

ARTIFICIAL INTELLIGENCE IN INDIAN TRIAL COURTS: PROMISE, PERILS, AND THE PATH FORWARD

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Abstract

Artificial Intelligence (AI) has become a prominent term in today's world. Almost every sector is benefiting from AI-assisted tools in some way. Technology is rapidly evolving and becoming an integral part of our lives. Even the judiciary is embracing AI. Countries such as China, the United States, and the United Kingdom have recognised the advantages of AI tools and have gradually integrated them into their judicial systems. China, in particular, is aggressively promoting AI in its judicial system. This paper explores how AI can reduce the pendency in Indian trial courts. Despite having over 18,000 district and subordinate-level courts, 25 high courts, and a Supreme Court, the backlog of cases in Indian courts is alarmingly high. Currently, there are over 50 million pending cases in Indian courts. AI can help address the backlog by being introduced at various stages of case proceedings. It will not only assist judges in performing their duties more efficiently but also address issues such as repetitive tasks, emotional distress, case management, time constraints, and inconsistent rulings. It is believed if AI is introduced in a controlled manner at various stages of legal proceedings, it can significantly improve the adjudication process in Indian courts.

I Introduction

THE USE of artificial intelligence (AI) in the courts is gaining popularity worldwide. Most developed nations are already using some form of AI or considering adopting it in their judicial systems. The United States, the United Kingdom, and China have formally integrated AI into their adjudication processes in a phased manner.¹ Though AI is not a panacea for all problems in the judicial system, it can provide judges with some assistance in efficiently performing their work.²

The pervasive presence of machines significantly influences daily life. From morning until night, and even during sleep, technology-driven devices exert a profound impact. Devices like cell phones, computers, internet-connected gadgets, smartwatches, autopilots, and autonomous cars are increasingly influencing human behaviour and decision-making, with both positive and negative effects.

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1 Ummey Sharaban Tahura and Niloufer Selvadurai, 'The Use of Artificial Intelligence in Judicial Decision-Making: The Example of China' *Int'l J L Ethics Tech* 1(2022).

2 Herbert B. Dixon Jr., "What Judges and Lawyers Should Understand about Artificial Intelligence Technology" 59 *Judges J* 36(2020).

The courts, as institutions, are not distant from developments in the tech world. The use of technology in the courts is not new, but with the advent of AI, legal professionals are seeking ways to leverage it to grow the industry and carve out a niche. Tasks such as proofreading extensive documents, drafting contracts, conducting due diligence, and predicting legal outcomes are areas where law firms are considering leveraging AI.³ Additionally, AI tools are being developed for use by judges worldwide.⁴

India is globally known for its vibrant information technology sector. The use of technology in Indian courts is also prevalent.⁵ However, with a population of over 1.4 billion, India needs more smart courts and technology-driven human resources at the support level for better outcomes. This is where AI can play a crucial role in addressing many of the challenges faced by Indian courts. While AI is not meant to entirely replace human judges, it can certainly assist judges in performing their work more efficiently in less time. However, implementing AI will require infrastructural changes that need approval from the Supreme Court of India. Additionally, amendments to procedural statutes and codes are required to give AI-generated results evidentiary value under the law.

India has 3683 district and subordinate level court complexes, 25 high courts, and a Supreme Court.⁶ However, the ratio of judges to the population is quite low at 21 per million.⁷ There are 47.92 million pending cases in the district and sessions courts,⁸ 6.35 million in the high courts⁹ and 92,743 cases in the Supreme Court of India.¹⁰ As a judge serving in a district court in India, Addressing the challenges faced by district

3 Vincent R. Johnson, 'Artificial Intelligence and Legal Malpractice Liability' 14 *St Mary's J on Legal Malpractice and Ethics* 55, 73 (2024).

4 *Supra* note 3.

5 K. Vanathi Krishna and K. Shobika, "Technology in Upgrading Indian Courts" 18 *Supremo Amicus* 969

6 eCourts Services (2020), *available at*: https://ecourts.gov.in/ecourts_home/ (last visited on Feb. 10, 2026).

7 Government of India, Ministry of Law and Justice, *available at*: [https://sansad.in/getFile/loksabhaquestions/annex/1715/AU1335.pdf?source=pqals#:~:text=ARJUN%20RAM%20MEGHWAL\),\(a\)%3A%20At%20present%2C%20the%20judge%20%2D%20population%20ratio%20in,21%20Judges%20per%20million%20population](https://sansad.in/getFile/loksabhaquestions/annex/1715/AU1335.pdf?source=pqals#:~:text=ARJUN%20RAM%20MEGHWAL),(a)%3A%20At%20present%2C%20the%20judge%20%2D%20population%20ratio%20in,21%20Judges%20per%20million%20population) (last visited on Feb. 10, 2026).

8 National Judicial Data Grid, District Court of India, *available at*: <https://njdg.ecourts.gov.in/njdgnew/index.php>, (last visited on Feb. 10, 2026). The figures keep on updating as data on the website is fed on real time basis.

9 National Judicial Data Grid, High Courts of India, *available at*: <https://njdg.ecourts.gov.in/hcnjdgnew/> (last visited on Feb. 10, 2026). The figures keep on updating as data on the website is fed on real time basis.

10 National Judicial Data Grid, Supreme Court of India, *available at*: https://njdg.ecourts.gov.in/scnjdg/?p=home/index&app_token=6282d571f475d5a252b032422f72224ee6451f5f13039876bb737bcccc72f5e (last visited on Feb. 10, 2026).

and subordinate courts and to examine the potential integration of artificial intelligence tools into court proceedings to develop effective solutions.

The infrastructure of trial courts differs substantially from that of appellate courts, which include the high courts and the Supreme Court. The majority of cases are filed in trial courts, making them the cornerstone of the Indian judicial system. Unlike the appellate courts, trial courts are easily accessible to the public, and judges frequently interact with litigants.

Since 2005, the Supreme Court of India has been implementing the ‘e-court project’ across the country to promote information technology in court services. This project has been implemented in phases, taking into account the vast expanse of the country. Currently, the third phase of the e-court project is in operation.¹¹ As of now, almost 3683 district and taluka-level courts are connected to the National Judicial Data Grid (NJDG), ensuring timely updates of pending and disposed cases. Any person can log in to the e-court website to check the current status of their case. I am discussing this to emphasise that India has a robust IT infrastructure to implement AI in its judicial system. AI can assist in expediting case disposal, distributing the workload evenly among judges, identifying cases that require priority hearings, drafting standard orders, conducting research, and verifying the authenticity of information filed in court, among other things.

II AI in the judicial system

This section aims to briefly provide a general understanding of AI in the judicial system and its uses.

McCarthy, in 1955, described AI as a computer capable of thinking and acting like an intelligent being.¹² Similarly, Elaine Rich offered a more intriguing definition, stating that artificial intelligence is the study of programming computers to perform tasks at which humans are now superior.¹³ The definition of AI has improved over time, as has its performance in tasks. The term AI in the context of the judicial system may be of recent origin, but the use of technology in courts is not new. Today, courts are technology-driven, and significant improvements are being made to provide the best services to people. Examples of technology used in courts worldwide include the automatic display of case numbers on centralised screens, updates of cause lists on phones, witnesses receiving e-summons, and obtaining copies of orders directly from court portals. Using AI tools in courts sets a new benchmark in the justice delivery process.

11 Department of Justice, ‘Cabinet approves eCourts Phase III for 4 years’, *available at*: <https://doj.gov.in/phase-iii/> (last visited on Feb. 10, 2026).

12 W. Keith Robinson, ‘Enabling Artificial Intelligence’ 60 *Hous L Rev* 331 (2022).

13 *Ibid.*

Maoyu Wang, in his “Artificial Intelligence (AI) in the Field of Law,” argues that AI can make litigation more cost-effective, save lawyerstime, and improve communication with clients.¹⁴ In sectors such as customer service, AI tools can already answer callers’ questions, and chatbots are being developed to handle multiple queries simultaneously. The question arises whether comparable services can be developed for the legal industry and whether machines can address legal queries to reduce the cost of legal advice. Scholars who support AI integration have responded affirmatively. However, before discussing the potential use of AI in the legal sector, a layman’s understanding of AI is desirable.

Artificial General Intelligence (AGI), Artificial Super Intelligence (ASI), and Artificial Narrow Intelligence (ANI) are the three subsets of AI.¹⁵ ANI is commonly referred to as ‘weak AI’ by programmers due to its limited functionality and specialised task design.¹⁶ Strong AI is what programmers refer to as AGI and ASI. More powerful AIs carry out duties similar to those of humans.¹⁷ In particular, ASI is smarter than humans, but AGI can perform tasks and has intelligence comparable to humans.¹⁸ Similarly, machine learning is a branch of artificial intelligence.¹⁹ With the right inputs, machine learning systems are coded to become proficient at the jobs they are tasked with using mathematical formulations.²⁰ For example, suggesting songs or videos to a viewer depending on their past choices and preferences.²¹

Daniel Faggella, Head of Research at Emerj, in his work ‘AI in Law and Legal Practice: A Comprehensive View of 35 Current Applications’, has argued that AI is being used in the legal sector for various purposes, a few of which are discussed below.²²

Legal prediction

AI is capable of predicting litigation’s outcome. AI predicts, after considering the facts and circumstances, the likelihood of winning or losing, and confirms whether a

14 Maoyu Wang, ‘Use of Artificial Intelligence (AI) in the Field of Law’ (2022-2023) 6 *Ariq LJ Emerging Tech i*.

15 ScienceDirect, ‘Artificial General Intelligence’, *available at*: <https://www.sciencedirect.com/topics/computer-science/artificial-general-intelligence> (last visited on Feb. 10, 2026).

16 *Ibid*.

17 *Ibid*.

18 *Ibid*.

19 *Ibid*.

20 *Ibid*.

21 *Ibid*.

22 Daniel Faggella, ‘AI in Law and Legal Practice – A Comprehensive View of 35 Current Applications’ (EMERJ, 7 Sep. 2021), *available at*: <https://emerj.com/ai-in-law-legal-practice-current-applications/> (last visited on Feb. 10, 2026).

litigant should file a case.²³ Machine learning is used to predict the outcome. Cases of a similar nature follow a trend that, if fed with the right data, could predict the outcome. Courts tend to follow precedent, and machine learning can be used to predict outcomes when AI tools are fed previous judgments.

Due diligence

Due diligence in commercial legal transactions involves reviewing and vetting documents in accordance with legal requirements.²⁴ Corporate lawyers often engage in due diligence before finalising any commercial deals. This is one area where law firms use AI. Legal professionals used to evaluate papers in a physical data room, but nowadays they can work together virtually in a software-based data room. AI makes the process even easier by extracting data and classifying papers into categories, such as contract types and jurisdictions.²⁵ Lawyers still need to review the information manually, but automation makes it easier for them to quickly find various items, such as contract clauses. This automation speeds up lawyers' review of papers, but it does not replace their legal analysis.²⁶

Data trend analysis

By studying case law, AI can identify relevant facts and provide lawyers with useful trends in judge's decisions in specific situations. AI will be able to accurately predict the outcome, likely to be made, if filed before a particular judge with the given facts and circumstances.²⁷ By optimising each search's outcome, AI also helps lawyers with their legal research. Finding pertinent laws and cases that can be used to bolster a claim is how the AI enhances searches.²⁸ By recognising the methods that lawyers have previously employed for particular fact patterns, AI can forecast appropriate case strategies. To draw an analogy, it is like predicting music based on a listener's taste.²⁹ The judge's behaviour is studied through the cases he decides to make predictions.

Document generation

AI can also help lawyers with legal drafting. By entering data, lawyers can utilise machine-learning technologies to complete contracts. The algorithm may, for instance, complete non-disclosure agreements (NDAs). As machine learning can decipher written natural language and identify patterns across many texts, AI may also process texts

²³ *Supra* note 14.

²⁴ *Ibid.*

²⁵ *Ibid.*

²⁶ *Ibid.*

²⁷ *Ibid.*

²⁸ *Ibid.*

²⁹ *Ibid.*

found in memoranda of law and identify patterns.³⁰ AI can be used in drafting standard rent/lease agreements, partnership deeds, sale agreements, gift deeds, loan agreements, vendor and supplier contracts, wills, affidavits, legal notices, *etc.*

Intellectual property reviews

AI can help with intellectual property searches across domains in multiple jurisdictions. Existing patent, copyright, trademark, and geographical indication searches can be facilitated by AI, reducing the burden on officers.³¹ It can identify similar inventions, detect potential infringement risks, compare technical claims, and uncover hidden overlaps using semantic and keyword analysis.

E-discovery and inspection

In civil matters, discovery and inspection of documents play an important role. Parties exchange the documents they rely on to narrow down the issues of fact and law. Original land records are also provided to the court for adjudication. AI can help verify the documents/record of rights/mutation papers, *etc.* With the digitalisation of the record of rights underway across India, AI can run checks on documents and easily verify their genuineness if they correspond to available digital land records, reducing time and human error.

AI-assisted online courts

During the COVID-19 pandemic, courts worldwide started using video conferencing to conduct their proceedings. AI-assisted courts can help record evidence and translate documents. Courts often face challenges when a lawyer or litigant speaks a different language, and AI can help overcome those barriers. AI can also perform the work of stenographers and deposition typists, making it cost-effective for organisations and reducing the likelihood of human errors.

III Digitalisation of the Indian courts

This section aims to discuss the current information technology used in Indian trial courts to understand whether AI can be introduced into the Indian judicial system.

With a population of over 1.4 billion, India has 3683 district and subordinate court complexes, 25 high courts, and a Supreme Court.³² The digitalisation and management of all these courts, comprising a single integrated judiciary, is a herculean task. The important tech-related initiatives taken by the Indian courts are discussed below.

E-committee and e-court project

In 1991–1992, computers were introduced in the Indian Supreme Court and high courts for office automation, account keeping, and payroll preparation. Between

³⁰ *Ibid.*

³¹ *Ibid.*

1997 and 1998, the Supreme Court of India and a few high courts began using computers to prepare court cases daily and to print rulings and orders.³³ The real Information and Communication Technology (ICT) revolution in the Indian courts began in 2005, when the Supreme Court proposed an e-committee to advance ICT development in the Indian courts. The e-committee additionally recommended a phased implementation of ICT in Indian courts. At present, the third phase of ICT development is underway.³⁴

With the help of the e-Courts initiative, the Indian judiciary will be able to use ICT to streamline the administration of justice and make it more litigant-focused, cost-effective, transparent, and responsible.³⁵ Phase I of the e-Courts project, approved in February 2007 and with a budget of Rs. 935 crores, was successfully completed on March 31, 2015, with 14,249 sites equipped with Judicial Service Centres and Computer Server Rooms for filing cases. In 13,436 courts, hardware was installed with local area network (LAN) and more than 14,000 judicial officers received laptops.³⁶ At present, most district courts in India maintain official websites.

The project's second phase ran from 2015 until 2023. There are currently 18,735 District and Subordinate courts that are computerised.³⁷ The covered courts in Phase II are equipped with additional hardware (1+3) systems per courtroom, whereas the newly created and uncovered courts from Phase I are equipped with 2+6 systems per courtroom. Additionally, the court complexes are equipped with hardware, LAN, and other necessary equipment.³⁸

Phase II plans to link all remaining court complexes with prisons.³⁹ Production of undertrial prisoners is to be conducted through video-conferencing-enabled courts. It also provides for a Judicial Knowledge Management System, including an Integrated Library Management System and the use of digital libraries, with a focus on judicial

32 eCourts Services, *available at*: https://ecourts.gov.in/ecourts_home/ (last visited on Feb. 10, 2026).

33 E-Committee, Supreme Court of India, 'National Policy and Action Plan for Implementation of Information and Communication technology in the Indian Judiciary', *available at*: <https://main.sci.gov.in/pdf/ecommittee/action-plan-ecourt.pdf> (last visited on Aug. 2026).

34 Department of Justice, 'Cabinet approves eCourts Phase III for 4 years', (last visited on Feb. 10, 2026).

35 Sunil Ambwani, 'Information and Communication Technology in Courts', *available at*: https://nja.gov.in/Concluded_Programmes/2018-19/P-1142_PPTs/1.Information%20and%20Communication%20Technology%20in%20Courts.pdf (last visited on Feb. 10, 2026).

36 *Ibid.*

37 Ministry of Law and Justice, 'Status of E-Court Mission Mode Project', Press Information Bureau, Delhi, *available at*: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1945462> (last visited on Feb. 10, 2026).

38 *Supra* note 35.

39 *Ibid.*

officers' capacity-building.⁴⁰ Emails, SMS, and mobile phones are widely used for information sharing. Every court complex will have a 'kiosk' that will provide online certified copies and have e-payment gateways for deposits, court costs, fines, and other payments.⁴¹ Except for having a kiosk, most targets have been achieved. A few trial courts in India are located in remote areas and face connectivity issues despite strong internet penetration nationwide.

Case Information System (CIS)

The Case Information System (CIS) is an initiative of the e-committee of the Supreme Court of India, successfully implemented nationwide. The main purpose of CIS is to enable litigants to monitor their cases online from anywhere in the world. This includes accessing daily case status, orders, hearing dates, and case progress on any given date.⁴² The data is updated in realtime by court staff and judges and can be viewed on the website www.ecourt.gov.in. Additionally, the e-Courts Services/CIS app is available for download on Android and iOS devices. There is also a separate e-court services website for the high courts, the Supreme Court, and all district and session courts in India.

The CIS provides additional information, such as the number of case institutions and disposals, officers' monthly disposals, e-chargesheets, the report on judgment and orders not uploaded, prisoners' IDs, and the cause list, among others. It also provides information on age-wise pendency, reasons for difficulty in securing witnesses, absconders, cases stayed by the high court and the Supreme Court, obstruction in the service of process in execution matters, *etc.* Additionally, it includes details of cases where parties are not interested or counsel is unavailable. CIS provides model templates for orders such as return of plaint, committal order, *ex-parte*/hostile witness/compromise judgments. CIS also has a '*Rojnama*' section where the court manually enters daily case updates.

E-court national portal

Litigants can access cause lists and case statuses through the e-Courts National Portal by providing information such as case numbers, first information report numbers, party names, advocate names, filing numbers, Acts, and case kinds. Daily orders, final orders, and judgments can be viewed and downloaded on www.ecourts.gov.in. Each District Court in India has a website whereit posts information about itself.⁴³ The judges are expected to upload judgments and orders daily, if not preferably

40 *Ibid.*

41 *Ibid.*

42 E-Committee, Supreme Court of India, 'Case Information System', *available at*: <https://ecommitteesci.gov.in/division/case-information-system-cis/> (last visited on Feb. 10, 2026).

43 *Ibid.*

within seven days of pronouncement. However, due to excessive workload and a lack of human resources, it is taking longer than usual. AI can make significant improvements in this, as discussed in later sections.

National Judicial Data Grid (AI in use)

The National Judicial Data Grid (NJDG) is an online platform developed as part of the e-Courts Project that contains a database of orders, judgments, and case details from district and subordinate courts, high courts and the Supreme Court.⁴⁴ It provides information on cases from all computerised district and subordinate courts, including appellate courts. Both civil and criminal case data are accessible on NJDG. It also allows for drill-down analysis by case age, time of filing, district of filing, *etc.*⁴⁵ This drill-down analysis is itself an example of AI successfully working in the Indian judicial system. The system filters cases more than 20 years old and prioritises them before the judges for their disposal.

NJDG provides stakeholders with access to statistical data on case pendency, disposal rates, age distribution of cases, stages of proceedings, and court performance. It plays a crucial role in judicial reforms by supporting evidence-based policymaking. Governments and judicial authorities rely on NJDG data to allocate judicial infrastructure, appoint judges, and oversee case backlogs. Additionally, it enhances transparency by enabling the public to monitor institutional efficiency and overall court operations. As a valuable empirical resource, NJDG aids in analysing litigation trends, judicial delays, and access to justice. Overall, NJDG marks a significant technological advancement that aims to modernise the Indian judiciary and bolster public confidence in the justice system.

In the 2018 Ease of Doing Business report, the World Bank praised the National Judicial Data Grid for generating case management reports, thereby simplifying contract enforcement.⁴⁶

E-Filing (AI in use -CIS consuming data)

Electronic filing of documents is now possible through the e-filing system. Cases may be submitted electronically to the courts that have implemented e-Filing systems. E-Filing aims to encourage paperless filing while saving litigants and lawyerstime and money.⁴⁷ The portal also offers filing of online *vakalatnama*, online oath recording

44 Department of Justice, 'The National Judicial Data Grid (NJDG)', *available at*: <https://doj.gov.in/the-national-judicial-data-grid-njdg/> (last visited on Feb. 10, 2026).

45 *Ibid.*

46 Apoorva Mandhani, 'World Bank Lauds National Judicial Data Grid In Ease Of Doing Business Report' (*Live Lawin*, Nov. 5 2017), *available at*: <https://www.livelaw.in/world-bank-lauds-national-judicial-data-grid-ease-business-report/> (last visited on Feb. 10, 2026).

47 E-Committee, Supreme Court of India, 'eFiling Services', *available at*: <https://www.nic.in/wp-content/uploads/2023/04/eFiling.pdf> (last visited on Feb. 10, 2026).

and ready-made templates for easier drafting of pleadings. Today, documents can be filed 24/7 from any location. The high courts have been sent draft e-filing regulations for adoption by the Supreme Court. As of April 30, 2024, twenty-two high courts had accepted the model e-filing regulations.⁴⁸ It has also become mandatory to e-file documents in commercial disputes pertaining to governments and PSUs. The best part of e-filing is that CIS continuously consumes the data and becomes smarter, further reducing errors. This is yet another example of AI being used in India.

Virtual courts

India has virtual courts that currently handle only traffic violation cases. Anyone who has been fined can log in to the website and pay the fine. The litigant also has the option to contest the case, in which case he must appear in court. To handle traffic challan matters, 22 Virtual Courts in 18 States and UTs have been operationalised.⁴⁹

AI without using the word AI

The above discussions have been made with the objective of understanding the level of IT infrastructure Indian courts have. Since 1995, the Supreme Court of India and the government have made significant efforts to advance court technology. Not only have the courts been computerised, but they have also been connected to a single grid, the National Judicial Data Grid (NJDG), to update case information and developments in real time. Today, with a single click, anyone can access all information about the cases. Without using the word AI, the Indian courts are already reaping the benefits of AI in case management. What is additionally required is the use of AI in the case proceedings. The CIS software is regularly fed with data and is an example of machine learning. It analyses the pendency by age and prompts the disposal of old cases. It also monitors the performance of judicial officers across India. Recording of evidence through video conferencing, online remands, hearing bail applications online (particularly during COVID), issuing online certified copies, e-filings, automatic detection of defects in the petition, online templates for charge, statement, etc., are examples of ways in which machines are efficiently assisting the judges, lawyers, and litigants.

It is worth noting that India has become a global pioneer in the use of video conferencing (VC) for judicial proceedings. Using video conferencing systems, various high courts heard 78,69,708 cases till June 30, 2023, while the district and subordinate courts heard 1,98,67,081 cases. As of May 15, 2023, the Supreme Court of India

48 Department of Justice, 'eFiling, available at: <https://doj.gov.in/efiling/>> (last visited on Feb. 10, 2026).

49 Virtual Courts, About Virtual Courts', available at: <https://vcourts.gov.in/virtualcourt/>, (last visited on Feb. 10, 2026).

had conducted 4,82,941 hearings online.⁵⁰ Additionally, Video Conference facilities have been made available between the 1272 jails and 3240 court complexes. The High Courts of Gujarat, Guwahati, Orissa, Karnataka, Jharkhand, Patna, Madhya Pradesh, and the Supreme Court of India have begun to stream live court proceedings, enabling the media and other interested parties to follow along.⁵¹

The government of India launched the Tele Law program in 2017 as part of the DISHA (Designing Innovative Solutions for Holistic Access to Justice) scheme.⁵² This program connects the underprivileged and needy with panel lawyers through video conferencing, phone calls, and chat services available at Common Service Centres (CSCs) located in Gram Panchayats, as well as through the Tele-Law mobile app. The Tele Law program is an efficient and dependable e-interface platform. The National Service and Tracking of Electronic Processes (NSTEP) program was introduced to facilitate technology-enabled summoning and process serving. At the moment, 28 States and UTs have implemented it.⁵³

A recent example of AI use in the Indian judiciary is the Supreme Court's launch of the '*Su-Sahayak chatbot*' on May 11, 2026.⁵⁴ This AI-powered interactive chatbot, developed by the National Informatics Centre (NIC) in collaboration with the Supreme Court Registry, aims to simplify access to court services by providing interactive prompt-based guidance to visitors.⁵⁵ Using a variety of search parameters, including diary number, case number, party name, CNR number, or case specifics from high courts and district courts, it provides real-time case status.⁵⁶ The chatbot provides comprehensive guidance on using Supreme Court e-services, including online appearances, certified copy requests, RTI applications, and other digital court resources.⁵⁷ It further provides downloadable links to daily orders and final judgments. In addition to responding to frequently asked questions about court fees, the official calendar, hybrid hearings, court procedures, and more, *Su-Sahayak* improves user support and digital accessibility.⁵⁸

50 Ministry of Law and Justice, 'Use of Technology in Judicial Institutions', Press Information Bureau, *available at*: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1941500> (last visited on Feb. 10, 2026).

51 *Ibid.*

52 Department of Justice, 'Designing Innovative Solutions for Holistic Access to Justice', *available at*: <https://doj.gov.in/designing-innovative-solutions-for-holistic-access-to-justice-disha/> (last visited on Feb. 10, 2026).

53 *Ibid.*

54 Supreme Court of India, 'Launch of Su-Sahayak Chatbot' (F.No CC-13/1/2025-CC 11 May 2026), *available at*: <https://cdnbbsr.s3waas.gov.in/s3ec0490f1f4972d133619a60c30f3559e/uploads/2026/05/2026051147.pdf>, (last visited on Feb. 10, 2026).

55 *Ibid.*

56 *Ibid.*

57 *Ibid.*

58 *Ibid.*

IV AI in the courts: Lessons from China

This section deconstructs the jurisprudential necessity of AI-governed courts backed by studies by academic scholars worldwide. It further discusses key AI applications used in the Chinese courts.

Why AI? A judicial necessity or constructed myth

Before discussing the types of AI used in Chinese Courts, it is imperative that we address a fundamental query: Why is there such an emphasis on the employment of AI in courts? Have people stopped reposing faith in human judges, or are AI judges more capable of doing the same work more efficiently?

In an interesting study, *Jens Ludwig and Sendhil Mullainathan* have argued that the same judges treat cases differently, and that the same defendant is treated differently by different judges.⁵⁹ There is no uniformity, and the criminal justice system fails in its fundamental duty to provide justice.⁶⁰ They further argued that many high-risk individuals are released and low-risk individuals are jailed, often making mistakes. Many disadvantaged groups bear the brunt of the system, proving the whole set-up to be discriminatory.⁶¹ They have argued that algorithms have a long history in criminal justice as a potential solution to these problems. They have observed that building a good algorithm depends on understanding how human judges react to a particular situation.⁶²

There is a further advantage to algorithms: when properly maintained, their issues are simpler to identify and address than those arising from human psychology. Improving flawed algorithms is easier than improving faulty decision-makers.⁶³ It can also address problems like ‘tough’ and ‘lenient’ judges. Authors, interestingly, point out that judges vary not only from one another but even from themselves; a single judge may make a different decision on the same issue on a daily basis. He himself may not be uniform in his approach. This is where AI plays a role, offering the system consistency and stability.

Saul Levmore and *Frank Fagan* have interestingly observed that, just as computers predict next week’s weather better than any human working alone, machines can make better decisions than judges when deciding whether to grant bail.⁶⁴ Similarly, scholar *Joshua Park* in his work “*Your Honor, AI*” published in the Harvard Law Review has observed that AI today can take photographs of a speeding vehicle automatically and send fines to the address linked to the number plates. He, however, points out

59 Jens Ludwig and Sendhil Mullainathan, ‘Fragile Algorithms and Fallible Decision- Makers: Lessons from the Justice System’ 35(4) *Journal of Economic Perspectives* 71-96(2021).

60 *Ibid.*

61 *Ibid.*

62 *Ibid.*

63 *Ibid.*

that deciding a simple matter with AI is one thing, and deciding a complex matter is another.⁶⁵ He notes that humans have abilities that robots cannot match; in the case of the judiciary, these include the capacity to critically analyse a given circumstance and the flexibility to reach just decisions while taking into account a variety of factors. He observes that AI judges possess speed, multitasking capabilities, and instant access to pertinent legal materials. In addition to allowing the judges to concentrate on more significant decisions, this is advantageous for the general public as well, as it spares them from having to endure the protracted, costly, and unpleasant litigation process.⁶⁶

Additionally, AI judges may be more equitable than human ones. According to a collaborative study conducted by Queensland University of Technology and Swinburne University Law School in Australia, arbitrary factors such as socio-economic class and race affected court decisions.⁶⁷ Furthermore, judgments were inconsistent across courts due to the judiciary's collective composition, which comprises hundreds, or even thousands, of distinct judges, attorneys, and legal professionals. For example, the study found that one court in Victoria, the second-most populous state in Australia, had a conviction rate for offenders three times higher than that of other courts in the region.⁶⁸

The most common complaint about the legal system is the 'cost factor'. People find it very expensive to afford a lawyer. With AI, people can obtain legal services at no cost and at their convenience using a digital platform. People who are unable to afford a lawyer can resolve legal issues without incurring high costs and can obtain the justice they are entitled to without missing significant portions of their pay or workdays.⁶⁹ This is especially true because witnesses lose valuable time and money when they are called to testify in court. This can be mitigated by devising a way for witnesses to testify from where they reside, after taking an oath online.

AI in Chinese courts

Benjamin Minhao Chen and Zhiyu Li, in their scholarly work '*How will technology change the face of Chinese Justice*', have critically examined the various dimensions of technological integration within the Chinese legal system and its transformative impact on judicial administration. AI technologies are being tested in courts to increase access to justice and streamline adjudicatory procedures. China is increasingly positioning

64 Saul Levmore and Frank Fagan, 'Competing Algorithms for Law: Sentencing, Admissions, and Employment' 88(2) *The University of Chicago Law Review* 367-412(2021) .

65 Joshua Park, 'Your honour, AI' 41(2) *Harvard International Review* 46-48(2020).

66 *Ibid.*

67 *Ibid.*

68 *Ibid.*

69 *Ibid.*

itself to become the first nation to systematically integrate AI into judicial functioning and court administration.⁷⁰ Some of the leading AI-based applications used in Chinese courts are discussed here:

Xiao Zhi 3.0 or little wisdom

This AI application, widely known as ‘judge’s assistant’ or ‘little wisdom’, has been developed in China (2019) and is largely being used for financial and traffic disputes. Recently, a court in China used the tool to try 10 people who failed to repay the loan.⁷¹ The judgment was out in less than 30 minutes.⁷² But for the AI, ten separate trials would have been held, engaging ten different judges, or one judge would have tried all the matters together. Xiao Zhi 3.0 initially took on repetitive duties, including announcing court proceedings during hearings. These days, the technology is used to assess case materials, validate facts in real time from databases, summarise arguments, evaluate evidence and record testimony using speech recognition.⁷³

Xiao Fa

Xiao Fa robot has been installed in more than a hundred courts. It can provide information on both substantive and procedural law. Xiao Fa uses common language to translate technical legal jargon to educate the public. It uses the child’s voice to diffuse arguments and calm the litigants.⁷⁴ The robot fills a societal demand for accessible and reliable counsel. The majority of the responses search engines provide are drawn from other users’ experiences; they are not expert opinions, but they do offer some assistance to litigants. Courts can, by installing robots, freely disseminate legal knowledge tailored to local circumstances.⁷⁵

One-stop terminals/litigation guidance machines

This is very common in Beijing courts and is being slowly rolled out nationwide. The machines are one-stop terminals that estimate litigation costs and draft complaints. These terminals provide reports that estimate the likelihood of a lawsuit failing and the potential litigation expenses, including reputational damage, time, money, and family ties, based on self-administered questionnaires.⁷⁶ The reports also mention similar cases, pertinent statutes, and documents needed at each level of the process. A court or mediator will arrange a conference where both parties can submit evidence,

70 Benjamin Minhao Chen and Zhiyu Li, ‘How will technology change the face of Chinese Justice?’ 34(1) *Columbia Journal of Asian Law* 4(2020).

71 Arasa Dale, ‘Chinese AI Helps Make Legal Decisions’ (*INQUIRER.NET*, 22 January 2023) <<https://technology.inquirer.net/120951/chinese-ai-facilitates-legal-decisions>> (last visited on Feb. 20, 2026).

72 *Ibid.*

73 Deutsche Welle, ‘How China’s AI is automating the legal system’ (*Taiwan News*, 20 Jan. 2023) available at: <https://www.taiwannews.com.tw/news/4787354> (last visited on Mar. 2, 2026).

negotiate, and reach a settlement agreement, if they are willing to mediate. A complaint generator provides free assistance in drafting the claim if the party chooses to proceed to adjudication.⁷⁷ This machine is also called a 'litigation guidance machine' and produces a 'litigation assessment report'. The report includes verdicts from similar cases and provides a comprehensive explanation of everything.⁷⁸

When the complaint is prepared, it can be submitted in person or through WeChat. Cases will be electronically sent to the appropriate court, even if it is located in a different part of the country.⁷⁹ As of December 2019, this method had been fully adopted in all basic and intermediate people's courts, having been piloted in Zhejiang Province. Between July 2019 and December 2019, when the initiative was fully implemented, 19,471 cases were processed using the cross-regional filing system.⁸⁰ Additionally, the Chinese Supreme Court is testing a national network that will allow parties and attorneys to access case-related documents via phone, email, and instant messaging apps. A similar procedure has also been established by the lower courts.⁸¹ At the end of 2018, 2995 courts countrywide provided litigation services on their official websites, in addition to the 1,623 courts that had created their own mobile applications.⁸²

Mobile courts

China is also experimenting with 'mobile courts'. Under the tagline "let data cover more ground, let litigants run less," mobile courts replicate courtroom processes from physical locations into mobile devices.⁸³ Many of the features available on individual court websites, like case evaluation, electronic filing and service, and question answering, are integrated into mobile courts. Parties can participate in discovery, mediation, or trials via WeChat on mobile courts, which combine facial recognition and e-signature technologies with remote audio and video recording. This mobile court is not to be confused with mobile vans that travel to the remotest corners of the country to provide justice. Even the vans are well equipped with self-service litigation. The tech-

74 Benjamin Minhao Chen and Zhiyu Li, 'How will technology change the face of Chinese Justice?' 34(1) *Columbia Journal of Asian Law* 4,9(2020).

75 *Id.* 10.

76 *Id.* 11.

77 *Ibid.*

78 *Ibid.*

79 *Supra* note 74 at 12.

80 *Ibid.*

81 *Ibid.*

82 *Supra* note 74 at 13.

83 *Ibid.*

savvy vans can provide AI identification, cross-examination, voice recognition, live broadcast and panoramic intelligent trial recording.⁸⁴

Similar case intelligent recommendation system

The algorithm has been developed to recommend similar cases based on the circumstances, the type of dispute, and the relevant statutes.⁸⁵

206 System (Shanghai intelligent case-handling system for assisting judges in criminal cases)

An AI-based trial support system created by the Shanghai People's High Court and the ICT company iFlyTek. It has been granted a patent and a copyright by the Chinese government. It was originally an integrated criminal case processing system that could automatically search for and link pieces of evidence, compare facts to precedents, identify relevant legal doctrines, and help judges systematically apply the law to the salient aspects of the evidence-supported facts.⁸⁶ It now includes certain categories of cases involving commercial and civil law. The 206 System uses modern natural language processing (NLP) technology to determine the semantic meaning of legal and evidentiary materials. Additionally, it uses well-established techniques such as bootstrapping and Dual Iterative Pattern Relation Extraction (DIPRE) to simultaneously extract templates and examples from labelled samples and train the machine to automatically annotate texts.⁸⁷

In a 206-system courtroom, there are telescreens in front of the judge, the prosecutor, the defendant, the parties, and the attorneys. As the trial progresses, relevant data, such as arrest warrants, witness statements, interrogation transcripts, and video clips, will be displayed instantly on the screen via voice recognition commands. The system not only displays the information but also automatically analyses it. After the evidence is presented, an assessment will be made to determine whether the chain of evidence meets the required standard of proof.⁸⁸

Four unique roles performed by this AI tool are:

- i. Evidence standards and rules guidance: This AI tool provides easily understandable, digitised checklist-style guidelines for case-handling staff to gather and present evidence. This helps to avoid common issues with the

84 Huaxia, 'Across China: China's mobile courts serve people in mountainous areas' (Xinhua, 02 September 2023), *available at*: <https://english.news.cn/20230902/0a1fa557159d406f9bb80a172831cfba/c.html>, (last visited on Feb. 20, 2026).

85 *Id.* 17.

86 George G. Zheng, 'China's Grand Design of People's Smart Courts' 7 *AsianJLS* 561 (2020).

87 *Ibid.*

88 *Ibid.*

- procedure, such as inconsistent evidence standards across procuratorates, courts, and public security agencies, and irregular case-handling practices.⁸⁹
- ii. Evidence Review: The 206 system can review, verify, and oversee both the individual pieces of evidence and the chain of evidence of the entire case. It can promptly alert investigators and officers to issues with the evidence, improving case management.⁹⁰
 - iii. Interrogation guidance: The AI can provide guidance to police personnel during questioning or interrogation using interrogation models developed for various case types. It can also assist users in identifying inconsistencies in the confessions, ensuring the accuracy, legitimacy, and comprehensiveness of the statements made during interrogation.⁹¹
 - iv. Intelligent Court Trial Assistance – The system ensures that the trial is the centrepiece of the judicial process, confirming that facts and evidence are determined in court, and guaranteeing the public’s right to know, participate, and express.⁹²

To conclude, the growing integration of Artificial Intelligence within the judicial system of China reflects a transformative shift towards technologically assisted adjudication. China is pushing the limits in AI-based adjudication and reinventing how courts function. Today, AI tools in China can identify discrepancies and weed out contradictory statements. Computers produce draft opinions that describe the dispute’s background and procedural history. The AI tools have become so advanced that algorithms trigger warnings when they recognise comparable fact patterns, in case a judge deviates too much from the standard decision.⁹³

V AI and trial courts in India

This section aims to identify the stages at which AI can be used in the trial courts of India. This does not imply that the AI discussed here cannot be replicated for appellate courts (High Courts and the Supreme Court). References to sections II & III shall be drawn as and when required. The author shall be using his experience as a judge while discussing a considerable portion of this section.

The trial courts in India are considered the backbone of the Indian judiciary. The nation is the world’s largest democracy, and managing the courts is a tedious task given the cultural differences and population heterogeneity. The Indian judiciary must be credited for its efforts to bring justice to the remotest corners of the country.

⁸⁹ *Ibid.*

⁹⁰ *Ibid.*

⁹¹ *Ibid.*

⁹² *Ibid.*

⁹³ Chen and Li, “How will Technology Change the Face of Chinese Justice?” *Supra* note 74 at 19.

Despite strong internet penetration in India, some areas still lack internet connectivity. There are 3683 District and Taluka Court Complexes in India.⁹⁴ A large number of cases are filed every day, more than are disposed of, which adds to the total pendency. As of February 1, 2026, 47,923,477 cases are pending in the district courts of India, of which 11,104,009 are civil cases, and 36,819,468 are criminal cases.⁹⁵ According to statistics, 86 per cent of the total pendency in Indian courts is in district courts.⁹⁶ The remaining are in the high courts and the Supreme Court. AI can be used to reduce the pendency in the trial courts. The technology can be used to streamline the entire filing system, case take-up process, evidence and appreciation, witness summoning, document verification, and real-time forensic results and judgment.

With the current IT infrastructure, AI can be introduced in the Indian judiciary. The only thing holding back is the level of awareness of the litigants and advocates. However, that can also be answered with an example. The “e-court services” application, available on the Android Play Store for the general public, is among the most downloaded applications for the judiciary. As of May, 2021, the e-court app has more than 5.81M downloads.⁹⁷ This demonstrates the people’s technical awareness. The e-court application has all the information about the cases and their stages. It is centrally connected to NJDG and updated in real time. Anyone can view the case status remotely. The NJDG also contains information about the total pendency in India. With the drill-down feature, cases can be found based on the judge’s name, party’s name, age of the case, filing date, filing district, and the date of judgment, among others.

Though AI is already in use in the Indian judiciary, it is being used more to generate data and statistics. It is being used for case information and case management. The author believes that AI can be successfully used at various stages of trial. China is already a world leader, and its smart courts are equipped with various AI tools to assist the judges and investigators. Various provinces and high courts in China have developed their own AI systems tailored to the nature of cases filed with them. India

94 E-Committee, Supreme Court of India, ‘District Courts Portal’, *available at*: <https://ecommitteesci.gov.in/service/district-courts-portal/> (last visited on Feb. 20, 2026).

95 National Judicial Data Grid, ‘District Courts of India’ *available at*: https://njdg.ecourts.gov.in/njdg_v3/ (last visited on Feb. 20, 2026).

96 PRS Legislative research, ‘Vital Stats’ (*Pendency of cases in the Judiciary*, 15 May 2018), *available at*: <https://prsindia.org/policy/vital-stats/pendency-cases-judiciary> (last visited on Feb. 20, 2026).

97 E-Committee, Supreme Court of India, ‘ECOURTS SERVICES MOBILE APP’, <https://ecommitteesci.gov.in/service/ecourts-services-mobile-application/#:~:text=The%20number%20of%20downloads%20has,simply%20scanning%20the%20QR%20code>, (last visited on Feb. 20, 2026).

can have similar things. For example, during the author's posting in Dhanbad district (the coal capital of India), he observed that a large number of cases involved illegal mining and coal theft. In such circumstances, software can be developed to quickly verify the authenticity of documents related to the mining, trading and transportation of coal. As of now, whenever coal is seized or alleged to be smuggled, the court sends the document for verification to the police and the Goods and Services Tax (GST) authorities. It usually takes 15 to 20 days for the verification report to come. With a strong AI application developed particularly for coal cases, this can be done in a jiffy. Additionally, the risk of corruption is also eliminated.

There are multiple stages where AI can be successfully integrated into the Indian judicial process. A few of them have been discussed hereunder.

The criminal side

First Information Report (FIR) and charge-sheet

FIR is the first stage of the criminal proceedings. Whenever an FIR is filed, the original is forwarded to the court for further proceedings, and a copy is retained at the police station. According to Section 187 of the Bharatiya Nagarik Suraksha Sanhita, 2023 (corresponding to old 167 CrPC), a charge sheet/Final Form is supposed to be filed within 60 or 90 days from the date of FIR, depending on the nature of the offence. If the same is missed and the accused is in prison, he is entitled to statutory bail. AI can assist investigating agencies by generating timely alerts and reminders to ensure that charge sheets are filed within the prescribed statutory period.

Similarly, as the investigation progresses, police must maintain a case diary in which they record details of the investigation carried out each day, along with statements of witnesses recorded under Section 161 of the CrPC (currently replaced by Section 180 of the BNSS, 2023). The court can only see the statement recorded and other materials that form part of the case diary/police paper after they are filed under Section 193 BNSS (old section 173 CrPC) or when the court specifically orders them. It often happens that corrupt officials alter the diary's contents to benefit a particular side.

India needs to develop an AI-based system that automatically records and stores every step taken by the police during the investigation in the court's database. During a bail hearing, a court often asks for a case diary, and it can take more than a fortnight for the police to produce it. Considerable time is wasted while the accused languishes in jail. If we have a system that updates the progress of the police in the court's database, not only can corruption be routed out, but the court can refer to the diary at its fingertips. India already has a concept of online FIR, and this can be easily implemented.

Framing of charge

Framing of the charge is another stage in the criminal proceedings. In simplest terms, the accused is formally informed of the charges against him. He has two options: either plead guilty and accept the judge's punishment, or plead not guilty and face trial. India is already using AI in this respect. The judiciary's internal software 'Case Information System' (CIS) has ready-made templates for a charge frame, and judges can use it to frame a charge. One just needs to enter the sections and description of the offence. The final result is the form containing charges against the accused.

Trial of the accused

AI can be used during various stages of the accused's trial. The trial involves filing a charge sheet, exhibiting documents, summoning and examining witnesses, producing documentary and material evidence, presenting arguments, and rendering judgments, amongst others.

(i) AI-based authentication- Exhibiting documents by the parties to establish their authenticity takes a considerable time. This time can be saved by using an AI-based verification system. We need to introduce an AI-based automated authentication system in India's criminal justice administration. One can do away with the need to examine formal witnesses to prove documents such as 'seizure memo' and 'arrest memo' by introducing, in our trial, the systems of 'digital generation'⁹⁸ and 'time stamping'⁹⁹ of the documents. The investigating officer involved can generate a seizure and arrest memo on a secure police platform/server, with the GPS location properly marked. It can be time-stamped after the officer's identity is confirmed through biometric verification.

The documents can be digitally signed by the accused, witnesses, and the police and further sent to the court, along with the certificate required under Section 63 of the Bharatiya Sakshya Adhiniyam, 2023 (BSA), corresponding to earlier Section 65B of

98 The term 'digital generation of documents' describes the process of creating, recording, storing, and managing documents using electronic technology rather than conventional paper-based techniques. Digital signatures, timestamps, QR codes, biometric authentication, and encrypted data may be included in these papers, which are created using computers, mobile devices, or specialised software to guarantee security and validity. Government of India, Controller of Certifying Authorities, 'Time Stamping' *available at*: <https://cca.gov.in/sites/files/pdf/services/timestampingbrochure.pdf> (last visited on Mar. 10, 2026).

99 A computer technique called time stamping safely affixes an exact, unchangeable date and time to a document or signature. It verifies the document's existence at that precise instant and locks the file, preventing anyone, including the author, from backdating or changing its contents in the future. Vikas Pansare, 'Evolution of Digital Documentation – An Observation' (2023) Chartered Secretary <<https://www.icsi.edu/media/webmodules/CSJ/April/18ArticleVikasPansare.pdf>> (last visited on Mar. 10, 2026).

the Indian Evidence Act.¹⁰⁰ To corroborate the evidence, investigating officers can further submit body-on-camera footage and a live recording of the arrest/seizure memo. The entire process has to be uploaded to a secure police server, which is then synced with the court's database, allowing judges to view the evidence and electronic materials. With this system in place, the need to call formal witnesses can be avoided. Most importantly, once data is uploaded to the server, tampering becomes nearly impossible. This not only leads to a paperless trial but also to a swifter and fair adjudication. This process can be used for other court documents as well.

Similarly, in civil matters, someone offering papers such as a title deed, a registered contract, a registered sale deed, or a registered gift deed can be easily verified by AI tools linked to the government's centralised document verification system. The government of India is already taking steps in this regard by digitalising all property-related documents, and once it is done, AI can help assist the courts.

(ii) Summoning of accused/witnesses – Sending physical summons to the accused and witnesses is a significant source of delay in the court proceedings. At present, summons are handwritten by the court staff and signed by the judge. It is served either by the court office (*Nazarat*) or by the police. Physical summons increases the chances of denial by the person served. The server might also be bribed to avoid summons. India can have a system like the '206 system' of China, where summons can be prepared at the spot and sent directly from the court to the addressee. The online summons will save time for the court and the witness. The author agrees that, given India's current educational landscape and the large rural population, online summons may not be fruitful. However, this can be done in major cities where litigants are considerably informed and well-connected online. It can be started on a trial basis.

However, some developments have occurred in this regard through National Service and Tracking of Electronic Processes (NSTEPS).¹⁰¹ It is an application for tracking centralised process services, consisting of a website and a mobile app that work in tandem to simplify the process. The NSTEP mobile app, available to process servers and bailiffs, enables transparent, real-time tracking of the service of summonses and notices. The procedure will be made available on the NSTEP web application in electronic format after it has been approved by the relevant courts using CIS software. If service is to be performed within a bailiff's jurisdiction, the NSTEP web tool facilitates assigning published processes to bailiffs. The NSTEP Mobile App allows

100 S. 63 of BSA sets conditions for admitting electronic records as evidence in court. It treats computer-generated records as documents and requires a certificate verifying how they were produced.

101 E-Committee, Supreme Court of India, 'NSTEP' available at: <https://ecommitteesci.gov.in/nstep/>, (last visited on Feb. 20, 2026).

the bailiffs to view the assigned processes. Bailiffs are given Android phones that are connected to the court's service modules. The GPS position, the receiver's signature, a picture of the recipient or the premises (if none are available for service), and an on-the-spot recording of the reasons why service was not performed are all captured by the bailiffs. The core NSTEP application receives the collected data in real time. Courts can monitor service status using data transmitted from the NSTEP online application to CIS.¹⁰² NSTEP is an example of AI successfully being implemented in India.

(iii) Recording of evidence –This is an area where AI can be successfully used. Chinese courts have well-established AI tools that can automatically record witness testimony. The AI tool also has a translation feature, and language never becomes a barrier for the courts. In India, almost every court is equipped with 3-4 computer systems. With AI applications, one can make computers smarter, enabling them to record evidence, saving precious time for the court. The software can be trained in multiple languages, tailoring it to Indian situations. Simple voice transcription applications might do the job. Over time, the machine will learn what to type as there will be repetition of context by the witnesses. Similarly, even if the witness is located elsewhere, examination and cross-examination can be conducted using AI devices. Video-conferencing in the courts is already in use in India; it can be further developed to enable examinations without witnesses having to come to court. China's mobile courts are already doing this work.

(iv) Judgment–The use of AI for judgment and order writing remains one of the most debated issues in the legal sector. In my view, AI-based systems can be developed to assist in drafting judgments and orders in routine matters that involve limited judicial discretion and do not require extensive application of the judicial mind. The whole concept of AI is based on the fact that with the right algorithm, better decisions can be made without error. Humans can make judgmental errors, but machines cannot. Humans can be biased, but machines are not. Humans may have emotional distress, but machines will not.

My proposition is that AI can be utilised to assist judges in drafting routine judgments and orders, while the ultimate authority and responsibility for reviewing, modifying, and finalising such decisions should remain with the presiding judicial officer.

If AI can search for the right precedents for a judge, it can also frame an order or judgment. Legal search engines are a fine example of AI use in the judicial system.¹⁰³ To avoid controversy, and on an experimental basis, AI can be used to frame orders

¹⁰² *Ibid.*

¹⁰³ In India, legal search engines like SCC online, India kanoon, manupatra, live law etc. are frequently used.

and judgments in routine matters. For example, granting of bail in bailable offence cases or bail in compoundable matters where litigants have compromised the case. In bailable cases, judges usually verify whether the sections are bailable or not; similarly, in compoundable cases, they ensure that the compromise is entered voluntarily and without coercion. The writing part is routine work that can even be performed by an AI algorithm. It is an example of how AI can assist human judges and save the court's considerable time. Writing judgments/orders in cases of no evidence, compromised civil suits, minor traffic and excise offences, civil substitution matters, interlocutory orders, etc., can be easily assigned to the AI.

Similarly, AI may be effectively utilised in matters arising under the Negotiable Instruments Act, 1881, particularly cheque dishonour cases. In such proceedings, the court is primarily required to determine objective factors such as whether the complaint was instituted within the prescribed limitation period, whether the statutory legal notice was duly issued and served, whether any reply was submitted, and whether the cheque and signature are genuine. These determinations are largely procedural and technical, involving limited judicial discretion and greater factual and mathematical assessment. It can be easily performed by AI if we develop the right algorithm.

Civil Cases

(i) Reporting on admission- Reporting on admission by the court's Shristedar (head clerk) takes considerable time and is often surrounded by controversies. The civil court rules and circulars of the concerned High Court guide the Shristedar's role in the civil admission matters. As per rules, he is required to go through the plaint and report on territorial and pecuniary jurisdiction, limitation, valuation of the suit, sufficiency of court fees, proper description of parties, verification and signatures, etc., and put up before the judge for hearing on admission. The dispute mostly arises on issues such as the sufficiency of the court fee and the relief claimed (single or consequential), as the Shristedar's report and the court fee mentioned by the advocate differ, leaving the matter to the judge's discretion. The issue of the sufficiency of court fees is technical, and with the right algorithm developed for the purpose, AI can calculate the court fee. The circle rate/registered value/market value (depending upon the existing practice and local legislation) of the land in the concerned district can be entered into the system, and AI can automatically determine the amount of court fee payable after reviewing the plaint and the scheduled property. This will make the whole admission process seamless and further save litigants' time. For this, the pleadings must be filed online and routed through the court's CIS. Other verification-related aspects, such as identifying defects in the plaint, examining limitations, and assessing jurisdiction, can also be efficiently handled through AI-based systems. An algorithm tailored specifically for admission and scrutiny matters may be developed to assist courts in streamlining the preliminary examination of civil suits.

(ii) Discovery and inspection- Civil suits (primarily immovable land disputes) in India can particularly benefit from AI. Civil cases largely depend on the strength of the documents produced by the parties. Document verification can be easily handled by AI, thus saving the court's precious time. As discussed earlier, land records or sale deeds filed with the court for adjudication can be vetted by the AI if they correspond to the original land records entered in the digital land database. A copy of the sale deed is retained with the government, and the chain of possession can be authenticated by AI, thus reducing duplication and fabrication.

(iii) Analysing pleadings (plaint and written statement)-AI can assist the court in scrutinising the requirements of the pleadings under Orders VI, VII and VIII of the Civil Procedure Code, 1908. With the right algorithm, AI can detect inconsistencies such as missing signatures (digital or manual), improper affidavits, absent or incorrect party details, incomplete addresses, lack of jurisdictional statements, improper suit valuation, insufficient court fees, defective *vakalatnama*, and missing limitation condonation. AI can also flag missing cause of action, material facts, dates, prayer clauses (including omission of consequential relief), mandatory notices, specific denials, and issues with counterclaims or admissions. Further, AI can frame 'issues' for adjudication by the court.

AI-based spot verification- Courts have, on numerous occasions, appointed advocate commissioners for spot verification while deciding injunction matters. An AI-based spot verification system may significantly enhance the accuracy and efficiency of such proceedings. Advocate commissioners can be equipped with GPS-enabled digital devices capable of geo-marking the disputed property, conducting live video recording of the site, recording statements of relevant witnesses, and generating secure time-stamped digital records that can be directly uploaded to the court's database. This will allow the court to understand the factual ground realities for deciding interim injunction matters and other property-related disputes.

Orders and judgments - This is similar to what was discussed in the previous section on drafting criminal judgments and orders. The preposition remains the same. AI can assist judges in drafting routine civil orders and judgments. For example, interlocutory applications such as heir substitution matters, formal amendments, adjournments, suit restoration orders, orders in compromised civil suits, etc., can be drafted by AI-based software.

Generating and consuming data

The entire process of using AI in Indian trial courts depends upon creating and consuming data. AI needs constant feeding with extensive and diverse datasets to create a working algorithm. India possesses a significant advantage because its extensive network of district courts and the high volume of daily litigation consistently generate

valuable legal and procedural data. This vast body of data, consisting of petitions, applications, orders, judgments, precedents, references, etc., need to be channelled into the court's centrally located AI database, for example, the CIS of the Indian courts. The CIS can continuously ingest and organise data at the time of filing itself. Likewise, court orders and judgments already uploaded to the CIS may be utilised for training AI models and developing algorithms. Steps can also be taken to link legal periodicals, legal search databases, statutes, judgements of appellate courts, etc., with CIS, enabling it to consume data regularly and become richer every day. Publicly available databases containing documents related to land titles, identification cards, driving licenses and similar official data may also be linked with CIS for courts to view and use. Such integration would gradually create a comprehensive, smarter judicial ecosystem, providing hassle-free access to justice in Indian courts.

VI AI in the courts- Drawbacks

Historically, adjudication has been the exclusive domain of humans. While artificial intelligence (AI) technologies have demonstrated benefits across various sectors, their adoption has also revealed significant drawbacks. AI has been successfully employed in the courts around the world. Countries like China and the US are aggressively promoting AI tools in their adjudication process. This, however, is not free from criticism. Scholars worldwide have strongly opposed the use of AI in the courts. Some of them have been discussed below:

- i. **Loss of humanness-** Scholars around the world have argued that promoting AI in the judicial process will usher in a lack of humanity implicit in the adjudicative process. The 'human' aspect will be missing in the AI-governed courts. I believe AI can be implemented on a limited, controlled basis. AI should be seen as assisting judges, not controlling them. Courts perform a wide range of administrative, procedural, and routine functions, many of which do not necessarily require intensive human judicial intervention. The same task can be performed by machines much more efficiently and faster. Places where AI can be implemented have been discussed in the previous section.
- ii. **Algorithmic bias** - AI uses complex data and machine learning algorithms to infer solutions rather than codify them. The algorithmic result reflects the code writer's mindset. How it is designed, who created the code, and how it is maintained and cleaned all play major roles.¹⁰⁴ An incorrect algorithm design may lead to gross errors. Biased outcomes can also result from biases in the datasets used to train the AI system. Thus, the objectivity of an AI system largely depends upon the manner in which it is programmed, as well as the

104 Ummey Sharaban Tahura and Niloufer Selvadurai, 'The Use of Artificial Intelligence in Judicial Decision-Making: The Example of China' *Int'l J L Ethics Tech* 1 (2022).

methods by which data is collected, processed, and analysed.¹⁰⁵ A study conducted on the COMPAS AI tool used in the USA by pixel plus suggests that machines are biased against blacks.¹⁰⁶

- iii. **Data accessibility** - AI trains on a vast number of high-quality data sets to become a better version of itself. Maintaining data quantity and quality and collecting datasets ethically are the two key issues AI developers face while collecting data.¹⁰⁷ Because data privacy laws are very strong in developed nations, obtaining data may be difficult. Not having a data protection law will pose another threat.
- iv. **AI cannot exercise discretion**- Scholars have argued that in a real-life situation, judges have to exercise discretion. AI cannot do this. AI works on prior data to predict future outcomes. AI also lacks the concept of moral values and justice.¹⁰⁸ Judgment is not always mathematical and requires the use of discretion by a judge.
- v. **Transparency** - Using AI systems in the court decision-making process has also been criticised for its perceived lack of transparency.¹⁰⁹ Ananny and Crawford contend that because automated decision-making systems evaluate people without disclosing the reasoning behind their judgments, they are opaque and endanger people's autonomy and sense of dignity. Any ruling by a human judge usually includes an explanation of the reasoning. Algorithmic decisions, however, lack this process.¹¹⁰ Furthermore, Gacutan and Selvadurai point out that, as machine learning algorithms' internal logic is frequently opaque, a person's ability to contest such choices may be weakened due to a lack of the right to explanation.¹¹¹
- vi. **Accountability**- The biggest concern is who should be held accountable for a wrong decision: the judge who relied on the algorithm, or the algorithm itself.¹¹² Scholars have argued that humans tend to rely on machine-generated results rather than using their minds. This, in the long term, will create a 'justice' issue.

105 *Ibid.*

106 Kira Belova, 'Artificial Intelligence in the Criminal Justice System' (Pixelplex, 13 January 2021), available at: <https://pixelplex.io/blog/artificial-intelligence-criminal-justice-system/> (last visited on Mar. 10, 2026).

107 *Supra* note 14.

108 *Ibid.*

109 *Ibid.*

110 Ananny, M., and Crawford K, 'Seeing without knowing: Limitations of the transparency ideal and its application to algorithmic accountability', 20(3), *New Media & Society*, 973-989 (2018).

111 Joshua Gacutan and Niloufer Selvadurai, 'A Statutory Right to Explanation for Decisions Generated Using Artificial Intelligence', 28 *Int'l Journal of Law and Technology* 197(2020).

112 *Supra* note 14.

Though appeal is a part of the judicial system, what about those cases where there is no provision for an appeal? It has also been suggested that a hybrid system will be more workable than a complete AI-based judicial system.¹¹³ AI can be used to assist judges rather than frame their judgments. Results worldwide will continue to shape AI use in the judiciary.

VII Conclusion

AI has advanced at an extraordinarily fast pace during the past several decades. Every sector of society is influenced by AI and is rapidly adopting it to reap the benefits. The judiciary is no exception. Courts around the world are adopting some form of AI technology to upgrade their justice delivery process. The 'COMPAS' in the USA, 'Xiao 3.0' and '206 system' in China have already become a popular choice for nations that are thinking of embracing this new technology. Judges and law clerks are spending time on repetitive work that can also be handled efficiently by AI algorithms. Reviewing pre-trial documents, vetting document authenticity, finding precedents, recording testimonies, *etc.*, are a few examples that can be done by AI systems. This will overall enhance the quality of judicial work in any country. The issue of bias among judges can also be addressed to some extent. The same judge may treat cases differently, and the same defendant is dealt with differently by different judges. The problem of a lack of coherence and uniformity in a judge's orders may also be addressed through the adoption of AI.

Speaking specifically for India, AI can solve a plethora of problems. More than 47 million cases are pending in India's trial courts. Despite increasing the number of judges, the figures are not coming down. The only solution is to embrace the technology from the right perspective. India already has a good IT infrastructure in its judicial system, and adopting AI will be a smooth transition. Not only have the courts been computerised, but they have also been connected to the NJDG to update information in real time. Indian judiciary's Case Information System (CIS)/e-courts services have already been appreciated by the World Bank. With the right technologies and AI-assisted courts, India can certainly reduce its pendency and improve the quality of its legal services. Judges and court clerks will be able to spend more time doing quality work than performing repetitive tasks. I believe AI can be implemented on an experimental basis in India. The coders have to develop India-specific algorithms that cater to litigants, lawyers and judges of India.

Issues like algorithmic bias, inconsistency, transparency, and accountability will always be there. But with consistent experiments and prolonged use, these trivial problems can be solved. Every new technology, when adopted, has to face teething problems

113 Yash Raj Shrestha, Shiko M. Ben-Menahem & Georg von Krogh, 'Organizational Decision-Making Structures in the Age of Artificial Intelligence' 61 *California Management Review* 74 (2019).

and acceptability concerns. With the right approach and tailored AI for the concerned jurisdiction, the technology will certainly offer numerous benefits. The judiciary, in particular, has been very slow to adapt to the new changes the world is witnessing.