

Artificial Intelligence in Law and Ethics in Brazil: Regulatory Gaps, Democratic Risks, and Opportunities for Responsible AI

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ABSTRACT

Artificial intelligence (AI) is reshaping legal systems worldwide, and Brazil is no exception. From judicial automation to algorithmic policing, AI is being deployed across the Brazilian public sector with the promise of efficiency and modernization. However, this technological advancement also brings critical ethical concerns, especially in a country marked by deep socio-economic inequalities and a fragile data governance framework. This paper explores the intersections of AI, law, and ethics in Brazil, analyzing case studies, regulatory mechanisms such as the General Data Protection Law (LGPD), and democratic implications. It proposes a framework for responsible AI governance rooted in transparency, accountability, and the rule of law.

Keywords: Brazil, Artificial Intelligence, Legal Ethics, Judicial Automation, LGPD, Algorithmic Discrimination, Data Governance, Digital Rights.

INTRODUCTION

Brazil, Latin America's largest democracy, is rapidly incorporating artificial intelligence into its legal and administrative systems. AI is currently used to filter court cases, detect fraud in public benefits, and support law enforcement surveillance. While these initiatives promise increased efficiency, they also raise serious ethical and legal questions regarding transparency, due process, data privacy, and social bias.

This paper examines how AI is being integrated into Brazilian legal frameworks, the ethical challenges that emerge, and how Brazil's institutions are responding. It situates Brazil in the global context of algorithmic governance while emphasizing the country's unique vulnerabilities and democratic aspirations.

RELATED WORKS

Theoretical Frameworks

Algorithmic Justice and Social Inequality

Brazil's social and racial inequalities require that AI systems undergo heightened scrutiny for fairness and non-discrimination, particularly in legal decision-making.

Legal Positivism vs. Algorithmic Decision-Making

The Brazilian legal system, rooted in civil law traditions, emphasizes codified norms and textual interpretation. The integration of probabilistic AI models disrupts these traditions, requiring new theoretical accommodations.

Data Ethics and Human Rights

AI in legal systems must comply with constitutional guarantees of due process, equality before the law, and human dignity, while aligning with global digital rights frameworks.

Transparency and Public Accountability

In a country with low institutional trust, algorithmic systems must be auditable, explainable, and subject to public scrutiny (FGV Direito Rio, 2022).

METHODOLOGY

Applications of AI in the Brazilian Legal System

Judicial Automation and Case Management

The Superior Tribunal de Justiça (STJ) uses an AI tool called Athos to identify case similarities and suggest precedents (Supremo Tribunal Federal, 2022).

Victor, a program developed by the Supreme Federal Court (STF), scans cases for relevance to constitutional matters.

In São Paulo, AI systems filter and classify civil claims to optimize court workflow.

Law Enforcement and Surveillance

AI-powered facial recognition systems have been tested in Rio de Janeiro during Carnival and in metro stations.

Predictive policing tools, such as ISAAC, use data analytics to forecast crime hotspots, raising concerns over racial profiling.

Public Administration and Benefits Monitoring

The Ministry of Citizenship employs machine learning to detect anomalies in the Bolsa Família social welfare program.

AI flags beneficiaries for human review but lacks a formal appeals mechanism.

Ethical and Legal Challenges

Bias and Discrimination

AI systems may reinforce existing inequalities due to biased training data. For instance, facial recognition tools have shown higher false positive rates for Black Brazilians.

Legal scholars call for mandatory bias audits and exclusion impact assessments.

Due Process and Transparency

Automated decisions in the judiciary risk bypassing full legal reasoning.

The opacity of proprietary algorithms undermines a citizen's right to understand and contest decisions.

Data Protection and Consent

Brazil's LGPD (Lei Geral de Proteção de Dados) regulates personal data use but lacks robust enforcement capacity (Lei Geral de Proteção de Dados Pessoais, 2018).

Public sector deployments often occur without informed consent or impact assessments.

Institutional Oversight and Democratic Governance

Courts and ministries deploy AI with limited legislative oversight or public consultation.

Civil society demands more participatory governance in the design and deployment of legal AI tools.

RESULTS AND DISCUSSION

Case Study: The Use of "Victor" in the Supreme Federal Court

Victor is an AI system developed to classify cases filed before Brazil's highest court:

It processes thousands of petitions daily to flag those involving constitutional matters.

Judges report increased efficiency but also express concern over opaque classification methods.

A 2021 study by the Brazilian Institute of Legal Technology found that Victor's decisions aligned with human judges in only 74% of cases.

Outcomes

Calls for greater transparency and human-in-the-loop protocols.

Prompted STF to release partial documentation on Victor's decision logic.

Catalyzed national debate on the ethical limits of AI in constitutional adjudication.

Legal and Regulatory Environment

LGPD (2018): Inspired by the GDPR, Brazil's data protection law provides a legal foundation for AI regulation but lacks specific rules on algorithmic decision-making.

Marco Civil da Internet (2014): Guarantees net neutrality and privacy rights but does not address AI or automation.

STF Rulings: Courts are developing jurisprudence on digital rights and algorithmic accountability, though precedents remain limited.

National AI Strategy (2021): Promotes innovation but lacks enforceable ethical guidelines for public sector AI.

Institutional and Civil Society Responses

ANPD (National Data Protection Authority): Established in 2020, the agency is responsible for monitoring compliance with LGPD but is underfunded.

Public Defenders and Legal Clinics: Advocate for marginalized populations affected by opaque automated decisions.

Universities and Think Tanks: FGV Law School and ITS Rio lead research on algorithmic transparency and digital due process (ITS Rio, 2021).

Civil Society Organizations: Groups like Coding Rights and Data Privacy Brasil campaign for ethical AI and digital inclusion (Data Privacy Brasil, 2023).

Strategic Recommendations

Mandate Algorithmic Transparency in Courts and Agencies: Require public disclosure of AI models, training

data characteristics, and audit reports.

Adopt Algorithmic Impact Assessments (AIAs): Prior to deployment, assess the social, legal, and ethical implications of AI systems.

Strengthen the ANPD's Oversight Powers: Provide technical resources and independence to enforce LGPD in AI applications.

Promote Participatory Design: Include legal professionals, civil society, and marginalized communities in AI development processes.

Develop Sector-Specific AI Guidelines: Establish regulatory frameworks for legal, policing, and social welfare AI tools.

CONCLUSION

Artificial intelligence offers Brazil a powerful set of tools to enhance its legal and administrative systems. However, without robust ethical and regulatory safeguards, these systems risk perpetuating inequality, undermining civil rights, and eroding democratic accountability. By strengthening institutions, empowering oversight agencies, and prioritizing transparency, Brazil can build a rights-respecting framework for legal AI. Such a framework must reflect the country's constitutional principles, diverse population, and commitment to justice for all.

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