



Algorithmic Discrimination and the Law: Regulating Bias in AI Decision-Making

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ABSTRACT

Algorithmic discrimination is a recent phenomenon which has begun to drastically influence outcomes in the judicial system, healthcare, social services as well as employment. These algorithmic systems are mostly trained on historical data which is biased or based on irrational decision models, which can therefore worsen the existing social gap. This paper attempts to analyze the existing issues concerning algorithmic bias and assess how the current anti-discrimination laws could be revisited for incorporating provisions to regulate the algorithmic decision-making process. It determines whether the prevalent legal frameworks are sufficient to tackle the hidden nature of discrimination led by AI. This study adopts a comparative legal analysis combined with a case study approach, examining legal frameworks and judicial developments across different jurisdictions to evaluate regulatory responses to algorithmic discrimination. Reliance will be placed on relevant case laws and policy developments across multiple jurisdictions in order to identify enforcement gaps and opportunities for regulatory innovations. Furthermore, the paper attempts to explore the potential of modern AI driven tools for instance, impact assessments, algorithmic transparency mandates as well as audit requirements. Lastly, the paper suggests a precautionary and rights-oriented approach towards governing AI which is based on the principles of human dignity, justice, and accountability. Without sufficient legal oversight, algorithmic systems can replicate the discrimination and biases which were intended to be eliminated.

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1. Introduction

Artificial intelligence (AI) has integrated itself into the decision-making systems in the last few years. Specifically, in the contexts of law and justice, risk assessment mechanisms and predictive algorithms are commonly used for suggesting bail decisions, sentencing guidelines, as well as parole assessments. As far as the employment sector is concerned, recruitment is mostly led by AI-driven software which screens CVs, evaluates candidates and often conducts interviews as well. In the healthcare sector, algorithms are being used for determining patients' priority list for treatment, assessing disease risks. Likewise, public agencies use AI for fraud detection as well as processing immigration applicants. Although these applications promise efficacy and cost

reduction, yet it tends to often replicate and worsen the biases and discrimination patterns which were embedded in the data fed to them during designing and training of such parameters (Hacker, 2018). Historical datasets are fundamentally deployed for the training of decision-making systems driven by AI. In most cases, these data sets include existing societal inequalities as well as racial and other discriminatory trends. When these biased datasets are used by AI, it results in duplication and intensification of existing structural discrimination. For instance, if a hiring algorithm is trained on years old male-dominated employment data, then it might avoid hiring female applications, therefore, predictive policing based on these data sets can seriously harm the minority communities.

Therefore, the reliance of AI poses risks of embedding discrimination into systems, seeming to be apparently neutral, hence making it difficult to detect and remove such discrimination through traditional legal frameworks (Hacker, 2018). Although anti-discrimination laws have improved over the years yet they fail to adequately address discrimination and biases generated through application of AI systems. The uncertainty of algorithmic processes, as well as the complexities involved in audition models along with difficulty in justifying causation, violate fundamental legal protections. The existing anti-discrimination laws don't have express provisions for catering algorithmic bias, which leaves a significant gap in the accountability and enforcement of systems driven by AI. Furthermore, legal frameworks are yet to evolve to deal with cross-border implications of AI, which operate beyond the boundaries of a domestic legal framework. This research stresses that existing anti-discrimination laws are not adequate for tackling AI-driven discrimination, and thus legal reforms should be made for incorporating proactive measures such as transparency mandates, algorithmic analysis and impact assessments. This would help in ensuring that algorithmic processes and AI systems driven by them are in compliance with the principles of equality and human rights (Cofone, 2018).

2. Methodology

This research paper will utilize comparative legal analysis for evaluating the approaches of different jurisdictions towards algorithmic discrimination, with specific focus on regions such as the European Union, United States, and some examples from the Global South. Furthermore, a case study approach will be used for examining high-profile incidents regarding algorithmic discrimination, such as the recidivism risk tool COMPAS deployed in the criminal justice system of the US. Moreover, the study will also encompass the examination of policy developments and the new regulatory trends like the EUs AI Acts and the national algorithmic accountability bills. Such an integrated approach would allow to conduct more specific and thorough analysis of both the technical and legal side of the issue and will offer feasible solutions to effective reforms. By providing an algorithmic discrimination with a wider context within the scope of anti-discrimination law, this paper is trying to add to the new breed of scholarship that recognizes the urgent necessity to evolve law systems to address the technological breakthroughs. It finally demands the rights approach that is precautionary and preventive in tackling the issue of AI governance, and ensures that the efficacy of technology does not compromise the rights of humans and social equality.

2.1. Understanding Algorithmic Discrimination

Algorithmic discrimination refers to situations where automated decision-making systems produce outcomes that disproportionately disadvantage certain individuals or groups, often on the basis of protected characteristics such as race, gender, ethnicity, or socio-economic status. These discriminatory outcomes may arise from biased training data, flawed model design, or historical inequalities embedded within datasets used to train artificial intelligence systems. As algorithmic decision-making becomes increasingly integrated into governance and economic systems, concerns regarding fairness, accountability, and transparency have become central to legal and policy debates. Algorithmic discrimination can be explained as a sort of discrimination which renders unequal treatment to people through automated processes, as an outcome from biases in data sets used for training and designing of such algorithms. Bias, in the ethical and legal context, refers to systemic deviations which directly impact the marginalized and disadvantaged communities. In contrast to human prejudice, algorithmic discrimination is often covert and cannot be detected easily. As it works behind technical processors, it is less visible yet similarly, if not more, harmful. This algorithmic discrimination is different from human discrimination in multiple ways. For instance, algorithmic discrimination can make AI systems decide outcomes which might influence hundreds or even thousands of individuals all at once. Furthermore, since the decision-making process of AI and algorithmic structures is quite

complicated, therefore, it becomes difficult for the aggrieved persons to challenge the reasoning behind such decisions (Bigman et al., 2023). Algorithmic discrimination stems from some fundamental sources like biased training data, flawed design model, and contextual deployments. For instance, AI systems learn from datasets fed to it, and mostly datasets consist of biased input data which exacerbates existing social inequalities and discrimination when deployed by AI. Similarly, even if the data sets are not biased, a flawed model design can embed discriminatory assumptions. The context in which such algorithms are deployed is equally relevant. It has been observed that algorithms behave differently when they are deployed in different contexts. For instance, in policing, predictive models which were used in areas with high arrest rates for minority groups can suggest over-policing trends. The interplay of these elements often makes it complicated to identify a single cause for discriminatory outcome, thereby making it difficult to ensure legal accountability as well as technical remediation (Bigman et al., 2023).

The implications of algorithmic discrimination are not limited to just one domain, it influences various arenas of commerce and governance. For instance, when it comes to criminal justice, risk assessment tools deployed by the United States such as COMPAS have been observed to show overcalculate recidivism risks for Black defendants while underestimating the same for white defendants. These differences influence the sentencing regime and parole decisions, which reinforces the pre-existing racial basis in the judicial system (Chouldechova, 2017). Similarly, in the employment sector, an AI recruitment tool which was previously used by Amazon, reportedly downgraded CV's which contained some words such as women as it was trained on male-dominated data sets. Another example is one from the healthcare sector, where it was found in a 2019 study that algorithm ignored health needs of Black patients as compared to white ones. When it comes to public administration, it has been found that in the welfare fraud detection system deployed in the Netherlands, an algorithmic process was found to falsely flag people with immigration background more, which was challenged as causing indirect discrimination as well as privacy violations (Alon-Barkat & Busuioc, 2023). There are multiple reasons due to which it becomes difficult to track and trace algorithmic discrimination. For instance, many AI models, such as the deep learning systems, are not interpretable. While legal claims as per the anti-discrimination law mandates showing causation between outcome process and the disadvantage incurred, it might be difficult to achieve when algorithms are used. This is because it demands technical expertise for establishing a proper link between the discriminatory outcomes and harm caused in cases of algorithm, which is a major barrier not faced when handling cases where discrimination is caused by humans. Furthermore, it is equally difficult to determine and assign liability since many people are involved in the development of AI systems, ranging from data handlers to developers. Therefore, it becomes difficult to attribute liability across these persons involved in algorithmic processes. The scale and speed of algorithmic systems is another hurdle. Since, decisions are made in fraction of a second, it becomes difficult to detect errors and data is being rapidly linked into larger sets (Alon-Barkat & Busuioc, 2023).

2.2. Legal Regime Governing Algorithmic Discrimination

As per the present anti-discrimination legal framework, the algorithmic bias might fall within the ambit of either direct or indirect discrimination. However, these doctrines have been developed in a human-focused context so they presume the presence of ability to interrogate such decision-making processes. The General Data Protection Regulation (GDPR) provides some protections through right to an explanation (Articles 13 to 15), as well as restrictions on purely automated decisions (Article 22). However, these provisions are not entirely comprehensive, and have considerable ambiguity when it comes to dealing with algorithmic discrimination. The Title VII of the Civil Rights Act along with the Fair Housing Act provides for the anti-discrimination legal framework in the United States. Although these laws could be applied to algorithmic systems, enforcement agencies have found it troubling to conduct investigation and handle evidentiary requirements when dealing with AI driven algorithmic processes. Internationally, there is absence of unified principles and rules for tackling algorithmic discrimination, which enables AI driven systems to bypass scrutiny across various jurisdictions (Soysal, 2024). Other than legal compliance, algorithmic discrimination leads to increased concerns regarding human rights. For instance, the UN Guiding Principles on Business and Human Rights elaborates that it is the corporate responsibility to prevent the infringement of fundamental human rights, which even extends to the structure and deployment of AI. In the same manner, the OECD AI Principles calls for fairness, accountability and transparency as being fundamental to trustworthy AI. Looking through a rights-based perspective, the consequences of algorithmic discrimination is

not just confined to statistical disparity; rather it shows a breach of equality, dignity and human autonomy. People who are denied resources and opportunities through discrimination caused by algorithms have no proper forum for contesting such decisions, for obtaining compensation or compounding the harm (OECD, 2023). For effective reformation, it is crucial to comprehend and acknowledge the presence of algorithmic discrimination. Although, technical fixes like bias mitigation algorithms would prove to be inadequate if used in isolation. Therefore, structural legal and institutional reforms are required and only through such integrated reforms can it be ensured that incorporation of AI does not vitiate the rights and entrench the inequalities which anti-discrimination law seeks to diminish.

2.3. Existing Anti-Discrimination Legal Frameworks

International human rights law provides the foundational principles for addressing discrimination, including those arising from technological systems such as artificial intelligence. Several international conventions establish broad protections against discriminatory practices which can also be interpreted to address algorithmic bias. The deep gaps in existing anti-discrimination legal framework have been exposed through deployment of AI led decision-making. Even though human rights and equality laws are extensive in tackling discriminatory behavior on account of gender, race, disability or other grounds, their application towards algorithmic bias isn't completely operational yet. At the international level, the international human rights framework provides a solid foundation for protection of principles of equality and non-discrimination. For instance, as per Article 26 of the International Covenant of Civil and Political Rights (ICCPR), direct and indirect discrimination is prohibited, which technically extends to algorithmic discrimination as well in cases where automated outcomes reinforce discriminatory practices. However, the provision does not expressly provide for technological contexts, which leaves room for interpretation by courts and regulatory bodies (Atrey, 2017). Similarly, the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD) mandates states to eradicate racial discrimination in public and private spheres. Therefore, radically biased risk assessment tools, algorithmic discrimination, and other bias driven practices fall under the scope of this instrument (Achiume & Lake, 2022). However, the enforcement mechanisms are sluggish and reactive instead of being preventive. In the case of women, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) provides a framework for handling gender-specific discrimination, specifically in cases where hiring algorithms punish women due to biased data sets. For example, Amazon's previously used personnel hiring algorithm was involved in downgrading female candidates just because of their gender (Englehart & Miller, 2014). The Convention on the Rights of Persons with Disabilities (CRPD) stresses on accessibility and non-discriminatory practices in the use of technology. Therefore, the AI-driven systems which discriminate against individuals with disabilities, such as through automatic screening applications, are violating the provisions of this convention. Lastly, the UN Guiding Principles on Business and Human Rights (UNGPs) impose a duty on agencies for respecting human rights and ensuring non-discrimination. While they urge for practicing due diligence when using AI, they are soft-law instruments so they don't have a binding effect or enforcement power which reduces their probative force (Augenstein, Dawson, & Thielbörger, 2018).

As far as the regional frameworks are concerned the European Union is leading the world through providing one of the most comprehensive legal frameworks concerning equality and data protection. The Article 22 of the General Data Protection Regulation (GDPR) provides that individuals enjoy the right to be protected against automated processing which impacts them. Although this is connected with algorithmic discrimination, there are some exceptions to it and enforcement trends have been a bit inconsistent in this regard. Furthermore, GDPR focuses more on the domain of data protection instead of being a framework for anti-discriminatory practices. The equality directives, however, prohibit discrimination across various domains such as education, employment and services on the grounds of race, gender, disability, religion. However, their application towards AI-driven hiring tools that do indirect discrimination remains a challenge. Furthermore, the difficulty in establishing a proper link between algorithmic design and discriminatory outcome is causing enforcement problems. As per the Council of Europe AI Guidelines of 2019, it is necessary to ensure the protection of human rights in AI governance, thereby focusing on the need for establishing transparency as well as accountability. Nonetheless, these are non-binding recommendations and therefore, don't possess effective enforcement mechanisms (Sancho, 2020). As far as the legal framework of the United States is concerned it has developed a sectoral approach. The Title VII of the Civil Rights Act of 1964, expressly

prohibits discrimination in the field of employment on the grounds of race, gender or religion. However, if an algorithm is used in the hiring process and it excludes minorities, the employers could be held liable as per the disparate impact analysis. However, the lack of transparency in the use of algorithmic tools often makes it difficult for the complainants to establish sufficient evidence for proving their case (Pedriana & Stryker, 2004).

The Fair Credit Reporting Act (FCRA) regulates fairness as well as accountability in credit reporting. Principally, discriminatory credit scoring AI models can be challenged, however, courts have been reluctant to apply the scope of this act towards algorithmic discrimination as well. Therefore, it can be said that the approach of the US is litigation-based and a reactive one, which is unable to tackle algorithmic discrimination caused covertly and systemically (Mierzwinski & Chester, 2013). Canada's Human Rights Acts provide a framework for anti-discrimination prevention at both provincial as well as federal levels. However, the enforcement in the context of AI is still evolving. Notably, Canada has incorporated the Algorithmic Impact Assessment (AIA) device, which requires federal departments to determine the risks of biases in AI systems prior to deployment. This prevention and risk-based approach shows an increasing acknowledgment of algorithmic discrimination. The United Kingdom's Equality Act of 2010 prohibits all sorts of indirect and direct discrimination in services and employment. However, this legislation has not yet been applied towards AI driven algorithmic discrimination practices (Fell, 2017). Similarly, France made an attempt through the Digital Republic Act of 2016 which introduced guidelines regarding algorithmic transparency in the administrative processes, requiring disclosure of reasoning behind automated systems. However, it has not been fully complied with yet, and private sector AI remains untouched. Singapore also enacted Model AI Governance Framework in 2019, which provides for voluntary guidelines regarding ethical use of AI, such as fairness, accountability, as well as explainability. However, its non-binding nature restricts enforcement, particularly in the cases concerning algorithmic discrimination (Mercat-Bruns, 2016).

3. Gaps in Legal Framework

All of the above discussed legal frameworks across jurisdictions face several common drawbacks. For instance, there are no explicit provisions governing algorithmic and AI driven discrimination. Most of the domestic and international legal frameworks were drafted prior to the emergence of AI and, therefore, lack adequate provisions that could target algorithmic bias. Courts and regulators should diversify the existing scope of definitions within these frameworks in order to cover discriminatory practices done by AI. Furthermore, there are weak enforcement mechanisms. International treaties don't have adequate binding powers of adjudication, while national regimes struggle with minute resources and technical prowess for effectively auditing the AI systems (Kleinberg et al., 2018). Another issue with many anti-discriminatory laws is that they presuppose the existence of transparency in decision-making processes. In contrast, the algorithmic and AI driven models such as deep learning are "black boxes", which makes it extremely hard for complainants to sufficiently provide for discriminatory causation. Courts are also not well-equipped to comprehend such algorithmic outputs, which further worsens the evidentiary burdens. The approaches towards algorithmic discrimination have been fragmented across the world. The EU focuses more on data protection, the US on sectoral application, Canada relies on risk assessment while Asian states focus on soft-law. This patchwork application undermines consistency and coherence while addressing cross-border algorithmic discrimination. The analysis of existing frameworks highlight that although anti-discrimination laws exist, they are not appropriate for addressing the opacity, systemic nature and scalability of algorithmic discrimination. Therefore, it is crucial to strengthen enforcement, embed transparency rules, and expressly regulate AI discrimination through specific legal instruments (Kleinberg et al., 2018).

3.1. Case Law Analysis: Confronting Algorithmic Discrimination in Courts

The integration of algorithmic decision-making processes in sectors such as legal, administrative and employment has led to drastic challenges to the judicial frameworks across countries. Courts have been asked to determine whether reliance on such uncertain and potentially biased algorithms violates the constitutional rights, equality protection and due process guarantees. Case laws from different jurisdictions such as the United States, Europe, Canada and the United Kingdom highlight a progressive yet cautious approach, where judges have acknowledged risks posed by algorithmic discrimination but mostly hesitate to address those concerns. In the case of *State v. Loomis (2016)*, the issue of algorithmic risk assessment was involved when determining criminal sentences through COMPAS. The use of this tool was

challenged by Eric Loomis as he claimed that the tool reinforced racial discrimination through reliance on biased historical sets of data. The Wisconsin Supreme Court although upheld the use of COMPAS tool, however, the Court warned of “cautionary use”, thereby acknowledging the risks associated with racial discrimination and such discrimination is being reinforced through algorithmic use. This case highlights judicial restraint towards directly prohibiting algorithmic tools despite acknowledging their discriminatory competence. Another case from the United States, is the case of *Houston Federation of Teachers v. Houston ISD (2017)*, wherein the use of a secretive algorithm was under consideration. This statistical algorithm was being deployed for assessing the performance of teachers and determining employment decisions. Teachers challenged this system, arguing that it was discretionary and refused them the opportunity of appealing against the results. The Court ruled in favor of the plaintiffs, stating that the reliance on such an opaque and uncertain algorithm is violative of the right of due process. Therefore, this case, unlike the *Loomis case*, laid a strong foundation of judicial interpretation of algorithmic discrimination thereby stressing the need of ensuring procedural fairness. The case elaborates how judicial responses towards algorithmic discrimination have been contextually different, for instance, in criminal cases courts have exercised restraint, while in the cases of employment and civil rights, courts have relied on stronger scrutiny against algorithmic processes.

In the Netherlands, the *SyRI case of 2020*, dealt with a program called “SyRI” (System Risk indication) program which was designed for detection of social welfare fraud through aggregating large clusters of data and flagging certain individuals as high risk. The system was challenged by the civil society members as being violative of right to privacy and non-discriminatory rights protected under the European Convention on Human Rights (ECHR). The SyRI was struck down by the Dutch Court, stating that the system’s surveillance mechanism was intrusive and there was lack of adequate transparency mechanisms which violated Article 8 of the ECHR (right to privacy). This decision marks a landmark progress towards tackling algorithmic surveillance and discrimination, and thereby setting a precedent for the protection of human rights against the use of digital tools. In the case of *R (Bridges) v. South Wales Police (2020)*, the deployment of live facial recognition (LFR) software for policing was challenged. The claimant stated that the system was violative of privacy protections and enhanced discrimination against the minority segment. The Court of Appeal ruled that the deployment of this tool was unlawful as there were inadequate protections. This decision reinforced that algorithmic tools should meet the standards of usage, necessity, equality protections as well as proportionality. However, the LFR itself wasn’t declared illegal but rather it focused on robust regulations and effective governance mechanisms, thereby reflecting judicial restraint towards outrightly banning technologies in the UK. In Australia, a Robodebt scheme was introduced to make automated data-matching decisions to verify welfare recipients who received overpaid benefits, and thus, issues notices to repay without a proper systemic analysis. The scheme had the negative impact of disproportionately impacting the vulnerable community and this nationally criticized it as having discriminatory connotations. During the same period of 2019-2020, the Federal Court was influenced, both in terms of class actions, as well as, political pressure in order to declare this scheme as illegal and unlawful considering it violative of principles of fairness. This was followed by a government that had to pay up claims and returned sums in billions. As it has been emphasized in this case, when algorithmic systems are implemented at larger scales without proper oversight and monitoring, it may result in mass discrimination of socio-economically poor layers of the society (Van Krieken, 2024).

Through the study of the above cited case laws, there are some similar patterns which can be identified. As an example, the aspect of judicial restraint and black box problem is eternal in every situation. The concern on the side of the courts is usually that of the lack of transparency and does not go further to prohibit such algorithmic processes. They include proprietary protectives, trade secrets and insufficiency of efficient technical knowledge among other issues that make judicial review difficult. On the same note, claimants have a number of demands as far as proving discrimination is concerned. Algorithms are complex computer programs and data-based; therefore, people lack a sufficient access to evidences that are needed to demonstrate algorithmic discrimination. Moreover, the clear standards of evidentiary in this matter have not been presented in the courts. The human rights frameworks have been observed to be quite strict in terms of proportionality and necessity standards in the eyes of the European courts. These values offer a flexible pathway on evaluating the algorithm processes, yet do not offer the effective accuracy of controlling discriminatory systems. There is also judicial reaction towards the use of such algorithms in terms of criminal justice or civil issues. In the context of both the

civil rights and welfare Courts have seemed to be more protective whereas in the context of the criminal justice, the Courts have been judicially restrained (Van Krieken, 2024).

3.2. Enforcement and Regulatory Challenges

While legal frameworks increasingly acknowledge the risks posed by algorithmic decision-making, significant enforcement challenges remain. Algorithmic systems often operate with limited transparency, making it difficult for regulators and affected individuals to identify discriminatory outcomes. Additionally, existing legal mechanisms were primarily designed to address human decision-making rather than automated systems. These structural limitations create substantial barriers for effective accountability and enforcement in cases involving algorithmic discrimination. The enforcement and regulatory mechanisms regarding anti-discriminatory practices in the context of algorithmic processes pose significant challenges which go beyond the traditional legal paradigms. Courts, regulatory bodies, as well as policymakers face difficulties when it comes to ensuring fairness, transparency or accountability, specifically for those algorithms powered by Artificial Intelligence (AI), when they are deployed in domains of criminal justice, welfare, immigration or employment. In contrast to traditional human decision-making, these algorithmic systems mostly function as “black boxes”, which further complicates the process of redressal and oversight. One of the major enforcement challenges is the opacity of algorithmic systems. Several machine learning models, specifically those involved in deep neural networks, generate outcomes without easily comprehensible reasoning. This opacity is worsened when systems are proprietary, since private vendors deploy intellectual property rights for denying access to the source code. This results in a “black box” wherein affected people and regulatory bodies cannot adequately determine whether the outcomes are discriminatory or not (Domnitz, 1976).

The opacity of algorithms is directly connected with the evidentiary burdens. For instance, anti-discrimination laws mostly require that claimants need to establish a *prima facie* case regarding disparate, discriminatory or disproportional treatment. However, when decisions are made by AI devices, the affected parties don't have access to such discriminatory data sets, or error nodes required for the demonstration of such bias. Even in cases where concerns have been raised by claimants, courts mostly require statistical proof of such discriminatory results. This criterion is difficult to satisfy without disclosure obligations being placed on algorithm providers. Enforcement agencies face a dilemma that without a legal mandate for independent auditing, these high evidentiary standards insulate such algorithmic bias from being challenged (Lambrecht & Tucker, 2019). Another level of complication arises due to the global outlook of AI. For instance, many algorithmic systems deployed by governments as well as corporations are developed by multinational companies which are often headquartered outside of the regulating jurisdiction. Thus, the predictive policing systems or facial recognition systems might be exported to China or the United States but may end up being applied in Asia or Europe. This is headed towards the problem of jurisdictional gap. National regulators are limited to setting standards in their territorial areas, but algorithmic designs are frequently constructed in other countries. Also, domestic judgment against foreign business is both costly and a politically sensitive exercise. Finally, these piecemeal national strategies towards AI regulation have a danger of establishing enforcement defects in which multinational enterprises have multiple jurisdictions to forum shop in those with minimal or no such judicial presence. To enforce the law, one needs technical competency and reasonable legal authority. The majority of the regulators, both judges and administrative employees lack the necessary technical expertise to interrogate algorithmic systems. Although the courts that are well-informed concerning the examination of human evidence, model drift, overfitting, data bias training, and the like are the areas which cannot be explained in terms of the conventional legal framework. The gap in knowledge can help the vendors and deployment agencies to conceal discriminatory risks. It is also a deterrent to regulatory bodies to come up with effective guidelines on compliance. Though few jurisdictions have begun forming expert advisory bodies, but their development is rather slow.

The European Data Protection Law, General Data Protection Regulation (GDPR) offers both opportunity and challenges as far as enforcement is concerned. Article 22 of the GDPR allows individual rights towards the total absence of automated decision-making, whereas Recital 71 emphasized the protection against discrimination. Nevertheless, GDPR does not disregard trade secrets and intellectual property rights as such, which puts a strain on transparency requirements and protection of proprietary interests. For example, Article 15 provides that individuals have the

right to access information regarding the logic involved when it comes to automated decision-making, however, Recital 63 limits such disclosure if it would harm trade secrets. This creates an enforcement issue, wherein it is difficult to strike a balance between ensuring anti-discrimination oversight while ensuring transparency and commercial confidentiality. It is the duty of the Courts and regulatory bodies to effectively balance these competing objectives. Some are of the opinion that transparency needs to be prioritized where human rights are at stake, however, some suggest that caution should be exercised as over-disclosure can lead to discouraging innovation. Unless clear judgments are pronounced, enforcement will continue to be improper and controversial (Pöhn, Mörsdorf, & Hommel, 2023). The private sector plays a crucial role when it comes to algorithmic governance, since most of the systems are rafted through corporate vendors instead of the governments. As one measure of reaction to social criticism, several companies have utilized voluntary codes of ethics, committing themselves to fairness, openness as well as responsibility. Such tech giants as Microsoft, Google and even IBM have established their own internal review boards and principles on the responsible use of AI. Nevertheless, self-regulation has its limitations. Voluntary obligations are largely non-binding and have no action remedies, thus, they cannot take the place of the appropriate governmental accountability systems. Also, the commercial sector is more concerned with efficiency and profitability rather than fairness and equity. The statutory requirements such as the algorithmic impact assessments, publicly available list of AI systems and compulsory audits hold good enforcement possibility. Thus, the EU AI Act and the proposed Artificial Intelligence and Data Act (AIDA) in Canada are steps towards the right direction, but there are still a lot of jurisdictions that are behind. In the absence of proper statutory laws, the only way that they will be enforced is through litigation which is a normative and unpredictable process (Clement, 2023).

4. Conclusion

This paper illustrates that, even though artificial intelligence has a lot of efficiency and power, it is associated with considerable threats of discriminatory effects when algorithms are based on biased data or on the decisions that are not transparent. It is found that the current anti-discriminatory legislation is offering valuable normative basis, yet not enough to tackle the specific issue of automated decision-making systems. The comparative analysis of legal frameworks has shown that to successfully suppress the problem of algorithmic discrimination, there should be more transparency requirements, mechanisms of accountability, and regulatory controls. As much as it has provided unique opportunities on improving innovation, it also comes with extreme risks of improving discrimination. The essence of the research is that existing legislative systems are inadequate in combating algorithmic discrimination. The current anti-discrimination laws that were formulated to address overt or covert discrimination are ill-prepared to address the harms that arise out of opaque datasets, sophisticated machine learning models and out of neutral statistical correlations. As a result, the algorithmic decision-making process not only contributes to the existing inequality in the society, but also conceals them under the sun of technical objectivity. There is an acute necessity to deal with such risks. The use of AI systems is fast becoming a component of the key areas of housing, law enforcement, finance, healthcare and employment, which have systemically excluded individuals due to discrimination. In cases when algorithms attack anyone because of his/her gender or race, when the risk measurement mechanisms subject the representatives of the discriminated population groups to punishment, the outcomes are severe and the personal life, the source of livelihood, dignity and freedom of this group is critically affected. It indicates the pressing necessity of the increased understanding of law and technology because legal frameworks should be developed to be able to regulate and control the work of the algorithms and AI in general. Human rights and equality are the guidelines that ought to be incorporated in all technological systems.

To avoid algorithmic discrimination, a multi-layered reformation is needed. Express statutory restrictions of the algorithmic discrimination should be implemented at the legal stage, and the provisions that require cross-sectional bias analysis should be employed. To provide a viable audit, certification and enforcement of compliance and mandated disclosure requirement of sufficient accountability and transparency, independent AI supervisory bodies are needed at the regulatory stage. On the technical level, the developers must apply the concepts of fairness in creating such algorithmic models by running bias and discrimination checks as well as adopting explainability criteria by which aggrieved individuals can interpret and appeal such results. Technology and law are not the only aspects of change that are vital. The policy makers, courts, regulatory bodies and even the privately owned companies must have the principle of equality to be integrated regardless of how efficient it may be to sacrifice equality. Algorithms decision-

making approaches cannot be considered neutral but potentially, a place of bias and discrimination, and these processes have to be supervised by humans. At the end of it all, the governance of AI must be human rights-oriented, grounded on the values of human dignity, transparency and justice and accountability. When developed adequately, AI can be used as a source of equity rather than exclusion. Nevertheless, it requires a promise of reformation on all levels to ensure that the discriminative practices do not become a phenomenon that cannot be changed in the digital era.

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