

Law, technology and child protection: A contemporary analysis of ai in cases of children in conflict with law

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Abstract: Artificial intelligence is increasingly influencing policing, criminal investigation, judicial administration, risk assessment, digital evidence analysis and rehabilitation across criminal justice systems. Its application to children in conflict with law, however, presents qualitatively different legal and ethical concerns because juvenile justice is founded not merely upon determination of responsibility but upon protection, rehabilitation, reintegration, dignity and the possibility of a fresh start. In India, the Juvenile Justice (Care and Protection of Children) Act, 2015 establishes a specialised child-centred framework governed by principles including presumption of innocence, dignity and worth, participation, best interests, equality and non-discrimination, privacy and confidentiality, institutionalisation as a measure of last resort, diversion, fresh start and natural justice. These principles impose stringent normative limitations upon the use of artificial intelligence in juvenile justice. AI technologies may potentially assist authorities in analysing digital evidence, managing case pendency, identifying children requiring services, facilitating translation and accessibility, improving rehabilitation planning and detecting systemic patterns. At the same time, predictive policing, facial recognition, automated risk scoring, profiling and algorithm-assisted assessments may reproduce historical social inequalities, create opaque classifications and convert socioeconomic disadvantage into apparently scientific predictions of future criminality.

The concern becomes particularly important in relation to children aged sixteen to eighteen alleged to have committed heinous offences. Section 15 of the Juvenile Justice Act requires the Juvenile Justice Board to make an individualised preliminary assessment concerning the child's mental and physical capacity, understanding of consequences and circumstances surrounding the alleged offence. The Supreme Court's decision in *Barun Chandra Thakur v. Master Bholu* emphasises the delicacy and complexity of this process. AI cannot legitimately replace the Board, psychologists, psycho-social workers or other qualified experts in making such an assessment.

The article analyses artificial intelligence through India's constitutional framework, juvenile justice legislation, privacy jurisprudence, the Digital Personal Data Protection Act, 2023, and the India AI Governance Guidelines released in 2025. As of August 2026, India follows a principle-based, sectoral and techno-legal AI governance model rather than a comprehensive horizontal AI statute. The national guidelines expressly emphasise human oversight, fairness, accountability and proportionate safeguards for sensitive and high-risk AI applications. The article compares this approach with international child-rights standards and the European Union AI Act. It concludes that AI should remain a supportive and auditable instrument in juvenile justice and should never become an autonomous mechanism for determining culpability, dangerousness, transfer to adult trial, detention or rehabilitation outcomes. A rights-based framework of child-specific algorithmic impact assessment, meaningful human oversight, explainability, data minimisation, independent audits and effective remedies is essential if technology is to function as a protective rather than punitive instrument.

Keywords: Artificial Intelligence; Juvenile Justice; Children in Conflict with Law; Child Protection; Algorithmic Bias; Predictive Policing; Juvenile Justice Board; Rehabilitation; Child Privacy; Digital Evidence; Facial Recognition; Algorithmic Risk Assessment; Best Interests of the Child; Fresh Start; AI Governance.

INTRODUCTION

Artificial intelligence has moved rapidly from experimental computation to systems capable of influencing decisions affecting employment, education, finance, healthcare, policing and the administration of justice. Machine-learning systems can identify patterns in enormous datasets, classify images, detect correlations, analyse digital communications, recognise faces, predict probabilities and generate textual or audiovisual content. Within criminal justice systems, such technologies may assist crime analysis, forensic examination, investigation, case management, identification, translation and assessments concerning risk or rehabilitation.

The incorporation of AI into cases involving children requires significantly greater caution than its application to ordinary administrative activities. A child in conflict with law is not simply a smaller version of an adult accused. Juvenile justice is based upon developmental science, reduced culpability, vulnerability, rehabilitative potential and the recognition that childhood behaviour should not permanently determine an individual's future. The Indian legal framework consciously uses the expression *“child in conflict with law”* rather than conventional criminalising labels, reflecting the principle of non-stigmatising semantics.

The Juvenile Justice (Care and Protection of Children) Act, 2015 constitutes the principal statutory framework. Its long title expressly adopts a child-friendly approach in adjudication and disposal in the best interests of children and for rehabilitation and social reintegration. Section 3 contains fundamental principles guiding every authority functioning under the Act. These include presumption of innocence, dignity and worth, participation, best interest, safety, equality and non-discrimination, privacy and confidentiality, institutionalisation as a measure of last resort, repatriation and restoration, fresh start, diversion and natural justice.

These principles create an important question for the technological age: *Can an algorithm designed to identify risk, predict behaviour or classify individuals be reconciled with a juvenile justice system whose central objective is to prevent permanent labelling of children?*

AI may create important opportunities. Automated case-management systems may identify children whose inquiries have been pending beyond prescribed periods. Language technologies may enable children to understand legal proceedings in their own language. Digital tools may improve access to legal aid. Machine-assisted analysis may help detect

patterns of institutional violence, repeated school exclusion or socioeconomic vulnerabilities requiring preventive intervention. AI-supported forensic systems may help distinguish fabricated evidence from authentic evidence, particularly as deepfake technology becomes more sophisticated.

Yet the same technologies may be used in ways fundamentally inconsistent with child rights. Predictive-policing systems may identify neighbourhoods or children as supposedly high-risk because historical policing data reflect earlier patterns of surveillance. Facial-recognition systems may falsely identify children. Risk-prediction algorithms may assign higher scores because of family history, poverty, school absenteeism, neighbourhood, prior police contact or peer associations. Generative AI may produce inaccurate summaries of case files. Automated systems may generate apparently objective conclusions while concealing the assumptions, datasets and value judgments embedded in their design.

These concerns are particularly serious because children's personalities and circumstances are developing. Characteristics appearing statistically predictive at one stage of adolescence may rapidly change through family support, schooling, counselling, peer relationships and social opportunities. An algorithm trained to extrapolate the future from the past may therefore conflict directly with the rehabilitative philosophy of juvenile justice.

Indian constitutional law further reinforces these concerns. Articles 14, 15(3), 21 and 39(e)–(f) collectively provide a constitutional environment supporting equality, dignity, child welfare and protection against exploitation. The Supreme Court's recognition of privacy as a fundamental right in *Justice K.S. Puttaswamy (Retd.) v. Union of India* requires State data processing and surveillance to satisfy legality, legitimate purpose, necessity and proportionality.

Data protection adds another dimension. Section 9 of the Digital Personal Data Protection Act, 2023 establishes special safeguards concerning children's personal data, including restrictions upon processing likely to cause detrimental effects and upon tracking or behavioural monitoring of children, subject to statutory exceptions. Importantly, however, India's implementation regime is transitional. Following the November 2025 commencement notifications and DPDP Rules, most substantive processing provisions including Sections 3–17 of the Act are scheduled to commence eighteen months after 13 November 2025, i.e. in

May 2027. Thus, as of 25 August 2026, the substantive child-data obligations under Section 9 have not yet fully commenced. This makes the protections already contained in the Juvenile Justice Act particularly confidentiality and fresh start even more significant in the immediate context.

India's national AI policy has also evolved. The India AI Governance Guidelines were released on 5 November 2025 and adopt seven guiding principles including Trust, People First, Fairness and Equity, Accountability, Understandable by Design, and Safety, Resilience and Sustainability. The framework expressly favours human oversight and recommends proportionate safeguards for sensitive and high-risk AI applications. The Government has stated that a separate horizontal AI law is not considered necessary at the present stage and that AI risks are instead to be addressed through existing laws, sectoral regulation and techno-legal measures.

Against this contemporary legal background, this article examines whether artificial intelligence can become a legitimate protective tool within India's juvenile justice system. It analyses historical development, potential applications, risks of predictive decision-making, privacy and confidentiality, algorithmic discrimination, Section 15 preliminary assessments, rehabilitation, international approaches and reforms required for a child-sensitive AI governance framework.

Historical Background

The history of juvenile justice reflects a gradual transition from punishment of children as miniature adults toward recognition of childhood as a distinct developmental stage requiring specialised legal treatment. Traditional criminal law historically made only limited distinctions between young offenders and adults. Children could be subjected to punitive processes based principally upon the offence committed rather than their age, circumstances, developmental capacity or possibilities of rehabilitation. During the nineteenth and twentieth centuries, developments in psychology, criminology, social work and child welfare increasingly challenged this model. Reformatories, juvenile courts and probation systems emerged from the understanding that offending during childhood was frequently associated with environmental conditions, neglect, poverty, family disruption and developmental immaturity and that rehabilitation could often provide better social outcomes than punishment.

International standards played an important role in consolidating the child-centred approach. The United Nations Standard Minimum Rules for the Administration of Juvenile Justice, 1985 the Beijing Rules emphasised proportionality, diversion, privacy and the well-being of the juvenile. The Convention on the Rights of the Child, 1989 subsequently established an international child-rights framework. Articles 37 and 40 require child justice systems to respect dignity, ensure procedural guarantees, use deprivation of liberty only as a last resort and promote reintegration and the assumption of a constructive role in society. The United Nations Rules for the Protection of Juveniles Deprived of their Liberty, 1990 further restricted custodial approaches. The Committee on the Rights of the Child has since reiterated that public safety is best served through comprehensive child justice systems respecting children's rights, diversion and rehabilitation.

India's juvenile justice legislation evolved within this international environment. Earlier Children's Acts operated unevenly across States. The Juvenile Justice Act, 1986 attempted to establish greater national uniformity. It was followed by the Juvenile Justice (Care and Protection of Children) Act, 2000, enacted in the context of India's obligations under the Convention on the Rights of the Child. The legislation progressively shifted institutional language from punishment toward care, protection and rehabilitation.

The Juvenile Justice (Care and Protection of Children) Act, 2015 represented a further restructuring. It retained eighteen years as the general age threshold but created a special procedure for children who have completed sixteen years and are alleged to have committed heinous offences. Under Section 15, the Juvenile Justice Board must make a preliminary assessment concerning the child's mental and physical capacity to commit the alleged offence, ability to understand its consequences and circumstances in which the offence was allegedly committed. Assistance may be obtained from experienced psychologists, psycho-social workers or other experts. The statute expressly clarifies that this assessment is not a trial.

The 2016 Model Rules developed procedural safeguards for this assessment. They contemplate involvement of professionals experienced in working with children in difficult circumstances and preserve the presumption of innocence. The framework is therefore fundamentally individualised and multidisciplinary. Unlike conventional sentencing systems, it is not designed to calculate a statistically predicted level of dangerousness.

The Supreme Court's decision in *Barun Chandra Thakur v. Master Bholu* in 2022 became a landmark in understanding Section 15. The Court examined the complexity of assessing mental capacity, physical capacity, understanding of consequences and the circumstances surrounding alleged offending. It observed deficiencies in the available framework and highlighted the importance of specialised expert assistance. The judgment demonstrates why a superficial checklist cannot legitimately determine whether a child should face the consequences associated with adult trial.

Technology had already begun transforming Indian criminal justice by this time. The Information Technology Act, 2000 established legal recognition for electronic records. CCTV footage, mobile-phone records, social-media communications, geolocation information and computer forensics increasingly entered criminal investigations. Digital technology offered new evidence but simultaneously expanded surveillance capacity.

The next stage involved automated analysis rather than merely digital evidence. Internationally, machine-learning systems began being used for crime mapping, facial recognition and risk assessment. Risk instruments were introduced in several jurisdictions to estimate recidivism or failure-to-appear probabilities. These tools attracted criticism because statistical correlations may reproduce inequalities contained in historical data. Berk's study of juvenile justice risk assessment demonstrated that fairness and accuracy involve complex trade-offs that cannot be resolved by technology alone. Miron, Tolan, Gómez and Castillo similarly found that machine-learning models predicting juvenile recidivism could improve predictive performance while producing problematic disparities between protected groups.

Children's rights law also responded to the expanding digital environment. The Committee on the Rights of the Child's General Comment No. 25 of 2021 expressly recognises artificial intelligence, algorithms, automated systems, data analytics and biometrics as components of children's digital environment. UNICEF's *Policy Guidance on AI for Children* emphasised children's safety, privacy, fairness, inclusion, transparency and well-being in AI design and deployment. UNESCO's 2021 Recommendation on the Ethics of Artificial Intelligence similarly called for meaningful participation of children and young people in decisions concerning technologies affecting their lives.

In India, the Digital Personal Data Protection Act, 2023 established a specific statutory category of children's data protection, defining a child as an individual below eighteen years. The legislation prohibits data processing likely to cause detrimental effects upon children's well-being and, subject to exceptions, restricts behavioural monitoring. This development creates an important connection with juvenile justice because algorithmic risk assessments inevitably depend on processing behavioural and personal data.

The contemporary stage began with the IndiaAI Mission, approved in March 2024, and the India AI Governance Guidelines released in November 2025. The guidelines adopt a principle-based model rather than an immediate comprehensive AI statute and recognise bias, discrimination, lack of transparency and risks to children as important governance concerns. They explicitly observe that children constitute a vulnerable category requiring special protection in relation to algorithmic systems.

By 2026, India had also begun creating national AI governance institutions. The Government constituted the AI Governance and Economic Group in April 2026 and a Technology and Policy Expert Committee to provide technical, legal and policy advice. The historical trajectory has therefore moved from juvenile justice as welfare law, through rights-based child justice, to a new stage in which automated systems can influence decisions involving children. The central challenge is ensuring that technological sophistication does not reverse the fundamental movement of juvenile justice from prediction and punishment toward individualised protection and rehabilitation.

Artificial Intelligence and the Contemporary Juvenile Justice Process

AI can interact with juvenile justice at several stages: policing and identification; investigation and evidence analysis; assessment by the Juvenile Justice Board; bail and placement; rehabilitation; institutional management; and post-disposal record administration.

AI-assisted digital forensics may help investigators process large volumes of electronic material, identify relevant communications, authenticate photographs or videos and detect manipulated content. Such applications can protect children as well as assist prosecution because technological analysis may expose fabricated evidence or establish that a child was not present at a particular place.

Natural-language technologies can improve access to justice. A child may receive information about proceedings in a familiar language and simpler vocabulary. AI-assisted transcription can create records of hearings. Translation systems may help JJBs communicate with migrant children or those from linguistic minorities, although important statements must be verified by qualified humans because machine translation can generate consequential errors.

Case-management AI could also identify procedural delay. The JJ Act places importance on timely inquiries, and automated systems could flag cases approaching statutory deadlines, children detained for excessive periods or rehabilitation plans requiring review. Such use is relatively low-risk because AI assists administrative attention rather than deciding a child's rights.

More controversial applications arise when AI moves from **organising information to predicting individual behaviour**. A system may attempt to calculate the probability that a child will reoffend, abscond, become violent or fail rehabilitation. Such classifications can influence detention, bail, institutional placement or transfer decisions. Here AI begins affecting liberty and future identity and must therefore attract the highest degree of scrutiny.

AI, Predictive Policing and the Risk of Criminalising Vulnerability

Predictive policing generally uses historical data to estimate where offences may occur or which persons may present higher risks. Its apparent attraction lies in allocating limited police resources efficiently. Applied to children, however, prediction can generate serious rights violations.

Historical criminal justice data are not neutral descriptions of social behaviour. They are products of prior police decisions concerning where officers patrol, whom they stop, which conduct is reported and which cases enter formal systems. Communities subjected to greater surveillance naturally generate more recorded police data. Training an algorithm on those records may transform past enforcement patterns into future predictions.

This creates a feedback loop. A locality identified as high-risk receives greater policing; greater policing detects more offences; new offence data reinforce the algorithm's original designation. Children living in disadvantaged neighbourhoods may consequently acquire higher algorithmic risk merely because of where they live.

Family background, school attendance, economic circumstances and prior police contact are particularly problematic variables. Such factors may be statistically correlated with recorded offending but are also strongly associated with structural inequality. Juvenile justice law requires the State to respond positively to vulnerability. An algorithm that converts vulnerability into evidence of dangerousness reverses that protective principle.

The European Union AI Act provides an instructive safeguard. It prohibits AI systems used to predict the risk that an individual will commit a criminal offence **solely** on the basis of profiling or personality traits, while permitting limited AI support for human assessment already based upon objective, verifiable facts linked to criminal activity. The distinction is especially relevant to children and deserves consideration in India.

Section 15 Preliminary Assessment and the Limits of Algorithmic Decision-Making

The strongest case for restricting AI arises in Section 15 proceedings. A decision following preliminary assessment may ultimately expose a sixteen-to-eighteen-year-old child alleged to have committed a heinous offence to an adult-oriented process before the Children's Court. It is therefore one of the most consequential decisions possible within juvenile justice.

Section 15 requires assessment of four interdependent matters: mental capacity, physical capacity, ability to understand consequences and circumstances surrounding the alleged offence. These cannot legitimately be reduced to a numerical risk score.

Mental capacity is developmental and contextual. Understanding consequences cannot be inferred simply from school performance or chronological age. Circumstances may include coercion, abuse, family environment, peer pressure, developmental disability, emotional condition, exploitation or social deprivation. A trained professional can explore these factors through interaction; an algorithm only processes variables made available to it.

The Supreme Court in *Barun Chandra Thakur* emphasised the complexity of preliminary assessment and the need for expertise. The case records Rule 10A's expectation that experienced psychologists, psycho-social workers or experts familiar with children in difficult circumstances may assist the Board.

Accordingly, AI may assist professionals in organising records or locating relevant literature, but it should never determine whether a child possesses the capacity required by Section 15. A machine-generated risk score cannot replace clinical assessment, social investigation or the independent statutory judgment of the Board.

Where any algorithmic tool is used during such assessment, the child and legal representative should be informed. They should know what information was processed, the purpose of the tool, limitations, relevant factors and whether the output influenced the decision. The child must be able to contest incorrect data. A secret algorithm influencing a transfer-related decision would be difficult to reconcile with natural justice.

Algorithmic Bias, Equality and Non-Discrimination

AI systems learn from data, and datasets frequently contain social inequality. Even where sensitive characteristics such as caste, religion, disability or gender are removed, apparently neutral variables may function as proxies.

Postal code may correlate with caste or socioeconomic status. Type of school may correlate with family income. Language patterns may correlate with regional or ethnic identity. Prior police encounters may reflect unequal policing rather than greater criminal propensity.

Research on juvenile risk assessment demonstrates the difficulty of reconciling competing definitions of algorithmic fairness. Berk found that different fairness criteria can conflict and that technical optimisation cannot itself determine which conception of fairness society should choose. Miron and colleagues found that juvenile recidivism models could achieve higher predictive performance while producing worse outcomes on relevant fairness metrics.

This is particularly important under Section 3 of the JJ Act, which requires equality and non-discrimination. An AI system cannot be considered acceptable merely because it achieves high overall accuracy. A model that performs significantly worse for girls, tribal children, linguistic minorities, children with disabilities or economically disadvantaged groups may produce unlawful inequality despite apparently impressive aggregate performance.

India's AI Governance Guidelines recognise precisely these risks by identifying fairness, equity, human oversight and accountability as central principles and recommending

algorithmic audits to detect bias and unfairness. These general principles should be applied more strictly where children and liberty are involved.

Privacy, Confidentiality and the Principle of Fresh Start

Juvenile justice places unusual importance upon confidentiality because disclosure of childhood involvement in criminal proceedings can permanently damage education, employment, family relationships and social identity.

Section 74 of the JJ Act restricts disclosure of the identity of children involved in proceedings. Section 24 ordinarily protects children dealt with under the Act from disqualifications attached to conviction and requires destruction of relevant records after the prescribed period, subject to statutory exceptions for certain cases involving heinous offences and adult trial.

Section 3's **principle of fresh start** goes further conceptually: past records should ordinarily be erased so that the child can rebuild life without permanent stigma.

Artificial intelligence creates a direct challenge to this principle because machine-learning systems depend upon persistent data. Once records have been copied into training datasets, backups, analytics platforms or derived models, conventional deletion may not fully erase their influence.

This leads to a fundamental legal question: **Can an AI system trained upon juvenile justice records be compatible with the statutory principle requiring those records eventually to disappear?**

A rights-protective answer requires strict data minimisation. Identifiable juvenile records should not become general-purpose AI training material. Where research is genuinely necessary, anonymisation, controlled environments, purpose limitation and institutional ethics review should be mandatory.

The DPDP Act strengthens the future legal environment by providing specific protections for children's personal data, including restrictions on detrimental processing and behavioural monitoring. Yet juvenile justice should demand stronger standards than ordinary commercial

data processing because the relevant data may include alleged offending, psychological evaluation, family circumstances, health, education and rehabilitation records.

AI systems should therefore follow a principle of **juvenile data separation**: data collected for care, counselling or rehabilitation should not automatically become police intelligence or predictive-enforcement data.

Facial Recognition, Biometrics and Identification

Facial recognition may potentially assist in identifying missing or trafficked children, but its use against children suspected of offending raises different considerations.

Children's facial characteristics change with age, affecting model accuracy. Surveillance images may be poor quality. False positives can expose an innocent child to police intervention and stigma. Biometric systems may also produce uneven accuracy across demographic groups.

The principle of presumption of innocence therefore requires that algorithmic identification remain an investigative lead, not evidence of guilt by itself. Independent corroboration should be necessary.

Untargeted creation of juvenile facial databases would also conflict with privacy and fresh-start values. The EU AI Act's prohibition on creating or expanding facial-recognition databases through indiscriminate scraping of internet or CCTV images offers an important comparative safeguard.

Artificial Intelligence as a Protective and Rehabilitative Instrument

A critical analysis should not treat all AI as harmful. Technology may strengthen the protective objectives of juvenile justice when carefully designed.

First, AI can improve **case monitoring**. Systems can identify delayed social investigation reports, overdue Board inquiries or children remaining in institutional settings beyond appropriate periods.

Second, AI may assist **rehabilitation planning** by helping professionals identify available education, vocational programmes and community resources. The final plan, however, should remain individualised and human-led.

Third, AI can improve **accessibility** for children with disabilities through speech recognition, text-to-speech and alternative communication interfaces.

Fourth, analytical systems may identify **systemic rather than individual risks**. Instead of predicting which child will reoffend, AI can identify institutions with unusually high absconding rates, districts with excessive case delay, localities lacking counselling services or groups experiencing disproportionate detention. This shifts technology from predicting children's behaviour toward identifying failures of institutions.

Fifth, AI can help detect manipulated digital evidence, deepfakes and online impersonation. Such capability is increasingly important as synthetic content becomes easier to create. India's current AI policy specifically includes investment in deepfake detection and safety technologies. A child-rights framework should therefore favour **AI for institutional accountability rather than AI for individual suspicion**.

Human Oversight, Explainability and Natural Justice

Human oversight is particularly important in juvenile justice because decisions depend upon values, context and professional judgment rather than prediction alone.

The India AI Governance Guidelines state that humans should, as far as possible, retain final control over AI systems and that human-in-the-loop mechanisms should allow algorithmic outputs to be reviewed, overridden or supplemented before harm occurs.

For juvenile justice, human oversight should mean more than a person mechanically approving an automated recommendation. The authority must have sufficient information and competence to reject the system's conclusion. Explainability is equally important. If an algorithm affects bail, placement, diversion or rehabilitation, the child should have a meaningful opportunity to understand why. A statement that the model classified the child as “high risk” is not an explanation.

Natural justice requires access to relevant material, an opportunity to challenge adverse information and an unbiased decision-maker. An opaque system that prevents meaningful contestation may therefore conflict with Section 3's natural-justice principle. No AI system should independently determine:

- Whether a child should be apprehended;
- Whether bail should be denied;
- Whether a child should be placed in institutional care;
- Whether Section 15 requirements are satisfied;
- Whether transfer to adult trial is appropriate;
- Whether rehabilitation has succeeded; or
- Whether a child's records should remain accessible beyond statutory periods.

These are legal and human judgments involving rights, not merely optimisation problems.

International Perspectives

United Nations Child-Rights Framework

The Convention on the Rights of the Child provides the foundational international standard. Article 3 requires the best interests of the child to be a primary consideration, while Articles 37 and 40 establish safeguards governing children in conflict with law.

General Comment No. 24 on children's rights in the child justice system emphasises diversion, fair trial, rehabilitation and deprivation of liberty only as a last resort. These requirements apply irrespective of whether decisions are taken directly by humans or mediated through technology.

General Comment No. 25 expands children's rights into the digital environment and expressly encompasses artificial intelligence, automated systems, algorithms and biometrics. It therefore provides a conceptual bridge between traditional juvenile justice and algorithmic governance.

UNICEF's AI guidance places children's best interests, privacy, fairness, inclusion, safety, explainability and well-being at the centre of responsible AI. The important lesson is that child-specific AI governance cannot simply copy safeguards designed for adult consumers.

European Union

The EU Artificial Intelligence Act represents the most comprehensive current statutory AI framework. It adopts a risk-based model and imposes particularly strong restrictions upon certain law-enforcement applications.

Of direct relevance to juvenile justice, it prohibits AI used solely on the basis of profiling or personality characteristics to predict whether an individual will commit a criminal offence. This principle reflects the presumption that criminal justice should judge individuals by conduct and objective evidence rather than algorithmically predicted future behaviour.

The European framework's treatment of biometric identification and high-risk law-enforcement AI also demonstrates the need for greater safeguards where fundamental rights and liberty are directly affected.

Council of Europe

The Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law opened for signature in September 2024 and is the first international legally binding treaty specifically addressing AI from a human-rights perspective.

Its central contribution is conceptual: AI regulation should not be separated from existing human-rights obligations. In juvenile justice, this means that efficiency, innovation and predictive accuracy cannot override dignity, privacy, procedural fairness or protection against discrimination.

United States and Other Juvenile Risk-Assessment Systems

Risk-assessment instruments have been used extensively in parts of the United States to assist juvenile justice decisions. Research demonstrates both potential benefits and persistent fairness concerns. Modern studies show that statistical or machine-learning tools can sometimes improve prediction, but prediction should not be confused with justice. A system may correctly estimate population-level correlations yet remain inappropriate for deciding an individual child's liberty.

Research on juvenile algorithms also demonstrates that fairness cannot be reduced to a single mathematical metric. This international experience should caution India against importing automated risk tools without local validation, legal standards and child-rights assessment.

Contemporary Indian AI Governance and the Regulatory Gap

As of August 2026, India has deliberately chosen not to enact a comprehensive horizontal AI law. The India AI Governance Guidelines state that existing legislation can address many present risks and that targeted amendments may be considered as gaps emerge.

This flexible approach may support innovation, but juvenile justice presents a category in which sector-specific safeguards are urgently required. The consequences of an inaccurate shopping recommendation differ fundamentally from those of an inaccurate algorithmic recommendation affecting a child's liberty.

The 2025 Guidelines recognise children as a vulnerable group and specifically acknowledge risks created by AI systems affecting their well-being. They also recommend sector-specific safeguards, algorithmic auditing and explainability for high-risk use cases. Juvenile justice should therefore be formally designated a **high-impact or high-risk AI domain** in any future sectoral implementation framework.

Suggested Legal and Policy Safeguards

India should develop a dedicated protocol governing AI use by Juvenile Justice Boards, Special Juvenile Police Units, Children's Courts, probation authorities and child-care institutions.

First, automated systems should be classified according to risk. Administrative applications such as scheduling may be permitted with basic safeguards, whereas risk prediction, biometric identification and psychological profiling should attract stringent scrutiny.

Second, an **Algorithmic Child Rights Impact Assessment** should be mandatory before deploying AI capable of materially affecting a child. The assessment should examine purpose, necessity, proportionality, accuracy, dataset composition, discrimination risk, privacy, security and alternatives.

Third, certain applications should be prohibited altogether. AI should not autonomously determine criminal propensity or suitability for adult trial. Emotion-recognition systems should not be used to infer guilt, remorse or dangerousness.

Fourth, independent algorithmic audits should evaluate performance across age, sex, disability, caste, socioeconomic and linguistic groups, subject to lawful and ethical data practices.

Fifth, explainability and contestability must be guaranteed. A child and legal representative should be told when AI materially contributes to a decision.

Sixth, data used for rehabilitation should not automatically be repurposed for policing. Counselling records must remain protective information rather than future risk indicators.

Seventh, statutory deletion and fresh-start requirements must extend to algorithmic databases, derived profiles, backups and training pipelines wherever technologically feasible.

Eighth, JJB members, police officers, psychologists, probation officers, prosecutors, defence lawyers and judges require AI literacy. A human decision-maker who cannot understand an algorithm cannot provide meaningful human oversight.

Finally, child participation should form part of AI governance. UNESCO specifically encourages meaningful engagement of children and young people in decisions concerning AI affecting their lives. Children with lived experience of the juvenile justice system should therefore be consulted when designing digital systems intended for that system.

FUTURE SCOPE

Future research on AI and juvenile justice in India should move beyond abstract discussion and examine actual institutional practices. The first priority should be mapping where algorithmic systems are currently or potentially being used by police, courts, child-protection agencies and correctional institutions.

Empirical research should test whether AI systems produce different outcomes for children based on gender, caste, disability, language, region or socioeconomic background. Imported

systems should never be assumed to perform accurately within Indian populations simply because they have been validated elsewhere.

The operation of Section 15 requires particular research attention. Rather than developing algorithms to replace psychologists or Boards, technology could be designed to improve consistency by offering structured access to recognised developmental criteria, professional guidelines and relevant records while deliberately avoiding automated final scores.

Future research should also examine **algorithmic fresh start**. Traditional juvenile justice assumes that a file can eventually be destroyed. AI complicates this assumption because information may become distributed across datasets and trained models. Computer science and law must jointly develop methods for verifiable deletion, machine unlearning and data lineage capable of implementing statutory erasure requirements.

Another important field concerns deepfakes and synthetic evidence. Children may increasingly appear in manipulated videos, images or audio recordings. Juvenile justice institutions will require reliable forensic procedures for identifying synthetic material while avoiding excessive dependence upon equally imperfect automated detection tools.

AI-assisted legal aid presents considerable promise. Child-friendly systems may explain procedural rights, connect families with legal services and assist lawyers in identifying statutory safeguards. Such tools should complement rather than replace trained advocates.

AI may also be redirected toward institutional accountability. Future systems could identify excessive case pendency, unequal detention, repeated failure of rehabilitation programmes, geographical shortages of psychologists and disproportionate police referrals. This use is more consistent with child protection because the algorithm scrutinises institutions rather than predicting children's criminal futures.

India's evolving national AI architecture offers an opportunity for such sector-specific governance. The establishment of the AI Governance and Economic Group and Technology and Policy Expert Committee in 2026 creates institutional mechanisms through which child-rights experts, psychologists, juvenile justice specialists and technologists could develop specialised standards.

As the substantive provisions of the DPDP Act relating to children's data come into force in 2027, further research will be required to determine how child-data obligations interact with statutory criminal investigation, juvenile records, consent, legal mandates and the principle of fresh start.

Future legislation should ultimately distinguish between **AI that assists children** and **AI that judges' children**. The former may deserve encouragement; the latter requires exceptional justification and, in some contexts, prohibition.

CONCLUSION

Artificial intelligence presents both an opportunity and a constitutional challenge for juvenile justice in India. Properly designed technological systems can improve administration, evidence analysis, accessibility, legal assistance, rehabilitation planning and institutional accountability. They can help authorities identify delay, coordinate services and protect children against digitally fabricated evidence.

The danger emerges when AI moves beyond assistance and begins determining who is dangerous, who is likely to reoffend, who should remain in custody or who possesses the psychological capacity associated with adult criminal treatment. These decisions lie at the core of law, liberty and human dignity.

The Juvenile Justice Act provides an unusually strong normative framework for addressing these risks. Its principles of presumption of innocence, best interest, equality, privacy, natural justice, diversion and fresh start are not merely aspirational. They constitute standards against which technological innovation must be measured.

Section 15 provides the clearest illustration. Preliminary assessment of a child aged sixteen to eighteen alleged to have committed a heinous offence is an individualised legal and developmental inquiry. It involves capacity, understanding and circumstances, not statistical similarity with earlier cases. The Supreme Court's decision in *Barun Chandra Thakur* reinforces the importance of expertise and careful evaluation. An algorithm may assist in organising information, but it must never become the decision-maker.

Algorithmic prediction presents an additional danger because juvenile justice is premised upon the possibility of change. A machine-learning system operates principally by using past patterns to predict the future. Juvenile justice, by contrast, deliberately seeks to prevent a child's past from permanently defining the future. The tension between prediction and fresh start is therefore foundational rather than merely technical.

Privacy creates a similar challenge. A statutory promise that juvenile records will disappear loses meaning if the same records survive indefinitely in training datasets, predictive profiles or interconnected databases. The principle of fresh start must therefore evolve into a principle of **digital fresh start**.

International developments provide useful guidance. The UN Convention on the Rights of the Child and General Comments Nos. 24 and 25 require juvenile justice and digital systems alike to respect dignity, participation, privacy and rehabilitation. UNICEF and UNESCO emphasise child-centred AI governance. The EU AI Act demonstrates that certain predictive law-enforcement applications can appropriately be prohibited rather than merely regulated.

India's own AI Governance Guidelines offer a compatible foundation through their emphasis on people-first design, fairness, accountability, explainability and human oversight. However, general principles require translation into binding sector-specific safeguards before high-risk AI is integrated into juvenile justice.

The appropriate legal model should therefore follow five propositions: ***AI must assist rather than replace human judgment; predictive tools must never override individualised assessment; children's data must receive heightened protection; every consequential algorithmic output must be explainable and contestable; and rehabilitation must remain the ultimate purpose of juvenile justice.***

Technology should not transform a child from a person capable of development into a permanent collection of risk indicators. Nor should computational prediction undermine the legal presumption that children possess exceptional capacity for reform.

The true test of artificial intelligence in juvenile justice is consequently not whether it makes the system faster or more predictive. The test is whether it makes justice more protective, more equal, more transparent and more capable of giving children the opportunity to begin again.

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