

Study on the Regulation of Algorithmic Employment Discrimination in the Era of Digital Intelligence

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Abstract

In the era of digital intelligence, algorithmic decision-making is profoundly transforming the labor market. Employers are leveraging artificial intelligence to reshape the employment landscape—for instance, by using algorithms to target job advertisements and screen or match job applicants. Algorithms, as learning machines, not only replicate existing biases but also amplify societal prejudices against job seekers, posing new challenges to workers' access to employment and their ability to assert their rights. This paper begins by analyzing the necessity of regulating algorithmic employment discrimination and examines the institutional challenges in China from four dimensions: legal norms, criteria for identification, burden of proof, and regulatory mechanisms. It then proposes a regulatory framework that integrates both technical and legal approaches to address algorithmic employment discrimination in China.

Keywords

Algorithmic Regulation; Discrimination Identification; Burden of Proof Rules; Fairness Priority.

1. Introduction

China's online recruitment market reached a scale of RMB 15.6 billion in 2024, driven by the rise of flexible employment and the adoption of emerging technologies such as AI-powered interviews and metaverse-based hiring. The market is projected to surpass RMB 20 billion in 2025 and could reach RMB 45 billion by 2030, with a compound annual growth rate (CAGR) of 17.3% over the five-year period. In 2024, the proportion of job seekers participating in recruitment through platforms exceeded 50% for the first time.[1] The use of algorithms in AI-powered recruitment has become a major new trend in the workplace, but it has also given rise to novel forms of covert employment discrimination. Against the backdrop of algorithms increasingly and deeply intervening in employment processes—such as recruitment, workforce management, performance evaluation, and career advancement—the necessity of regulating algorithmic employment discrimination has become ever more evident. This necessity stems not only from the persistence and transformation of traditional forms of employment discrimination in the digital era, but also from the inherent characteristics of algorithmic technologies themselves—namely, their opacity, automation, and scalability—which can amplify discrimination risks and undermine workers' ability to seek redress for rights violations. The involvement of artificial intelligence in the labor market has the potential to mitigate employer-based employment discrimination; however, it may also exacerbate existing forms of discrimination.[2]

2. The Necessity of Regulating Algorithmic Employment Discrimination

2.1. Algorithmic Technologies Reinforce Historical Employment Biases

Algorithmic models often rely on historical data for training—such as past hiring records and performance evaluations—which may inherently contain implicit biases related to gender, age,

region, ethnicity, and other protected characteristics. Algorithms rely on historical data, if past hiring practices favored male, younger, or graduates from prestigious universities, the algorithm may treat these correlations as “reasonable criteria,” thereby transforming structural inequalities into seemingly objective “technical rationality.” Without careful design, algorithms can not only automatically replicate historical discrimination but even systematically amplify it-transforming biased patterns in training data into ostensibly “legitimized” outcomes through algorithmic processing. For example, a technology company once systematically excluded female candidates due to its AI-powered resume screening system, as the training data was overwhelmingly composed of male engineers. If algorithms systematically exclude vulnerable groups-such as older workers, persons with disabilities, women, or low-income individuals-they risk entrenching and even exacerbating social stratification, thereby violating the principle of “equality of opportunity.”

2.2. The Opacity of Algorithmic Technology Makes Employment Discrimination Difficult to Hold Accountable

The so-called “algorithmic black box” refers to the lack of intelligibility, traceability, or explainability in algorithmic decision-making processes, making it difficult for external users-including affected individuals, regulatory authorities, and even some developers-to clearly understand the causal relationships among the inputs, internal logic, and outputs of the system. “Black box” operations undermine transparency and accountability, constituting a core and urgent challenge in algorithmic governance. Many algorithmic systems-particularly deep learning models-are inherently opaque, making it extremely difficult for job seekers to detect discrimination. For instance, a candidate may submit a résumé only to receive no response, unaware that the algorithm silently rejected them based on an unexplained criterion such as “age not matching latent standards.” This “algorithmic black box” renders discriminatory practices far more covert, rendering traditional anti-discrimination legal mechanisms-especially those governing the burden of proof-largely ineffective. Such opacity not only erodes public trust in algorithmic systems but also severely undermines the accountability mechanisms long established in conventional legal frameworks.

2.3. Systemic Risks of Algorithmic Discrimination Trigger a Crisis of Social Trust

There is a profound intrinsic connection between the systemic risks of algorithms and employment discrimination. Algorithmic systemic risk refers to adverse societal consequences-characterized by cascading effects and amplification-that arise at scale due to flaws in algorithmic design, biased data, model logic, or deployment environments. Algorithmic employment discrimination is not merely an isolated technical glitch, but a digital manifestation of deep-seated structural social risks. If left unaddressed by timely institutional corrections to curb its systemic spread, it will not only undermine individuals’ opportunities for advancement but also erode “equality of opportunity”-a foundational pillar of modern society-ultimately triggering a profound crisis of trust in both technological progress and institutional justice. In the employment context, these risks manifest as the reinforcement of structural inequalities-such as deepening the underrepresentation of women in high-paying roles-and the systematic underutilization of vast pools of talent due to algorithmic bias. Marginalized groups, including persons with disabilities, ethnic minorities, and graduates from non-elite institutions, face heightened barriers and are increasingly excluded from mainstream employment pathways in a systemic manner. The systemic risks of algorithms can trigger a crisis of social trust, leading workers to doubt the notion of “technological fairness” and thereby undermining the legitimacy of the digital economy’s development.

In summary, it is imperative to strengthen legal regulation of algorithmic employment discrimination and enhance oversight of algorithmic technologies to safeguard workers' right to equal employment and maintain the integrity and order of the labor market.

3. The Dilemmas of China's Employment Discrimination Regime under Algorithmic Management

3.1. Incomplete Legislation

China has not yet enacted a comprehensive and independent anti-employment discrimination law; relevant provisions are scattered across various legal statutes. *Constitution of the People's Republic of China*, *Labor Law of the People's Republic of China*, *Employment Promotion Law of the People's Republic of China*, and *The Law of the People's Republic of China on Safeguarding the Rights and Interests of Women* collectively enshrine core principles such as citizens' right to equality, workers' right to equal employment and free choice of occupation, the prohibition of employment discrimination, and the protection of employment rights for vulnerable groups. Specialized legal provisions adopt an overly narrow definition of discrimination. For example, Article 12 of *Labor Law of the People's Republic of China* stipulates: "Laborers shall not be discriminated against in employment on the grounds of ethnicity, race, sex, or religious belief." This limited list excludes other potentially relevant grounds such as age, disability, educational background, or socioeconomic status, thereby constraining the legal recognition and redress of emerging or indirect forms of employment discrimination. Article 3 of *Employment Promotion Law of the People's Republic of China* stipulates: "Laborers shall, in accordance with the law, enjoy the right to equal employment and autonomous career choice. No Laborers shall be discriminated against in employment on the grounds of ethnicity, race, sex, religious belief, or other such factors." These legal provisions only prohibit direct discrimination through a closed list of grounds—such as ethnicity, race, sex, and religious belief—but fail to explicitly cover other common forms of employment discrimination prevalent in the labor market, including those based on age, marital or parental status, disability, infectious disease carrier status, and rural migrant worker status. This legislative gap significantly limits the scope and effectiveness of anti-discrimination protections in practice. In particular, indirect discrimination—especially the subtle and opaque forms prevalent in algorithmic decision-making—has not been explicitly addressed. Although the use of the catch-all term "such as" in legislation establishes a flexible, open-ended legislative framework that grants courts some discretion in expanding the scope of recognized employment discrimination, this approach remains insufficient to meet the complex and evolving challenges posed by algorithm-driven hiring and management practices in today's digital labor market.

In summary, China's current legal framework lacks a clear definition of employment discrimination, provides no established criteria to distinguish between legitimate differential treatment and unjustified discrimination, and does not expressly address the recognition or adjudication of indirect discrimination.

3.2. Difficulty in Establishing Clear Criteria for Identifying Algorithmic Employment Discrimination

Currently, the legal community has not reached a consensus on a universally accepted definition of algorithmic employment discrimination, resulting in ambiguity in its identification and significant challenges in judicial adjudication. Algorithms are a form of computer program and constitute "automated decision-making" under the law. Direct employment discrimination facilitated by algorithmic technologies tends to be overt and thus relatively clear in judicial application. In contrast, indirect employment discrimination is often latent and concealed, making it significantly more difficult to identify and establish legally.[3] Algorithmic

employment discrimination manifests in the following two key forms:(1) Intergenerational Transmission of Data Bias: When an employer's historical hiring data reflects biases based on protected or sensitive attributes-such as gender, educational background, or age (e.g., the disproportionate representation of men in technical roles)-algorithmic systems trained on such data may internalize and institutionalize these patterns as normative criteria for "ideal" or "high-potential" candidates. As a result, individuals who deviate from these historically dominant profiles are systematically excluded in subsequent hiring processes, effectively perpetuating pre-existing inequalities.(2) Implicit correlations and "proxy-based" discrimination: Algorithms may exploit seemingly neutral indirect variables-such as alma mater, residential address, social media activity, or consumer behavior-as proxies for sensitive attributes like gender, race, household registration (hukou), or socioeconomic status, thereby making biased decisions. This form of discrimination, mediated through proxy variables, is often highly concealed: job applicants rarely detect it, and existing legal frameworks struggle to identify or hold anyone accountable for it, making it a quintessential form of covert employment discrimination.

Due to the absence of clear legal criteria for identifying employment discrimination in the context of algorithmic big data, it has become significantly more difficult to recognize and establish algorithmic employment discrimination. As a result, employers often engage-unwittingly-in practices that carry discriminatory effects. Moreover, algorithmic systems are typically implemented as internal procedural tools and constitute proprietary business information. Mandating full transparency of these systems may, in turn, risk infringing upon employers' legitimate trade secrets, creating a tension between the need for algorithmic accountability and the protection of commercial confidentiality. This legal ambiguity and institutional dilemma further complicate effective regulation and redress in cases of algorithmic bias.[4]

3.3. Difficulty in Proving Algorithmic Employment Discrimination

Digital technologies have significantly increased the difficulty for vulnerable workers in gathering evidence to assert their rights. In China's labor market, the relationship between hiring entities and job seekers during the recruitment stage is considered a civil legal relationship. Currently, courts primarily treat recruitment discrimination cases as civil tort disputes, as such discrimination infringes upon the right to equal employment opportunities. These tort disputes are adjudicated under civil legal frameworks, including the *Civil Code of the People's Republic of China* and the *Civil Procedure Law of the People's Republic of China*. Due to differences in legislative purpose and legal nature, tort disputes and labor disputes differ significantly in scope of judicial review, legal liability, burden of proof, and available judicial remedies. Compared to labor disputes, in cases involving violations of the right to equal employment, workers bear the burden of proof under the principle of "he who asserts must prove." If they fail to provide sufficient evidence, they risk losing the case. Article 6 of the *Supreme People's Court's Provisions on Several Issues Concerning Evidence in Civil Proceedings* clearly allocates the burden of proof in labor dispute cases arising during the existence of an employment relationship. However, it does not expressly extend this allocation to employment discrimination cases occurring during the recruitment phase. As a result, unless job applicants can present clear and convincing evidence demonstrating discriminatory conduct by the employer during hiring, they stand little chance of prevailing in court.[5] Employers hold an overwhelming advantage in algorithmic technology and information-based decision-making, which significantly exacerbates the existing information asymmetry between them and job applicants or workers. Given that ordinary workers typically have limited understanding of algorithms and little insight into how algorithmic decisions are made, this knowledge imbalance makes it exceedingly difficult for them to identify potential biases or flaws embedded

in algorithmic systems-further compounding the already formidable challenges of gathering evidence in discrimination cases. This evidentiary dilemma fundamentally reflects a structural contradiction between evidence rules rooted in the industrial era and the demands of digital governance. The current burden-of-proof regime is ill-equipped to address the unique challenges posed by algorithmic employment discrimination disputes.

3.4. The Difficulty of Regulating Algorithmic Employment Discrimination

Currently, China has established a relatively systematic regulatory framework for algorithms, anchored by foundational laws such as the *Cybersecurity Law of the People's Republic of China*, the *Data Security Law of china*, and the *Personal Information Protection Law of china*, and supported by specialized regulations and departmental normative documents. Relevant regulatory instruments primarily include the *Provisions on the Administration of Algorithmic Recommendation Services in Internet Information Services* and the *Guiding Opinions on Strengthening Comprehensive Algorithmic Governance in Internet Information Services*, both of which center on algorithmic governance. Additionally, documents such as the *Ethical Norms for Next-Generation Artificial Intelligence*, the *Guidelines for Disclosure of Artificial Intelligence Algorithm Applications in Financial Services*, and the *Evaluation Specifications for Artificial Intelligence Algorithm Applications in Financial Services* establish national and industry standards that address algorithmic oversight, AI ethics, and responsible data and information use. [6]However, the rapid advancement of artificial intelligence technologies has outpaced regulatory development, presenting significant challenges for algorithmic governance. In particular, the regulation of algorithmic employment discrimination remains inadequate in several key respects: (1)The boundary of “algorithmic transparency” remains ambiguous. Although current laws require employers to disclose the “basic principles” of their algorithms, they lack concrete, enforceable standards-resulting in inconsistent implementation across employers. Consequently, job applicants and workers still struggle to genuinely understand how algorithmic decisions affecting their employment opportunities are made, undermining the practical effectiveness of transparency requirements. (2) Regulatory authorities face significant limitations in technical capacity. They lack sufficient expertise and resources to effectively audit and verify complex algorithmic systems. This hampers their ability to clearly identify the responsible parties in cases of algorithmic harm and to allocate legal liability appropriately. Moreover, the absence of robust, real-time coordination mechanisms among agencies impedes the implementation of dynamic, cohesive oversight-rendering current regulatory efforts fragmented and reactive rather than proactive and integrated. (3) There remains a notable gap between regulatory requirements and actual implementation. Some platforms either bury the “opt-out of algorithmic recommendations” option in obscure parts of their interfaces or implement it in a way that is functionally ineffective, thereby substantially limiting users’ practical ability to exercise their right to choose and undermining the genuine enforceability of algorithmic transparency and control provisions.

In summary, achieving an effective balance between regulation and innovation requires refining operational standards, strengthening corporate self-regulation in conjunction with coordinated oversight, and promoting independent third-party evaluation mechanisms-thereby realizing an integrated approach that ensures algorithms are both “effectively governed” and “responsibly utilized.”

4. Improving Regulatory Measures Against Algorithmic Employment Discrimination in China

4.1. Legal Level: Improve Legislation and Clarify Rules

4.1.1. Enact an Anti-Employment Discrimination Law to Establish Core Legal Frameworks

Algorithmic employment discrimination presents a novel legal challenge for every country, and legislative reform is urgently needed. Therefore, China should enact a dedicated *Anti-Employment Discrimination Law* and establish a comprehensive legal framework to effectively address this issue. The law should clearly define algorithmic discrimination-specifying its scope and typologies-and establish concrete criteria for identifying and proving algorithmic employment discrimination. [7] (1) Defining Algorithmic Discrimination. Chinese scholars have produced a substantial body of academic research on algorithmic discrimination, providing a solid theoretical foundation for legislation. [8] This paper defines “algorithmic discrimination” as conduct that results in unjustified adverse impacts on specific groups due to algorithm design, biased training data, deployment practices, or other related factors, and that is based on sensitive attributes such as race, gender, age, geographic origin, occupation, disability status, or other protected characteristics. (2) Expanding the Types of Algorithmic Discrimination. The forms of algorithmic discrimination are evolving from explicit, static, and individualized patterns toward implicit, dynamic, systemic, and intersectional ones. In China, the scope of algorithmic discrimination should be expanded, with a particular focus on indirect discrimination, including: Systemic Discrimination, Contextual Discrimination, Intersectional Discrimination, Dynamic or Feedback-loop Discrimination, Procedural Discrimination and Digital Divide-based Discrimination. (3) Criteria for Determining Algorithmic Discrimination. The general standard for identifying algorithmic discrimination is shifting from the traditional anti-discrimination law’s “intent-based” approach to a “effects-based” approach, emphasizing the assessment of the fairness of algorithmic outcomes. The anti-discrimination provisions in *the Charter of Fundamental Rights of the European Union* adopt an open-ended design, enabling the law to address novel forms of discrimination-even when they are not explicitly enumerated-by relying on the principle of “fairness.” This approach significantly enhances the flexibility and enforceability of the legal framework.

China’s legislation should clearly define the criteria for determination: (1) Establishing “substantive fairness” as a general principle for judicial application would allow judges to exercise discretionary authority in adjudicating cases.;(2) Building upon regulations such as *the Provisions on the Administration of Algorithmic Recommendation Technologies and the Interim Measures for the Administration of Generative Artificial Intelligence Services*, this article calls for the issuance of a dedicated *Guideline on the Identification of Algorithmic Discrimination* that clearly defines specific criteria for determination. The article argues that a “substantive public” general rule better aligns with practical needs.

4.1.2. Clarify the Application Rules for Reversal of the Burden of Proof

(1) A Comparative Study of Legal Frameworks and Practices on Reversal of the Burden of Proof: Domestic and International Perspectives

The application of the reversal of the burden of proof in algorithmic discrimination cases is a key institutional mechanism for overcoming the “algorithmic black box” dilemma, protecting the rights of vulnerable groups, and ensuring effective judicial remedies. Consequently, placing the burden of proof on the defendant-the algorithm user-to demonstrate the absence of discrimination has become an important trend in international algorithmic governance. This paper conducts a comparative analysis of China, the European Union, and the United States, examining differences in evidentiary rules and legal practices, clarifying their distinct

approaches, and drawing institutional lessons for reference. EU legislation explicitly provides for the reversal of the burden of proof, requiring algorithmic controllers (defendants) to bear the burden of proving the absence of discrimination. U.S. law applies the reversal of the burden of proof in a limited manner, once the plaintiff establishes a prima facie case of disparate impact, the employer (defendant) must then provide justification. China has no explicit statutory provision on the reversal of the burden of proof, it is only partially applied in certain consumer rights cases, and there is no judicial practice of burden-shifting in the context of employment recruitment. Comparative analysis reveals that, despite variations in implementation, the reversal of the burden of proof has become a widely accepted principle in algorithmic discrimination cases. Therefore, China should expressly establish a burden-shifting mechanism in its legislation on algorithmic discrimination to provide a clear legal basis for judicial application.

(2) Clarifying the Conditions for Applying Reversal of the Burden of Proof: The Standard for Prima Facie Evidence

The reversal of the burden of proof is not applied unconditionally; it typically requires the plaintiff to present prima facie evidence demonstrating a reasonable likelihood of algorithmic discrimination. Currently, there are no judicial cases in China applying burden-shifting in algorithmic discrimination disputes, making empirical analysis impossible. Drawing on legislative and judicial practices in the European Union and the United States, this paper explores an appropriate "prima facie evidence standard" for implementing the reversal of the burden of proof in China. The "prima facie evidence standard" primarily applies in the following scenarios:

- 1) The algorithmic decision outcomes show statistically significant disparities across different groups;
- 2) The algorithm is deployed in a high-risk domain.;
- 3) The algorithmic system lacks transparency or refuses to provide explanations;
- 4) There is contextual evidence of historical bias or widespread industry-level discrimination.

Once prima facie evidence is established, the burden of proof shifts to the defendant (e.g., the algorithm user or platform), who must fulfill the duty to rebut the presumption of discrimination. If the defendant fails to provide sufficient evidence to rule out the possibility of discrimination, algorithmic discrimination shall be presumed to exist.

In today's context, where algorithms deeply influence employment decisions, reversing the burden of proof is not an undue burden on enterprises, but a necessary safeguard for the right to equal employment opportunity.

4.1.3. Strengthening the Regulatory Framework for Algorithmic Governance

Regulating algorithmic discrimination is a critical issue for achieving social equity and justice in the digital era. In response to the shortcomings in China's current regulatory approach, China should draw on internationally accepted practices to build a distinctive algorithmic governance system grounded in the principles of security, order, and rights, and embodying efficiency, fairness, and accountability. The European Union and the United States have established clear regulations on data and algorithmic governance, offering valuable insights for improving China's regulatory framework. For example, *the European Union's Data Governance Act* (2018) grants individuals the "right not to be subject to fully automated decision-making," including the right to explanation and the right to object to algorithmic decisions. *The Artificial Intelligence Act* (2024) classifies AI systems by risk level and imposes strict oversight on high-risk AI systems-such as those used in recruitment-requiring measures like risk assessments, bias testing, and the establishment of an EU-level AI regulatory authority. The EU's regulatory approach is primarily preventive, emphasizing ex-ante compliance rather than ex-post accountability. The U.S. *Algorithmic Justice and Online Platform Transparency Act* (2021)

explicitly requires companies to ensure fairness in the actual deployment of algorithms and to subject them to rigorous review to prevent any bias or discriminatory outcomes. The bill requires companies with annual revenues exceeding \$50 million or those processing data of more than one million users to conduct bias impact assessments of their algorithms and submit fairness reports to the Federal Trade Commission (FTC), with a focus on evaluating discrimination risks along sensitive dimensions such as race and gender.[9] *The Algorithmic Accountability Act* (2022) established a robust regulatory framework for algorithms, granting individuals the right to contest decisions made by automated systems and to request human review. U.S. oversight reflects a hybrid model that combines industry self-regulation with judicial enforcement mechanisms.

Improving China's regulatory regime should emphasize ex-ante oversight. First, Establish an independent algorithmic auditing and certification mechanism, introduce third-party technical evaluations, promote cross-departmental coordination, and integrate regulatory resources across relevant government agencies. Second, Strengthen the continuous oversight regime. A continuous monitoring mechanism should implement end-to-end dynamic supervision of platform algorithms, with a focus on reviewing the compliance of data collection and the fairness of decision outcomes. It should also establish a periodic review system that spans the entire algorithmic lifecycle. Before recruitment algorithms are deployed in the labor market, in addition to the employer-conducted risk assessment, regulatory authorities should also carry out ex-ante review to perform an initial risk evaluation. Once the algorithm is in use in the employment market, regulators may monitor its operation and, upon identifying potential discrimination risks, require employers to promptly implement corrective measures. [10] Finally, strengthen social oversight by establishing a public supervision platform to facilitate worker complaints and reporting. Verified reports should be rewarded to enhance public participation.[11]

4.2. Technical Level: Embedding “Fairness-by-Design” Principles into Algorithms

4.2.1. Establishing “Fairness-First” as the Primary Principle for Recruitment Algorithms

Algorithmic fairness is a key criterion for assessing whether an algorithm is fair. It can also serve as a fairness constraint embedded within the algorithm itself, enabling the algorithm's outputs to achieve a certain level of fairness. A widely accepted understanding of algorithmic fairness is that, in decision-making contexts, individuals or groups should not be subjected to bias or favoritism based on their inherent or acquired characteristics.[12] The “fairness-first” algorithmic principle, from a technical perspective, means that in the design and operation of human resource-related algorithmic systems-such as those used for recruitment, screening, promotion, and performance evaluation-the prevention and mitigation of systemic adverse impacts on specific groups (e.g., based on gender, race, age, disability status, etc.) are placed at the core of algorithmic objectives. This principle may, when necessary, take precedence over metrics such as predictive accuracy or operational efficiency. Its fundamental goal is to ensure that algorithmic decisions do not reproduce, amplify, or conceal existing structural inequalities in society. Fairness is not an “add-on feature,” but a primary design constraint. It should be integrated into the algorithm's optimization objective function or enforced as a hard constraint from the outset, rather than addressed through after-the-fact remediation. At the technical level, the principle of “fairness-first” in algorithmic employment discrimination models hinges on a critical understanding: even if an algorithmic model does not intentionally produce discrimination, the absence of embedded fairness principles in its design makes it highly susceptible to replicating-and even amplifying-structural biases present in society, thereby constituting “algorithmic employment discrimination.” Therefore, “embedding fairness as a

priority” means proactively identifying, intervening in, and eliminating technical mechanisms throughout the model’s entire lifecycle that could lead to employment discrimination. Algorithmic decision systems that embody fairness as a legal principle are characterized by explicit value judgments, fairness across all stages of the process, and narrowly defined exceptions to liability. Only by embedding fairness into the very DNA of algorithms can we rebuild societal consensus around the vision of “technology for good.”

4.2.2. Design of the “Fairness-First” Rule

Designing “fairness” into recruitment algorithms must consider not only technical aspects but also the integration of technical and legal notions of fairness. Technical standards should be translated into legally enforceable benchmarks to ensure that technology does not become an “amplifier” of employment discrimination. Specific pathways for implementing a “fairness-first” design include: establishing fairness objectives at the very outset of model development, and ensuring that all technical choices-regarding data, features, model architecture, and evaluation metrics-are subordinate to this overarching goal. At the technical level, “fairness-first” requires embedding fairness principles throughout the entire algorithmic lifecycle, from data collection to model deployment and ongoing monitoring. Data preprocessing, model optimization, and monitoring metrics thus become critical tools for measuring and enforcing fairness.

In conclusion, “fairness-first” algorithmic governance is truly realized only when fairness monitoring metrics are displayed alongside system performance metrics on the same dashboard, trigger alerts at the same severity level, and receive equal attention in practice.

5. Conclusion

Algorithmic hiring is an important manifestation of technological progress; however, without effective regulation, algorithms can easily transform from “efficiency tools” into “engines of discrimination.” Therefore, establishing a dedicated legal regulatory framework specifically targeting algorithmic employment discrimination is not only a matter of technological governance, but also an essential requirement for upholding social equity and justice and safeguarding workers’ fundamental rights. Moving forward, China should accelerate legislative efforts to clearly define standards for algorithmic transparency and fairness in decision-making, strike a balanced reconciliation between technological innovation and equal rights, and promote the synergistic development of “responsible AI” and “fair employment.”

References

- [1] Information on www.docin.com
- [2] J.S.Hu: Intelligent Recruitment: A Major Transformation in Hiring Amid the AI Wave, Enterprise Management Publishing House,2020 Edition,P39. (in chinese)
- [3] Information on The Guiding Case No. 185(32nd Batch) of The Supreme People’s Court of the People’s Republic of China in 2022 : Yan Jialin v. Hangzhou Laizhe Technology Co., Ltd. - Dispute over the Right to Equal Employment. (in chinese)
- [4] Z.Huang,k.j.tang: Legal Regulation of Algorithmic Employment Discrimination, Journal of Shandong Federation of Trade Unions Forum,VOL.29(2023),P 77-84+100. (in chinese)
- [5] L.L.Hou,C.Wang: Artificial Intelligence: New Challenges and Responses in the Legal Regulation of Employment Discrimination, Journal of East China University of Science and Technology (Social Sciences Edition) VOL.36(2021).P5. (in chinese)
- [6] X.Y.Tang: he Dilemma and Way Forward for Protecting Workers’ Personal Data under Workplace Surveillance 5.0, Journal of Beijing Social Sciences, VOL.09(2021),P87-97. (in chinese)

- [7] Y.Zhou: Challenges Posed by Algorithmic Management in the Digital Age to Labor Law and Corresponding Responses, Journal of Law and Social Development,VOL.30(2024),P129-146. (in chinese)
- [8] L.H.Zhang: Legal Challenges and Responses to Algorithmic Employment Discrimination , Journal of Beijing Vocational College of Labour and Social Security, VOL.18(2024), P27-33. (in chinese)L.Y.Shen: Employment Discrimination in Machine Learning Decision Systems: Origins and Legal Governance Approaches, Journal of Beijing University of Technology(Social Sciences Edition),VOL.25(2025)P108-122. etc. (in chinese)
- [9] Jakob M ,Prathm J ,S. D W , et al.The US Algorithmic Accountability Act of 2022 vs. The EU Artificial Intelligence Act: what can they learn from each other?, Minds and Machines,Vol.32,2022,751-758.
- [10]X.Y.Tang: Legal Regulation of Covert Employment Discrimination in Algorithmic Hiring Decisions, Journal of Henan University of Economics and Law,VL.36(2021),P75-84. (in chinese)
- [11]T.Tian: Research on Corporate Anti-Employment Discrimination, Journal of Enterprise Reform and Management,VOL.7(2021),P85-86. (in chinese)
- [12]Saxena N A, Huang K, DeFilippis E, et al. How do fairness definitions fare? Examining public attitudes towards algorithmic definitions of fairness[C]. Proceedings of the 2019 AAAI/ACM Conference on AI, Ethics,and Society, 2019: 99-106.