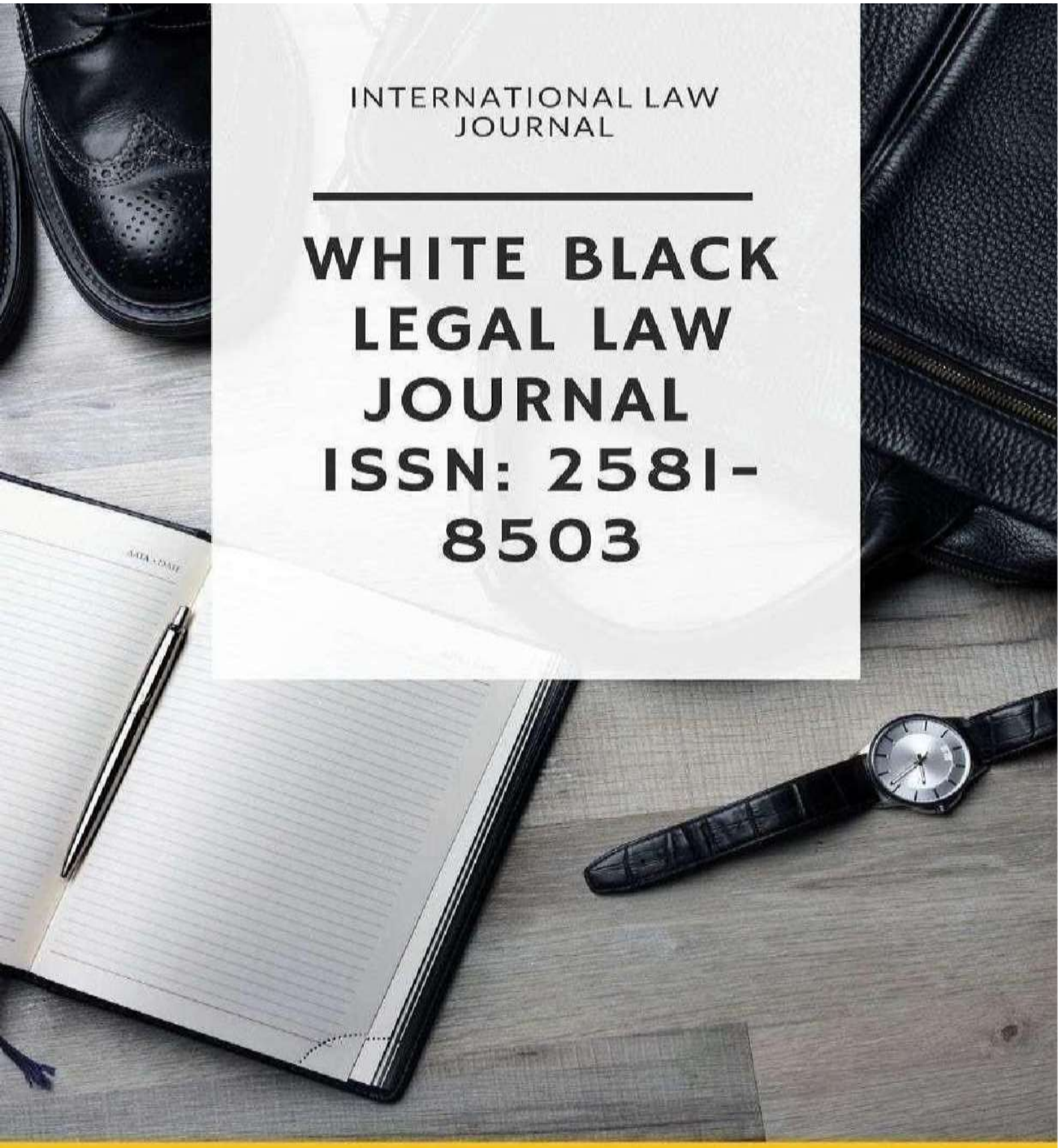

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TECHNOLOGICAL CONSTITUTIONALISM AND DISABILITY JUSTICE: REGULATING AI THROUGH INDIA'S RIGHTS OF PERSONS WITH DISABILITIES ACT

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Abstract

Artificial intelligence (AI) presents transformative opportunities for enhancing accessibility and autonomy of persons with disabilities (PwDs) in India. However, rapid AI deployment without adequate safeguards risks automating discrimination and perpetuating systemic exclusion. This research paper examines the intersection of AI governance and disability rights protection within India's existing legal framework, particularly the Rights of Persons with Disabilities Act, 2016 (RPwD Act), complemented by the Digital Personal Data Protection Act, 2023 (DPDP Act), and emerging jurisprudence including the Supreme Court's landmark Pragya Prasun judgment. Drawing on international comparative analysis, technological case studies, and Indian disability rights scholarship, this paper identifies critical regulatory gaps and proposes comprehensive legal reforms.

Key findings include: (1) existing disability rights legislation lacks AI-specific accountability mechanisms; (2) algorithmic bias disproportionately harms PwDs in employment, financial inclusion, and access to justice; (3) India's emerging AI governance frameworks inadequately address disability inclusion; (4) participatory design involving PwDs is absent from current regulatory requirements.

The paper recommends amending the RPwD Act 2016 with Section 4A establishing AI accessibility and fairness standards, modifying the DPDP Act 2023 to strengthen protections against discriminatory data processing, and enacting comprehensive national AI regulation integrating disability rights. Implementation requires institutional capacity-building, participatory governance mechanisms, and sustained engagement with disability communities. These reforms align with India's constitutional commitments and international obligations under the UN Convention on the Rights of Persons with Disabilities.

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"AI is not about making life easier—it's about making life possible for millions of people who face unique challenges every day." — Sundar Pichai

Keywords: Artificial Intelligence, Disability Rights, Algorithmic Bias, Accessibility, RPwD Act 2016, UNCRPD, Inclusive Technology, Data Protection, Legal Regulation, India

1. Introduction

1.1 Context and Significance

Over one billion persons globally live with disability, and India is home to approximately 27.7 million persons with disabilities, representing roughly 2.2% of the population according to Census 2021 data[2]. Despite constitutional protections and the RPwD Act 2016, PwDs in India continue facing systemic barriers in accessing education, employment, healthcare, and justice. Simultaneously, artificial intelligence—increasingly embedded in healthcare systems, educational platforms, recruitment algorithms, digital governance, and assistive technologies—creates a paradox: it offers unprecedented accessibility opportunities while simultaneously threatening to automate and amplify existing discrimination[3].

The transformative potential of AI for disability inclusion is evident in innovations documented in recent literature: AI-driven assistive technologies enabling real-time communication support for speech disabilities; adaptive learning platforms personalizing education for cognitive disabilities; wearable devices utilizing computer vision to provide autonomy to visually impaired individuals; and AI-powered accessibility conversion tools enabling persons with visual disabilities to access Science, Technology, Engineering, and Mathematics (STEM) materials[4]

Conversely, unregulated AI deployment risks significant harms. Algorithmic bias rooted in non-representative datasets and ableist design assumptions can systematically deny individuals with disabilities access to employment through biased hiring algorithms, exclude PwDs from digital financial services through inaccessible facial recognition systems, perpetuate health

[2] Census of India (2021), Population Statistics; Pragya Prasun & Ors. v. Union of India, Supreme Court of India (2024), Civil Appeal No. 1123, establishing digital accessibility as fundamental right.

[3] Ferebee, S. (2025). 'AI and Accessibility: Breaking Barriers for People with Disabilities', Premier Journal of Artificial Intelligence, 2, 100012; El Moor, C., Kundi, B., & Gorman, R. (2024). 'AI and disability: A systematic scoping review', Health Informatics Journal, 30(3), 14604582241285743.

[4] Valencia, S., Cave, R., Kallarackal, K., Seaver, K., Terry, M., & Kane, S. (2023). '"The less I type, the better": How AI language models can enhance or impede communication for AAC users', Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems, 830, 1–14; Gligorea, I., Cioca, M., Oancea, R., Gorski, A., Gorski, H., & Tudorache, P. (2023). 'Adaptive learning using artificial intelligence in e-learning: A literature review', Education Sciences, 13(12), 1216.

inequities through biased clinical decision-support systems, and reinforce medical model narratives positioning disability as pathology rather than human diversity.

In landmark judgment Pragya Prasun & Ors. v. Union of India (2024), the Supreme Court recognized digital accessibility as a fundamental right under Article 21 of the Constitution, holding that systemic exclusion of PwDs from digital Know Your Customer (KYC) processes constitutes discrimination violating both constitutional and statutory obligations[5]. This judgment signals judicial readiness to subject technological systems to disability rights scrutiny and creates opportunity for jurisprudential development addressing AI governance.

1.2 Research Question and Scope

This paper addresses the central question: **What legal and regulatory frameworks are necessary to ensure artificial intelligence serves as a tool for empowering persons with disabilities rather than perpetuating discrimination within India's disability rights regime?**

Specifically, the paper examines: (1) current landscape of AI accessibility and bias affecting PwDs in India; (2) adequacy of existing Indian legal frameworks in addressing AI-specific risks; (3) identified gaps in current regulatory approaches; (4) international best practices in AI governance applicable to Indian context; (5) recommendations for comprehensive legal reforms integrating disability rights into AI regulation.

The scope encompasses digital accessibility, algorithmic fairness, data protection, workplace equity, educational inclusion, healthcare equity, and access to justice for PwDs in AI-driven systems.

2. AI Accessibility and Disability: Opportunities and Challenges

2.1 Transformative AI Applications for Disability Inclusion

Recent technological innovations demonstrate AI's potential to enhance autonomy and participation for PwDs. Microsoft's Seeing AI application, developed by blind technology professional Anirudh Koul to help his grandfather recognize faces during video calls, demonstrates how lived disability experience can drive accessible innovation. The platform has assisted visually impaired users completing over three million tasks, earning the Helen Keller Achievement Award[6]. The application enables text recognition, face identification, product

[5] *Pragya Prasun & Ors. v. Union of India*, Supreme Court of India (2024).
[6] Microsoft (2024). SeeingAI: An App for Visually Impaired People that Narrates the World Around You. Microsoft Garage. Retrieved from https://www.microsoft.com/en-us/garage/wall-of-fame/seeing-ai/

identification, and currency denomination verification—fundamental capabilities for independent daily functioning.

OrCam MyEye, a wearable AI device utilizing computer vision and machine learning, exemplifies technology-mediated independence. The device enables individuals with visual impairments to read text, recognize faces, identify products, and verify currency. Case studies demonstrate that 85% of participants experienced improved daily living task completion when using OrCam, with quality of life improvements apparent immediately without requiring extensive training. However, at USD 4,250, the device remains prohibitively expensive for most Indian PwDs whose monthly incomes often fall below INR 10,000, illuminating persistent digital divides.

The Open University's Taylor chatbot exemplifies how conversational AI can reduce disclosure barriers for students with disabilities. By allowing anonymous, flexible, voice-based or text-based disability disclosure, Taylor removes stress and stigma associated with traditional form-filling, demonstrating that technology can humanize bureaucratic processes[7]. Benetech's AI-driven process for converting complex STEM materials illustrates social entrepreneurship in disability technology. By developing neural networks identifying mathematical and chemistry equations, the organization can convert math textbooks containing thousands of equations into accessible format within minutes, enabling visually impaired students to participate fully in STEM education.

2.2 Persistent Challenges and Algorithmic Discrimination

Despite opportunities, AI systems demonstrate persistent bias patterns disproportionately harming PwDs. Non-representative datasets constitute a primary source of bias. Facial recognition systems developed on predominantly non-disabled populations show significantly lower accuracy for individuals with facial differences, compounding employment discrimination[8]. Algorithmic systems embed ableist assumptions through feature selection, objective functions, and evaluation metrics. A hiring algorithm optimized for "productivity" systematically disadvantages individuals with disabilities requiring reasonable accommodations, failing to recognize that accommodations enhance overall team performance.

[7] Institute of Educational Technology (2024). How the OU's New Chatbot is Helping Disabled Students. Retrieved from https://iet.open.ac.uk/research/new-chatbot-for-ou-disabled-students

[8] Juscorpus (2025). 'Unfair by Design: Fighting AI Bias in E-Governance in India'. Retrieved from https://www.juscorpus.com/unfair-by-design-fighting-ai-bias-in-e-governance-in-india/

Intersectional exclusion represents another critical concern. Individuals with overlapping marginalized identities face compounded algorithmic discrimination. Indian research on facial recognition bias demonstrates that darker-skinned individuals and women face lower accuracy rates, with disparities magnified for disabled individuals within these categories.

Data privacy and exploitation risks accompany AI deployment affecting PwDs. The DPDP Act 2023 creates ambiguities regarding persons with disabilities and guardianship that may reinforce paternalism and deny PwDs autonomy in data governance[9]. Inferential risks emerge as AI systems may infer disability status without explicit consent, enabling discrimination. Secondary use risks arise when data collected for healthcare purposes are re-purposed for employment or insurance decisions. Algorithmic exploitation occurs when systems develop elaborate disability profiles predicting and pre-emptively excluding PwDs from opportunities.

Usability barriers persist despite well-intentioned AI systems. Microsoft Seeing AI usability studies identified multiple challenges: difficulty reading expiration dates on curved surfaces, poor recognition of digital screens, inconsistent probability statements causing user confusion, and difficulty with multi-column text. These findings demonstrate that accessibility requires ongoing iterative design informed by disabled users.

3. India's Legal Framework: Existing Provisions and Gaps

3.1 Rights of Persons with Disabilities Act, 2016: Key Provisions

The RPwD Act 2016, enacted to implement India's obligations under the UN Convention on the Rights of Persons with Disabilities (UNCRPD) ratified in 2007, represents paradigm shift from medical to social model disability frameworks[10]. Section 2(s) defines accessibility as "the ability of a person with disability to access, enter, exit and use a building or a part thereof, including its facilities, to avail of services rendered therein, or any other assistance, device or tool needed to access such buildings or facilities," with legislative intent extending to "information and communication technology" (ICT) systems[11].

Section 3 of the Act prohibits discrimination based on disability in employment, education, access to services, and political participation. The broad language of "discrimination" potentially encompasses algorithmic discrimination, though interpretation requires judicial development[12]. Section 4 mandates that establishments both public and private provide

[9] Digital Personal Data Protection Act, 2023, No. 22 Acts of Parliament, India, Section 2(s); DPDP Rules Draft Definition (2025)
[10] Rights of Persons with Disabilities Act, 2016, No. 49, Acts of Parliament, India, Preamble and Sections 1–5.
[11] Rights of Persons with Disabilities Act, 2016, Section 2(s)
[12] Rights of Persons with Disabilities Act, 2016, Section 3.

accessibility in physical infrastructure, transportation, and ICT systems[13].

The Harmonized Guidelines for Standards of Accessibility (2021), developed pursuant to Section 29 of the RPwD Act, address physical accessibility, transportation, and ICT systems. The guidelines align with WCAG 2.1 Level AA standards, requiring digital services to be perceivable, operable, understandable, and robust[21]. However, significant gaps exist: the guidelines predate contemporary AI and machine learning systems, do not specifically address algorithmic systems or automated decision-making, and treat accessibility as user interface design problem rather than recognizing how algorithmic opacity and bias create accessibility barriers different from interface design challenges.

3.2 Critical Regulatory Gaps

The RPwD Act 2016 lacks AI-specific accountability mechanisms, containing no provisions for algorithmic auditing, transparency, or explainability[14]. Enforcement occurs through complaint mechanisms and litigation—approaches that are slow and reactive rather than preventive. The Act provides vague reasonable accommodation standards without guidance regarding what constitutes reasonable accommodation in AI-driven systems. Should reasonable accommodation require modifying an algorithm? Providing alternative decision-pathways? Full transparency regarding algorithmic processes? The Act does not clarify[15].

Participatory requirements are absent: the Act does not mandate participation of PwDs in technology design or governance processes, failing to embed the disability rights principle "Nothing About Us Without Us" as statutory obligation[16] The Act provides penalties (INR 10,000 for first offense, INR 50,000 to INR 500,000 for subsequent offenses) but does not authorize affirmative obligations to redesign systems or compensate individuals harmed by algorithmic discrimination.

3.3 Digital Personal Data Protection Act, 2023: Protections and Ambiguities

The DPDP Act 2023, operationalized through rules notified in November 2025, introduces specific provisions for protecting data of vulnerable populations including persons with

[13] Rights of Persons with Disabilities Act, 2016, Section 4.
[14] Drishti IAS (2024). 'Enhancing Accessibility for Persons with Disabilities'. Retrieved from https://www.drishtiias.com/daily-updates/daily-news-analysis/enhancing-accessibility-for-persons-with-disabilities
[15] Rights of Persons with Disabilities Act, 2016, Section 2(m).
[16] Gorman, R. (2024). 'Disability data justice from the ground up: A practice-led, participatory co-design approach', Critical Studies, 18(1), 28–43.

disabilities[17]. Section 9 requires that before processing personal data of a person with disability who has a lawful guardian, data fiduciaries obtain verifiable guardian consent[18].

However, significant ambiguities create risks. The DPDP Act defines "person with disability" as an individual who (i) has long-term impairment limiting functioning and (ii) "despite being provided adequate and appropriate support, is unable to take legally binding decisions." This definition creates binary categorization failing to recognize: individuals with disabilities who have capacity to make autonomous decisions with appropriate support; temporary disabilities or disabilities with varying capacity depending on context; and the social model understanding that "inability to decide" reflects social barriers, not inherent cognitive limitation[19].

By vesting decision-making authority in legal guardians, the DPDP Act may reinforce paternalism and deny PwDs autonomy in data governance.

Research documents how guardianship systems often fail to prioritize ward preferences and can be vehicles for abuse. The Act does not adequately address risks of AI systems inferring disability status from data patterns (purchasing behavior, search history, location data) without explicit consent, enabling discrimination.

3.4 Supreme Court's Pragya Prasun Judgment: Expanding Digital Rights

In landmark judgment Pragya Prasun & Ors. v. Union of India (2024), the Supreme Court affirmed that digital accessibility is a fundamental right under Article 21 of the Constitution[20]. The case challenged exclusion of PwDs from digital KYC processes, which are prerequisites for accessing financial services, opening bank accounts, and receiving government welfare benefits.

The Court held that "full participation in society today requires digital access" and that denial of digital access violates Article 21's right to life and dignity. The Court found that existing digital KYC frameworks amount to "systemic discrimination" violating both constitutional and statutory obligations.

Citing India's obligations under the UNCRPD to ensure accessibility and meaningful participation of PwDs in all aspects of life, the Court issued twelve detailed directions to regulatory authorities including the Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), Insurance Regulatory and Development Authority (IRDAI), and

[17] Digital Personal Data Protection Act, 2023; Digital Personal Data Protection Rules, 2025 (notified November 2025).
[18] Digital Personal Data Protection Act, 2023, Section 9.
[19] Digital Personal Data Protection Act, 2023, Section 2(s).
[20] Pragya Prasun & Ors. v. Union of India, Supreme Court of India (2024).

Department of Telecom, requiring: formulation of comprehensive, disability-inclusive KYC guidelines; alternative liveness verification methods for visual and facial recognition systems; accessibility standards for digital services; grievance redressal mechanisms; regular auditing of digital accessibility; and engagement with disability advocates in governance.

The judgment establishes that courts will subject technological systems—including algorithmic decision-making—to constitutional and statutory disability rights scrutiny. It creates affirmative obligations for state and non-state actors to design systems inclusively, not merely avoid discrimination. It establishes a meaningful access standard whereby mere provision of formal access is insufficient; systems must be meaningfully accessible to PwDs.

4. International Frameworks and Comparative Analysis

4.1 UN Convention on the Rights of Persons with Disabilities

India ratified the UNCRPD on October 1, 2007, creating binding international obligations[21]. Article 3 establishes general principles including respect for inherent dignity and individual autonomy of persons with disabilities, non-discrimination and full and effective participation in society, and respect for difference and acceptance of PwDs as part of human diversity[22]. Article 9 mandates that states take appropriate measures ensuring persons with disabilities have access to physical environment, transportation, information, communication, and other facilities and services on equal basis with others[23]. Article 21 guarantees that persons with disabilities have the right to seek, receive, and impart information through accessible means and formats[24].

4.2 European Union AI Act: Risk-Based Regulation Model

The European Union's AI Act (2024), the world's first comprehensive AI regulation, provides relevant regulatory precedent[25]. The Act employs risk-based categorization, with systems demonstrating high risk of discrimination—including those affecting vulnerable populations including PwDs—facing stricter requirements for transparency, testing, and human oversight. High-risk AI systems must undergo fundamental rights impact assessments, including

[21] Department of Empowerment of Persons with Disabilities (2024). UNCRPD. Government of India. Retrieved from https://depwd.gov.in/en/policy/uncrpd/
[22] United Nations (2006). Convention on the Rights of Persons with Disabilities, Articles 3, 5.
[23]United Nations (2006). Convention on the Rights of Persons with Disabilities, Article 9.
[24] United Nations (2006). Convention on the Rights of Persons with Disabilities, Article 21.
[25] European Commission (2024). Artificial Intelligence Act. Retrieved from https://digital-strategy.ec.europa.eu/en/library/ai-act

disability impacts. The Act requires users of high-risk systems to receive information about system operation and have rights to human review of automated decisions. Prohibited practices include social scoring systems and certain automated decision-making forms causing legal or similarly significant effects[45]. Disability-specific obligations require that AI systems used for recruitment, education, and benefits allocation be designed ensuring accessibility for PwDs.

4.3 United States AI Bill of Rights

The White House AI Bill of Rights (2022), while not binding legislation, establishes important principles[26]. The Bill identifies freedom from algorithmic discrimination as fundamental right, requiring that algorithms not discriminate based on protected characteristics including disability. It mandates that affected individuals understand when algorithmic decisions affect them and that systems provide redress mechanisms. It requires human alternatives and fallbacks for significant decisions, with human review or alternatives to automated systems available.

4.4 UN Committee General Comment on Article 9

The UN Committee on the Rights of Persons with Disabilities, in its General Comment on Article 9 (2020), specifically addressed digital accessibility and emerging technologies[27]. The Committee emphasized accessibility by design—digital systems including AI must be accessible to persons with disabilities from the outset, not as afterthought. It mandated participatory design with meaningful involvement of persons with disabilities in designing and developing digital systems. It highlighted data governance requirements: personal data of persons with disabilities must be protected against misuse and manipulation.

5. Analysis of Regulatory Gaps and Proposed Reforms

5.1 Identified Gaps in Current Framework

India's disability rights legislation predates the AI revolution. The RPwD Act 2016, enacted before large language models, autonomous vehicles, facial recognition, and algorithmic decision-making systems became widespread, lacks specific provisions for algorithmic transparency requirements, mandated algorithmic auditing and testing, explainability

[26]Executive Office of the President (2022). Blueprint for an AI Bill of Rights. White House. Retrieved from https://www.whitehouse.gov/wp-content/uploads/2022/10/Blueprint-for-an-AI-Bill-of-Rights.pdf
[27] UN Committee on the Rights of Persons with Disabilities (2020). General Comment on Article 9 – Accessibility. CRPD/C/GC/2, 1–15

obligations, and data provenance assessment.

Enforcement mechanisms rely primarily on individual complaint mechanisms and litigation—approaches that are slow and reactive, resource-intensive for individuals harmed by algorithmic discrimination, and individualized rather than systemic, addressing individual cases without requiring systemic redesign.

Definitional ambiguities persist regarding "accessibility" in ICT context. While Harmonized Guidelines 2021 reference WCAG 2.1, they do not address algorithmic systems, automated decision-making, multimodal AI, or how accessibility standards apply to systems generating new content or adapting in real-time[28].

5.2 Proposed Amendment to RPwD Act 2016: Section 4A

The RPwD Act 2016 should be amended to include new Section 4A addressing AI and automated decision-making systems. Proposed Section 4A should apply to artificial intelligence systems including machine learning models, algorithmic decision-making systems, and automated processing systems that: process personal data of persons with disabilities; make or support decisions affecting persons with disabilities; or are deployed in public services, employment, education, healthcare, financial services, or other critical domains.

Accessibility requirements should mandate that all AI systems be accessible by design with accessibility requirements embedded in specifications, development, testing, and deployment; tested with persons with disabilities representing diverse disability types before deployment; accessible to persons with disabilities through multiple input modalities and output formats; capable of functioning with assistive technologies; and subject to ongoing accessibility auditing and user testing.

Anti-discrimination and bias prevention provisions should require that AI systems not discriminate based on disability; developers conduct pre-deployment bias audits examining system performance across disability types and intersectional identities; training data achieve representative inclusion of persons with disabilities; and system outputs not penalize reasonable accommodations or disability-related variations.

Transparency, explainability, and accountability provisions should require developers to publish algorithmic impact assessments describing system purpose, training data sources, performance metrics, potential harms, accessibility features, and data governance practices.

[28] Griffiths, T., Slaughter, R., & Waller, A. (2024). 'Use of artificial intelligence (AI) in augmentative and alternate communication (AAC): Community consultation on risks, benefits and the need for a code of practice', Journal of Enabling Technologies, 18(4), 232–247.

Individuals affected by algorithmic decisions must receive explanations in accessible formats. Organizations deploying systems must designate accessibility officers responsible for ongoing monitoring and redress[29].

Participatory design and governance provisions should mandate meaningful involvement of persons with disabilities in design, development, testing, deployment, and governance of AI systems; establishment of disability advisory boards comprising disabled people with decision-making authority; minimum 25% disability representation in user testing; and documentation of accommodation requests with published organizational response.

5.3 Amendments to DPDP Act 2023

The DPDP Act 2023 should be amended to clarify definitions and strengthen protections. The definition of "person with disability" should recognize individuals with disabilities who have capacity to make decisions with appropriate support, context-dependent capacity varying with environmental factors, and supported decision-making as alternative to guardianship.

The Act should recognize and facilitate supported decision-making whereby persons with disabilities can authorize supporters to help them make informed decisions about data processing without supporters replacing disabled individuals' decision-making. The Act should explicitly prohibit inferential identification of disability status without consent, use of disability-related data for discriminatory decisions, secondary use of disability data beyond original purpose, and algorithmic profiling or targeting based on disability.

The Act should establish participatory data governance requirements for organizations processing significant disability-related data, requiring establishment of disability data governance boards and regular auditing of algorithms processing disability data.

5.4 Proposed National AI Regulation

The government should enact standalone comprehensive AI regulation or substantially amend existing frameworks to include disability-specific provisions. A proposed National AI and Algorithmic Fairness Act should require algorithmic impact assessments for high-risk systems, with assessments evaluating impacts on persons with disabilities and public disclosure of results (with confidential information protected); independent auditing of high-risk systems for bias and discrimination with results disclosed to regulators and affected individuals; developer

[29] Swaraj Ability (2024). RPwD Act Explained: Inclusion, Rights & Workplace Impact. Retrieved from https://www.swarajability.org/

provision of accessible documentation regarding system purpose, design, training data, performance, and limitations; and rights to human review of high-stakes algorithmic decisions. The regulation should establish institutional accountability through designation of Chief Algorithmic Officers responsible for compliance, regular reporting to relevant regulators, liability for non-compliance harms, and mandatory insurance or bonding for high-risk systems. Regulatory authority should be vested in a Central Board or regulatory authority with power to issue algorithmic fairness standards, audit systems and conduct compliance investigations, impose remedies and penalties, support participatory governance, and engage with affected communities.

6. Case Studies: Lessons from AI Implementation

6.1 Algorithmic Discrimination in Indian Digital KYC Systems

The Pragya Prasun case revealed systemic exclusion of persons with visual disabilities and facial recognition disabilities from digital KYC processes, preventing access to financial services, bank accounts, government welfare, and digital participation[30]. Root causes included developers designing facial recognition systems using datasets with limited disability representation, algorithmic liveness verification assuming specific visual and facial capabilities, and lack of participatory testing with PwDs before deployment.

The Supreme Court recognized digital accessibility as fundamental right and issued binding directions for systemic reform. Regulatory lessons include that algorithmic systems functioning as gatekeepers to essential services must be subject to accessibility review before deployment; formal access is insufficient—systems must be meaningfully usable by PwDs; and proactive judicial intervention may be necessary to ensure institutional compliance with accessibility obligations.

6.2 Hiring Algorithm Bias

Research by Buyl et al. (2022) documents how hiring algorithms embed ableist biases, systematically disadvantaging candidates with disabilities[31]. Algorithms optimized for "productivity" often discount accommodations as factors reducing rather than enabling performance, over-weight physical presence requirements, penalize employment gaps reflecting disability-related treatment, and flag candidates with disabilities as "outliers" for

[30] Pragya Prasun (2024), 1–10.
[31] Buyl et al. (2022), 1071–1082.

automatic filtering.

With India's expanding AI use in recruitment (particularly in IT, financial services, and large corporations), the risk of algorithmic employment discrimination is acute[32]. The RPwD Act 2016 mandates non-discrimination in employment and requires reasonable accommodation, but lacks specific provisions for algorithmic recruitment systems[33].

6.3 Participatory Design Success: Microsoft Seeing AI

Microsoft's Seeing AI demonstrates how participatory design informed by blind developers and lived disability experience created genuinely useful AI accessibility tools. The development process involved blind developers and accessibility experts in ideation and design; iterative usability testing with blind and low-vision users; transparent communication about system limitations and capabilities; and free availability addressing cost barriers.

6.4 Social Enterprise Model: Benetech STEM Accessibility

Benetech demonstrates how social enterprise models can align profit, accessibility, and disability justice. By developing AI to convert STEM materials to accessible format, it created solutions for systemic accessibility barriers while building sustainable business models. Tax and regulatory frameworks can incentivize social enterprise models prioritizing accessibility. Non-profit organizations and social enterprises often lead in accessibility innovation, scalability requires attention to cost structures and sustainability[34].

7. Implementation Framework and Recommendations

7.1 Core Principles for AI Regulation

The regulatory framework should be grounded in: Accessibility by Design and Default—AI systems must be accessible to persons with disabilities from the outset, with requirements embedded in specifications, design, development, testing, and deployment stages. Non-Discrimination and Substantive Equality—AI systems must not discriminate based on disability and must support substantive equality ensuring disabled individuals can participate fully and meaningfully in society.

Participatory Governance—Persons with disabilities must be meaningfully involved in

[32] IBA (2025). 'Artificial intelligence in Indian workplaces: diversity law considerations'. Retrieved from https://www.ibanet.org/artificial-intelligence-in-indian-workplaces

[33] Rights of Persons with Disabilities Act, 2016, Sections 33–38.

[34]Ismail, K., Sohel, M.H., & Ayuniza, U.N. (2012). 'Technology social venture: A new genre of social entrepreneurship?', Procedia - Social and Behavioral Sciences, 40, 429–434.

designing, developing, deploying, and governing AI systems, with "Nothing About Us Without Us" embedded as statutory obligation. Transparency and Explainability—Developers must provide transparency regarding algorithmic logic, training data, decision-making processes, and limitations, with individuals affected by algorithmic decisions receiving explanations. Autonomy and Supported Decision-Making—AI governance frameworks must respect PwDs' autonomy and facilitate supported decision-making rather than defaulting to paternalistic guardianship models. Data Justice—Personal data of PwDs must be protected against exploitation, inference, discrimination, and secondary use, respecting disability privacy and avoiding instrumentalization of disability experiences.

7.2 Implementation Roadmap

Immediate Actions (0-12 months): Parliamentary introduction of RPwD Act Amendment with Section 4A; stakeholder consultation process engaging disability advocates, technologists, and affected communities; DPDP Act clarifications through Ministry notification; and government announcement of comprehensive AI regulation timeline.

Medium-term Actions (6-18 months): Establishment of Central AI and Disability Rights Board with multi-stakeholder governance including disabled people; AISI disability integration through formal representation and funded positions; strengthening of Accessible India Campaign with enhanced funding and AI-powered accessibility monitoring.

Technical Actions (12-24 months): Development of AI Accessibility and Fairness Standards extending WCAG 2.1 guidelines to algorithmic systems; disability-specific bias testing frameworks; participatory design infrastructure funding; and data governance support.

Capacity Building (Ongoing): Judicial education on disability rights and AI governance; administrative training for government agencies deploying AI; technology sector engagement forums; and disability community capacity building for technology policy expertise.

8. Anticipated Challenges and Counter-Arguments

8.1 "Disability-Specific AI Regulation is Burdensome"

Disability-specific AI regulation is justified because persons with disabilities face systemic exclusion from technological participation; market mechanisms alone have failed to produce accessible, non-discriminatory systems; costs of accessibility innovation are declining; accessibility benefits broader populations through universal design principles; and legal frameworks establishing baseline standards are more efficient than case-by-case litigation.

8.2 "Regulation Will Stifle Innovation"

Accessibility and fairness requirements can drive beneficial innovation. Companies operating under accessibility requirements (in EU markets) continue innovating successfully. Accessibility often produces more robust, elegant solutions benefiting broader populations. Innovation stifled through lack of accessible technology for disabled professionals is greater loss. Incentive structures (tax benefits, grants) can support accessibility innovation.

8.3 "Guardianship Protects Vulnerable PwDs"

Guardianship frameworks are associated with abuse, neglect, and autonomy deprivation. Supported decision-making provides better protection while respecting autonomy. The UN Committee on the Rights of Persons with Disabilities has moved away from guardianship toward supported decision-making. Capacity is not binary but varies with support, environment, and decision-type.

9. Conclusion

Artificial intelligence presents profound opportunities and risks for persons with disabilities in India. The technology can dramatically enhance autonomy and accessibility—enabling visually impaired individuals to read independently, supporting students with learning disabilities through personalized education, facilitating employment for individuals with mobility disabilities, and democratizing access to information and services. Simultaneously, unregulated AI deployment risks automating discrimination, perpetuating ableist assumptions at scale, exploiting disability data, and systematically excluding disabled individuals from technological participation and economic opportunity.

India's existing legal frameworks for disability rights, while groundbreaking in recognizing accessibility and non-discrimination as statutory rights, were developed before the AI revolution and do not adequately address algorithmic systems. The RPwD Act 2016 lacks AI-specific provisions, transparent accountability mechanisms, or participatory design requirements.

The DPDP Act 2023, while introducing protections for vulnerable populations, creates ambiguities regarding guardianship and autonomy that may reinforce paternalism. Enforcement mechanisms rely on individual complaints and litigation—approaches too slow and resource-intensive to address systemic algorithmic discrimination.

The Supreme Court's landmark recognition of digital accessibility as fundamental right in Pragya Prasun signals judicial readiness to subject technological systems to disability rights scrutiny and creates opportunities for jurisprudential development. However, courts cannot substitute for comprehensive regulatory frameworks; proactive legislative and regulatory action is essential to prevent harm rather than merely remediate it through litigation.

This paper has proposed a comprehensive legal framework grounded in core principles of accessibility by design, non-discrimination, substantive equality, participatory governance, transparency, autonomy, and data justice. Key recommendations include: Amendment to the RPwD Act 2016 to add Section 4A establishing AI-specific accessibility and fairness requirements, participatory design obligations, transparency standards, and enforcement mechanisms; Amendment to the DPDP Act 2023 to clarify disability definitions, support supported decision-making, strengthen anti-discrimination protections, and mandate participatory data governance.

Enactment of a National AI and Algorithmic Fairness Act establishing comprehensive AI regulation with disability-centered auditing, transparency, accountability, and institutional enforcement; Integration of disability protections into India's emerging AI governance framework; Strengthening of Accessible India Campaign through AI-powered accessibility monitoring and participatory governance; Implementation roadmap addressing legislative, institutional, technical, and capacity-building actions over 24-month timeframe; and Sustained engagement with disability communities, civil society, technology sector, and international partners.

These recommendations align with India's constitutional commitments under Article 21 and international obligations under the UNCRPD. Implementation will require sustained political will, cross-sector collaboration, and resourceful investment in disability-centered technology governance. However, the stakes justify the commitment: whether AI becomes a tool for universal inclusion or a mechanism for automating exclusion depends on regulatory choices made now.

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