

ARTIFICIAL INTELLIGENCE: AN INTERPLAY INTO THE MODERN LEGAL JURISPRUDENCE

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ABSTRACT

The emergence of Artificial Intelligence (AI) has raised various ethical and legal concerns due to its potential impact on society. AI has become a game-changer in different sectors, and its potential for revolutionizing industries is enormous. However, its development and deployment must consider ethical principles and comply with existing laws. This paper aims to provide an overview of the laws and ethics surrounding AI, highlighting the challenges that arise as AI advances. It covers privacy, transparency, bias, accountability, and responsibility. The paper concludes by proposing measures to ensure that the development and deployment of AI comply with ethical principles and existing laws.

Keywords: Artificial Intelligence, Law, ethical Concerns, Supreme Court, Legislation.

INTRODUCTION

Typically, the classification, accuracy, and reliability were determined by reviewing documents, which have always been considered the gold standard in the market. This gold standard bar is increasing in a world where technology facilitates searches, analyses, reviews, and documentation for legal proceedings. Similarly, In Judgement making, humans are also expected to make judgments with computer precision and consistency across large data sets. Seeking computer-like consistency from people and human-like thinking from computers will result in disappointment. However, before finalizing the data, a specialist review team typically examines a large amount of it, and still, there are considerable differences in accuracy and consistency. The subject matter expert gold standard, not the standard of the typical professional review team, is expected to be confirmed by the accuracy required by the automated approach to document classification. Professional review teams, rather than the subject matter experts, are coding most of the information on legal document reviews. Thus, holding automated systems to a high standard that is rarely, if ever, achieved in actual circumstances generates an unreasonable and unattainable aim.

Legal AI is the application of technologies such as natural language processing, machine learning, recognition of speech, legal robotics, preparation, natural image comprehension, rules-based expert systems, neural networks for logical programming, artificial vision that was machine learning, and neural networks to legal issues. Artificial intelligence (AI) has appeared as one of the innovative methods to acquire information and knowledge in several sectors. AI

can flawlessly support the need to automate business processes, gain insight from data analysis, and engage with customers and workers.

EVOLUTION

When Alan Turing began to show that the machine could think and learn by itself, thinking like human beings became a central issue for scientists. After a series of tests on whether "machines can think," Alan Turing could implement his hypothesis. Teaching machines to reflect and learn like humans is now not impossible; various tests have revealed the same. Then, in 1956, at the first academic conference on artificial intelligence, John McCarthy proposed the idea of artificial intelligence, which outlined that artificial intelligence is about letting a machine simulate the intelligent behavior of humans as precisely as it can.

The European Union adopted AI technology in 2001. EU has developed Legislation Interoperability Tools LegIT, open software for drafting and editing legislation. Also, Article 36 of Turkey's Constitution requires adopting IT technology in the justice system. As a result, the Government of Turkey has developed an advanced system of AI through the National Judiciary Informatics System (UYAP). The Ministry of Justice (MOJ) IT Department developed UYAP using the most updated technology and methodologies (EU, 2009). Currently, many nations across the world have been modernizing the justice system by using IT under the Strategic Plan of Judiciary

INTERPLAY OF ARTIFICIAL INTELLIGENCE IN LAW

Artificial intelligence (AI) has significantly impacted the legal sectors in the twenty-first century. AI technology has assisted various legal professionals, including lawyers, judges, legislators, and others, in securely storing many private files. The introduction of CD-ROM, electronic files, and digital libraries drew lawyers towards digitalization to minimize human labor in text searching and time difficulty in dealing with analog items. Lawyers and clients began researching Google, digital libraries such as Lexis Nexis, Bloomberg, Justia, and CanLII (Canada), and government documents such as court regulations, laws, and judicial decisions.

On the other hand, it saves time, assures efficiency, ensures accuracy, aids in document review, conducts legal research, and so on. AI has recently become an essential topic for government agencies, including the legislature. The laws have been posted on the websites of different government agencies and made available to individuals worldwide. Similarly, law companies worldwide are now employing AI to help their customers with counseling, document analysis, and even filing court applications. The significance of AI in law is growing by the day, as seen by the construction of National Judiciary Informatics Systems (UYAP) in numerous nations. As a result, AI has played an essential role in the legal field. Despite this, it may do more damage to the general public owing to various factors such as malware, data loss, and more. As a result, to reap the benefits of AI in the subject of law, it must be employed with caution.

Analog resources such as educational materials, casebooks, case reporters, quickly loose-leaf offerings, law journals, and laws were part of every lawyer's library during the evolution stage of law. Because everything was in paper form, managing these records was tiresome. Their storing, conserving, consulting, and sorting took a long time.

The latest interest of lawyers is in computational technologies such as predictive tools and natural language processing, which allow users to extract and reclaim relevant text from noisy data using engines for searching, speech-to-speech translations, and intelligence aids for consumer reimbursement. Artificial intelligence, in particular, is expected to disrupt and take over consumer comprehension, implementation of company infrastructure management, and legal processes. AI can do analytical activities and replicate most of the work now performed by humans. The ability to incarcerate and manage inferred legal expertise that aids in decision-making by lawyers and those they represent is critical here. Such systems function as a legal storehouse, accumulating and gaining insight from their knowledge to better the advice provided.

Despite artificial intelligence's multiple problems, legal AI challenges human knowledge by providing legal services through legal data research, prediction technology, e-discovery, intelligent interfaces, triage services, and legal bots. Legal data research includes a prediction system in which legal artificial intelligence predicts the outcome of an investigation based on a specific theme, as well as/or lawsuit leaning depending on the outcome and knowledge system of authorized research along practice lines.

TOOLS OF ARTIFICIAL INTELLIGENCE USED IN LAW

Legal AI comprises intelligent interfaces to assist lawyers in completing legal activities, contract analysis to assist individuals in finalizing contracts by thoroughly analyzing them, and legal data research to analyze legal data. Legal AI employs machine learning to accomplish these duties, which entails inputting vast information, learning information by machine during the training phase, and producing a learning-based output.

Litigators use planning and predictive Systems in pre-litigation preparations. This AI-powered software examines many publicly available court qualifications, cases, and verdicts completed by the arbiter in precedent up to the present day related to the case, as well as an innovative range of valuable community statistics. A predictive system analyses data such as damage/costs granted, cases resolved by specific firms, success/failure charges of certain lawyers, petition winner/collapse, appealing/losing point of view, and judicial views/rulings. Its primary goal is to reduce the size of a labor-intensive study and provide attorneys and clients with an enforceable approach to previous cases. The deed of attorneys on similar matters, and, where possible, confer some clue of reimbursement that could be granted by such affair/and/or additional feel value data concerning the root of its gathered evidence regarding the liable triumph of an issue compared to before similar matters.

Further, there is Lex Machina, which offers timing analytics using artificial intelligence to forecast the estimated time of a case trial before a given judge. The most basic technique for analysis is artificial intelligence, which discovers the best form from training data, which can include legal documents, photos, audio, and more. Regarding legal AI, we have a legal expert system, which is an analytical form based on legal expertise and competency, thus operating as an e-lawyer. Division of Machine learning classification is into two types: supervised learning, which teaches a representation of recognized input/output data to predict future outcomes amid ambiguity, and unsupervised learning, which discovers hidden prototypes or basic information in input data.

The trial-and-error method selects the best algorithm for regression and classification in legal situations. The method is because highly elastic algorithms tend to overfit data by introducing noise. Choosing the best algorithm necessitates sacrificing one advantage in favor of another, considering complexity, accuracy, and speed. MATLAB provides tools to let the person conduct a variety of appliance learning algorithms and achieve the best results.

SVM, Discriminant Analysis, nave Bayes, closest neighbor, and neural networks are some techniques available in MATLAB for classification. For ensemble methods, decision trees and neural networks perform well for regression techniques such as linear regression, GLM, SVR, and GPR. MATLAB also has regression and classification learner apps that help us choose the optimal model. These programs analyze the data, choose features, and visualize the results, preventing overfitting via holding out or cross-validation. Using these tools and strategies, we may organize our data in an organized manner by categorizing it based on litigations, decisions, judgments, and appeals on cases.

CONTRACTUAL HELP: To assist people in finalizing contracts, legal AI first scans and then analyses legal agreements such as leases and commercial contracts to extract meaningful data and compare them to current laws/rules. The fuzzy rule-based system is the most essential soft computing technique for decision-making. As the base of this AI system is Natural Language, the Fuzzy approach performs well when dealing with imprecise data. It uses fuzzy if-then rules to transform the human answer into fuzzy dependence and a common language. Leasing law, eDiscovery, diligence checks, sales/procurement contract review, risk and compliance assessment, financing/ OTC derivative deal analysis, and employment contract review are some of the uses discovered by law firms.

Due Diligence	Legal Robot, JPMorgan, Judicata: Litigators employ AI techniques to undertake due diligence to identify background information. It aids in counseling customers on the available options in a legal scenario and the essential action to resolve the issue.
Prediction Technology	To find the anticipated outcome of litigations, litigators use artificial intelligence algorithms such as Everlaw, DISCO, Catalyst, Exterro, Brain space discovery, Intraspection, and Premonition.
Legal Analytics	Lawyers can use information based on previous case win/loss history, previous case law, and judge's history to identify patterns and trends. Lex Machina, Ravel Law
Document Automation	The report, perfect NDA, Law firms employ software templates to construct filled-out papers based on data inputs.

Intellectual Property	Trademark Now, ANAQUA Studio, Smart Shell, and Lawyers employ AI tools to help them analyze extensive IP portfolios and make conclusions from the context.
Electronic Billing	Legal AI assists lawyers in automatically computing billable hours: Bright Flag and Smoke Ball.

A SCOPE FOR IMPROVEMENT

Several steps can be put in place to lessen the abuse of AI in the Indian legal system:

1. Robust Regulations: India just implemented regulations for the availability and misuse of digital data via the **Digital Data Protection Bill 2023**, and the country already has IT regulations. Implementation of such regulations simply means that India is already halfway there. Now, all the country needs is detailed rules governing AI's application to the legal system. This legislation should cover algorithm accountability, openness, and the legal limits of AI's influence on decision-making. Adopt strict data protection controls to shield sensitive legal data against manipulation, breach, or unauthorized access.

2. Transparency Reports: Establishments utilizing AI in the court system should be required to regularly produce transparency reports outlining the technology's application, effectiveness, and any remedial measures implemented. Such transparency encourages responsibility and public confidence. AI algorithms employed in legal proceedings must also be released in public, as done by Poland in 2021, after some judges complained about the error in the AI system used by the Ministry of Justice. To reduce biases and errors, ensure the algorithms are thoroughly tested, audited, and verified. Accountability mechanisms are required to hold developers accountable for any unfavorable effects.

3. Ethics Committees: Establishment of impartial Quasi-Judicial ethics committees with legal and AI experts and ethicists to ensure that AI technologies in the judicial system uphold moral and legal standards. These committees can examine and authorize the Usage of Artificial Intelligence. The Committee will also regularly evaluate and modify AI policies and guidelines to reflect new technological developments and evolving ethical concerns.

4. Continuous Monitoring and Auditing: While using any AI, Consistently examining and auditing is needed to find and fix any biases, mistakes, or unintended outcomes that may occur. Such monitoring will result in preserving the honesty and equity of legal proceedings.

5. Human Oversight: No matter how accurate and Effective AI can be, it will always need more empathy and critical thinking. In 2020, some renters were wrongly listed as sexual Offenders, eventually blocking them from getting a home. These crises can be averted if there is a slight human insight into these AI-generated suggestions or decisions. Continue to exercise a sizable amount of human judgment in critical legal issues involving AI.

6. Education and instruction: Give legal professionals specialized instruction on artificial intelligence (AI), its potential, ethical considerations, and limitations. They can use AI

technologies and analyze their outcomes with more knowledge. Start public education efforts to inform people about the legal system's use of AI and its potential limitations. Training will remove any misconceptions about AI and help demystify it.

7. User Consent: Verify that parties to judicial proceedings are aware of the use of AI and how it can affect their cases. Before using AI in decision-making processes, get explicit consent. There is also a dire need to extend the already given concept of consent in the new Data Protection Bill to make it more inclusive to all vulnerable stakeholders.

By putting these policies in place, India can take advantage of AI's advantages in its judicial system while lowering the chance of abuse and supporting the ideals of fairness, equity, and transparency.

CONCLUSION

Artificial intelligence strategies are gaining popularity due to increased client demands on dominating businesses to be more proficient and a growing aversion to remuneration for what they view to be advancement-stage toil. This paper covers current trends in legal AI and suggests strategies that can be used in the future. In the future, using MATLAB software, one can perform deep learning and machine learning algorithms on legal documents. We can create a tax commandment classifier using classification and deep learning based on print published in the Supreme Court, High Court, and district court verdicts in which the courtyard announced a twofold resolution for the specific legal matter.

There are also many complex and critical ethical issues regarding the employment of AI in India's legal system. Addressing issues about transparency, accountability, bias reduction, and job displacement is critical as AI technologies advance and become more integrated into legal procedures. Although artificial intelligence (AI) has an opportunity to improve effectiveness as well as accessibility to justice, it needs to be deployed cautiously and under a strict legal framework to prevent unforeseen consequences.

Furthermore, several recommendations might be taken into account to manage these ethical problems successfully, and the author has discussed a few of them. However, explicit norms and standards should be developed for AI algorithms employed in legal decision-making to ensure openness and justice. Second, it should be required that AI systems be continuously monitored and audited in order to spot and correct any biases that may develop over time. Third, specialized training should be provided to legal professionals so they can comprehend AI's potential, constraints, and ethical ramifications.

Furthermore, a balanced strategy reconciling technology breakthroughs with legal ideals requires cooperation between legal professionals, AI developers, and policymakers. Public awareness initiatives can reduce fears and encourage trust by informing people about AI's role in the legal system. As AI develops and becomes more prominent in India's legal system, continued study and discussion should remain a top focus.

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