Artificial Intelligence Sentencing

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Abstract

Technology like law is neutral it is what you make of it. AI Sentencing is the recent development which is taking place in the working of judiciary. Technology is making life easy and on other hand it can also infringe rights of public. Technology is something which has potential to risk equality among people. The implementation of AI in case of sentencing is infringing basic human rights. The human judgment was considered to be very beneficial for the judicial system. If the underlying data is prejudiced in any way, there is a chance that unjust biases and structural inequities would not only be duplicated but also magnified. AI is good for the economic growth and social good of the country. The Indian courts have started the pilot study related to the implementation of Artificial Intelligence in the courts for the delivery of justice; there is a lot of pendency of cases in which requirement of technology like Artificial Intelligence is necessary. The usage of technology as always has something good in it but a lot of backdrop too. The decision made AI lacks in transparency it is black boxed algorithm this means that the access to it is only restricted to the owner. In this paper we will be talking about how Artificial Intelligence is being embedded in the judicial system and also we will discuss and criticize as to whether sentencing on basis of AI will be helpful for people or will it violate rights of public and may create chaos among society also we will be looking towards the risk assessment of as of how Artificial Intelligence is working on terms of criminal sentencing.

Keywords: Artificial Intelligence, Technology, Judiciary, Privacy, Sentencing, Data.

Introduction:

We are the people who love to be in a fictional place and AI is making it true in some sense and helping us in many ways for making life easier. Law and technology are interlinked to each other they mix like oil and water. Intelligent technology is rapidly growing and taking its place globally everywhere all over the world since 20th century. Artificial Intelligence (AI) is something which has potential to provide many extraordinary benefits. AI is helpful as in saving time and human efforts, it provides speedy collection of data and also it plays a significant role in criminal justice systemIn 2016, ProPublica published a series of reports raising concerns about racial bias in software used to assess criminal risk.[1] In State v Loomis rejected the defendant's claim the use of algorithmic risk assessment at sentencing was a violation of due process.[2] There has been an increase in interest in the concept of utilising artificial intelligence as a support system throughout the sentencing process. For instance, it has been proposed that machine learning algorithms could aid in reducing issues with inter-judge variance in sentence. It is claimed that enhancing inter-judge uniformity in sentencing is not necessarily desirable insofar as the unfairness of sentence difference is regarded to represent a retributivist perspective of proportionality.

 More generally, it is demonstrated that if there is a difference between actual sentencing practice and the sentences that are ideally desirable, the idea of introducing machine learning algorithms, which produce sentencing predictions on the basis of a dataset built of prior sentencing decisions, faces serious challenges. The learning of machines and Artificial Intelligence in trial is nowadays a debatable topic for everyone as it is promoting the work and efficiency but also increasing the risk among the society. This kind of technology is promoting and innovate the reform in the judicial system. The conviction and sentencing in criminal cases with help of artificial intelligence is somehow complex. Naturally, concerns about AI's inherent prejudice are growing as it is used in criminal justice. But when used properly, algorithms may end up being less prejudiced than people. However, there are some significant social and ethical issues, particularly with regard to transparency and consistency. If AI is to properly support courts in their sentencing choices and give precise assessments of criminals' risks and requirements, these issues must be handled.

The fact that there are many complex situations in criminal processes where the facts cannot be established is not particularly as scary as it seems to be, but the judicial thinking and principles of judicial organs are somewhat complicated. By way of illustration, the court should rule that a defendant is innocent when the facts presented by the prosecution are insufficient to establish that they committed a crime. However, complicated thought and the application of principles cannot be carried out by intelligent robot technology, therefore there is still immaturity.

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[1] See Julia Angwin et al., Machine Bias: There's Software Used Across the Country to Predict Future Criminals. And It's Biased Against Blacks, PROPUBLICA (May 23, 2016),
[2] 881 N.W.2d 749, 753 (Wis. 2016).

There are three ways to organise human conduct, according to the late economist Kenneth Boulding[3]: coercion, exchange, and gift. Coercion is the foundation upon which armies and the judicial system are based. Families, friends, and places of worship work on the principle of giving while markets operate on the principle of trade. All communities use all three methods, but the more a society relies on gift and less on compulsion, the healthier it is overall.

States' increasing reliance on algorithmic systems prompts long-standing worries about prediction in our criminal justice system, including how to classify a person's level of danger, how much previous behaviour predicts future behaviour, and the impact of racial inequities.[4]

Research questions:

1. Whether sentencing by use of Artificial Intelligence will be helpful or violates rights of people?
2. Whether the sentencing through Artificial Intelligence is enhancing or not?

Research methodology:

I will be using Doctrinal Research in this study as I am using the secondary sources like; news article, blogs, articles, journals, books, etc. It will be based on these particular sources only.

Hypothesis:

Implementation of Artificial Intelligence in judiciary will adversely impact the justice system.

Research Objective:

- To understand the aspects of Artificial Intelligence.
- To understand the relevance of AI in Indian judicial system.
- To find out the loopholes which are in sentencing due to AI.
- To see what AI can do in the court of law?

Meaning of Artificial Intelligence:

Artificial Intelligence is something which has its root from very beginning of this techno era, people usually says what if we could sit and the works can be done by the help of robots or something that is generally a machine. Artificial Intelligence that is very similar to something which only a human being can do, everything that a human thinks or the intelligence which a human being posses can be done by the use of AI. The goal that AI wants to meet is that to invent a machine that can easily work without any human intervention.

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[3] AI IN THE COURTROOM: WILL A ROBOT SENTENCE YOU?, <u>AI in the Courtroom: Will a Robot Sentence You? | Mind Matters,</u> jan 24, 2020.

[4] Sonia K. Katyal, *Private Accountability in the Age of Artificial Intelligence*, 66 UCLA L. REV. 54, 58 (2019).

Artificial intelligence is a topic that, in its most basic form, combines computer science and substantial datasets to facilitate problem-solving. Additionally, it includes the branches of artificial intelligence known as deep learning and machine learning, which are commonly addressed together. These fields use AI algorithms to build expert systems that make predictions or categorise information based on incoming data. Now that AI is sort of a broader field of research, Machine Learning (or ML) is a particular subfield within it. The main goal of machine learning is to create systems that can learn. By "learn," I mean that they gradually enhance their responses by utilising a lot of data. AI like: which detects faces, objects, text in images, convert one language text to another and recommendation we get to buy things or to buy something else.

Weak AI, also known as Narrow AI or Artificial Narrow Intelligence (ANI), is AI that has been programmed and directed to carry out particular tasks. The majority of the AI that exists today is weak AI. This form of AI is anything but weak; it supports some incredibly sophisticated applications, including Apple's Siri, Amazon's Alexa, IBM Watson, and autonomous vehicles. "Narrow" could be a better term for it.

Artificial General Intelligence (AGI) and Artificial Super Intelligence make up strong AI (ASI). A computer with intellect comparable to humans, a self-aware awareness, and the capacity to learn, reason, and make plans for the future would be said to have artificial general intelligence (AGI), also known as general AI. Super intelligence, commonly referred to as artificial super intelligence (ASI), would be more intelligent and capable than the human brain. Even though there are now no real-world applications for strong AI and it is only theoretical, experts in the field of artificial intelligence are continuously studying its potential. In the meanwhile, science fiction works like HAL, the superhuman, rogue computer aide, might provide the best illustrations of ASI.

More businesses may now benefit from AI at a cheaper cost and in less time thanks to the development of AI-powered tools and solutions. Solutions, tools, and software that are ready to apply AI either have AI capabilities built-in or automate the process of algorithmic decision-making.

Ready-to-use AI can be anything from autonomous databases that use machine learning to self-heal to prebuilt models that can be deployed to a range of datasets to address problems like text analysis and image recognition. It can assist businesses in achieving a quicker time to value, increasing efficiency, cutting expenses, and strengthening customer relationships.

Automation of previously labor-intensive processes or operations thanks to artificial intelligence (AI) technology that is increasing business performance and productivity. AI can also analyse data at a scale that no human has ever been able to. This ability has significant business advantages. For instance, Netflix, which employs machine learning to deliver a level of personalisation, saw a more than 25% increase in client base in 2017.

Neural networks are the actual building blocks of deep learning. A neural network with more than three layers, including the inputs and output, is referred to as a "deep learning algorithm" and is defined as having more than three layers. The way each algorithm learns is where deep learning and machine learning differ. Deep learning significantly reduces the amount of manual human interaction necessary during the feature extraction phase of the process, allowing for the usage of bigger data sets.

The main goal of AI is to mimic—and eventually surpass—human perception and behaviour. It is quickly taking the place of innovation's pillar. AI, which is fueled by multiple machine learning techniques that identify patterns in data to enable predictions, can benefit your company through:

- Delivering a more thorough knowledge of the vast amount of data available.
- Use predictions to automate overly complicated or repetitive jobs.

Implementation of AI in Judiciary:

The era of e justice is now in some countries. In recent years looking into different aspects of the society and conditions that arise in the time of pandemic (Covid-19), the system all used in delivering justice was by AI. Artificial Intelligence in recent times have taken a place which has made everything easy and better in some aspects with some major loopholes too. The debatable question arises is that whether the entire process of delivering justice can rely on Artificial Intelligence. Such computer programmes are already finding use in China, the United States, Great Britain, France, and other nations, although they now act just as an additional tool for document analysis and do not take the role of a judge. The European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems, which was endorsed by the European Commission for the Efficiency of Justice of the Council of Europe, became the first international law specifically devoted to the use of artificial intelligence in justice in December 2018.[5] An ethical charter was passed by the European commission for efficiency of justice in which they gave certain guidelines:

- Doctrine of prohibition of discrimination.
- Principles of the human rights should not be violated.
- Principle of the safety and quality.
- Principle of transparency.

The effects of these technologies on how justice is administered and the values upheld by universally accepted standards of judicial conduct are generally beneficial. The most recent technology trend in well-known nations'

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[5] Karmaza, O.O, , Koroied, S. O., Makhinchuk, V. M., Strilko, V. Y., & Iosypenko, S. T. (2021). Artificial intelligence in justice.Linguistics and Culture Review,5(S4), 1413-1425, View of Artificial intelligence in justice (lingcure.org).

travel is based on artificial intelligence (AI), which has the potential to revolutionise the way legal choices are made. This goal is mostly achieved using a particular type of technology known as "machine learning," which develops forecasts by analysing case data, including both procedural records and relevant judicial decisions. In order to create statistical correlations between cases and associated court rulings, this set of data, sometimes referred to as "training data," is examined. The programme predicts outcomes in new situations more correctly the more data it evaluates.

It is common practise to create default judgments and declarations of inadmissibility; many situations just call for a quick evaluation without a hearing; and some matters are settled. Complex, conflicting matters only make up a small part of the cases that the judiciary must handle.[6]

Indian scenario: The justice delivery system in India is getting better with time but the thing is that is it enough? The answer that generally comes is no because the judiciary is already overburdened by the several cases, there is a lot of pendency of cases in the Indian judicial system which is delaying the justice of people and making judiciary questionable. Recently the Law Minister has asked for the implementation of the electronic courts project which is very necessary and asked to implement it by the help of technology that is Machine Learning and Artificial Intelligence which can increase the efficiency of justice delivery. The Supreme Court of India has made a special committee for implementation of Artificial Intelligence in the judicial domain. The committee will look in the translation of legal document and process automation with the AI technology. The project is named as the E court project which will work for this particular matter: This project is implemented for the transformation of the Indian judiciary by the Information and Communication Technology. Examples of Artificial Intelligence in judiciary: at times of pandemic everything was virtual so was the judicial system too there were virtual hearing taking place, e filling of cases took place. A term which is used **is** SUVAS (Supreme Court Vidhik Anuvaad Software) is an AI system which is used to translate the regional language into local language which is used to increase the justice delivery. The next term was SUPACE (Supreme Court Portal for Assistance in Court Efficiency) recently it is launched by the Supreme Court. By encapsulating judicial operations that can be automated by AI, it helps the Court increase efficiency and decrease pending cases. It is designed to first understand judicial processes that need automation. Different countries have opted for different global initiatives which help in the working of the courts by technology of Artificial Intelligence. Those initiatives are:

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[6] A. D. Reiling, Technology for Justice, how information technology can support judicial reform (diss. VU Amsterdam) Leiden: Leiden University Press 2009, p. 111-122. The Netherlands Judiciary deals with approximately 1.3 million cases annually.

- COMPAS (Correctional Offender Management Profiling for Alternative Sanctions): A prime example of how artificially intelligent machines can make conclusions based on statistical data is COMPAS, which is now used in criminal trials. About 100 parameters are evaluated by the computer system to determine if a defendant is statistically likely to change their ways or commit new crimes. This concept is also criticized as AI can also be biased in some reasons and just the justice delivered by humans AI can also give prejudice bias decision based on previous crimes.

- HART (Harm Assessment Risk Tool): Risk analyses are done while making decisions on bail, sentence, parole, extended supervision, and continuing detention orders for high-risk criminals, among other criminal procedural decisions. Such risk assessments, which are based on clinical assessments, structured by legislation and common law principles, and which capture the idea of individual justice, have traditionally been the responsibility of the human discretion and intuition of court officers.[7] The risk assessment is an AI technique which is being used in this context to see whether the things that are getting assessed are proper or not.

Estonia is the first country which has started the system of operation of AI judges in courts as it is considered that the country is highly developed and digitalized in its sector of working. By sorting and processing information at a considerably faster rate, artificial intelligence (AI) technology in Estonian courts will free judges from making decisions on minor disputes up to 7,000 Euro. Because of this assistance, human judges will have more time to concentrate on complex cases. AI personnel's decisions will be enforceable in court, but they will still involve some human judgment. There will still be appeals made to human judges.[8]

In order to guarantee a transparent, reliable, and unbiased legal system, issues of human error and algorithm design need to be further addressed if the judiciary is likewise outfitted with AI systems on a global scale. Although there are advantages to using technology in courts, it is also threat to dangers like cybercrime. Russian hackers disrupted Estonian e-government networks in 2007 and caused service outages. Even though no serious harm was done, the attempt showed that increased security must take precedence if AI systems are to be used in courts. A weak area in the judiciary's AI systems could be exploited by terrorist organisations, criminal gangs, and governments with bad intentions.

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[7] Carolyn McKay, Predicting risk in criminal procedure: actuarial tools, algorithms, AI and judicial decision-making, 29 Sep,2019, Predicting risk in criminal procedure: actuarial tools, algorithms, AI and judicial decision-making: Current Issues in Criminal Justice: Vol 32, No 1 (tandfonline.com).

[8] Yasemin Zeisl, Risk and Benefits of Artificial Intelligence in Courts, 16 April 2019, Risks and Benefits of Artificial Intelligence in Courts | Global Risk Intel

What can artificial intelligence do for courts?:

- Organising information.
- Advising.
- Predictions.

AI in courts ethical or not? :

As said in earlier times that everything has two sides it's always up to us how we want to use it and as same technology is something which has two aspect that are totally different from each other, one is the positive aspect and one is negative aspect due to unlawful use of technology.

The Commission for the Efficiency of Justice (CEPEJ) of the council of Europe has addressed the issues. It is working for the ethical issues that are involved in the case of implementation of AI.

- Respect for Fundamental Rights: Make sure that the creation and use of Al tools and services respects fundamental rights such as the right to privacy, the right to equality, and the right to a fair trial. Every right must be secured and all the focus should be there in terms of the rights os the people.
- Equal Treatment: Avoid treating people or groups of people differently. The aforementioned COMPAS example demonstrates the potential of prejudice and arbitrary differentiation between individuals and groups. The bias may have been introduced by the algorithm itself or it may have been caused by the data of the algorithm employed.
- Data Security: In a secure technological environment, multidisciplinary models with recognized sources and unchangeable data should be used to handle court decisions and data.
- Transparency: Data processing procedures should be made clear and understandable, and external audits have to be permitted. Transparency is now a requirement based on case law. In order for third parties to have access to the decisions made, the data and assumptions employed, the user of an algorithm must make them publicly available in a thorough, timely, and suitable manner.
- AI under User Control: The algorithm is not intended to be used as a prescription, meaning that the computer is not capable of making decisions on its own. Users must be aware of and cognizant of what the Al does, and they must have control over the decisions they do. This means that people must be able to easily stray from the algorithm's result. This human control was a topic in the Loomis case, which was heard by the Wisconsin Supreme Court.[9] A) Whether the use of a risk assessment result by a tool like COMPAS, where the operation is a business secret, violates the defendant's right to a fair trial because the secret operation prevents the defendant from being able to verify the precision and scientific value of the risk assessment, and B) Whether relying on such a risk assessment, which considers race and gender into the probability of recurrence, breaches the right to a fair trial. Although the Wisconsin Supreme

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[9] A. D. Reiling, Courts and Artificial Intelligence, 11 IJCA 1 (2020).

Court overruled Loomis' arguments, it ruled that judges should justify their employment of COMPAS. The Supreme Court of the United States declined to consider the case after it was referred to it.

AI can be considered as a useful tool for the delivery of justice and have so many benefits and positive aspect of involving it. AI is something which is truly based on the computer system mainly the machine learning system which can disturb the whole judicial system as it have so many loopholes as talked earlier so the question that arises is whether AI can be considered an ethical practice or not? The thing we have seen and got by this work is there could be a lot of benefits of AI but the loopholes are very risky which is making the working of the judicial system tough and creating a lot of problems because of which the issue of privacy and other rights of a person can be directly violated.

Case laws related to the application of AI in Judiciary:

Through 2020 and possibly beyond, AI will be the next front in the war. In order to make smart robots appear "intelligent," more sophisticated methodologies are pushing beyond conventional rule-based algorithms to construct systems that comprehend, learn, forecast, adapt, and maybe function autonomously. Additionally, it will set off a few autonomous systems that are designed to function autonomously, enabling IT teams to dig deeper and do more.[10] The issue with AI is that much of its foundation is made up of freely downloadable open source software. New ideas, methods, and productive trials are also widely disseminated because AI powerhouses like Google and Facebook, which are competing to attract and retain the greatest AI minds, encourage their top AI developers to publish their work. Some cases took place which shows the loopholes an positive sides of the working of Artificial Intelligence in the court rooms.

In Pollard v. United States, the defendant claimed that a sentencing error that resulted in extended probation and resentencing two years later had violated his right to a speedy trial.[11]this case was relating to the speedy trial as because of the error in the trial the person suffered a lot if AI could be implemented then the scenario could be different.

Eric Loomis, the defendant in Wisconsin v. Loomis[12], was found guilty of participating in a drive-by shooting. Loomis provided information at intake that was then input into Compas, a risk-assessment tool created by a privately held company and utilised by the Wisconsin Department of Corrections. Due in part on Loomis' "high risk" rating from this black box risk-assessment tool, the trial judge gave the defendant a long sentence. Loomis

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[10] REPORT OF COMMITTEE – D ON CYBER SECURITY, SAFETY, LEGAL AND ETHICAL ISSUES, Committes_D-Cyber-n-Legal-and-Ethical (1).pdf.

[11] Kristin Saetveit, Beyond Pollard: Applying the Sixth Amendment's Speedy Trial Right to Sentencing, vol. 68, feburary 2016.

[12] Jason Tashea, Courts Are Using AI to Sentence Criminals. That Must Stop Now, 17 April 2017.

contested his conviction on the grounds that he was not authorised to evaluate the algorithm. The state supreme court dismissed Loomis' appeal last summer on the grounds that understanding the algorithm's results constituted adequate transparency.

AI and Privacy:

- A cyberterrorist has the ability to penetrate a variety of organisations, including banking, healthcare, education, the government, the military, as well as communication and infrastructure networks. Most malicious cyber activity is now web-based. Recent trends suggest that hackers are shifting away from targeting computers by creating system failure and instead targeting users to obtain personal information.

- Artificial intelligence (AI) systems may score, recommend, customise, and otherwise change human experiences using large data. The inherent hazards of these systems include privacy breaches, the codification and entrenchment of biases, a reduction in accountability, and an increase in the knowledge imbalance between those who design these systems and the users and policymakers.

- Another issue to take into account when sharing vast amounts of personal data is how to use the data as effectively as possible while minimising invasions of people's privacy. In practise, it is important to apply techniques like "anonymization" or "de-identification," in which datasets are processed to remove as much information about specific people as possible while keeping the dataset useable for the intended purpose.

Conclusion:

Today's society wants everything done by the use of machines and technology, no one really wants to go through any books to search anything. Technology has come a long way and had made a stand in the society without which nothing is considered to be possible, but it has many negative aspects involved in it as well. AI is something which can be an easier and helpful tool for people to search anything on Google, but they might not be considered ever appropriate for sentencing in the courts. The due process rights are weakened when judges are permitted to use risk assessment software, such as COMPAS, when determining sentences. There is something to be said in sentencing carried out by judicial judgement without the aid of algorithms, even though forcing COMPAS to be open-sourced and enacting an auditing and training programme to oversee its usage during sentence could address some of the difficulties raised. As a result, when they let bias influence them in one direction or another, it is simpler to question and scrutinise their choices. In future perspective may be technology can enhance its working, but for now the court relying on the concept of AI sentencing is not a good suggestion or the courts could opt for the system where AI is only used for helping purpose and not for sentencing.