HUMAN RIGHTS AND LEGAL ISSUES IN THE AGE OF ARTIFICIAL INTELLIGENCE: CHALLENGES, GAPS AND VULNERABILITIES

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ABSTRACT

Over the past decade, advancements in Artificial Intelligence (AI) have accelerated. As a result, it has come to be used and relied on widely in a wide range of contexts that impact our daily lives, human rights, and the prohibition of discrimination. The article delves into AI discrimination, asking what causes it, how it manifests, who is (most) at risk, and what politicians can do to prevent it and uphold human rights. The results show that AI is discriminatory in several ways, with the most marginalized communities disproportionately affected. A lack of regulation and an excessive reliance on artificial intelligence contribute to numerous problems in the industry.

Keywords: Human Rights, Artificial Intelligence, Discrimination, Bias, Prohibition of Discrimination

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II. AI as a Tool of Discrimination

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I. Introduction

RAPID PROGRESS is being made in AI's research, development, deployment, and use, all of which positively impact the world economy. While artificial intelligence (AI) has many positive effects (such as enhanced creativity, services, safety, lifestyles, and problem-solving), it also

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¹ M. A. Boden, AI: Its Nature and Future (Oxford University Press, 2016).

causes many worries and concerns (adverse impacts on human privacy, autonomy, and fundamental rights).²

The transformative power of AI is immense, and we have only just begun to explore its possibilities. AI will speed up the lending process, reduce credit card fraud, and prevent hackers from accessing financial institutions' systems.

Nonetheless, advances like AI push the boundaries of what is reasonable, ethical, and legal. The next step and doing the right thing are constantly at odds with one another. Moreover, to successfully navigate this conflict in AI and machine learning, everyone from data scientists to Csuite executives must place a premium on results and the people whose lives will be most affected by the decisions made by AI algorithms.

The legal discussion about AI and human rights is well-established, and there are many detailed legal analyses of specific issues.³ Still, this field is a moving regulatory target, so we need a curated, exploratory overview of many problems. Also missing is a complete discussion and map of how vulnerable people are to these problems.⁴ The main research questions for the article are: What are the legal and human rights issues with artificial intelligence? What are the gaps and problems in this situation, and how can we help people be less vulnerable and more vital?

II. AI as a Tool of Discrimination

Discrimination and institutional racism have emerged as significant issues in public discussions about AI's impact on our biological society. Article 2 of the UDHR⁵ and the ICCPR⁶ states that everyone is guaranteed protection under the law. Of course, this is easier said than done, given the prevalence of prejudiced beliefs and repressive customs that permeate human contact. Some people have the naive idea that artificial intelligence is the way out to this problem, a technical

² OECD, Artificial intelligence in society (OECD Publishing, Paris, 2019).

³ Filippo Raso, Hannah Hilligoss, et.al, "Artificial Intelligence & Human Rights", Berkman Klin Center for the Internet & Society at Harvard University, available at: https://cyber.harvard.edu/publication/2018/artificialintelligence-human-rights (last visited on October 11, 2022).

Ready or Not: Artificial Intelligence and Corporate Legal Departments, available https://legal.thomsonreuters.com/en/insights/articles/artificial-intelligence-ai-report (last visited on May 30, 2022).

⁵ The Universal Declaration Of Human Rights And Fundamental Freedoms, 1948, art. 2.

⁶ International Covenant on Civil and Political Rights, 1966, art. 2.

apparatus that will free us from human decision-making biases. However, this viewpoint fails to take into consideration the human intellect that is embedded in AI.⁷

On the other hand, AI and other advancements regularly push the envelope of what is considered reasonable and ethical. The next best thing and doing the right thing are constantly at odds with one another.⁸ Data scientists and C-suite executives must remember the outcomes and the people who will be most affected by AI algorithms making judgments as we navigate this tension in AI and machine learning.

Simply said, AI describes computer programmes that can analyse large amounts of data and use that information to perform tasks such as problem-solving, decision-making, and risk assessment. AI can rapidly sift through massive amounts of data to identify previously unknown patterns. Early AI required human programmers, but we now have AI systems capable of autonomous learning.⁹

As AI improves and people stop explicitly programming and keeping an eye on systems, hidden bias could lead to decisions that hurt people and society. Algorithms or data used to make decisions may introduce this bias.¹⁰

From Human Bias to AI Bias

The world we inhabit is rife with prejudice. Whether we like it or not, our years of experience and social training colour every choice we make daily. These prejudices may muddle the capacity to learn and think clearly, objectively, and logically. In a discriminating way, they might set off a domino effect.¹¹

Will we still are concerned about bias and prejudice in the future when code is an integral part of our life and algorithms, not humans, have a more significant say in whether we get the job, the

⁷ Tai MC, "The impact of artificial intelligence on human society and bioethics", 32(4) *Tzu Chi Med J* 339-343 (2020).

⁸ 5 Ethical Issues in Technology to watch for in 2021, *available at*: https://connect.comptia.org/blog/ethical-issues-intechnology (last visited on July 12, 2022).

⁹ Rockwell Anyoha, "The History of Artificial Intelligence", *available at*: https://sitn.hms.harvard.edu/flash/2017/history-artificial-intelligence/ (last visited

https://sitn.hms.harvard.edu/flash/2017/history-artificial-intelligence/ (last visited on October 11, 2022).

¹⁰ James Mayika, Jake Slberg, *et.al*, "What Do We Do about the Biases in AI?" *Harvard Business Review*, October 25, 2019.

¹¹ For Us and the World We Inhabit: A Civics of Interdependence, *available at*: https://compact.org/news/for-us-and-the-world-we-inhabit-a-civics-of-interdependence (last visited on Feb 4, 2022).

loan, the scholarship, whether or not we go to jail, whether or not we get to travel, and nearly everything else? Can cutting-edge AI-driven systems possibly free us from centuries of prejudice?

How humanity creates and uses artificial intelligence technology will determine the answer to this issue. Suppose the principles of ethical AI are not followed, including explainability, privacy, security, safe AI, fairness, and human agency oversight. ¹² In that case, there is a big chance that our future societies will not only keep projecting human biases from the past but also worsen those biases. Why? Because in the end, humans (with all their imperfections) are responsible for modelling, specifying, and overseeing AI systems. As a result, our inherent biases will permeate the systems we design, even if we try to suppress them.

Although it may be impossible to eliminate human bias from AI systems, we can still take every precaution to mitigate its effects. To do this, we need a workforce that reflects the variety of our society and is adept at processing a wide range of inputs, as well as careful selection of training data and watchful data maintenance.¹³

Face-recognition systems and artificial intelligence algorithms have consistently failed to maintain a minimum level of fairness, ¹⁴ especially by displaying discriminating inclinations against persons of African ancestry. ¹⁵ As a proof of concept, in 2015, *Google Photos* tried out a sophisticated detection programme that misidentified a images of people of colour as one of the gorillas. ¹⁶ When users entered search phrases in Google's search box like "Black Girls", the algorithm of search engine returned results containing sexually explicit information. ¹⁷ The researchers also found that an algorithm used to decide if a person needs extra medical care undervalues the medical needs of

¹² Xizntao Wang, "Artificial Intelligence and the Loss of Humanity", *Berkeley Political Review*, November 15, 2020. ¹³ AI bias and human rights: Why ethical AI matters, *available at*: https://www.ericsson.com/en/blog/2021/11/ai-bias-what-is-it (last visited on Feb 12, 2022).

Many Facial-Recognition Systems Are Biased, Says U.S. Study, *available at*: https://www.nytimes.com/2019/12/19/technology/facial-recognition-bias.html (last visited on September 4, 2022).

¹⁵ Charlotte Jee, "A biased medical algorithm favoured white people for health-care programs", MIT Technology Review, *available at*: https://www.technologyreview.com/2019/10/25/132184/a-biased-medical-algorithm-favored-white-people-for-healthcare-programs/ (last visited on October 11, 2022).

Google's solution to accidental algorithmic racism: ban gorillas, *available at*: https://www.theguardian.com/technology/2018/jan/12/google-racism-ban-gorilla-black-people (last visited on June 22, 2022).

¹⁷ Can Yavuz, *Machine Bias: Artificial Intelligence and Discrimination* (2019) (Unpublished Master Thesis, Lund University).

people with African ancestry. ¹⁸ Often, data sets are incomplete, known as *coverage bias* ¹⁹. It occurs when the sample in the data set does not represent the entire population that the AI model is attempting to forecast. For instance, car safety systems that are built for and tested on the typical form of a male body would not provide results that adequately protect a female body. Incorporating an inadvertent bias in the data set into an analysis or algorithm designed for use in a population that does not distinguish between men and women could lead to complications. ²⁰

Several countries use facial recognition technology in their respective criminal justice systems, including China, India, Denmark and Hong Kong.²¹ It is becoming more common to detect potential criminals for predictive monitoring.²² Cynics have indicated out²³ that these algorithms, rather than reducing and regulating the activities of the police, improve pre-existing biased law enforcement methods. Because of the inherent bias of these instruments, persons of African descent are now at a much-increased danger of being viewed as high-risk criminals.²⁴ As a result, racial tendencies inside the court and prison systems have become even more entrenched. The fact that AI has racial bias built into it is a stain on the revolutionary potential of AI for society. It is a violation of equal treatment as well as the right to protection.²⁵

The Black Lives Matter movement has prompted communities to advocate for black civil rights. At the same time, though, more people are using AI, which leads to digital prejudice and repeats

¹⁸ Widely used health care algorithm has racial bias, Harvard T.H. Chan School of Public Health, *available at*: https://www.hsph.harvard.edu/news/hsph-in-the-news/study-widely-used-health-care-algorithm-has-racial-bias/ (last visited on October 11, 2022).

¹⁹ Racial bias in a medical algorithm favors white patients over sicker black patients, *available at*: https://www.washingtonpost.com/health/2019/10/24/racial-bias-medical-algorithm-favors-white-patients-over-sicker-black-patients/ (last visited on March 18, 2022).

²⁰The deadly truth about a world built for men – from stab vests to car crashes, *available at*: https://www.theguardian.com/lifeandstyle/2019/feb/23/truth-world-built-for-men-car-crashes (last visited on April 22, 2022).

²¹ AI & Global Governance: Turning the Tide on Crime with Predictive Policing, *available at*: https://cpr.unu.edu/publications/articles/ai-global-governance-turning-the-tide-on-crime-with-predictive-policing.html (last visited on Feb 10, 2022).

²² Human Rights in the Age of Artificial Intelligence, available at:

https://www.accessnow.org/cms/assets/uploads/2018/11/AI-and-Human-Rights.pdf (last visited on March 22, 2022). ²³ Beyond science fiction: Artificial Intelligence and human rights, *available at*:

https://www.openglobalrights.org/beyond-science-fiction-artificial-intelligence-and-human-rights/ (last visited on August 22, 2022).

²⁴ Machine Bias, *available at*: https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing (last visited on March 22,2022)

²⁵ Joy Buolamwini, "Artificial Intelligence Has a Problem with Gender and Racial Bias. Here's How to Solve It", T*ime*, February 7, 2019, *available at*: https://time.com/5520558/artificial-intelligence-racial-gender-bias/ (last visited on August 1, 2022).

the wrongs that people are fighting against. This technology disproportionately impacts the disadvantaged population since it exacerbates existing discriminatory behaviours in contemporary society.²⁶

Sampling bias²⁷ occurs when data are not obtained randomly from the target group. At the same time, participation bias²⁸ occurs when respondents from one group are more likely to abandon a survey than another. Confirmation bias²⁹ is a difficult-to-identify prejudice that happens when an analyst or decision-maker has a firm previous experience or conviction that hinders his or her capacity to examine alternatives. This may cause one to favour facts that strongly support a previously held view. Individuals may adopt a confirmation bias if they believe, for instance, that left-handed persons are more capable of creativity or analysis than right-handed ones. They may choose to ignore or discount evidence to the contrary.³⁰

The same applies to *algorithmic bias*³¹ or bias caused by AI programmes. One type of prejudice introduced by algorithms is *implicit bias*.³² The findings of data modelling might be impacted when data scientists draw connections or assumptions based on their mental models and memories. Implicit bias may impact the collection and classification of data and the design and development of systems.³³ As robots learn, their findings and judgments have repercussions for humans. For AI to be truly ethical, it must be aware of these consequences and work to mitigate them by introducing new rules and evaluation procedures.³⁴

Companies that want to create ethical AI should prioritise data innovation that serves the needs of actual people. This can be achieved by adopting a holistic strategy toward data, including using and deploying AI and recognising digital rights on par with human rights. Another crucial

²⁶ Mehgan Gallagher, "Black Lives Matter: The 21st Century Civil Rights Movement?" *O'Neill Institute for National and Global Health Law*, October 12, 2018, *available at*: https://oneill.law.georgetown.edu/black-lives-matter-the-21st-century-civil-rights-movement/ (last visited on August 13, 2022).

²⁷ Ninareh Mehrabi, Fred Morstatter, et.al., "A Survey on Bias and Fairness in Machine Learning", available at: https://arxiv.org/pdf/1908.09635.pdf (last visited on August 16, 2022).

²⁸ Ibid.

²⁹ *Ibid*.

³⁰ Kendra Cherry, "What Is the Confirmation Bias?", *VeryWellMind*, August 13, 2022, *available at*: https://www.verywellmind.com/what-is-a-confirmation-bias-2795024 (last visited on August 20, 2022)

³¹ Supra note 23.

³² Supra Note 23.

³³ Tellef Solberg, "A Practical Introduction to Simulation Modelling for Data Scientists", *Towards Data Science*, July 17, 2021, *available at:* https://towardsdatascience.com/a-practical-introduction-to-simulation-modelling-for-datascientists-a5e32cec0304 (last visited on August 31, 2022).

³⁴ Supra note 6.

component of ethical AI is its transparency. Wary of the "black box"³⁵ nature of AI, ethical organisations must understand the data and algorithms that drive a given AI approach and also employ ways to keep track of their design tools, methodology, models, and drift. For a deeper understanding of AI's capabilities, ethical organisations are investigating the feasibility of employing AI to monitor AI.³⁶

III. The Root Cause of AI Bias

It appears to be simple. However, the harsh reality of today's world frequently makes the theoretical more difficult to realise than it should be. Reports show that automated systems are often based on data sets made from thousands of hours of low-paid work and crowdsourced data, which men often do.³⁷ Furthermore, this might lead to issues without good data governance or algorithmic hygiene.³⁸

There are many ways for bias to make its way into algorithms. Training data can include biased human decisions or reflect social or historical wrongs. AI systems can learn to conclude from this data even when sensitive variables are omitted, such as gender, colour, or sexual orientation.³⁹ After discovering that a hiring algorithm gave more weight to applications from men containing phrases like "executed" and "captured," Amazon decided to stop using the system.⁴⁰ Another thing that can cause bias is the wrong way of picking data samples. This happens when training data has too many or too few examples of some groups.⁴¹

We are all accountable for our prejudices. It hurts the people treated unfairly but also hurt everyone else by making it harder for them to participate in the economy and society. It lowers the

³⁵ Gyandeep Chaudhary, "Artificial Intelligence: The Liability Paradox", Summer Issue *ILI Law Review* 147-150 (2020).

³⁶ Tim Fountaine, Brian McCarthy, *et.al.* "Building the AI-Powered Organization", *Harvard Business Review*, July-August 2019, *available at*: https://hbr.org/2019/07/building-the-ai-powered-organization (last visited September 1, 2022).

³⁷ Florian Schmidt, Florian, "Crowdsourced Production of AI Training Data – How Human Workers Teach Self-Driving Cars How To See Working Paper Nr. 155 – Hans-Böckler-Stiftung" 10.13140/RG.2.2.35294.59207.

³⁸ AI Bias and Human Rights: Why Ethical AI Matters, *available at*: https://www.ericsson.com/en/blog/2021/11/ai-bias-what-is-it (last visited on July 23, 2022).

³⁹ L Belenguer, "AI bias: exploring discriminatory algorithmic decision-making models and the application of possible machine-centric solutions adapted from the pharmaceutical industry" 2(3) *AI Ethics* (2022).

⁴⁰ Damini Gupta, T.S. Krishnan, "Algorithmic Bias: Why Bother?" California Review Management, *available at*: https://cmr.berkeley.edu/2020/11/algorithmic-bias/#fnref:2 (last visited on October 9, 2022).

⁴¹ Miranda Bogen, "All the Ways Hiring Algorithms Can Introduce Bias", *Harvard Business Review*, May 06,2019, *available at*: https://hbr.org/2019/05/all-the-ways-hiring-algorithms-can-introduce-bias (last visited on July 23, 2022)

possibilities for AI in business and society by creating mistrust and giving skewed results. Leaders of businesses and organisations must ensure that AI systems enhance human decision-making. They are responsible for promoting research and standards that will decrease bias in artificial intelligence.⁴²

The Impact of Technology on Unemployment

Article 23 of the Universal Declaration of Human Rights,⁴³ Article 6 of the ICESCR,⁴⁴ and Article 1.2 of the ILO⁴⁵ all guarantee the right to work and protection against unemployment.⁴⁶ Due to the loss of jobs, which AI's rapid growth has caused, a new era of unemployment has begun. Even though AI has changed business and personal life by making machines and services more efficient, this is still the case. According to research by Oxford University,⁴⁷ nearly half of all US employment could be eliminated in the future due to AI automation. They explained that the rapid pace at which technology develops makes this inevitable.

A Chinese business that makes mobile phones, Changying Precision Technology,⁴⁸ increased its output by 250 per cent and reduced its error rate by 8 per cent after replacing 90 per cent of its human workers with machines in 2017. Adidas⁴⁹ has also implemented "robot-only" factories to maximise productivity. As a result, companies can expand without adding employees, and human labour may hurt productivity. Until recently, technological advancements have got a more negative⁵⁰ impact on modest and medium-skilled employees, resulting in fewer job openings and

⁴² Milan Dordevic, "How Artificial Intelligence Can Improve Organizational Decision Making", *Forbes*, Aug 23, 2022, *available at:* https://www.forbes.com/sites/forbestechcouncil/2022/08/23/how-artificial-intelligence-can-improve-organizational-decision-making/?sh=4e201a792a1c (last visited on September 2, 2022).

⁴³ Universal Declaration of Human Rights, 1948, art. 23.

⁴⁴ International Covenant on Economic, Social and Cultural Rights, 1966, art. 6.

⁴⁵ Employment Policy Convention, 1964 (No. 122), art. 1(2).

⁴⁶ Sahajveer Bawja, Swapnil Singh, "Beginning of Artificial Intelligence, End of Human Rights", *LSE Blog*, July 16, 2020, *available at*: https://blogs.lse.ac.uk/humanrights/2020/07/16/beginning-of-artificial-intelligence-end-of-human-rights/ (last visited on April 23, 2022).

⁴⁷ Carl Benedikt Frey, Michael A. Osborne, "The Future of Employment: How Susceptible Are Jobs to Computerisation?" 114 *Technological Forecasting and Social Change* 254-280 (2017).

⁴⁸ Chinese factory replaces 90% of human workers with robots. Production rises by 250%, defects drop by 80%, *available at:* https://www.zmescience.com/other/economics/china-factory-robots-03022017/ (last visited on September 2, 2022).

⁴⁹ Adidas to move activity to robot-only factories, *available at*: https://www.zmescience.com/science/news-science/adidas-robot-factories-25052016/ (last visited on September 2, 2022).

⁵⁰ Nathan Leigh, "Low Skilled Humans Need Not Apply: The Growth, Quality and Polarization of New Jobs", Medium, Aug 23, 2015, *available at*: https://medium.com/@nath_leigh/low-skilled-humans-need-not-apply-the-growth-quality-and-polarization-of-new-jobs-9e41049b863c (last visited on September 4, 2022).

lower earnings, and ultimately the formation of job divergence.⁵¹ Nevertheless, if technology⁵² develops further, numerous vocations that we currently regard as safe from automation will someday be supplanted by AI. Personal assistants, language translators, and other services that rely on human involvement are just some roles that AI-based virtual assistants⁵³ software like Alexa, OkGoogle, Cortana and Siri have taken over.

The job losses caused by the COVID-19 pandemic may be exacerbated by a new wave of AI revolutions. As AI is introduced gradually into various job sectors, the poor will become poorer and the wealthy will become wealthier. Indeed, AI is the embodiment of a new style of capitalism that views human labour as an impediment to growth rather than a source of profit. Thus, it is urgent to build a techno-social governance framework that can safeguard human workers' rights to employment in the age of artificial intelligence.⁵⁴

Controlling Populations and Movement

Several international treaties guarantee the freedom to travel freely, and many governments uphold this principle as human dignity.⁵⁵ The degree to which artificial intelligence can be utilised to monitor activities closely correlates with its effectiveness in restricting this freedom. At least 75 of the 176 countries examined by the Carnegie Endowment for International Peace⁵⁶ use AI for border control and other security purposes. Concerns have been raised about the uneven impact of surveillance on police-discriminated communities, such as refugees, blacks, and irregular migrants, because predictive policing systems⁵⁷ result in "dirty data"⁵⁸ that reflects intentional and inherent bias. The Guardian⁵⁹ stated that in Arizona, along the US-Mexico border, hundreds of

⁵¹ Alan Manning, "We Can Work It Out: The Impact of Technological Change on the Demand for Low-Skill Workers" 51(5) *Scottish Journal of Political Economy* 581-608 (2004).

⁵² Martin Ford, *Rise Of The Robots* (Basic Books, New York, 2015).

⁵³ Grace Su, "Unemployment in the AI Age" 3(4) AI Matters (2018).

⁵⁴ Supra note 40.

⁵⁵ Right to liberty and freedom of movement, *available at*: https://libertyvictoria.org.au/content/right-liberty-and-freedom-movement (last visited on June 2, 2022).

⁵⁶ Steven Feldstein, "The Global Expansion of AI Surveillance", *Carnegie Endowment for International Peace*, September 17, 2019, *available at*: https://carnegieendowment.org/files/WP-Feldstein-AISurveillance_final1.pdf (last visited on August 19, 2022).

⁵⁷ Rashida Richardson, Jason Schultz, *et.al.*, "Dirty Data, Bad Predictions: How Civil Rights Violations Impact Police Data, Predictive Policing Systems, and Justice" 94 *N.Y.U. L. REV. ONLINE* 192 (2019). ⁵⁸ *Ibid.*

⁵⁹ Surveillance Society: Has Technology at the US-Mexico border gone too far? *available at*: https://www.theguardian.com/technology/2018/jun/13/mexico-us-border-wall-surveillance-artificial-intelligence-technology (last visited on Aug 12, 2022).

towers were installed with laser-enhanced cameras to deter illegal entry. The United States government has also implemented a facial recognition system to track foreign visitors' faces as they enter and exit the nation via passenger vehicles.⁶⁰

Additionally, technological changes have affected the humanitarian and military sectors. In a 2010 UN report, ⁶¹ the rising usage of armed drones in warfare, ⁶² particularly by the United States in Afghanistan and Pakistan, was frequently condemned as a violation of International Humanitarian Law. ⁶³ According to an investigation by *The Intercept* ⁶⁴ into drone strikes by the United States military against the Taliban and al Qaeda in the Hindu Kush have killed nearly nine out of ten persons who were not intended targets. ⁶⁵ Rapid advancements in AI and autonomous technology have led to entirely autonomous weapons, such as "killer robots," ⁶⁶ which create several moral, legal, and security problems. Concerns have been expressed concerning the dependability and error-proneness of these weapons, which could lead to unintended deaths and the quick intensification of conflicts due to their lack of ethical judgement. Indeed, the article by Zachary Kallenborn emphasises ⁶⁷ the inability of these weapons to distinguish between non-combatants and fighters.

In addition, the development of "humanitarian drones",⁶⁸ in which military technology may be utilised for compassionate objectives, has prompted ethical concerns over the potentially detrimental effects of this technology on vulnerable communities. There are significant negative

⁶⁰ US government to use facial recognition technology at Mexico border crossing, *available at*: https://www.theguardian.com/technology/2018/jun/05/facial-recognition-us-mexico-border-crossing (last visited on July 29, 2022).

⁶¹ Human Rights and Human Realities: Local perspectives on drone strikes and international law, *available at*: https://paxforpeace.nl/media/download/pax-report-drones-human-rights.pdf (last visited on October 31, 2022).

⁶²Humanitarian Concerns raised by the Use of Armed Drones, *available at*: https://www.genevacall.org/humanitarian-concerns-raised-by-the-use-of-armed-drones/ (last visited on July 29, 2022).

⁶³ Noel Sharkey, "The Automation and Proliferation of Military Drones and the Protection of Civilians" 3(2) *Law, Innovation and Technology*, 229-240 (2011).

Ryan Devereaux, "Man hunting in the Hindu Kush", *The Intercept* October 15, 2015, *available at*: https://theintercept.com/drone-papers/manhunting-in-the-hindu-kush/ (last visited on October 11, 2022).

⁶⁵ The One Job That Will Disappear By 2062 — The Job of Fighting Wars, *available at*: https://theprint.in/pageturner/excerpt/job-will-disappear-by-2062-fighting-wars/409314/ (last visited on July 29, 2022).

⁶⁶ Losing Humanity the Case against Killer Robots, *available at*: https://www.hrw.org/report/2012/11/19/losing-humanity/case-against-killer-robots (last visited on July 29, 2022).

⁶⁷ Zachary Kallenborn, "Swarms of Mass Destruction: The Case for Declaring Armed and Fully Autonomous Drone Swarms as WMD", *Modern War Institute*, May 28, 2020, *available at*: https://mwi.usma.edu/swarms-mass-destruction-case-declaring-armed-fully-autonomous-drone-swarms-wmd/ (last visited on July 23, 2022).

⁶⁸ J Emery, "The Possibilities and Pitfalls of Humanitarian Drones" 30(2) *Ethics & International Affairs* 153-165 (2016).

repercussions for disadvantaged groups whose personal data has increased their risk of violence. The UNHCR has used biometrics to keep track of incoming refugee populations; while this may seem like an objective identifying tool, there is abundant proof to suggest that these instruments actually classify and codify discrimination.⁶⁹ For Example: The Rohingya population's suffering has been compounded by the use of biometric data obtained from refugees in India and Bangladesh to facilitate their repatriation rather than integration into society.⁷⁰

During the current pandemic, many people are worried about their privacy due to the widespread adoption of AI for social control. The Arogya Setu⁷¹ project is risky because it combines health records with electronic monitoring.⁷² When used for exploitation and oppression, technologies seriously threaten basic human rights. In truth, the human rights of vulnerable groups would be violated if AI uses largely stays unregulated.⁷³

Addressing AI bias – Where to Begin?

The prevalence and application of AI are growing. An Ericsson AI Industry Lab survey found that over half of those responsible for AI and analytics projects anticipate completing their AI transformation by the end of 2020.⁷⁴ The survey also found that people,⁷⁵ not the technologies themselves, are the biggest impediment to the widespread adoption of AI. Eighty-seven per cent⁷⁶ of participants said that problems with people and culture were more common than problems with technology and administration. Remarkably, over half of the top 10 essential difficulties organisations face involving people and culture. This includes deterrence issues like employees'

⁶⁹ UNHCR, "Guidance on Registration and Identity Management- 6.5 Registration interview and data collection" (2018).

⁷⁰ D. Padma Kumar Pillay, "Repatriation of Rohingya Refugees: An Aberration on India's Humanitarian Legacy", *available at*: https://idsa.in/idsacomments/repatriation-of-rohingya-refugees-dpkpillay-161019 (last visited on July 16, 2022).

⁷¹ Ashi Mehta, "Does India's covid-19 Contact Tracing App Violate Digital Rights?" *Oxford Human Rights Hub*, May 11, 2020, *available at*: https://ohrh.law.ox.ac.uk/does-indias-covid-19-contact-tracing-app-violate-digital-rights/ (last visited on July 20, 2022).

⁷² Sidner Fussell, Will Knight, "The Apple-Google Contact Tracing Plan Won't Stop Covid Alone", *Wired*, April 14, 2020, *available at:* https://www.wired.com/story/apple-google-contact-tracing-wont-stop-covid-alone/ (last visited on July 20, 2022).

⁷³ *Supra* note 40.

⁷⁴ Ericson, "Adopting AI in Organizations" (November 2020).

⁷⁵ *Ibid*.

⁷⁶ *Ibid*.

preference for tried-and-true ways, their fear of losing their employment, and their general misunderstanding of technology and unwillingness to adapt.⁷⁷

The root of the problem is an unwillingness to let go of control and a failure to grasp the situation. We need visible, comprehensible, and explicable AI to dispel these misunderstandings. We need AI that humans can rely on.⁷⁸ Then, how do we get there from here?

1. Regulating an AI to be more ethical

In April 2021, the European Commission⁷⁹ unveiled its first-ever legal framework on artificial intelligence (AI), as well as a new Coordinated Plan with the Member States,⁸⁰ which will "guarantee the safety and fundamental rights of people and businesses, while strengthening AI adoption, investment, and innovation across the EU."

With the advent of the risk-based approach, AI will be subject to stringent regulations based on a calculated risk. It also imposes an essential prohibition on artificial intelligence (AI) systems that are deemed "a threat to the safety, livelihood, and rights of people," including "systems that manipulate human behaviour, circumvent users' free will, and allow governments to perform social scoring."

The announcement of a comparable AI ethical framework in Australia⁸¹ in June 2021 added further momentum to this movement. According to the country, this framework will "guide businesses, governments, and other organisations to design, develop, and use AI responsibly."

A robust and sustainable foundation for future AI research may be found in the emerging ethical AI frameworks mentioned earlier; nevertheless, this does not mean that they are the silver bullet solution. Instead, government, technology companies, corporations, and activist groups all contribute to developing and delivering artificial intelligence that is ethical and inclusive. The

⁷⁷ Mikael Anneroth, "AI bias and human rights: Why ethical AI matters", *Ericsson Blog*, April 10, 2021, *available at*: https://www.ericsson.com/en/blog/2021/11/ai-bias-what-is-it (last visited on May 13, 2022).

businesses-harness-technology/artificial-intelligence (last visited on September 4, 2022).

⁷⁸ Erik Ekudden, "To deliver cognitive networks, we build human trust in AI", *Ericsson Blog*, May 04, 2021, *available at*: https://www.ericsson.com/en/blog/2021/5/cognitive-networks (last visited on May 13, 2022).

⁷⁹ European Commission, "Proposal for a Regulation Laying down Harmonised Rules on Artificial Intelligence", *available at:* https://digital-strategy.ec.europa.eu/en/library/proposal-regulation-laying-down-harmonised-rules-artificial-intelligence (last visited on May 13, 2022).

European Commission, "Coordinated Plan on Artificial Intelligence 2021 Review", *available at*: https://digital-strategy.ec.europa.eu/en/library/coordinated-plan-artificial-intelligence-2021-review (last visited on May 13, 2022).
 Artificial intelligence, *available at*: https://www.industry.gov.au/policies-and-initiatives/helping-industry-and-

European Parliament⁸² highlighted this concern in its resolution for the year 2020 regarding civil liability for artificial intelligence. According to the resolution, the artificial intelligence system is never liable for anything; instead, the many participants throughout the entire value chain who maintain, produce or regulate the risk posed by the AI system are held accountable.⁸³

2. Company and organisational engagement

Now that the frameworks have been established, companies that want to use AI technologies will soon be required to demonstrate that they can meet the requirements by incorporating them into their day-to-day operations and the goods they produce.

In a blog post,⁸⁴ Ericsson discusses the ethics of artificial intelligence and lays out seven steps businesses can take to increase their customers' confidence in AI systems while meeting compliance requirements. According to the author, businesses should start planning to implement these strategies immediately.⁸⁵ This work is headed toward a similar framework for prevention, detection, and response in the footsteps of other compliance and ethics programmes like tax evasion and anti-corruption. Companies need to take the initiative to ensure their AI meets the growing demand for trustworthiness. If they do not, adopting AI and, by extension, societal development could be stymied by regulatory uncertainty or over-regulation.

3. Rights and activist groups

To put it another way, we are just getting started on a long and winding road to new forms of social machinery, on which the nature of the bond between humans and machines will be constantly refined. To keep our societies on the moral high ground, AI must never lose sight of people as autonomous agents with inherent rights and freedoms.

There is no doubt that activist groups and civil rights organisations will play a crucial role in this direction, constantly pushing the conversation and providing a platform to those whose lives are badly impacted by technological advancements.

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⁸² European Parliament, "European Parliament Resolution of 20 October 2020 with Recommendations to the Commission on A Civil Liability Regime for Artificial Intelligence" (2020/2014(INL)).

⁸⁴ Hema Lehocky, "Ethics and AI: 8 Steps To Build Trust In Intelligent Technology", *Ericsson Blog*, October 29, 2019, *available at*: https://www.ericsson.com/en/blog/2019/10/8-principles-of-ethics-and-ai (last visited at August 1, 2022).

⁸⁵ *Ibid*.

A new politics of refusal is required, according to Joy Buolamwini;⁸⁶ an artificial intelligence (AI) contributor and researcher to the recent Netflix documentary Coded Bias: "One of the questions we should be asking in the first place is if the technology is necessary or if there are alternatives; and after we have asked that if the benefits outweigh the harm, we also need to do algorithmic hygiene." Examining the benefits and drawbacks of these systems is the focus of "algorithmic hygiene."

IV. Age of Artificial Intelligence : Safeguarding Human Rights

There has been a significant expansion in the applications of AI, which are now widespread in modern society. The enormous data analysis that AI systems undertake makes it conceivable to use an intelligent navigation system to go around traffic congestion or receive personalised offers from a trustworthy merchant. Both of these things were previously impossible. Even though these specific cases have positive outcomes, the public often overlooks data science's ethical and legal implications.

The subfields of artificial intelligence known as machine learning and deep learning are particularly suspect and may only appear neutral. Subtly, it can take on profoundly individual qualities. While there are numerous situations in which a statistically based decision-making process would be extremely helpful, an over-reliance on AI, which by its very nature entails finding patterns beyond these calculations, might turn against users, limit people's rights and perpetuate injustices. This is correct, although identifying patterns goes beyond arithmetic in artificial intelligence.

In the author's opinion, artificial intelligence (AI) affects our human rights negatively. Thus, many of the issues raised in the primary mandate. That these systems are relied upon for decision-making only compounds the issue. However, their development, operation, and potential evolution are shrouded in mystery, and users have no control over any of these factors.

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⁸⁶ How can we avoid coded bias in facial recognition tech? *available at*: https://www.bbc.com/news/av/technology-56929271 (last visited on August 2, 2022).

Intruding the Right to Privacy and the Right to Equality

The benefits of AI technology and the risks it brings to our human rights collide in the area of privacy. The right to solitude is necessary for maintaining one's personal safety and dignity. Whether or not we realise it, when we use social media platforms and programmes, we voluntarily or involuntarily give vast amounts of personally identifiable information to the digital world. They can be used to create behavioral predictions based on our profiles. Who will use the information we provide about our health, politics, and families is unknown.

The machines do what we tell them to do. A biased outcome is guaranteed when a biased system is fed biased information. As a result, a severe problem exists due to a lack of inclusion and diversity in creating AI systems. We may be reinforcing discrimination and prejudice with what seems like objective decision-making when, in fact, we are just giving it a veneer of objectivity. There is mounting evidence that marginalized groups, such as women, people of colour, people with disabilities, and members of the lesbian, gay, bisexual, transgender, and queer (LGBTQ+) community, are stereotyped.⁸⁷

According to the findings,⁸⁸ Google is significantly more likely to show adverts for well-paying jobs to men than to show to women. Furthermore, in May of this year, the EU Fundamental Rights Agency published a study highlighting the potential for AI to amplify discrimination.⁸⁹ Decision-making that is based on information but takes into account socio-cultural biases maintains and bolsters the existence of those biases. Academics and non-governmental organisations (NGOs) have recently embraced the Toronto Declaration⁹⁰ as a reaction to this issue. This proclamation provides recommendations for preventing discriminatory outcomes from being amplified by machine learning systems.⁹¹

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⁸⁷ Supra note 14.

⁸⁸ *Ibid*.

⁸⁹ Getting the future right – Artificial intelligence and fundamental rights, "European Union Agency for Fundamental Rights, 2014" (14 December 2020).

⁹⁰ The Toronto Declaration: Protecting the right to equality and non-discrimination in machine learning systems, *available at:* https://www.accessnow.org/cms/assets/uploads/2018/08/The-Toronto-Declaration_ENG_08-2018.pdf (last visited on September 8, 2022).

⁹¹ *Ibid*.

Suppressing the Rights to Free Speech and Assembly

The right to free speech, sometimes known as the freedom to speak one's mind and express oneself, is also in jeopardy. According to a recent Council of Europe report⁹² on human rights and algorithms, sites for sharing web, YouTube and Facebook, have reportedly created a system to screen intense radical content.⁹³ Notably, neither the methodology nor the criteria used to determine which videos contain "clearly illegal content" are disclosed. While this effort to curb the spread of hate speech is commendable, there are legitimate concerns that the lack of openness surrounding content moderation could be used to stifle lawful expression. The automated sorting of user-generated content at the moment of upload has been called into question due to potential infringements of intellectual property rights under the planned EU Directive on Copyright.⁹⁴ Automated methods for disseminating content can seriously affect people's right to free speech and privacy when bots, targeted spam, troll armies or adverts, and algorithms are utilised to choose what content to display.

Another example of the conflict between technology and human rights is facial recognition. While helpful in tracking down terrorist suspects, this technology also has the potential to be weaponised and used against the populace. It is far too simple for governments today to keep constant tabs on their citizens and limit their freedom of expression, assembly, movement, and press.⁹⁵

V. Conclusion

AI is a rapidly developing field that has the potential to profoundly alter our way of life in numerous ways. From intelligent healthcare systems to automated transportation, AI technology is already transforming the way we work, live, and interact. As with any disruptive technology, however, there are potential drawbacks and negative effects that must be addressed.

⁹² Council of Europe, "Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems." (8 April, 2020).

⁹³ Justine N. Stefanelli, "Council of Europe Publishes Human Rights Guidelines on Algorithms and Automation", American Society of International Law, April 8, 2020, *available at*: https://www.asil.org/ILIB/council-europe-publishes-human-rights-guidelines-algorithms-and-automation (last visited on August 23, 2022).

⁹⁴ Europeran Union, Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC.

⁹⁵ Elizabeth Fernandez, "Facial Recognition Violates Human Rights, Court Rules", *Forbes*, August 13, 2020, *available at*: https://www.forbes.com/sites/fernandezelizabeth/2020/08/13/facial-recognition-violates-human-rights-court-rules/?sh=2259886d5d44 (last visited on August 31, 2022).

The potential for bias is one of the most significant concerns regarding artificial intelligence. AI systems are only as impartial as the data they are trained on; if the data is flawed or biassed, the system will reflect this bias. This can result in unfair and discriminatory outcomes in fields such as employment, lending, and criminal justice.

Collaboration is required to combat bias and ensure that AI is used in a fair and just manner. Experts from various fields must collaborate to develop an ethical framework for the development and use of AI because no single discipline can address all of the challenges posed by artificial intelligence. This includes legal professionals, who can help ensure that artificial intelligence is developed and deployed in a manner that respects human rights.

In the multidisciplinary field of AI, where a single application of AI can affect multiple civil rights, legal input is especially crucial. The legal community must be knowledgeable about artificial intelligence and its potential effects in order to provide guidance and assistance to those working in the field. Attorneys and civil liberties advocates have a duty to prioritise AI, and their input is essential for preventing bias and other negative effects.

The effects of AI on society are already evident, and they will only intensify as AI becomes more pervasive. In the past, significant technological changes have shook society, but we have always found a new equilibrium. The 70-year-old Universal Declaration of Human Rights (UDHR) provides a framework for identifying and redressing past and present injustices and for constructing a future that respects and recognises everyone's rights. This will only occur if we consider how our actions impact the rights of others.

The Guiding Principles emphasise the importance of doing the right thing before employing advanced technologies such as artificial intelligence. It is encouraging to see a growing interest in human rights-based approaches to evaluating and addressing the social effects of artificial intelligence. The private sector recognises its responsibility to respect human rights, but the government also plays a crucial role in regulating and monitoring AI.

Governments are the creators and implementers of artificial intelligence, and as such, they have a unique responsibility to ensure that it is used fairly and justly. Under international law, they also have a responsibility to protect human rights. The government must define and remedy any

violations of human rights caused by AI, as well as consider how AI affects distribution and take steps to address potential inequities.

To ensure that the benefits and burdens of AI are distributed equitably across society, democratic institutions and processes are essential. Governments must take the lead in defining and addressing any potential human rights violations associated with artificial intelligence. This includes conducting regular audits and evaluations of AI systems to ensure they are functioning as intended and are not causing harm to any individuals or groups.

In conclusion, AI offers significant opportunities for innovation and advancement, but also potential risks and disadvantages. Collaboration is essential for ensuring the fair and just application of AI. Legal professionals play a crucial role in this endeavour, as they can help ensure that artificial intelligence is developed and deployed in a manner that respects human rights. Governments must also take the lead in regulating and supervising AI in order to protect human rights and ensure that the benefits and burdens of AI are distributed equitably throughout society. We can create a future in which AI benefits all of society while respecting the rights of every individual by working together.