Sincerity and Honesty towards my own research as seen from Teilhard de Chardin's research attitude

Research on AI Ethics inspired by Teilhard de Chardin's "The Phenomenon of Man"

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Abstract

This paper explores honesty and sincerity in Artificial Intelligence (AI) ethics through Teilhard de Chardin's concepts of unity, convergence, and collective consciousness, drawing from *The Phenomenon of Man*. It examines challenges like explainability, bias, and transparency, emphasizing the existential need to integrate ethics into AI to avoid the future risk of moral bankruptcy.

Teilhard's idea of the noosphere, a domain of human thought, shapes a foundation of how AI propels humanity toward harmony at the Omega Point, a state of unity and fulfilment. The paper looks at how a lack of AI ethics leads to the negative effects such as fragmentation and mistrust because of disregard of sincerity and honesty. It examines how virtues like honesty and collaboration are critical in ethical advancements of AI and research towards a holistic future.

The paper explores the topic of sincerity and honesty in AI ethics from two complementary perspectives - the broader and the individual research levels. In the broad sense, it examines the ethical values of sincerity and honesty as universal principles shaping the development and application of AI systems, as inspired by Teilhard de Chardin's vision of convergence towards unity of ethics and AI. At the individual research level, the paper reflects on how to implement these values in my research on AI ethics. This includes adopting transparent methodologies, fostering interdisciplinary collaboration, and ensuring that the outcomes of research align with ethical aspirations. By addressing both perspectives, the paper provides a holistic view of how sincerity and honesty can serve as guiding lights for ethical AI development.

This dual perspective allows examination of ethical dilemmas arising from Al's growing complexity and its intersection with other fields of knowledge. Thus, the paper asserts that aligning ethical values of sincerity and honesty in AI development can help in building a future grounded on ethical coherence, shared knowledge, and collective wisdom thus, realizing Teilhard's vision of progress that is inspired by unity, collaboration, and freedom.

Introduction

1. Honesty and Sincerity - AI Needs Ethics, Now More Than Ever

This paper explores the role of sincerity and honesty in AI ethics. It does so in a top-down approach from the broader to individual perspective of ethics in AI and research. The first two sections explore challenges and solutions in AI ethics in the broad sense. They focus on the wider impact of ethical values in guiding AI research and development.

With inspiration from Teilhard de Chardin's vision of convergence and unity, these sections outline the ethical challenges and opportunities that come with AI systems. They emphasize the importance of aligning technology with universal ethical imperatives. The next two sections explore the sincerity and honesty values at the individual research level. They focus on my research on AI ethics as a case study. They explore how to scale these ethical values from individual research level to a broader outlook in AI ethics. The sections detail how to integrate principles like transparency, and ethical accountability in AI research practices.

By starting with broader universal considerations and gradually moving toward individual and specific applications, the paper provides a comprehensive understanding of how ethical values can bridge the gap between broader AI ethics challenges and individual research responsibilities. This workflow mirrors Teilhard's vision, linking the broader evolution of humanity's ethical consciousness with the individual actions that contribute to it.

The Ethical Essence of Honesty and Sincerity in AI Evolution

The unprecedented rise of AI in recent decades has presented both opportunities and challenges. It is impossible to overstate the ability of AI to influence personal choices, social norms, and international policies as it becomes more and more ingrained in our daily lives. Thus, sincerity and honesty have become a critical cornerstone for ethical AI. Ethical dilemmas brought up by AI's complexity, opacity and abuse, risks destroying our social values.

Sincerity and honesty are vital for ethical AI. AI without ethics risks creating innovations devoid of shared human values, leading to societal destruction. Conversely, ethics that are divorced from AI applications risk inhibiting creativity and research and distancing it from practical issues. AI research that incorporates ethical principles will guarantee that technological developments foster humanity's progress toward harmony and collective wisdom.

Core Challenges inherent to gaps between AI and Ethics

One of the main issues with AI is its complexity, which exacerbates moral dilemmas like algorithmic bias, opaque decision-making, and insufficient accountability. Amid this complexity, the biased facial recognition datasets further marginalize communities in many disproportionate ways. This calls into question developer practices in handling diversity and inclusivity.

Complexity also raises the question of the AI development process. How do developers and users relate with decisions coming out of complex and opaque systems? In ethics, this is the black box problem. Ignorance of AI ethics is not just a mistake; it is a threat to the integrity of humanity. AI developers must face the fact that their creations might cause chaos instead of coherence if they do not have practical ethical solutions. AI without ethics is not intelligence but recklessness posing as innovation.

Transparency at every level is paramount. From data collection and algorithm design to deployment and evaluation, transparency is necessary for AI safety, because a stitch in time saves nine in ethics. Researchers must be transparent about the limitations, risks, and potential biases of their systems. Through this, we can prevent problems at early stages.

Besides enabling users and stakeholders to make well-informed decisions, these ethical practices will facilitate the ethical development and applications of AI. Sincerity requires researchers to align research goals with ethical principles for the benefit of all people. Fairness, inclusivity, and accountability must take precedence over immediate profits. Together, these values form the foundation of ethical AI, fostering trust, collaboration, and societal benefit.

Relevance of Teilhard de Chardin's views in AI Ethics

Teilhard's ideas provide insightful guidance on how humans can deal with the moral dilemmas presented by AI. The vision of the noosphere calls for an integration of AI and ethics to propel collective human progress. His view on convergence, the notion that diverse fields and viewpoints must unite to tackle tough issues, also emphasizes how crucial interdisciplinary cooperation is to AI ethics.

Researchers can create AI systems that represent the collective wisdom and goals of humanity by enlisting the help of experts in computer science, engineering, and ethical philosophy. The *Omega Point*, his vision of ultimate unity, pushes us to think about AI's long-term ethical effects on humanity rather than just its immediate uses.

AI has the potential to speed up humanity's progress toward a higher level of collective consciousness. We can fulfil this if AI systems embody ethics and sincerity. This serves as a reminder that advancements in technology alone cannot define evolution but only through advancements' conformity to moral principles.

Compounding Challenges in AI Ethics Research

Even though sincerity and honesty are obviously important, there are many obstacles in the way of implementing ethics in AI research. The intrinsic complexity of AI systems is a significant barrier. The decision-making processes of increasingly complex algorithms are frequently harder to understand, further distancing developers from users and ethicists.

Because it gets harder to spot mistakes and deal with biases, this lack of transparency not only erodes trust but also restricts accountability. Researchers need to recommit to putting transparency first and investing in ways that make AI systems easier to understand for honesty and sincerity to flourish in AI research.

The competitive nature of the AI industry presents another ethical dilemma. Businesses frequently take shortcuts towards profitability at the expense of ethics. This can even go so far as to silence the voices that question the ethics and safety of such practices.

The conflict between ethics and profitability frequently jeopardizes research endeavors. Decisions are ultimately influenced more by market forces than by moral principles. Increased funding for AI ethics research is required to counteract this trend and create incentives for developers to incorporate ethical values in AI research and development.

Through the concepts of unity and convergence between the two fields of computer science and ethical philosophy, AI ethics can chart a pathway forward. The AI community can establish a culture of collaboration that rewards honesty and sincerity among researchers, ethicists, and other stakeholders. In order to guarantee use of AI as a tool for collective advancement rather than for individual benefits, this culture must transcend technical fields and include broader societal values.

Convergence towards a Unified Vision for AI Ethics

The convergence of AI and ethics requires researchers to approach their work with transparency, acknowledging the risks and ethical limitations of their systems. Researchers ought to align their innovations with the welfare of humanity. It is only through ethics that the 'I' in AI becomes truly intelligent.

Researchers can tackle the complex problems of AI holistically by assembling specialists from various domains. For instance, sociologists can draw attention to the societal ramifications of AI systems, engineers can create systems that reflect these insights, and philosophers can offer ethical frameworks that guide AI research and development.

This cooperative method guarantees that a diversity of viewpoints can inform AI research, resulting in AI systems that are transparent, fair, and responsible. Although there are challenges on the path to ethical AI, Teilhard's vision offers optimism and motivation towards honesty and sincerity. Researchers can ensure that their work serves the common good of humanity while also advancing both ethical and technological goals.

Core Challenges in AI Ethics

2. AI Ethics - Ethical Dilemmas and Problems of AI

AI Applications and Its Ethical Complexities

We are living witnesses of how AI has transformed a wide range of sectors, including healthcare and transportation. Its quick advancement promises more profound impacts on the future. But these developments also bring with them difficult ethical conundrums that demand more focus on AI ethics.

The unprecedented capacity of AI gives it the potential to revolutionize, but also destroy if it does not embody ethical concerns. Only by mastering both innovation and ethics will we be able to use AI responsibly for the good of humanity.

The question whether ethical principles inform AI development and application is at the heart of these issues. Because of AI's reliance on data and algorithms, AI systems are susceptible to biases and flaws in data, algorithmic designs, and its training processes.

The complexity of AI systems often makes this problem worse, which calls into question explainability and accountability. This section dives into greater detail on the moral dilemmas from the first section. It does so by examining real-world cases and highlighting the urgent need for oversight and ethical values like fairness, transparency, and honesty.

The Problem of Bias in AI Systems

The masquerading bias in AI is not just an urgent ethical issue, it is a ticking time bomb. Left unchecked, it can transform AI into a tool for systemic injustice. Thus, the convergence of AI and ethics is not just desirable, it is imperative. Only by embedding fairness and transparency at the core of AI issues can we prevent it from becoming a force of division rather than progress.

Bias in AI systems frequently results in segregation and discrimination. An experience that often fuels fears that artificial intelligence will eventually replace human intelligence. This calls into question humanity's role in a world dominated by AI.

Teilhard's ideas provide a hopeful perspective on these anxieties. The idea of convergence sees AI as a collaborative force that expands human potential rather than replacing it. Thus, AI serves a driving force towards integration. In the upcoming paragraphs, the paper explores this theme through widely known cases of ethical biases and how ethics can shape the role of AI as humanity's friend rather than foe.

• Facial Recognition Technology

Facial recognition systems frequently misidentify darker-skinned and female faces because of biased training data and a lack of ethnic and gender diversity among developers. Black people are more commonly misidentified by facial recognition software, which increases scrutiny and discrimination against Black and minority groups [1]. Such moral lapses reveal a lack of diversity and openness in the AI development process.

The COMPASS algorithm [2], used in the US criminal justice system, is the clearest example of this uphill battle for AI ethics in high-stakes applications. Even after adjusting for comparable criminal histories, COMPASS still disproportionately marginalizes Black defendants as high-risk compared to white defendants [2].

The algorithm is a case in point of AI perpetuation of historical ethnic segregation of minority communities. Hampering an equitable shared space, a noosphere for all ethnicities. COMPASS's opaque decision-making process makes it even more difficult to address these ethnic biases [2]. COMPASS is a prime illustration of the grave moral issues that result from failing to connect AI and ethics.

• AI systems in Hiring and Recruitment

Large tech companies' human resources departments have long sought to use AI systems to streamline their operations. Serious ethical issues have arisen in AI applications because of a lack of ethical oversight. Recent scholarly publications on ethical issues highlighted this dilemma found in Amazon's AI hiring tool [3]. Research discovered that the recommendation results discriminated against female applicants [3]. The system was perpetuating historical biases. When AI systems discriminate, they do not just perpetuate historical injustices; they institutionalize them. This betrayal of fairness and inclusivity underscores why ethics in AI is non-negotiable.

• The Black Box Problem and The Lack of Explainability

The growing complexity of AI models causes their decision-making processes to become opaque and challenging to understand. This leads to the "black box" problem in deep learning [4]. When algorithmic behavior goes wrong, this can have major repercussions. This is especially noticeable in autonomous systems that must process intricate relationships across many information layers.

Autonomous cars like Tesla and Waymo rely on complex AI for operation [4]. Their lack of openness makes it more difficult to determine who is at fault and the source of fault after accidents. This raises

questions of accountability. As accountability and safety require transparency, we should treasure safety over profitability. It is better to be safe than sorry.

Data Privacy and Algorithmic Manipulation

The amount of online data has grown because of people becoming more interconnected in the Internet era. In order to sort through the increasing amount of online data, AI tools have become a necessity. However, there have been several ethical issues such as privacy on the use of these AI tools. Data exploitation and intrusive surveillance have become prevalent because of gathering and use of personal information without the express consent.

Without sufficient ethical supervision this gives AI systems the potential to degrade the ethical principles of liberty and freedom. Financial services AI systems need ethics in evaluating creditworthiness using personal data. Prejudices against members of specific socioeconomic groups can cause traumatic experiences for minorities.

Facebook's well-known privacy breach is the most famous example of a data privacy breach [5]. It is a typical case of data privacy breach and algorithmic manipulations that occur when AI systems lack moral competence. AI needs ethics badly and needs it now more than ever.

• Unethical harvesting and data use by Cambridge Analytica Scandal

The ethical issue of data privacy and algorithmic manipulations comes up again and again in various forms. Scandals like Cambridge Analytica and Facebook's data breaches highlight how AI-driven algorithms can exploit personal information, eroding trust, thus emphasizing the need for more ethical oversight [5].

Predictive Policing and Surveillance

Government agencies are increasingly turning to AI systems for automation of some of the decision-making processes. Thus, important government agencies are using AI systems more and more. Law enforcement is one of these vital agencies. There are major concerns. These agencies' use of such AI systems needs more ethical oversight. How just and fair can an AI system uninformed by ethics be?

Predictive policing tools like PredPol offer a grim reminder that AI systems without ethics amplify injustice [6]. They target marginalized communities and perpetuate cycles of oppression [6]. AI without ethics becomes an accelerant for inequality. AI developers must ensure that AI systems serve towards justice not prejudice.

Corporate Interference in Ethical AI Research

Profitability has always carried higher weight against ethics in the corporate world. Corporate organizations are constantly searching for new ways to be more profitable. This has consistently encouraged shortcuts to solve their issues, even to the extent of stifling ethical concerns. Prizing profitability to ethics leads to undermining ethical supervision to the detriment of both AI and humanity.

The well-known and contentious departure of ethics researcher Timnit Gebru from Google serves as a noteworthy example of this issue [7]. Her work has received mixed reviews for drawing attention to ethical concerns regarding corporate meddling in ethical research.

Gebru's tensions with her employers resulted from her work challenging safety practices regarding algorithmic bias and the social impact of AI systems [7]. This raises the ethical question, when developers address safety concerns regarding ethics, are they playing with fire?

AI in Warfare: Ethical Dilemmas in Autonomous Weapons

In a world where the number of war-torn countries is rising and the world is becoming more multipolar, AI applications that are blind to ethical values cast a deep shadow on AI ethics. There are also serious ethical questions raised by creating autonomous weapons that can make deadly decisions on their own without human help.

These systems call into question established ideas about responsibility and ethics in combat. This emphasizes how important it is to have ethical oversight and transparency when developing autonomous systems. Sincerity and honesty play a vital role in acting as a check and balance on plans to develop autonomous weapons.

The development of autonomous systems without regard for ethics impedes humanity's progress toward ethical maturity and unity. As a result, the only outcome from autonomous AI systems lacking ethics is destruction. This is a departure from Teilhard's vision of humanity progressing towards a higher ethical consciousness and a common good.

Algorithmic Amplification of Hate Speech and Polarization

AI tools are being used more and more by social media companies to run their social services. Platforms like YouTube, Facebook, and Twitter use AI-driven recommendation algorithms, some of which have drawn harsh criticism for amplifying harmful content. A prominent example of algorithmic amplification is the use of Facebook to spread hate speech prior to the Rohingya massacre in Myanmar [8].

By emphasizing interaction, these algorithms frequently wind up endorsing extreme or divisive ideologies, which exacerbates societal polarization [8]. This brings conflict of interest between maximizing profit and upholding ethical duty. Ethical oversight on AI systems is necessary in resolving ethical conflicts. Therefore, the unification of AI and ethics is the only evolutionary route forward for humanity.

A Teilhardian Vision for Ethical AI

3. Shaping the Future of AI with Ethics

Proposed Solutions and Future Directions

It takes careful thinking and a forward-looking approach to shape the ethically guided future of AI. It is imperative now more than ever that we align AI and ethics. AI needs Ethics and needs it urgently. We can only guarantee that AI develops as a tool for the benefit of humanity rather than danger by taking decisive action, collaborating across disciplines, and showing a commitment towards collective wisdom. Devastation is the only outcome when ethics are absent. This section outlines potential solutions for ethical AI. It explores remedies and avenues for ethical research practices in AI ethics.

Promoting Unity in Diversity through Inclusive AI Development

To avoid biased results, as shown by facial recognition systems that incorrectly identify minority groups, inclusivity in AI is necessary. Diversity in datasets and development teams is paramount. We can create

a more inclusive and richer noosphere by encouraging diverse representation in datasets and development teams. This inclusivity brings unity in diversity and humanity one step closer to the Omega Point, where unity and shared progress define advancements in technology and ethics.

Advancing Collective Wisdom through Ethical Innovation

AI has an unmatched capacity to produce insights and assist in decision-making. We must use moral principles to channel this ability. This will guarantee that rather than widening societal divides, technological progress advances collective wisdom. History has shown us a vital truth: when technology walks hand-in-hand with ethics, humanity thrives. Every invention, from the printing press to the personal computer, has thrived humanity. In a similar vein, artificial intelligence has the potential to enhance human connection and individual creativity.

Integrating Ethics into Every Stage of AI Development

Integrating moral principles into AI research and development at every level is what it will take for ethical innovation. Researchers and developers must adhere to ethical AI design standards. This includes respecting procedures for dealing with prejudice and guaranteeing safety. Companies must prioritize ethics through stakeholder engagement, audits, and transparency in order to foster collaboration for the common good [9].

Beyond technical frameworks, we must consider how AI's evolution intersects with deeper philosophical and ethical challenges. This raises the question of AI consciousness and personhood. Will machines eventually develop consciousness and how will conscious AI encapsulate the values of sincerity and honesty? How will the consciousness of an AI entity fusion with human consciousness?

Given Teilhard's ideas of convergence towards collective consciousness, how will humanity and AI progress for the better towards the convergence point, the Omega? How can we integrate ethical values in such a unified and collective consciousness? Amid all these deep and foundational questions, one fact remains constant, and that is the role of embodying ethical values like sincerity and honesty in artificial intelligence and research at large.

Proposed Solutions

4. Ethics At Individual Research Level - AI Ethics Research

Artificial intelligence presents broad ethical problems that are just as intricate as the systems themselves. Addressing them requires a foundation of ethical values at the individual research level. This section delves into how these values can shape research practices at the individual level. Thus, the section explores the role and implications of sincerity and honesty to my own AI ethics research and how Teilhard's vision inspires my research. These implications range from open dialogue, to documentation, to algorithm design and development.

Sincerity through Transparent Methodologies

To inculcate sincerity, I emphasize openness in research design by integrating feedback mechanisms. The feedback mechanism enables evolution of the ethical frameworks responding to new societal needs. This means ensuring accountability by documenting decisions about algorithmic fairness and recognizing trade-offs during model development. Thus, Teilhard's vision inspires the practice where AI models focus not only on performance but also on ethics. Transparent methodologies are

foundational, but honesty is equally critical in ensuring these methodologies acknowledge risks and limitations.

Honesty in Presenting Ethical Risks and Capabilities

Honesty requires being upfront about potential risks of AI systems. This implies designing explainable and transparent algorithms that prioritize inclusivity and fairness. This includes mechanisms for independent audits and third-party evaluations of research findings. Thus, the disclosure of both strengths and weaknesses of the systems becomes an obligation. Honesty builds trust and embodies Teilhard's vision of unity by fostering collaboration among diverse parties in the research. Beyond honesty, interdisciplinary collaboration bridges the gap between technical and ethical rigor, producing research that fosters collective wisdom.

Interdisciplinary Collaboration for Collective Wisdom

My research bridges the two disciplines of AI and Ethics by facilitating conversations between computer science and ethical philosophy. It raises various foundational and practical research questions. How can principles of virtue ethics, deontology and utilitarianism be operationalized in the design and deployment of AI systems? What are the key philosophical tensions when translating abstract ethical principles into computational models? How can AI systems be designed to identify and mitigate biases in training data to uphold ethical duties like fairness and inclusivity? What are the effective techniques for enhancing transparency? These interdisciplinary research questions bring to reality the role of Teilhard's vision of convergence and collective progress. Collaborating with ethicists and social scientists reinforces the ethical foundations of AI systems. This in turn addresses global challenges such as inequality and sustainability. Through such collaboration, the research ensures AI systems reflect humanity's shared ethical values.

Embedding Ethical Values into AI Metrics

On a practical level, my research explores the development of hyperparameters and metrics that measure AI models' adherence to ethical values. Such ethical metrics reinforce sincerity and honesty during AI development. These measurements enable the evaluation of AI systems against ethical benchmarks throughout their lifecycle. This mirrors Teilhard's vision of aligning scientific advancement with collective accountability.

Contribution to Humanity's Ethical Evolution

Winding up, sincerity and honesty at the individual level extend beyond research outcomes to include intentions and reflections. This implies intentionally evaluating how well my research work aligns with ethical aspirations and its potential contributions or harms. Such self-reflection highlights Teilhard's call for intellectual and moral responsibility, ensuring that my research remains committed to fostering collective progress.

Implications for AI Ethics Research

5. Towards A Unified Ethical Framework

This section explores how we can align and scale ethical values of honesty and sincerity from the individual level to a collective ethical goal that builds a unified progression, enabling AI to embody the shared moral compass of humanity's evolutionary journey.

Preparing for the Future: Education and Research Investment

From the individual research level, we can scale up these values into academic institutions. Universities can embed ethics into research and educational curricula, thereby building a foundation of sincerity and honesty in research practices. This prepares the next generation of AI researchers to inculcate ethical values. It assists students in navigating the ethical complexities of AI. Funding for ethical AI research must be a top priority for governments, universities, and private enterprises. This entails fostering multidisciplinary cooperation, resolving unsolved ethical issues and reducing AI bias. This commitment resolves the risk of building a future where capacity for harm drowns AI's potential for good. The cost of incorporating ethics in AI is high. But the cost of neglecting ethics is much higher than the cost of its maintenance. This calls to mind the age-old wisdom, if you think education is expensive, try ignorance.

Encouraging Accountability and Transparency

We can ensure accountability through mechanisms like bias detection tools, ethical audits, and recourse systems for AI errors [9]. These actions help the AI community develop a culture of accountability. Building public trust in AI systems requires active public engagement [9]. Actions speak louder than words for successful building of trust in AI. Researchers can develop systems that represent the values and priorities of the public by incorporating communities in conversations about AI ethics. In fact, public involvement emphasizes the shared responsibility of creating a positive AI future. These measures are consistent with Teilhard's vision of united collective consciousness.

Conclusion

The Convergence of Ethics and AI

Advancing research in AI ethics is like walking a tightrope - a race against time requiring a delicate balance between AI's efficiency and ethics' safety. The convergence of ethics and AI can be a force that unites and uplifts humanity rather than destroying it. With Teilhard's vision for unity, interdisciplinary collaboration and investment in AI ethics will ensure a thriving future of humanity as a collective.

This paper has highlighted the necessity of sincerity and honesty in research at both individual and broader universal level. It highlighted the importance of linking AI and ethics, individual level and domain-level research practices, thus further affirming Teilhard's call for unity and convergence. From the broader level, it examined ethical principles as universal imperatives for aligning AI with humanity's shared values. At the individual level, it showed how these ethical principles can be implemented at the individual research level, emphasizing the importance of transparency, interdisciplinary collaboration, and accountability at all levels. Together, these perspectives form a unified approach to achieving humanity's collective aspirations through actionable research practices.

Teilhard's vision reminds us that the future of AI and humanity must be one of unity, guided by ethics, or it will be one of disarray guided by anarchy. By integrating his ideas of the noosphere and striving toward the Omega Point, we can trace a research path from individual research level to collective AI ethics. Convergence of AI and ethics can guide humanity towards a better tomorrow - a future defined by shared collective wisdom fulfilling humanity's destiny of a one happy universal family.

References

- 1. J. Buolamwini and T. Gebru, "Gender shades: Intersectional accuracy Disparities in commercial gender classification*," *Proceedings of Machine Learning Research*, vol. 81, pp. 1–15, [Online]. Available: https://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf
- J. Angwin, J. Larson, S. Mattu, and L. Kirchner, "Machine bias: There's software used across the country to predict future criminals and it's biased against Blacks," *ProPublica*, ProPublica, May 23, 2016. [Online]. Available: https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing
- 3. X. Chang, "Gender Bias in hiring: An analysis of the impact of Amazon's recruiting algorithm," *Advances in Economics Management and Political Sciences*, vol. 23, no. 1, pp. 134–140, Sep. 2023, doi: 10.54254/2754-1169/23/20230367.
- 4. F. Filipsson, "Ethical issues in AI for autonomous vehicles," *Redress Compliance Just another WordPress site*, Aug. 18, 2024. https://redresscompliance.com/ethical-issues-in-ai-for-autonomous-vehicles/ (accessed Nov. 24, 2024).
- 5. Federal Trade Commission, "FTC imposes \$5 billion penalty and sweeping new privacy restrictions on Facebook," *Federal Trade Commission*, Aug. 20, 2024. https://www.ftc.gov/news-events/news/press-releases/2019/07/ftc-imposes-5-billion-penalty-sweeping-new-privacy-restrictions-facebook (accessed Nov. 24, 2024).
- 6. T.-W. Hung and C.-P. Yen, "Predictive policing and algorithmic fairness," *Synthese*, vol. 201, no. 6, Art. no. 206 (2023), Jun. 2023, doi: 10.1007/s11229-023-04189-0.
- 7. K. Hao, "We read the paper that forced Timnit Gebru out of Google. Here's what it says.," *MIT Technology Review*, MIT Technology Review, Dec. 04, 2020. [Online]. Available: https://www.technologyreview.com/2020/12/04/1013294/google-ai-ethics-research-paper-forced-out-timnit-gebru/
- 8. "Amnesty report finds Facebook amplified hate ahead of Rohingya massacre in Myanmar," *PBS News*, Sep. 29, 2022. https://www.pbs.org/newshour/world/amnesty-report-finds-facebook-amplified-hate-ahead-of-rohingya-massacre-in-myanmar
- 9. C. Huang, Z. Zhang, B. Mao, and X. Yao, "An Overview of Artificial intelligence ethics," *IEEE Transactions on Artificial Intelligence*, vol. 4, no. 4, pp. 799–819, Aug. 2023, doi: 10.1109/TAI.2022.3194503.