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## Artificial intelligence, the cogency of current legal framework and legal challenges

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### Abstract

Human intelligence brought in technological and information revolutions in the society. The progress of civilizations, as evidenced by the ever-changing information technology, easily accessible by use of computers was no doubt put to use for improvement in standard of living of human beings. Information technology has become a valuable source for development of commerce, communication, entertainment and companionship. It has affected human life in every respect around the world. Data breach involves criminal activities that are traditional in nature, such as theft, fraud, forgery, defamation and mischief. The abuse of computers has also given birth to a gamut of new age crimes such as hacking, web defacement, cyber stalking, web jacking, etc. Legal provisions should provide assurance to users, empowerment to law enforcement agencies and deterrence to criminals. The law is as stringent as its enforcement. Crime is no longer limited to space, time or a group of people and with the advent of the artificial intelligence, it would neither be limited with the culprit being present in the physical world and to deal with the challenges that lies ahead of us posed by the artificial intelligence, our legislation should evolve too with the evolution of the information technology otherwise the future might bring with itself the crime where owing to the lacunas of the legislation, it would be a hard battle which has to be fought to actually penalize the culprit and provide the justice. The research paper focuses on how cogent our current legal framework is to deal with the artificial intelligence and protect the data and what are the changes which should be brought about in the legislations to deal with the same.

**Keywords:** Artificial intelligence (AI), AI governance, data privacy, intellectual property (IP), data protection, cybersecurity

### Introductions

Today's era is of information, communication, instant transmission of information, connectivity, but with all these things new problem has arisen in technically equipped society. One can understand the efficacy and impact of social media in everyone's life in present state, as it is highly useful in the world of communication and technology, where we want to transmit instantly the information, communication and to connect with the different people from different places with one another. But the flipside of social media is becoming too dark, as it interferes in one's liberty, peace and sometime takes away someone's life. These technological inventions and aids should be taken to create life in more comfortable manner and not to get disturb because of it. Development itself and changes through the development are considered for the betterment of the society and for the people encompasses in it, and not to get distract or disturb of someone's life or liberty.

It is acceptable that nothing is permanent in this world except the change. But the changes should be positive for the progression, development of the society and people who are living in it. Sometimes changes going to occur in society may not be perpetual but its impact or repercussions on one's life sometimes, may remain forever and his whole life will be ruin. If in society there is no peace, harmony, comfort can we say the society is welfaristic society? Development and progress in any society, it should maintain peace and comfort in society. Same is the case with our Cyber World and use social media, which is now so called 'online harassment'.

The ability of the government to ensure efficient, effective, transparent, and responsive administration is essential to governance, which is widely defined as the "activity or manner of managing a state." Given the size and diversity of India, governing it presents particularly difficult challenges. Government in India has always been constrained by slow, out-of-date

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procedures and bureaucratic obstacles, but recent efforts to integrate newer technologies are giving the system new life. To this end, there has been ongoing discussion in recent years on how to best employ AI to promote effective governance. Three major trends came to light during the analysis. First, while interest in the idea of applying algorithms across all states has been high, technological capabilities and implementation vary widely. In adopting the use of algorithms in industries like education and agriculture, Andhra Pradesh and Karnataka appear to be more aggressive than other states. Second, the commercial sector, which collaborates with the government through partnerships or contracts, is responsible for developing the majority of the AI technology that is currently in use. And last, much of the technology that is at the center of discussions about AI and governance in India has already been put into practice in other nations, especially the United States, the United Kingdom, and China. Even if India might try to adopt some of this technology, it would be a good idea to first analyze some of the technological, legal, and ethical issues that have emerged in these nations and find ways to overcome them before implementing the technology in Indian administration. In order to chart the trajectory of technology development in India in the near future and make a regulatory model readily available after the technology is in use, this paper, unlike the other case studies, pays a significant lot of attention to uses of AI in other jurisdictions.

### Major sectors incorporating ai use in India

Key AI technologies are being researched and in some circumstances are being deployed by law enforcement on a global scale which includes drones, robocops, autonomous police cars, voice recognition, facial recognition, and predictive analytics, too. Our research in this area revealed that India's technical development is still in its infancy. Many initiatives are still in the ideation stage and lack the proficiency to completely integrate AI solutions for law enforcement. At the same time, India is working on initiatives that will provide the data and infrastructure required to power AI solutions in the field of law enforcement. Important applications of AI in Indian law enforcement include: A.

### Predictive analysis

India has made progress in using big data analytics and algorithms to handle enormous amounts of data in order to create predictive police models. Running predictive police programmes requires the use of improved and sophisticated data collection methods. The National Crime Records Bureau is reportedly collaborating with Advanced Data Research Institute to create the technology necessary to implement predictive policing techniques.

The Indian Space Research Organization and the Delhi Police have begun collaborating on predictive policing techniques (ISRO). The Crime Mapping, Analytics and Predictive System is a system that is in the works that will provide police officers access to real-time information at crime scenes, easing the strain of having to return to police stations to complete reports. The web-based software is able to gather information from the Dial 100 hotline of the Police Authorities and employs clustering algorithms to detect 'hotspots' spatially using satellite imagery from ISRO. Thus,

this software enables Delhi Police to anticipate when and where crime may occur and subsequently deploy police troops to make strategic interventions.

A method called proximity analysis would make it possible to evaluate information about suspects, victims, witnesses, and other people who were situated close to the scene of the crime and utilize that information to analyze any changes that had occurred soon before or after the event.

### Speech and Facial recognition

Improving safety in public spaces like streets, bus stops, and train stations is a key goal of this project. The Artificial Intelligence System, which digitizes criminal records and automates research through features like facial recognition, is being utilized by the police authorities of various states. By using facial recognition, police may get information about the offender. If a police officer finds a suspect, he snaps a photo of him. The photo is next entered into the phone app, which compares the digital image with the previously stored photo. Additionally, such applications quickly conveys the individual's criminal history to the concerned officer's phone. H-Bots Robotics, a Hyderabad-based technological start-up, has created a smart policing robot that has not yet been used in the field. The "robocop" can help maintain law and order and improve traffic control. If it were to be deployed autonomously, it might perform a wide range of crucial security-related tasks, such as preserving security at strategic intersections in locations like malls and airports.

### Education

Decision-making, student services, monitoring student progress, and personalized learning are where AI is most commonly employed in education. Despite the wide variety of languages spoken in India, it doesn't seem like many of the solutions being created in this field have a language focus. The most frequently used method among the solutions appears to be machine learning.

- **Decision making:** HTC Global Services, a US-based service provider, is concentrating on the introduction of products in the Indian educational market. Students will be able to make better choices while selecting courses and electives at colleges thanks to this web-based tool. This application will effectively employ the same algorithms that let users choose products on e-commerce sites by using AI and machine learning to analyze historical data.
- **Student Service:** This would include answers to difficulties like admissions questions, which are primarily manual and take a lot of time - from the perspective of both students and professors.
- **Student Progress Monitoring:** In order to enable personalized monitoring of children and provide individualized attention to their progress, the government is aiming to gather information from a variety of databases and process the data through Microsoft's Machine Learning Platform. This will help reduce school dropouts.
- **Personalized Learning:** AI is being used widely for the purpose of creating programs for the purpose of learning and even teaching which are personalized on the basis of specific requirement which varies from learner to learner.

## Defence

AI is mostly used in the defence industry for intelligence, surveillance, and reconnaissance, robot soldiers, cyber defence, risk terrain analysis, and intelligent weapons systems. Defense is the only industry we examined where the employment of autonomous systems is explicitly being considered. However, a lot of these initiatives are still in the planning and experimental stages, and it's unclear how much the various branches of the government actually trust and support them.

- **Intelligence, Surveillance and Reconnaissance:** The Indian army has begun to employ unmanned autonomous vehicles for reconnaissance tasks like spotting naval mines in littoral areas and keeping watch over territorial waters to look for intruders.
- **Cyber Defence:** The use of AI by the government is enhancing and expanding cybersecurity capabilities. For instance, artificial intelligence powered cyber forensic tools that may be used by law enforcement, the government, and intelligence organizations. The Indian government has contracted to analyse data from intelligence agencies to assess threat patterns and forecast future events in their most recent product, called Prophecy.
- **Risk Analysis:** According to a publication from the Defense Research and Development Organization, AI is being used in risk terrain analysis in the following ways: (1) Military Geospatial Information System: This facilitates the creation of terrain trafficability maps in relation to five thematic layers, including soil, slope, moisture, land use, and landform. The maps are then produced in a three level hierarchical fashion after they have been combined. (2) Terrain Feature Extraction System: This system enables the classification of land uses by training a multilayer perceptron and generating various themes afterwards. (3) Terrain Reasoner System: Enables decision-makers to create alternate routes for completing a mission that has been predetermined.

## Legal and ethical challenges in incorporation of AI in

**India:** The full range of fundamental rights, including the requirements for substantive and procedural due process in Article 21, the right to equality in Article 14, and the freedom of speech and expression in Article 19, in addition to statutory rights like the right to information, apply whenever a government body carries out a "public function." The legal debate over the horizontal applicability of basic rights to private actors is, at best, splintered. Therefore, the level of duty, accountability, oversight, and liability assumed by commercial actors utilizing AI in the industrial or healthcare sector may be lower than the constitutional standards for due process or transparency.

## Privacy and Security

Data collection, use, and consent are the main privacy and security problems in education, especially when the data is pertaining to a juvenile. When evaluating the legitimacy of consent obtained for the purposes of administering vaccinations, the medical community has acknowledged that Indian legislation is still unclear regarding the age of consent. A person above the age of 18 can provide legal

consent to suffer any harm from an act that is done in good faith for his benefit and without intent or knowledge to cause death, according to section 88 of the Indian penal code. Likewise, a minor under the age of 12 cannot offer legal assent. Nothing explicit has been outlined in Indian legislation for those between the ages of 12 and 18 years. This is a legal issue that needs to be resolved before AI is implemented in the educational sector because each student's level of comfort and consent with regard to having his or her data processed and used algorithmically may be different and subject to change over time. The extent to which the child must participate in the AI-driven learning path that is created for him and whether parents can offer consent on behalf of the child's data processing are both unknown. Concerns about denial of service and profiling coexist alongside privacy and security issues in the delivery of government services. The public sector is not currently covered by India's quasi-data protection policy, which is found in section 43A of the IT Act.

## Liability

All Indian citizens must have their fundamental rights upheld by the government, which no matter whether the developer or implementor of the solution is a government employee, as long as the government has played a role in the development or implementation of the solution, it must be subject to scrutiny as per the full range of fundamental rights contained in Part I. This is because whenever a state authorizes an act that is "financially, functionally, or administratively" under the control of the government, it can be held accountable for the act the Indian Constitution under Part III. Ensuring that the software developer in the private sector adheres to the constitutional principles of due process is the government's main challenge. The fact that the source code is proprietary and held by the creator rather than the consumer may be a tricky problem. A system that establishes guidelines for programmers working with the government on "public functions" should be created in order to address this.

## Accountability, Oversight and Evaluation

The algorithmic black box that takes inputs and produces useful outputs is a key component of artificial intelligence. In many ways, the numerous possible applications of algorithms in governance could result in what is referred to as a Black Box Society, in which the course of daily life is determined by opaque algorithms. When the values and prerogatives that the encoded rules execute are hidden it is difficult to ensure accountability. Implementing practical accountability and evaluation standards, however, continues to be difficult. This may not be an appropriate example of the algorithm's effectiveness. For instance, Pred Pol's success is frequently attributable to the fact that police have found more crimes in the regions the algorithm identifies as high risk. This judgement, however, does not take into consideration the fact that more crime is found in certain regions because more police officers are stationed there. Additionally, whenever AI is used to make decisions, there needs to be ongoing lines of communication so that the person who will be affected by the usage of the technology is continuously aware of how the technology is being used to make judgments that could have an influence on their everyday lives.

### Redressal

Every person impacted by a decision made by or on behalf of the state apparatus should be allowed to appeal it in court in accordance with constitutional principles. Making decisions with AI could present issues in two different ways. First, the process of converting inputs into outputs is frequently black-boxed, which implies that even the algorithm's inventor might not be able to comprehend how the algorithm came to a particular conclusion. Second, even though the government is always in charge, it is still unclear what a developer in the private sector would be expected to do. It is unclear how a legal system and judicial precedent will handle issues of accountability, liability, and redress in order to prevent state action from being used as an excuse to downplay or ignore harm, given the potential complexity of public-private partnerships, the possibility that the private sector will possess the majority of knowledge about how the technology operates, and the lack of judicial precedent on the regulation of AI.

### Bias and Discrimination

There are two possible ways that discrimination might occur, according to both international human rights law and Indian constitutional requirements. Every state is required by its constitution to defend the life and liberty of its residents, which is a necessary condition for the upholding of the rule of law, according to Indian legal tradition. There should be no discrimination based on philosophy, political conviction, caste, creed, or religion. A person experiences direct discrimination when they are treated less favorably than someone else who is similarly situated on one of the forbidden criteria outlined in the relevant Convention. A policy, rule, or requirement that appears to be neutral on the surface but has a disproportionate negative effect on those groups that are supposed to be protected by one of the illegal bases for discrimination is considered indirect discrimination.

Any application of AI in governance must be mindful of creating purportedly neutral algorithms that end up indirectly discriminating against a given category of people because algorithms categorize or classify people based on traits that may not be representative of the group in question. This is especially important in a multicultural nation like India where discrimination and victimization are frequently brought on by identity differences.

### Due process of Law

The natural justice principles must be preserved in accordance with Indian legal heritage in order to achieve the fairest result. The notion of non-arbitrariness stated in *E.P. Royappa v. UOI* under Article 21 has been incorporated into the Constitution, it is largely acknowledged that *Maneka Gandhi v. UOI* brought due process into the law. According to the Court, no procedure could be prescribed by law for the deprivation of life and personal liberty under Article 21; instead, the procedure had to be one that is neither arbitrary nor unfair nor illogical.

The 'innocent until proven guilty' principle in law enforcement may lead to some guilty people being let off the hook. Nevertheless, it reflects the underlying assessment of the drafters of our Constitution that releasing a person who may have committed a crime due to a lack of evidence constitutes less of a threat to our society and our constitutional framework than enabling an innocent person

to be found guilty or to serve an excessive period of time in jail.

In various respects, a judge's personal judgement has been used to decide what is fair. However, it is not straightforward to incorporate Indian concepts of fairness into algorithms and modify them for various situations. Especially because algorithms are frequently created to favour purported efficiency at the expense of fairness. The task at hand is to ensure that the potential efficiency of machine learning in the criminal justice system does not come at the expense of human judgement in maintaining procedural due process.

### Conclusion and suggestions

Although current AI offers us few ethical and legal issues, the main problem in this field is the projections of their capability to be more human like and pose new concerns. Social roles will be fulfilled by AI that are transparent and predictable enough. Artificial Super Intelligent algorithm which are not yet in existence do not need new kind of safety assurance in predictable context. AI that has sufficiently advanced mental state may be counted as person and must be regulated by a new set of rules and principles. And finally, the prospect of AIs with superhuman intelligence and superhuman abilities presents us with the extraordinary challenge of stating an algorithm that outputs super-ethical behavior. These challenges may seem visionary, but is very much predictable to be encountered in near future

Instead of promoting citizens' confidence in potentially unreliable technologies, more trustworthy methods may be designed to generate more trust in AI products and services. In any situation, establishing our goals and how AI could be useful could be influenced by meaningful interaction with a variety of stakeholders, including citizens, from the very beginning of development.

The next generation of AI goods and services, based on IoT and 5G, are expected to see significant legislative initiatives, and preparations are already under way. As a result, AI is at a critical juncture for both technological advancement and regulation. AI may ensure that citizens have a meaningful role in expressing what they want from AI development and what they are willing to provide in return by conducting its own race. Additionally, keeping in mind the promotion of competitive markets alongside the domestic Indian markets, but also aligning them with national values and Indian laws.

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