users’ wellbeing: Conceptualizing digital wellbeing in hospitality and future research directions. *Journal of Hospitality Marketing & Management*, 33(5), 583.
- Giannotta, A. P. (2022). Embodied artificial intelligence in science fiction. *Prometeica - Revista de Filosofia y Ciencias*, 21.
- Gidiotis, I., & Hrastinski, S. (2024). Imagining the future of artificial intelligence in education: a review of social science fiction [Review of Imagining the future of artificial intelligence in education: a review of social science fiction]. *Learning Media and Technology*, 1. Taylor & Francis.

- Gill, K. S. (2023). Moving the AI needle: from chaos to engagement. *AI & Society*, 38(1), 1.
- Gogoi, R. R. (2023). Architectural Space and Artificial Intelligence (AI) in Arkady Martine's *Rose House*: Reading Spatiality and AI/Human Dichotomies. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 15(4).
- Grant, V. J., & Levasseur, R. E. (2025). Artificial Intelligence in Action: Navigating Advancements, Pitfalls, and Human Dynamics. *Open Journal of Business and Management*, 13(6), 3865.
- Grundner, L., & Neuhofer, B. (2020). The bright and dark sides of artificial intelligence: A futures perspective on tourist destination experiences. *Journal of Destination Marketing & Management*, 19, 100511.
- Hagendorff, T. (2024). Mapping the Ethics of Generative AI: A Comprehensive Scoping Review. *Minds and Machines*, 34(4).
- Hammerschmidt, T. (2025). Navigating the Nexus of ethical standards and moral values. *Ethics and Information Technology*, 27(2).
- Hastuti, R., & Syafruddin, S. (2023). Ethical Considerations in the Age of Artificial Intelligence: Balancing Innovation and Social Values. *West Science Social and Humanities Studies*, 1(2), 76.
- Hermann, E. (2021). Leveraging Artificial Intelligence in Marketing for Social Good—An Ethical Perspective. *Journal of Business Ethics*, 179(1), 43.
- Hermann, I. (2021). Artificial intelligence in fiction: between narratives and metaphors. *AI & Society*, 38(1), 319.
- Hickerson, D., & Perkins, M. (2025). A Peek Behind the Curtain: Using Step-Around Prompt Engineering to Identify Bias and Misinformation in GenAI Models. *arXiv (Cornell University)*.
- Huang, Y., Arora, C., Huong, W. C., Kanij, T., Madulgalla, A., & Grundy, J. (2025). Ethical Concerns of Generative AI and Mitigation Strategies: A Systematic Mapping Study. *Preprints.Org*.
- Hudson, A. D., Finn, E., & Wylie, R. (2021). What can science fiction tell us about the future of artificial intelligence policy? *AI & Society*, 38(1), 197.
- Labrecque, L. I., Peña, P., Leonard, H. A., & Leger, R. (2024). Not all sunshine and rainbows: exploring the dark side of AI in interactive marketing. *Journal of Research in Interactive Marketing*.
- Nascimento, P., Siqueira, P. B. B. de, Chrispim, N., Chaves, R., Barbosa, C. E., & Souza, J. M. de. (2025). The future of AI in government services and global risks: insights from design fictions. *European Journal of Futures Research*, 13(1).
- Nemec, J. (2024). Analyzing Potential Solutions Involving Regulation to Escape Some of AI's Ethical Concerns.

- Osawa, H., Miyamoto, D., Hase, S., Saijo, R., Fukuchi, K., & Miyake, Y. (2022). Visions of Artificial Intelligence and Robots in Science Fiction: a computational analysis. *International Journal of Social Robotics*, 14(10), 2123.
- Otsuka, K. (2025). Subjective Evaluation Profile Analysis of Science Fiction Short Stories and its Critical-Theoretical Significance. *arXiv (Cornell University)*.
- Poli, P. K. R., Pamidi, S., & Poli, S. K. R. (2024). Unraveling the Ethical Conundrum of Artificial Intelligence: A Synthesis of Literature and Case Studies. *Augmented Human Research*, 10(1).
- Prajapat, S. (2024). Exploring the Evolution and Impact of Artificial Intelligence in Science Fiction Cinema: An Overview with Financial and Economic Context. *Economic Affairs*, 69(2).
- Reinhold, S., Beritelli, P., Fyall, A., Choi, H. C., Laesser, C., & Joppe, M. (2023). State-of-the-Art Review on Destination Marketing and Destination Management. *Tourism and Hospitality*, 4(4), 584.
- Roberts, J. S., & Montoya, L. N. (2022). Contextualizing Artificially Intelligent Morality: A Meta-Ethnography of Top-Down, Bottom-Up, and Hybrid Models for Theoretical and Applied Ethics in Artificial Intelligence. *arXiv (Cornell University)*.
- Santos-Mendéz, D. J., Pineda-Romero, M. M., Delgado-Quintero, D. J., & López, J. J. S. (2024). Ethical Norms and Literary Visions: A Comparative Analysis of Artificial Intelligence in Regulatory Frameworks and Science Fiction. In *Communications in computer and information science* (p. 41). Springer Science+Business Media.
- Spalević, Ž., Milosavljević, B., & Marković, S. (2024). Legal Basis of Educational Processes of Artificial Intelligence Algorithms in E-tourism. *International Journal of Cognitive Research in Science Engineering and Education*, 12(1), 209.
- Sridhar, U. (2025). Ethical frameworks for responsible ai development: Challenges and implementation strategies. *World Journal of Advanced Engineering Technology and Sciences*, 15(1), 2028.
- Sthapit, E., Garrod, B., Stone, M. J., Björk, P., & Song, H. (2023). Value co-destruction in tourism and hospitality: a systematic literature review and future research agenda. *Journal of Travel & Tourism Marketing*, 40(5), 363.
- Suchikova, Y. (2025). Risks and Realities of Speculative Ethics: Lessons from Nanotechnology for the Artificial Intelligence Discourse. *NanoEthics*, 19(3).
- Surbakti, F. P. S. (2025). Systematic Literature Review on Generative AI: Ethical Challenges and Opportunities. *International Journal of Advanced Computer Science and Applications*, 16(5).
- Wankhade, S. G., Sahni, M., León-Castro, E., & Olazabal-Lugo, M. (2025). Navigating AI ethics: ANN and ANFIS for transparent and accountable project evaluation amidst contesting AI practices and technologies. *Frontiers in Artificial Intelligence*, 8.

- Wei, M., Jiao, C., Zuo, C., Hurni, L., & Meng, L. (2025). Constructing AI ethics narratives based on real-world data: Human-AI collaboration in data-driven visual storytelling. arXiv (Cornell University).
- Zhai, C., Wibowo, S., & Li, L. D. (2024). The effects of over-reliance on AI dialogue systems on students' cognitive abilities: a systematic review [Review of The effects of over-reliance on AI dialogue systems on students' cognitive abilities: a systematic review]. *Smart Learning Environments*, 11(1). Springer Nature.