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Algorithmic Discrimination and Equal Protection: Rethinking Anti-Discrimination Law in the AI Era

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Abstract

Algorithmic discrimination becomes a nightmare, especially as artificial intelligence systems continue to affect citizenry in the field of employment, housing, credit, policing, and healthcare. We can expect such technologies to be efficient and objective, however, they tend to recreate or intensify historical biases enshrined in data or decision-making settings. The present paper poses the question of whether current anti-discrimination/equal protection legislation is sufficient to deal with the harms caused by algorithms. It holds the position that the opacity, scale, speed of AI-based decisions cannot be adequately dealt with by traditional legal systems, most of which were created in the pre-digital age. The paper is based on a critical assessment of the current trends in global regulation to define the evolutions of the anti-discrimination norms that have to be implemented to achieve the aims of algorithmic equity and accountability. The study suggests a multifaceted legal policy combining regulatory creativity, demands of algorithmic transparency, and rephrasing of discriminatory intent to reflect its online manifestation.

Introduction

Artificial intelligence (AI) systems are taking over a critical role in human life, absorbed by automated employment agents and credit rating programs, the ability to foresee attacks on police and content moderation. Hyped as more objective, such systems tend to reproduce or increase past practices of discrimination and marginalization. These harms have been termed as algorithmic discrimination, whose implications are that AI-based decisions result in negative impacts on individuals due to race, sex, religion, disability, or socio-economic status.

This change poses pressing challenges to whether the current systems of anti-discrimination are sufficient, with most of them having been created far earlier in the days before automated decision-making. Processing of discrimination law that relies on aspects of intentionality and comparability to support findings can be challenging to implement on opaque, complex, dynamically changing algorithms. Consequently, one of the primary questions before the legal systems throughout the

world is how to go about losing a discourse of giving equal protection and the technological challenges of AI.[1]

Anti-discrimination laws in Pakistan, like in other states, are based on three principles: the constitutional law provisions, the human rights laws. Nonetheless, their use on decisions made using AI is not fully explored. At the international level, the emergence of sets of regulatory measures acting as a reaction to the challenges caused by AI, including the European Union regulation on AI (the so-called AI Act), the US Blueprint to an AI Bill of Rights, and the Canadian Algorithmic Impact Assessment Framework, may indicate that a reconsideration of the legal framework is in the process.[2] These models highlight the necessity of the development of a new generation of legal instruments that have the potential to detect, eliminate/suppress, and address the discriminatory final outcomes even in the case when there is no overt human bias involved.

The purpose of the paper is to evaluate critically the scope of the existing legislation guarding against algorithmic discrimination and suggest practical avenues of change. It relies on recent scholarly work as well as on the latest policy developments to explore the ways to make the principles of equal protection effective and applicable in the age of AI. This argument is organized in six sections as part A starts by providing a conceptual explanation of algorithmic discrimination, whereas part B includes a brief background of the current equal protection legislation. It then establishes the conflicts between the old anti-discrimination principles and algorithmic government. Comparative analysis is made using EU, US and Pakistan. Lastly, the paper will introduce the reform proposals that will combine legal, regulatory, and ethical strategies to guarantee fair results in a more automated world.

Understanding Algorithmic Discrimination

Algorithmic discrimination occurs when automated systems produce outcomes that disproportionately disadvantage individuals or groups based on protected characteristics such as race, gender, age, religion, or disability. Unlike traditional forms of discrimination, which are often intentional and attributable to identifiable actors, algorithmic discrimination is frequently emergent, unintentional, and embedded within the system's design or training data. This phenomenon is particularly troubling because AI systems are often perceived as neutral or objective, thereby concealing structural inequalities beneath a veneer of technical legitimacy.[3]

Discriminatory outputs in algorithms typically arise from three sources: biased training data, flawed model design, or discriminatory deployment. Historical data, which reflects past human decisions, may encode existing inequalities. For example, predictive policing tools trained on crime data from over-policed neighborhoods will likely reinforce the same policing patterns, disproportionately targeting marginalized communities.[4] Similarly, hiring algorithms trained on prior employment data may inherit gender or racial biases embedded in historical hiring practices.[5] Moreover, the opacity or "black box" nature of many AI systems complicates efforts to detect, interpret, or challenge discriminatory outcomes. Even developers often lack full visibility into how

[1] "(PDF) Why Fairness Cannot Be Automated: Bridging the Gap between EU Non-Discrimination Law and AI," accessed June 27, 2025, https://www.researchgate.net/publication/352664973_Why_fairness_cannot_be_automated_Bridging_the_gap_between_EU_non-discrimination_law_and_AI.

[2] Andrew C. Michaels, "Artificial Intelligence, Legal Change, and Separation of Powers," *University of Cincinnati Law Review* 88 (2020 2019): 1083.

[3] "The Global Landscape of AI Ethics Guidelines | Nature Machine Intelligence," accessed June 27, 2025, https://www.nature.com/articles/s42256-019-0088-2.

[4] "Dirty Data, Bad Predictions: How Civil Rights Violations Impact Police Data, Predictive Policing Systems, and Justice," *NYU Law Review* (blog), accessed June 27, 2025, https://nyulawreview.org/online-features/dirty-data-bad-predictions-how-civil-rights-violations-impact-police-data-predictive-policing-systems-and-justice/.

[5] "Fairness and Bias in Artificial Intelligence: A Brief Survey of Sources, Impacts, and Mitigation Strategies," accessed June 27, 2025, https://www.mdpi.com/2413-4155/6/1/3.

complex models arrive at particular decisions. This creates a significant accountability gap, especially when affected individuals cannot meaningfully contest or understand the basis for an adverse decision.[6]

Legal theorists and computer scientists have also started to draw the difference between disparate treatment (intentional discrimination) and disparate impact (facially neutral decisions that disproportionately negatively affect a group) with algorithmic contexts. Nevertheless, the legal categories are hard to apply when it comes to AI. Disparate treatment will require the intent to be proven- it will be difficult to prove with automatic decision-making. Although more suited, disparate impact actions remain vulnerable to more traditional meaningful aspects of evidence, which make no allowance regarding being technical and opaque in nature.[7]

To conclude, algorithmic discrimination cannot simply be viewed as some kind of technical malfunction, as it rather represents some underlying social, historical, and institutional prejudices. It can be solved not just by enhancing the quality of data or optimizing algorithms. It requires a serious review of the legal structures present in establishing and governing the discriminatory harm in the digital era.

Equal Protection and Anti-Discrimination Law: An Overview

The principle of equal protection under the law is a foundational tenet in many constitutional systems, ensuring that individuals are not treated differently based on arbitrary or impermissible classifications such as race, gender, religion, or disability. In traditional legal frameworks, anti-discrimination law operates through two primary mechanisms: prohibitions against direct discrimination (intentional differential treatment) and indirect discrimination (neutral policies with disproportionate adverse effects).[8]

In jurisdictions such as the United States, equal protection is constitutionally grounded in the Fourteenth Amendment, while statutory frameworks like Title VII of the Civil Rights Act provide broader regulatory mechanisms against workplace and institutional bias.[9] The European Union, by contrast, embeds anti-discrimination norms through the Charter of Fundamental Rights and directives such as "Directive 2000/43/EC on racial equality and Directive 2006/54/EC" on gender equality in employment.[10]

These frameworks generally depend on a model of discrimination that assumes human actors making deliberate or at least traceable decisions. However, AI systems disrupt this model by introducing automated processes that may generate discriminatory outcomes without any identifiable intent or clear causal chain. This disconnects between the human-centered assumptions of existing laws and the machine-driven logic of AI has created significant legal ambiguity.[11]

For example, under many current legal standards, a successful discrimination claim requires showing either:

- Intentional bias (as in direct discrimination), or
- A statistically significant disparate impact, often requiring comparison with similarly situated individuals or groups.

[6] "'We're All Born Naked and the Rest Is Speech: Gender Expression and the' by Charlie Ferguson," accessed June 27, 2025, https://scholarship.law.upenn.edu/penn_law_review/vol172/iss3/3/.

[7] "The Racist Algorithm_," n.d.

[8] "A Theory of Discrimination Law - Hardback - Tarunabh Khaitan - Oxford University Press," accessed June 27, 2025, https://global.oup.com/academic/product/a-theory-of-discrimination-law-9780199656967?cc=pk&lang=en&.

[9] "Two Concepts of Discrimination by Deborah Hellman :: SSRN," accessed June 27, 2025, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2652859.

[10] "Handbook on European Non-Discrimination Law – 2018 Edition | European Union Agency for Fundamental Rights," March 2, 2018, https://fra.europa.eu/en/publication/2018/handbook-european-non-discrimination-law-2018-edition.

[11] "The Yale Law Journal - Print Archive," accessed June 27, 2025, https://www.yalelawjournal.org/issue.

These requirements are ill-suited to algorithmic decision-making, where the criteria used may be non-transparent, dynamic, and unintelligible to non-experts. Furthermore, existing enforcement mechanisms (such as individual litigation or complaints-based procedures) are reactive and ill-equipped to address systemic algorithmic harms.[12]

In Pakistan, the Constitution under Articles 25 and 27 guarantees equality and non-discrimination, while the Protection Against Harassment of Women at the Workplace Act, 2010 and disabled persons' ordinances offer targeted protections. However, these laws are largely silent on automated systems and their discriminatory potential. Pakistan, like many developing jurisdictions, lacks the institutional capacity and regulatory clarity to address algorithmic harms through existing anti-discrimination law.[13]

As AI permeates public and private decision-making processes, a growing number of scholars and policymakers argue for a redefinition of legal discrimination that moves beyond intentionality and encompasses systemic, statistical, and emergent forms of inequality embedded in algorithms.

Challenges of Existing Legal Frameworks in the AI Era

The integration of artificial intelligence into governance and business practices has exposed the limitations of current anti-discrimination laws, which were designed primarily for human decision-makers. Traditional legal doctrines of equal protection and anti-discrimination are ill-equipped to address the nuanced, often invisible ways in which algorithms perpetuate bias. These challenges are both conceptual and procedural, requiring a fundamental rethinking of how legal systems define and prove discriminatory harm in the AI context.[14]

One of the foremost challenges is the opacity of algorithmic systems, commonly referred to as the "black box" problem. Many AI models, especially deep learning systems, are so complex that even their developers cannot fully explain how specific outputs are generated. This makes it nearly impossible for individuals to understand or challenge decisions that negatively affect them, undermining legal standards for transparency, justification, and due process.[15]

A related issue is proxy discrimination, where algorithms do not directly use protected attributes like race or gender but rely on correlated variables that effectively produce the same discriminatory outcomes. For example, an algorithm that excludes applicants from certain zip codes may disproportionately affect racial minorities due to historical segregation, even if race is not explicitly used[16]. Because current legal doctrines often require explicit intent or direct use of protected categories, such indirect harms can evade scrutiny.[17]

Furthermore, traditional anti-discrimination law depends heavily on individual complaints and retrospective remedies. But algorithmic systems often operate at scale, impacting large populations simultaneously and continuously updating based on new data. This demands proactive and systemic monitoring, a function poorly served by existing legal mechanisms that focus on discrete acts and individualized harms.[18]

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[12] Elisabeth Steindl, "Safeguarding Privacy and Efficacy in E-Mental Health: Policy Options in the EU and Australia," *International Data Privacy Law* 13, no. 3 (August 1, 2023): 207–24, https://doi.org/10.1093/idpl/ipad009.

[13] "The Role of Artificial Intelligence in Enhancing Social Governance: A Framework for Ethical Implementation and Policy Development in Pakistan | Journal of Management & Social Science," accessed June 27, 2025, http://www.rjmss.com/index.php/7/article/view/113.

[14] "Responsability and AI EN DGI(2019)05 Web A4," n.d.

[15] "How the Machine 'Thinks': Understanding Opacity in Machine Learning Algorithms - Jenna Burrell, 2016," accessed June 27, 2025, https://journals.sagepub.com/doi/full/10.1177/2053951715622512.

[16] "Fairmlbook," n.d.

[17] "'A Common Law of Choice of Law' by Lea Brilmayer and Daniel B. Listwa," accessed June 27, 2025, https://ir.lawnet.fordham.edu/flr/vol89/iss3/2/.

[18] "'Slave to the Algorithm? Why a "Right to an Explanation" Is Probably No' by Lilian Edwards and Michael Veale," accessed June 27, 2025, https://scholarship.law.duke.edu/dltr/vol16/iss1/2/.

In addition, most anti-discrimination laws rely on comparative frameworks, requiring plaintiffs to prove they were treated differently than a similarly situated individual. However, in algorithmic decision-making, comparators may be undefined, inaccessible, or nonexistent due to the system's complexity or personalization. This makes it exceedingly difficult to establish prima facie cases of discrimination.[19]

Finally, there is a profound regulatory lag. Legal systems evolve incrementally, while technological advancements occur rapidly. This temporal gap enables discriminatory systems to flourish in a legal vacuum. In Pakistan and other developing countries, this challenge is exacerbated by weak institutional capacity, lack of technical expertise, and the absence of AI-specific legal frameworks or oversight bodies.[20]

Comparative Jurisprudence: EU, U.S., and Pakistan

As algorithmic decision-making becomes increasingly pervasive, jurisdictions across the globe have begun to develop distinct legal and regulatory approaches to address the threat of algorithmic discrimination. A comparative analysis of the European Union, United States, and Pakistan reveals divergent models of governance, each reflecting different constitutional commitments, institutional capacities, and regulatory philosophies.

European Union: Proactive Regulation through the AI Act

The most ambitious step toward the regulation of artificial intelligence has been made by the European Union (EU) with a help of its Artificial Intelligence Act (AIA), adopted in 2024. AIA categorizes AI systems according to levels of risk and has stringent requirements on the systems identified as having high risk such as the systems used in employment, education and law enforcement-areas that are prone to discrimination. The most ambitious step toward the regulation of artificial intelligence has been made by the European Union (EU) with a help of its Artificial Intelligence Act (AIA), adopted in 2024. AIA categorizes AI systems according to levels of risk and has stringent requirements on the systems identified as having high risk such as the systems used in employment, education and law enforcement-areas that are prone to discrimination.[21] They are accompanied by transparency requirements, human review, data quality, and documentation requirements, which are intended to avert biased results.

Notably, the AIA places the emphasis of the regulation on preventative measures, rather than cure, requiring the coverage of the conformity and algorithmic impact assessment prior to implementation.[22] This will be a recognition that algorithmic discrimination is frequently structural and opaque, necessitating ex ante control systems, as opposed to a posteriori law suits. The model of the EU is an extension of the wider data protection regime pursuant to the General Data Protection Regulation (GDPR), which has already embedded the aspects of automated decision making and profiling. United States: Fractured and Lawsuit Based.[23]

United States: Fragmented and Litigation-Driven

[19] "'It's Reducing a Human Being to a Percentage'; Perceptions of Justice in Algorithmic Decisions | Request PDF," ResearchGate, accessed June 27, 2025, https://doi.org/10.31235/osf.io/9wqxr.

[20] Faiza Khalil, "A Vision for Digitizing Judicial Processes and Integrating Artificial Intelligence in Pakistan's Judiciary: Enhancing Efficiency and Upholding Judicial Integrity," *International Journal of Law, Ethics, and Technology (IJLET)* 2024 (2024): 108.

[21] "EU Artificial Intelligence Act | Up-to-Date Developments and Analyses of the EU AI Act," accessed June 27, 2025, https://artificialintelligenceact.eu/.

[22] "AI Act | Shaping Europe's Digital Future," accessed June 27, 2025, https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai.

[23] Margot E Kaminski and Gianclaudio Malgieri, "Algorithmic Impact Assessments under the GDPR: Producing Multi-Layered Explanations," *International Data Privacy Law* 11, no. 2 (April 1, 2021): 125–44, https://doi.org/10.1093/idpl/ipaa020.

The U.S. does not have a single federal law on AI, but there have been regulations in the sector and an increase in the number of lawsuits against algorithmic harms. The redress avenue in the event of a discriminatory outcome is afforded by the Equal Protection Clause, the fourteenth amendment to the constitution of the United States together with statutes such as Title VII of the Civil Rights Act, among other statutes that afford such opportunities. Nonetheless, such legal mechanisms do not frequently suit algorithmic decision-making since they are based on the notions related to intent and comparability, which are hardly provable in automated systems.[24]

To address these gaps, the White House Office of Science and Technology Policy released a Blueprint for an AI Bill of Rights in 2022, which, while not legally binding, outlines key principles such as algorithmic transparency, data privacy, and the right to opt out of automated decisions.[25]

In parallel, the Federal Trade Commission (FTC) has issued guidance warning companies against deploying biased algorithms under consumer protection laws, but enforcement remains inconsistent and largely reactive.[26]

The American approach remains decentralized and heavily reliant on litigation, with regulatory innovation lagging behind technological development. While some states like California and New York are experimenting with algorithmic auditing laws, there is no comprehensive federal framework akin to the EU's AI Act.

Pakistan: Early Stage with Significant Gaps

In Pakistan, the legal and regulatory framework for AI remains underdeveloped. The Constitution guarantees equality before the law under Article 25 and prohibits discrimination in public appointments under Article 27, but these provisions are not interpreted in the context of algorithmic governance.[27]

Moreover, Pakistan lacks a dedicated AI policy or legal mechanism to oversee algorithmic decision-making. The Prevention of Electronic Crimes Act, 2016 (PECA) and data protection bill drafts offer limited relevance, focusing primarily on cybersecurity and personal data without addressing automated decision-making, algorithmic accountability, or bias.[28]

Recent scholarship and civil society reports have raised alarms over the use of facial recognition and surveillance tools in public spaces without adequate legal oversight or ethical guidelines.[29]

Despite the promise of digital transformation under initiatives like Digital Pakistan, there is little institutional momentum toward regulating algorithmic discrimination. The absence of technical expertise, independent regulatory bodies, and public awareness compounds the governance vacuum.

Reforming Anti-Discrimination Law for the Algorithmic Age

The emergence of algorithmic decision-making systems has outpaced the development of corresponding legal safeguards. As existing anti-discrimination laws struggle to cope with the opacity, scale, and complexity of AI, legal scholars and policymakers are calling for a paradigm shift in how discrimination is conceptualized and regulated. Reforming anti-discrimination law in

[24] Oreste Pollicino and Giovanni De Gregorio, "Constitutional Law in the Algorithmic Society," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, 2021), https://papers.ssrn.com/abstract=3964742.

[25] "What Is the Blueprint for an AI Bill of Rights? | OSTP | The White House," accessed June 27, 2025, https://bidenwhitehouse.archives.gov/ostp/ai-bill-of-rights/what-is-the-blueprint-for-an-ai-bill-of-rights/.

[26] "Aiming for Truth, Fairness, and Equity in Your Company's Use of AI « Machine Learning Times," accessed June 27, 2025, https://www.predictiveanalyticsworld.com/machinelearningtimes/aiming-for-truth-fairness-and-equity-in-your-companys-use-of-ai/12104/.

[27] "1333523681_951," n.d.

[28] "› Data Protection Law in Pakistan: Policy Recommendations by DRF," accessed June 27, 2025, https://digitalrightsfoundation.pk/data-protection-law-in-pakistan-policy-recommendations-by-drf/.

[29] "Media Matters for Democracy," accessed June 27, 2025, https://mediamatters.pk/.

the algorithmic age requires a multi-layered strategy that blends legislative innovation, administrative regulation, and technical design principles.

A. Shifting from Intent to Impact

One of the foundational reforms must involve moving away from the requirement of discriminatory intent, which is often irrelevant in algorithmic systems. Since machine learning models operate on correlations rather than causations or human motivation, the focus of legal scrutiny must shift toward outcomes and systemic effects. This echoes the broader move from a fault-based model to one rooted in disparate impact and structural discrimination.[30]

Legal standards should prioritize whether an algorithmic process results in unequal access to opportunities or disproportionate harm, regardless of whether that harm was intended. For instance, the EU's AI Act emphasizes ex ante obligations for high-risk systems, including risk management, data governance, and fairness testing, potentially providing a replicable model.[31]

B. Mandating Algorithmic Transparency and Auditing

Effective reform also demands algorithmic transparency, which is currently limited by the complexity and proprietary nature of most AI systems. Governments should require that organizations deploying high-risk AI systems maintain explainability and documentation protocols, enabling third-party auditing and regulatory oversight.[32] Tools like Algorithmic Impact Assessments (AIAs), now used in Canada and under consideration in the U.S. and EU, can help evaluate the potential for discriminatory outcomes before deployment.[33]

These assessments should become legally binding components of deployment processes, especially in sectors like finance, policing, education, and employment. Public reporting and stakeholder engagement should be integrated to ensure inclusivity and accountability.

C. Building Technical and Legal Capacity

In countries like Pakistan, the capacity to regulate AI is constrained by the lack of technical expertise within regulatory bodies and the judiciary. Reforming anti-discrimination law must go hand-in-hand with institutional development, including specialized AI regulatory authorities, interdisciplinary advisory councils, and judicial training programs.[34] Public sector institutions should also collaborate with academia and civil society to build open databases, AI testing sandboxes, and legal clinics focused on algorithmic fairness.

D. Embedding Fairness by Design

Legal reform should be complemented by "fairness by design" principles, whereby fairness, equity, and non-discrimination are embedded into the development process of AI systems. This includes setting constraints on training data, algorithmic objectives, and permissible use cases from

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[30] Solon Barocas and Andrew D. Selbst, "Big Data's Disparate Impact," *California Law Review* 104, no. 3 (2016): 671–732.

[31] "EU Artificial Intelligence Act | Up-to-Date Developments and Analyses of the EU AI Act," accessed June 27, 2025, https://artificialintelligenceact.eu/.

[32] "Accountability of AI Under the Law: The Role of Explanation," accessed June 27, 2025, https://dash.harvard.edu/entities/publication/73120379-2f8b-6bd4-e053-0100007fdf3b.

[33] Treasury Board of Canada Secretariat, "Algorithmic Impact Assessment Tool," May 30, 2024, https://www.canada.ca/en/government/system/digital-government/digital-government-innovations/responsible-use-ai/algorithmic-impact-assessment.html.

[34] "Regulating Artificial Intelligence: Challenges for Data Protection and Privacy in Developing Nations | Journal of Social Signs Review," accessed June 27, 2025, https://socialsignsreivew.com/index.php/12/article/view/249.

the design stage onward.[35] Governments may issue technical standards to guide developers in achieving compliance with evolving fairness metrics and anti-discrimination norms.

Policy Recommendations

Given the systemic, opaque, and scalable nature of algorithmic discrimination, legal reform alone is insufficient. A comprehensive response must include policy mechanisms that enable proactive detection, institutional accountability, and public participation. Based on the preceding analysis, the following policy recommendations are proposed:

1. Enact Comprehensive AI Legislation with Anti-Discrimination Safeguards

Pakistan and other jurisdictions in similar positions ought to come up with explicit AI-specific laws that specifically include the concept of anti-discrimination. Such legislations should:

• Establish a broad definition of algorithmic discrimination by covering any indirect or emergent damage.

• Hire the requirement of fairness testing and documentation in high-risk AI systems.

• Implement penalties on a non-compliance and false visibility. The European Union AI Act can serve as a good guide, especially its approach to binding verification prior to deployment in such sensitive areas as employment and policing through risk-based classification.[36]

2. Institutionalize Algorithmic Impact Assessments (AIAs)

AIA tools should become mandatory for all public-sector deployments of automated decision-making systems and encouraged in the private sector. These assessments should:

- Include equity-focused metrics.
- Require consultation with affected communities.
- Be subject to independent audits and regulatory oversight.

Canada's AIA model offers a functional blueprint adaptable to Pakistan's governance context.[37]

3. Create a Central AI Ethics and Oversight Authority

An independent **AI Commission or regulatory authority** should be established to:

- Monitor algorithmic systems.
- Investigate bias-related complaints.
- Issue technical and ethical guidelines.

This body should include legal experts, technologists, civil society actors, and members from historically marginalized communities to ensure pluralistic representation and legitimacy.

4. Promote Public Awareness and Legal Literacy

Governments should invest in public education campaigns to increase awareness of algorithmic harms and rights under anti-discrimination laws. Legal literacy programs targeted at civil servants, lawyers, and judges are essential to ensure informed interpretation and enforcement.

5. Encourage Responsible Innovation through Incentives

Regulatory frameworks should **incentivize fairness** by:

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[35] "Bias Preservation in Machine Learning: The Legality of Fairness Metrics Under EU Non-Discrimination Law | Request PDF," accessed June 27, 2025, https://www.researchgate.net/publication/368028168_Bias_Preservation_in_Machine_Learning_The_Legality_of_Fairness_Metrics_Under_EU_Non-Discrimination_Law.

[36] "EU Artificial Intelligence Act | Up-to-Date Developments and Analyses of the EU AI Act," accessed June 27, 2025, https://artificialintelligenceact.eu/.

[37] Treasury Board of Canada Secretariat, "Algorithmic Impact Assessment Tool," May 30, 2024, https://www.canada.ca/en/government/system/digital-government/digital-government-innovations/responsible-use-ai/algorithmic-impact-assessment.html.

- Offering grants or tax benefits for companies adopting fairness-by-design principles.
- Certifying algorithms that meet ethical and legal benchmarks.
- Promoting open-source, auditable, and inclusive AI design practices.

Conclusion

Algorithmic governance is revolutionary in the same way that society, law and governance are coming to terms with the effects of algorithmic decision making. In as much as artificial intelligence brings exceptional efficiencies and predictive abilities, it equally presents very grave threats to equality, fairness, and human dignity. Algorithmic discrimination is in many cases well concealed in esoteric technical procedures, and the structural weaknesses of the current anti-discrimination legislation, which was written at a time when people made decisions, and sometimes were deliberately discriminatory.

In the paper, this is the aspect that has been analyzed on how these traditional forms of equal protection that rest on the concepts of intent and comparability are inadequate in the presence of automated systems, large-scale, and data-driven systems. The typological progress explored in the European Union and the United States can be useful and instructive, but, at the same time, they reveal flaws in enforcement and reluctance of regulators to adapt to changes.

The issues are even worse in Pakistan, where legal infrastructure and digital governance is yet to become mature. As a response to these challenges, there is a need to reconsider the anti-discrimination law that is beyond formalism and brings substantive equality to the algorithmic setting. Institutional innovation, technical transparency, ethical oversight, and inclusive policy design ought to be accompanied by a legal reform. Putting fairness or rather ethical governance in the code of the artificial intelligence systems is both a legal requirement and a moral obligation in a world that continues to run on code. The future of equal protection does not only rely on the development of laws, but also on the ability of societies to guarantee that technology development is directed toward justice and will respect human rights.

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