ALGORITHMIC JUSTICE – HOW ALGORITHMIC DECISION-MAKING IN WELFARE DELIVERY, CREDIT SCORING, AND POLICING IMPACTS EQUALITY, DUE PROCESS, AND DISCRIMINATION

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Introduction

Algorithmic justice refers to the fairness, accountability, and transparency of algorithmic decision-making systems, especially when they are used in areas that significantly affect people's lives. Governments, financial institutions, and law enforcement agencies increasingly rely on algorithms to make or support decisions in welfare distribution, credit scoring, and policing. These systems promise efficiency, consistency, and cost reduction. However, real-world experience shows that algorithmic decision-making can also reproduce and amplify social inequalities, weaken due process protections, and result in discriminatory outcomes. Algorithms are not neutral. They are designed by humans, trained on historical data, and deployed within existing social and legal structures. As a result, they often reflect past biases, policy priorities, and structural inequalities. Recent legal cases and public controversies around automated systems highlight the urgent need to examine algorithmic justice carefully. This essay discusses algorithmic justice by separately analyzing its impact on welfare delivery, credit scoring, and policing, and by examining broader concerns related to equality, due process, and discrimination.

Algorithmic Decision-Making in Welfare Delivery

Welfare Automation and the Logic of Efficiency.

Governments increasingly deploy algorithms in welfare administration to manage large beneficiary populations and reduce administrative costs. Automated systems are used for identity verification, eligibility determination, fraud detection, and benefit distribution. From a public policy perspective, this reflects a shift toward managerial governance, where efficiency

and quantification are prioritised over discretion and contextual judgment.as in D.S. Nakara v. Union of India[1] and People's Union for Civil Liberties v. Union of India[2]

While automation may streamline processes, welfare systems are not merely administrative mechanisms; they are instruments of social protection grounded in constitutional and human rights obligations under Articles 14 and 21 like what happened in Maneka Gandhi v. Union of India [3] .The automation of welfare decisions therefore raises critical concerns about justice and accountability.

Equality and Substantive Justice in Welfare Systems

From an equality standpoint, algorithmic welfare systems often fail to account for socioeconomic diversity and lived realities. Standardized data-driven criteria may disadvantage individuals whose lives do not conform to formal documentation or stable employment patterns. Informal workers, migrant populations, and rural communities are particularly susceptible to misclassification or exclusion.

Moreover, equality before the law requires substantive, not merely formal, fairness. Treating unequal circumstances identically can result in unequal outcomes. Algorithmic systems, by prioritizing uniform rules and rigid thresholds, often lack the flexibility necessary to address structural disadvantage. Consequently, automation may deepen social stratification rather than alleviate poverty or inequality.

Discrimination Risks in Welfare Algorithms

Algorithmic discrimination in welfare systems can arise through biased data, proxy variables, or flawed assumptions embedded in system design. Factors such as geographic location, consumption patterns, or family composition may indirectly reflect caste, ethnicity, or socioeconomic status as in A.K. Kraipak v. Union of India[4]. Even when explicit identifiers are excluded, discriminatory outcomes can persist.

Even when discrimination is not intentional, its effects can be severe. Algorithmic justice

[1] D.S Nakara v Union of India AIR 1983 (SC 130)
[2] People's Union for Civil Liberties v Union of India(Right to food Case)(2001)5 SCC 33
[3] Maneka Gandhi v Union of India AIR 1978 (SC 597)
[4] A.K. Kraipak v Union of India AIR 1970 (SC 150)

requires proactive identification and mitigation of discriminatory outcomes, rather than assuming that automation is inherently fair.

Algorithmic Decision-Making in Credit Scoring

Role of Algorithms in Financial Systems

Credit scoring systems use algorithms to assess the likelihood that an individual will repay a loan. These systems influence access to credit, interest rates, housing, education, and entrepreneurship. Automated credit decisions are increasingly central to modern financial markets.

While algorithmic scoring is often presented as objective and data-driven, it operates within deeply unequal economic structures. Financial data reflects historical patterns of privilege and exclusion, which algorithms may replicate.

Equality and Access to Credit

Algorithmic credit scoring can undermine equality by disadvantaged individuals without formal financial histories. People from low-income backgrounds, young adults, migrants, and women may lack the data signals that algorithms prioritize.

The use of alternative data sources, such as online behavior or transaction patterns, may further disadvantage those with limited digital access, as observed in Air India v. Nergesh Meerza[5]. Equality requires that access to credit not be determined solely by data profiles shaped by structural inequality.

Without corrective measures, algorithmic credit systems risk entrenching economic stratification.

Due Process and Transparency

Transparency is essential for procedural justice in financial decision-making. However, many credit scoring algorithms are proprietary and shielded from scrutiny. Individuals denied credit

[5] Air India v Nergesh Meezra AIR 1981 (SC 1829)

may receive little or no explanation, limiting their ability to correct errors or challenge unfair assessments.

From a legal standpoint, this opacity conflicts with principles of fairness and accountability, particularly when algorithmic decisions have long-term consequences for individuals' economic lives.

Discrimination and Indirect Bias

Even when explicit identifiers such as race or caste are excluded, algorithms may discriminate through correlated variables. This phenomenon poses challenges for anti-discrimination law, which traditionally focuses on intent rather than impact. Comparative developments in algorithmic discrimination have also been recognised internationally.

Algorithmic justice requires a shift toward outcome-based assessments of fairness, supported by regular audits and regulatory oversight.

Algorithmic Decision-Making in Policing

Equality Before the Law

Predictive policing algorithms frequently generate feedback loops that intensify surveillance in already policed areas. This undermines the principle of equality before the law by subjecting certain communities to disproportionate state scrutiny as observed in State of Uttar Pradesh v. Deoman Upadhyaya[6]

From a sociological perspective, such practices reinforce social stigma and criminalisation of poverty and minority status.

Due Process and Risk-Based Policing

Due process is threatened when individuals are subjected to policing decisions based on opaque risk scores. People labelled as high-risk may face increased surveillance or harsher treatment without knowing why.

[6] State of U.P. v Deoman Upadhyaya AIR 1960 (SC 1125)

The lack of explanation and accountability undermines legal safeguards such as the presumption of innocence. When algorithmic assessments influence arrest, bail, or sentencing decisions, the consequences for individual liberty are profound.

Discrimination and Civil Rights Concerns

Algorithmic policing systems may disproportionately harm racial, religious, or caste minorities. Facial recognition technologies, for example, often perform less accurately on certain populations, increasing the risk of misidentification.

Discrimination in policing has long-term consequences, including erosion of trust between communities and law enforcement. Algorithmic justice demands strict safeguards to prevent automated systems from amplifying existing injustices.

Advancing Algorithmic Justice

Achieving algorithmic justice requires a comprehensive approach involving law, policy, technology, and public participation. Transparency, accountability, and human oversight must be embedded at every stage of algorithmic design and deployment.

High-risk algorithmic systems should be subject to impact assessments, regular audits, and clear lines of responsibility. Individuals affected by automated decisions must have access to explanations and remedies.

Crucially, algorithms should support—not replace—human judgment in decisions affecting fundamental rights. Justice cannot be fully automated.

Conclusion

Algorithmic decision-making now plays a central role in welfare delivery, credit scoring, and policing. While these systems promise efficiency and consistency, they also pose serious risks to equality, due process, and non-discrimination. As this essay has demonstrated, algorithms are not neutral instruments but reflections of social structures and institutional priorities.

In welfare systems, algorithmic errors can deprive individuals of basic necessities. In financial systems, automated scoring can entrench economic inequality. In policing, algorithmic tools risk reinforcing systemic bias and undermining civil liberties.

For law, public policy, and sociology, the challenge is not whether to use algorithms, but how to govern them in ways that uphold human dignity and substantive justice. Without such governance, algorithmic systems risk becoming instruments of exclusion rather than tools of progress.

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