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UNVEILING AI’S EXISTENTIAL THREATS AND SOCIETAL RESPONSIBILITIES
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ABSTRACT

Artificial Intelligence (AI) stands at the intersection of unprecedented opportunities and profound challenges. As AI is increasingly integrated into societal structures, the necessity for transparency and open-source approaches becomes paramount to foster both innovation and ethical considerations. Collaborative efforts among academia, industry, and policymakers are essential for addressing the multifaceted complexities that AI presents. While AI promises transformative benefits, potential challenges, such as its weaponization, corporate exploitation, and job displacement, warrant careful attention. Striking a balance between regulation with innovation is critical. Academic institutions can play a pivotal role, guiding AI’s trajectory, nurturing interdisciplinary learning, and equipping future professionals. Embracing open-source AI can ensure its ethical use and mitigate the risks associated with its exploitation. The existential threats posed by AI are significant, yet with strategic collaboration and foresight, a bright, AI-driven future is within reach.

Keywords: Artificial Intelligence (AI), open-source AI, AI ethics, AI transparency, AI Education.

INTRODUCTION

The discourse surrounding the existential threats of AI often gravitate towards a doomsday scenario where AI usurps control, ultimately paving the way to a dystopian world devoid of human life. While such dramatic tales are undoubtedly engaging, both for news headlines and movie plots, they often lack a firm grounding in science. Historian and philosopher Yuval Noah Harris argues that such a threat is unfeasible due to AI’s inherent inability to biologically reproduce.¹ AI’s existence is inherently linked to ours—

¹ Harari, Y. N., Human Nature, Intelligence, Power, and Conspiracies, Lex Fridman Podcast #390; https://youtu.be/Mde2q7GFCrw?si=i8kckoGRO4-1NiwU
if we cease to exist, so too will they, given their biological reproduction limitations. Additionally, what would be the AI agent’s motives? Unlike humans, AI lacks inherent desires and objectives and does not possess goal setting or motivational characteristics, outside what is programmed by human developers. Philosopher Nick Bostrom from Oxford University emphasizes that AI lacks innate biological drives, such as motivations to attain food, air, energy, and to protect their young. “By contrast, an artificial mind need not care intrinsically about any of those things.”\(^2\) Therefore, it is critical to evaluate: what are the inherent existential threats associated with the growing integration of AI technologies into our daily lives, and what are the societal responsibilities for AI oversight?

**AI ETHICS**

Discussions on AI ethics have shined a light on our understanding of human behavior and societal expectations and norms. Before we can instill a sense of ethics into our AI systems, we must first grapple with these complexities ourselves. Navigating moral dilemmas and discerning the morally correct can be a challenging task, with the “right decision” being far from clear-cut. Consequently, training AI to evaluate these decisions becomes a difficult task. How do we negotiate the risks of permitting AI to make moral decisions on our behalf? Who should bear the burden of shaping these decisions, which may significantly affect numerous lives? Who will be held responsible if something goes wrong? What measures can be implemented to ensure corporate ethical behavior? These are all pressing ethical questions that require thorough consideration as we continue to evolve AI technology.

Transparency is pivotal to examine the inner workings of these AI models. Entrusting corporations to make the right decisions without scrutiny is a gamble. Such companies often prioritize boosting profits, not necessarily enhancing the quality of human life. Who bears the responsibility and has the technical expertise to oversee and assess these systems for adherence to ethical standards? Who should be granted the authority to define these ethical guidelines? While open-sourcing code offers another degree of transparency, it’s far from a comprehensive solution. Absent stringent regulations for adherence to open-source AI, the field of AI ethics risks devolving into a “wild west,” teeming with opportunities for potential misuse. However, excessively stringent regulations can hinder innovation, increase costs, and make it challenging for smaller companies with limited resources to compete effectively in the market.

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The concept of alignment is frequently invoked, but the issue lies in identifying who or what the AI agents should align with. Autonomous AI makes independent decisions, which are predicated on the training criteria utilized during its development. For instance, if faced with a moral dilemma—choosing between saving the passengers in the car or the people walking in the street—what would constitute the most ethical choice? Should the passengers assume the risk for associated with driving the autonomous vehicle? Is it reasonable to expect an autonomous vehicle company to prioritize the safety of pedestrians over the passengers? If a baby or a child is involved, either in the car or on the pedestrian walkway, would that alter the AI’s decision-making process? Many would have differing opinions on these ethical, moral questions. Alignment must be on both sides: established social values may necessitate adaptive thinking, just as AI initiatives should resonate with the current social framework. This balanced approach can propel AI innovation and social progress.

WEAPONIZATION OF AI

AI holds the potential for weaponization in several domains, including military, political, and economic spheres. The precision demonstrated in contemporary drone light shows underscores the capability to deploy autonomous weapons for warfare. Drones can also be used for targeted assassinations or sabotage operations. The potential military implications of AI also warrant careful consideration. The utilization of autonomous AI weapons by one nation against another could potentially trigger arms races and unintended escalations, resulting in humanitarian consequences. Without human oversight and regulations, AI could render such weaponry dangerous and unpredictable. To mitigate those dangers, including a human-in-the-loop can eliminate the potential for error in the AI systems. In the realm of cyber warfare, AI can implement direct attacks on network infrastructure. What could be the potential fallout if a military’s autonomous weapons were attacked and compromised?

Given the possible militarization of AI, it is imperative to foster international cooperation to address this issue. Entities such as the United Nations can serve as forums to facilitate discussions, determine best practices, and devise international standards and treaties for AI governance. Similarly, the Organization for Economic Cooperation and Development (OECD) can offer a platform for governments worldwide to collaborate on matters concerning AI development and its implications for societal well-being.
AI Propaganda

AI can be used in information warfare to create large-scale disinformation campaigns, manipulate public sentiment, and engage in censorship, potentially destabilizing political processes by influencing electoral outcomes. Potential risks can arise if AI is used by social media companies to shape and influence public opinion. AI can be used to create disinformation campaigns at a massive scale, which could influence election outcomes and social behavior. The recent Congressional testimony about the weaponization of social media platforms by governmental bodies is evidence of this ongoing concern. Amplified by AI, such manipulation can result in even more profound threats to democratic processes in the United States.

Additionally, the ability to produce deep fakes introduces the potential to spread fabricated messaging attributed to country leaders, amplifying misleading information and propaganda. AI can be used to craft targeted propaganda by identifying vulnerabilities and specific interests within populations. These insights can then guide campaigns tailored towards particular populations, influencing public opinion in potentially manipulative ways. “Recently, a low-quality video of Ukrainian President Volodymyr Zelensky purportedly telling Ukrainian soldiers to lay down their arms and surrender circulated on social media.” This demonstrates how AI technology is already being weaponized and used to manipulate a population during a war. Computer scientist and journalist Lex Fridman, stated in a recent interview that “social media has a role in either creating World War III, or avoiding World War III.”

With the potential risk of AI weaponization, it sheds light on the importance of fast action needed to address and regulate the ethical and humanitarian concerns. If left unaddressed, we could be potentially leading the world down the path to the next world war, with AI having the potential to escalate conflicts and erode trust among nations. International efforts need to be made to establish norms, regulations, and agreements to prevent the misuse of AI technology for destructive purposes in warfare, and to promote responsible and ethical applications of AI by all nations.

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5 Harari, Y. N., Human Nature, Intelligence, Power, and Conspiracies, Lex Fridman Podcast #390; https://youtu.be/Mde2q7GFCrw?si=i8kckoGRo4-1NiwU
CORPORATE EXPLOITATION WITH AI

Advances in AI generated media create potential for corporations to generate misleading advertisements and testimonials, deceiving consumers about product or service quality or efficacy. Given the influence and power large corporations wield, they can significantly shape policies in their favor, creating additional barriers for smaller competitors. Lobbying efforts, using large cash infusions to influence political decisions, could result in AI regulations and policies favoring corporate interest over societal well-being.

The profit-driven nature of corporations might instigate environmental challenges and other adversities. AI systems might prioritize strategies that ensure continued financial growth, even if they result in harmful effects on the environment or humanity. If such negative impacts occur, the question of liability arises.

Predatory Pricing

Companies can exploit AI to adopt predatory pricing tactics, initially undercutting prices to eliminate competitors, then hiking prices upon achieving market dominance. The approach is not new, with companies like Walmart and Amazon\(^6\) previously implicated. AI allows companies to rapidly analyze consumer behavior, enabling dynamic pricing based on individual willingness to pay, which can lead to price discrimination in specific customer segments. AI driven bots can fabricate reviews, distorting consumer perceptions. Additionally, larger corporations could deploy AI to stifle competitor innovations that pose threats to their established business models.

Data Privacy Concerns

Large corporations equipped with significant power and resources, have substantial opportunities to leverage AI to dominate markets.\(^7\) Their access to extensive amounts of personal data enables them to deploy personalized ads designed to tap into human cognition influencing purchasing decisions. Such access prompts concerns about potential exploitative predatory practices and the ethics of mass manipulation. There’s a growing apprehension about how expansively this data is being utilized. AI’s capabilities in data collection and analysis are reaching unparalleled levels, fostering even more potentially manipulative advertising methods. The investigation into Cambridge Analytica in the 2016 elections shows how political advertising used

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personal data to build profiles to market political ads in target areas, which in turn swayed public opinion. With the integration of AI, the potential for issues related to data privacy and improper usage are escalated.

**Perpetuation of Discrimination and Bias**

Discrimination and biases are prevalent in our societies, often manifested unconsciously. As such, these prejudices can permeate the data used to train AI models, thereby risking the reinforcement and perpetuation of these biases. Diverse teams of developers, data scientists, and ethicists should be organized to bring a variety of perspectives to the AI development process. This approach would identify and mitigate biases from different angles. Additionally, data preprocessing, and continuous monitoring and auditing of AI systems, can help to detect and resolve bias issues during development and post-deployment.

**JOB DISPLACEMENT AND DISPARITY**

The unprecedented advancements in AI technology present potential socioeconomic impacts, primarily due to job displacement across industries. As we face an unprecedented moment in human history, the job market’s outlook for the next decade and thereafter, are uncertain. The rapid integration of AI across all sectors could result in widespread unemployment and disrupt socioeconomic stability, if not addressed. Yet how can we effectively manage such extensive job losses across industries in such a relatively short period of time? Additionally, what incentive do companies have to invest in human capital as well as AI?

The introduction of AI automation into the workplace could further exacerbate the already prevalent wage gap between CEOs and average employees, potentially leading to an intensification of economic inequality. AI can significantly maximize corporate profits by cutting labor costs. If AI systems replace human labor at a large scale, this could lead to increased profitability for companies. The increased concentration of wealth at the corporate level, if primarily shared among shareholders and top executives, has the potential to intensify economic inequality within society. Additionally, if these financial benefits are not passed on to consumers, there is a risk of further inflating the cost trajectory of product and goods.

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AI’s potential to replace human labor could particularly impact individuals with academic degrees more than those in skilled trade roles. This is largely due to the nature of the tasks performed in many professional fields, which often involve routine, data-centric tasks that can be automated with AI. One example is the healthcare industry, where AI’s capabilities for accurate diagnosis and personalized treatment recommendations, based on a patient’s history, can outpace human capabilities. While this technological shift may impact the labor market adversely, it is also important to recognize the broader perspective. The advances in diagnosis and treatment facilitated with AI could potentially save countless lives. Additionally, research indicates that by combining human judgement with AI boosts diagnostic accuracy. Therefore, how can academia promote integration of AI into professional roles to amplify their efficiency, rather than merely replacing them?

**FUTURE OF AI**

In anticipation of a future with AI, we need to counteract potential adverse effects by mandating open-source AI, conducting comprehensive assessments, and fostering interdisciplinary research. The objective is to minimize potential negative impacts while still harnessing AI’s positive societal benefits. By focusing on transparency and open-source AI, efforts can support the technological innovation of AI, and not hinder its progress with over-regulation.

The involvement of industry experts and academics, drawing from their technical expertise in development and research, is crucial to assist government officials. The valuable insights from ethicists, legal scholars, and various academic fields can offer direction on the ethical guidelines and implications of AI, ensuring harmony with societal values and human rights. These guidelines should outline protocols for training AI systems in navigating moral dilemmas, rather than leaving such consequential decisions solely to individual governments or corporations.

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International Cooperation

Governments are increasingly addressing AI-related concerns, but many of these efforts remain siloed. The lack of coordinated efforts among nations can create inconsistent standards, complicating the development of products intended for a global audience. Additionally, a uniform approach to AI regulation may fall short, given the diverse requirements across industries and countries. Therefore, it is crucial for governments to prioritize collaboration, transparency, expertise, and a balanced focus on open-source AI to encourage and promote innovation and ethical considerations.

With the potential threats of AI being used in warfare, necessitates international cooperation and the contemplation of potential treaties that regulate the deployment of AI in military contexts. Emphasis should be placed on establishing transparent and responsible decision-making protocols, coupled with mandates for human involvement in critical decisions. This layer of oversight can help to guarantee the ethical application of AI on a worldwide level.

Open-Source AI

Mandating open-source AI fosters an essential level of transparency, ensuring that ethical considerations are being integrated into AI systems that align with the collective of humanity. This approach not only speeds up innovation, but also encourages creativity and reduces the barrier of technical complexity. By making AI open-source, it serves as a safeguard against bias, empowering data scientists and other academics access to delve into the AI’s programming and logic. Closed-source AI can create a digital divide, where only those with the resources to purchase proprietary AI solutions can benefit from its capabilities. That could disproportionately affect small businesses and low-income households. Additionally, the concept of open-source AI provides opportunities for smaller companies to engage in fair competition with the larger competitors. Open-source AI systems also allow for accountability in the event of serious failure.

Regulation

Marc Andreesen, University of Illinois alum and co-author of the first widely used browser, warns against the risks of government regulation, stating “Big AI companies should be allowed to build AI as fast and aggressively as they can—but not allowed to achieve regulatory capture, [and] not allowed to establish a government-protect cartel that is insulated from market

competition due to incorrect claims of AI risk.” He argues that sectors controlled by government regulation bottleneck technological innovation and drive-up prices.\textsuperscript{14} The Price Changes chart shows the greater degree of government involvement, the more expensive the goods and services.\textsuperscript{15}

![](image)

There are potential threats of corruption that could stem from AI regulation. Regulation can “naturally invite corruption, because they provide opportunity for government officials to be paid off for regulatory favors, subsidies, and government contracts.”\textsuperscript{16} These regulations, can in turn pose threats to democratic processes and capitalism. Consequently, how can this be prevented?

\textsuperscript{14} Andreesen, M., \textit{Why AI Won’t Cause Unemployment}, Twitter; https://twitter.com/pmarca/status/1632167998965551104

\textsuperscript{15} Perry, M., \textit{Chart of the Day...or Century?}, American Enterprise Institute; https://www.aei.org/carpe-diem/chart-of-the-day-or-century-8

By encouraging industry self-governance, industries can proactively establish guidelines and standards to ensure ethical development. Companies can establish ethics committees or review boards, or seek external audits, to evaluate the AI systems being developed are following industry guidelines. Internal ethical impact assessments can be conducted before deploying AI technologies to identify and mitigate potential negative consequences.

Through academia, collaboration can be encouraged among industry, ethicists, and policymakers to collectively address AI ethics. Their diverse expertise can provide insights that can help to identify potential ethical concerns and guide responsible decision-making. Another option would be to institute a system for voluntary certification for AI products and systems. Companies that adhere to ethical principles and best practices could earn certifications that demonstrate their commitment to responsible AI.

**Benefits of AI Adoption**

The rapid integration of AI across industries has sparked a technological shift that has the potential to improve human life. One industry of notable impact is healthcare, where ongoing advances are showing improved accuracy in diagnosis and can provide a more personalized approach to medical treatments. These changes can vastly improve medical diagnosis with AI’s capability to review and parse large amounts of data. AI can also be used to develop enhanced assistive technologies, which can provide greater mobility and communication for individuals with disabilities. AI can also forge a new path forward in medicine, by allowing doctors to prescribe medicines based on prescription efficacy, as well as patient history, to customize a medical treatment plans which can lead to improved outcomes and overall patient health.

Within the realm of education, AI holds the potential to craft personalized learning plans, tailored to the individuals’ capabilities, and learning styles. This personalized approach revolutionizes education by enhancing overall engagement and facilitating improved comprehension. AI also proves to be an invaluable tool for research, leveraging its capability to analyze massive data sets and detect intricate patterns that are hard for humans to detect. By using AI as a research companion, insights can be identified more quickly, subsequently accelerating the pace of discoveries and enriching humanity’s collective knowledge.

The possibilities with AI also reach into the environmental industry, where it will be instrumental in monitoring and analyzing environmental

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17 OpenAI, *Be My Eyes*; https://openai.com/customer-stories/be-my-eyes
data. This capability can aid in predictive analytics for disasters, but also foster sustainable practices to optimize energy usage, reduce waste, and promote sustainability. AI impact on agriculture can already be seen in crop and livestock management, leading to more sustainable practices and lower costs for consumers.18

**Academia’s Role**

Academia can help strike a balance between preventing government over-regulation and fostering responsible AI innovation. By drawing on expertise within industries and government relations, academics can offer invaluable insights into the complex nature of AI technology, ethics, policy, and societal implications. With extensive research, academia can inform policymakers with evidence-based recommendations that help guide effective outcomes without stifling innovation. Additionally, academia’s role extends to developing ethical guidelines and best practices for AI development and deployment. Opportunities for collaboration with industry leaders exist to foster a culture of responsible AI development while reducing the necessity for strict government intervention. With education and training, academia can equip future professionals and policymakers with the necessary knowledge to make informed decisions about AI’s impact. By integrating ethics into technology-based curricula, academic institutes can ensure incoming professionals know the importance of ethical considerations related to AI.

Through engaging with a diverse range of stakeholders, academia can ensure that its research and innovation efforts are aligned with the needs and interests of the community while raising social awareness and comprehension. In this way, academic institutions can help carve a path forward by contributing independent assessments of AI systems, outlining potential impacts, and providing evidence-based recommendations on regulations. Furthermore, by reaching beyond national boundaries, we can foster international cooperation on AI-related subjects. As Dr. Peter Boltuc explains, “Online inter-campus, international collaboration represents the future of education.”19

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PREPARING FOR THE FUTURE JOB MARKET

With the uncertainties in the job market related to AI, how can academic institutes prepare students? By adopting a multifaceted approach that focuses on soft skills like critical thinking, problem-solving, adaptability, communication, and emotional intelligence, institutions can help prepare future professionals on how to navigate and apply their knowledge in diverse contexts. Institutions should prioritize a strong foundational understanding in relevant disciplines, such as computer science, data science, and ethics. Providing students with a comprehensive grasp of these fundamentals ensures they can adapt to emerging AI technologies and concepts. Additionally, institutions should foster entrepreneurial skills and innovative thinking. This prepares students to identify gaps in the market and create solutions that can adapt to evolving landscapes.

INTERDISCIPLINARY PROGRAM DEVELOPMENT

By developing interdisciplinary programs, academic institutes can effectively prepare future professionals for advances in AI. These programs should blend a range of fields, enabling graduates to understand and work with AI in diverse contexts. To achieve this, collaboration among departments is essential to merge technology, ethics, social sciences, liberal arts, and other specialized knowledge. With a multidisciplinary approach, institutions can ensure students receive a comprehensive education that will equip them with the necessary skills to work and succeed in the complex world, fully immersed with AI. Faculty collaboration is essential for such programs. By involving faculty from various disciplines, courses become enriched with diverse viewpoints and perspectives. This collaboration also provides students an opportunity to witness the integration of knowledge from different fields.

Integrating AI ethics into curriculum is crucial to ensure students understand AI’s applications across industries. Real-world projects can provide hands-on experience in interdisciplinary teamwork to bridge the gap between theory and application. Creating physical spaces dedicated to interdisciplinary collaboration can encourage students from different backgrounds to come together for AI-related projects and research. Workshops, lectures, and panel discussions can further reinforce interdisciplinary nature of AI and foster an environment for collaboration. The continuous improvement of these programs based on feedback from students, faculty, and industry partners, can help optimize the offerings with the evolving demands of the AI field.
Interdisciplinary programs can empower graduates to navigate the future with AI, with the education to address challenges and to contribute to responsible and ethical development and deployment of AI across all domains. Additionally, fostering a life-long learning mindset can encourage students to embrace continuous education opportunities as AI continues to evolve.

**CONCLUSION**

The integration of AI into our lives brings both immense opportunities and profound challenges. The discussion of AI as an existential threat requires a balanced perspective, considering both the inherent limitations of AI, as well as the possible motives of those who express concerns. It is vital to acknowledge the potential for unintended consequences stemming from its deployment. Ethical considerations are paramount, as the technology inherits biases and prejudices present in the training data. Collaborative efforts among academia, industry, and policymakers are essential to navigate the future with the complexities that AI presents.

The weaponization of AI, potential for propaganda, corporate exploitation, and concerns regarding job displacement, raise important questions about societal well-being and global stability. Navigating the inherent societal and economic impacts of AI require the implementation of regulations within military domains, the cultivation of international cooperation, the establishment of national ethical guidelines, and incentives for organizations to follow those ethical guidelines and best practices. These measures can collectively serve to prevent misuse and foster ethical AI development.

The benefits of AI adoption are vast, from revolutionizing healthcare and education, to advancing environmental sustainability and research. However, responsible AI development demands open-source AI, industry self-regulation, and practical ethical impact assessments. The potential risks of exploitation of AI highlight the pressing need for effective and independent bodies, and government mandates for transparency and open-source AI development. Large corporations, with their extensive resources and infrastructure, could wield AI as a tool to consolidate an imbalanced concentration of power. This holds the potential to influence crucial aspects of society significantly and could pose a serious challenge to our foundational principles of democracy and capitalism.

It is essential for academia to delicately navigate between preventing excessive regulation and promoting innovation, guiding AI’s future direction. Open-source AI remains a pivotal way for ensuring its ethical use. Industries subjected to rigorous government oversight often face inflated costs, unlike their less-regulated counterparts. As AI reshapes the job market, academic
institutes must prepare students through a multifaceted approach that emphasizes soft skills and interdisciplinary collaboration. Graduates should be empowered to adapt, innovate, and contribute to the world by harnessing AI for the greater good. Interdisciplinary programs that blend technology, ethics, social sciences, and liberal arts, can provide future professionals a comprehensive understanding of AI.

While AI poses serious risks, it also has immense potential for improving quality of life for humans. While some argue that open-source AI could be exploited by malicious actors, it is similar to the freedom of speech principle. Despite the potential for misuse, we don’t diminish such freedoms; rather, we implement laws addressing and penalizing abuses like hate speech. By championing interdisciplinary learning, fostering global partnerships, mandating robust open-source AI, humanity can address the multifaceted challenges of AI and potential for the societal advancement. The existential threats are real, but so is the promise of a better future.

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