Artificial Intelligence, Judges, and Legal Ethics
By Prof. Gary E. Marchant

EXECUTIVE SUMMARY

In his introduction, Professor Marchant explains that artificial intelligence ("AI") is revolutionizing the legal system. He explains how AI works and identifies specific challenges AI poses: (1) important decisions are no longer being made by human beings at some level, (2) most humans, especially without advanced scientific training, will be limited in their ability to truly understand AI decisions, and (3) AI may engage in biased decision-making or make other serious mistakes. He proposes that judges reflect on AI’s ethical dilemmas and offers guidance on how to resolve them.

Part I situates the growth of AI in the context of duties imposed on judges to remain current with technology before explaining how some guidance for judges has specifically addressed AI. This part notes that different states have suggested a greater openness to AI than others. Some states have explained that AI can be a helpful tool and indicated that judges have wide discretion over how to use it. Other states have cautioned that judges should only use AI for relatively narrow purposes like research and that it should not be used to draft final opinions or orders, or permitted judges to use only certain AI tools. Professor Marchant also summarizes steps organizations like the National Center for State Courts and the American Bar Association have taken to encourage familiarity with AI. He ends with conclusions judges can take from these various efforts. First, judges have a duty to become educated about AI. Second, Professor Marchant agrees that judges should not use AI to make decisions or draft final opinions or orders because of AI’s present limitations.

Part II explains how judges can provide needed oversight as attorneys increasingly use AI. He provides several instances when litigants have relied on AI to draft court filings that have egregious errors in them like making up cases that do not exist. Judges need to be prepared to handle these situations for the foreseeable future. Professor Marchant then notes that many judges have tried to address concerns about AI with standing orders, but concludes that these have generally been an inadequate solution. Professor Marchant further discusses special considerations for policing AI when pro se litigants are involved. On one hand, AI could help with the difficulties pro se litigants experience accessing justice by helping them prepare filings and do

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legal research. On the other, pro se litigants lack the training that prepares attorneys and judges to catch AI errors. Matters become even more complicated when powerful entities use AI to create fake citations that pro se litigants are unable to challenge because of their lack of legal training and experience. Finally, Professor Marchant documents cases where AI has been used to create fake evidence and given rise to the incentive to claim that evidence harmful to a client was falsified by AI. These cases demonstrate AI’s risks and the need for judges to be vigilant about them.

The rapid recent acceleration of the capabilities and applications of artificial intelligence (AI) is affecting all aspects of society, including the legal profession and the court system. Judges, lawyers, and other legal actors can no longer afford to remain oblivious or ignorant of the technological revolution that AI is fomenting, because it will now directly affect their own work and duties. Indeed, courts, judges, judicial organizations, attorneys, law firms, clients, and the legal bar have recently been scrambling to get ahead and to try to stay ahead of this AI tsunami. It will not be an easy challenge, but it will be a necessary one, as AI brings major changes to the traditionally staid professions of judging and lawyering. In the words of legal futurist Richard Susskind, AI and associated technologies will drive disruptions that will force “legal institutions and lawyers [to] change more radically in less than two decades than they had in the past two centuries.”

This article addresses the ethical issues that judges will confront as a result of recent advances in AI. Although AI has been around in simpler forms since the mid-1950s, two recent developments have propelled AI to the forefront of legal and societal attention. The first development was the rise of machine learning, of which the most advanced form is deep learning. Previous versions of AI, sometimes referred to as classical or symbolic AI, simply implemented the instructions that a human programmer coded into a computer program. In contrast to this earlier “rules-based” AI, machine learning AI systems are “data based” and “learn” from the data. While various forms of active or passive human supervision is involved in training the machine learning system, it is the machine that “learns” from the data and makes its recommendations or decisions based on its own learning, rather than from what any human instructs it to do. This machine learning process requires large quantities of data, but can result in systems that can approach or even exceed some human computational capabilities. For example, some high-level AI machines can make as many calculations in one second than it would take a human over 30 billion years to do.
Machine learning AI has three important legal consequences:

First, for the first time ever, we are delegating important human decisions to a machine, whether it be to read a medical image, steer an autonomous vehicle, or calculate the recidivism risk of a criminal defendant. It will often be useful or ethically necessary for a human to oversee the AI decision, but that does not change the fact that the AI made the initial decision based on its own learning rather than human programming. And when that initial AI decision was based on thousands or even millions of data points, the ability of a human to meaningfully second-guess the AI’s decision may be limited.

Second, machine-learning AI decisions are largely unexplainable. The machine cannot explain why or on what basis it made its decision, nor can a human outside the system understand the reasoning of the decision. In other words, the AI system is a black box. While large amounts of resources are being applied to develop explainable AI by major AI companies, so far there has been limited progress in developing explainable AI. This means that humans must gamble their trust on AI decisions that they cannot fully understand or second-guess.

Third, because machine learning algorithms are trained on historical human data, they may be biased. We know that historical human data collected from the criminal justice system, health care, employment decisions, housing and many other areas is rife with human bias and stereotypes. Those biases and stereotypes implicit in the inputs to a machine learning system are likely to be reflected in the outputs, in fact the biases and stereotypes might even be amplified by a machine learning system. So unless special care is taken to prevent or compensate for these biases, machine learning may result in biased and discriminatory decisions.

The second major AI advance in recent years in generative AI. This technology also uses deep machine learning, but instead of looking for patterns and trends in data like previous machine learning AI (sometimes called categorical or discriminative AI), generative AI maps relationships between words and phrases in massive data sets (called large language models in the case of text data) to generate new content in response to a request or prompt.

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AI can not only generate text, but also graphics, video, audio and code.\(^{17}\) Generative AI hit mainstream attention when openAI released its generative AI chatbot, named ChatGPT 3.5, in late November 2022 and then the even-more advanced ChatGPT 4 in March 2023.\(^{18}\) The program was accessed by over 100 million people in its first two months, the fastest ever uptake of a new technology.\(^{19}\) An ever-growing number of developers are offering generative AI products, and businesses across virtually every industry are now Implementing this technology, including the legal field.\(^{20}\)

The new powers and capabilities provided by these two major advances of machine learning and generative AI now put AI on a firm trajectory to become a major, permanent, and growing part of the practice of law and court operations. Judges and lawyers will need to become knowledgeable, if not proficient, on what these AI technologies can and cannot do, their strengths and limitations, and their ethical implications.\(^{21}\) This article addresses the ethical issues that judges will confront, starting with the ethical dimensions of the use of AI by judges and their staff, and then examining the ethical issues that judges will confront from the use of AI by attorneys and pro se litigants appearing in their courtrooms.

\section{Ethical Aspects of Judicial Use of AI}

If a poll had been conducted of sitting judges just five years ago, few judges would likely have predicted that they would someday be using and supervising AI in their chambers and courtrooms. Yet that day is coming very quickly, and has already arrived for some of the judicial early adopters. For example, a juvenile law judge in Ohio (Hon. Anthony Capizzi) is using IBM’s Watson AI to read through lengthy court records and summarize key information he needs to make his decisions on a “dashboard” he can access in real time in the courtroom.\(^{22}\) An appellate judge in Louisiana (Hon. Scott Schlegel) has used generative AI to create a number of videos and presentations to help educate stakeholders of his court and judges in other courts of the potential advantages of AI as well as the risks of deep fakes.\(^{23}\) Other judicial champions of using

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\item Maria N. Greenstein, \textit{AI and a Judge’s Ethical Obligations}, JUDGES JOURNAL (Feb. 3, 2020),
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AI are sure to arise, if they haven’t already. Judges who hire judicial clerks out of law school will increasingly find that these young law school graduates are comfortable and experienced in using AI for legal research and other tasks, and will be inclined to want to use such tools in their work for judges. The incorporation of generative AI into traditional legal research databases such as Westlaw and Lexis will further ensure the use of AI in judicial chambers.²⁴

A. Judicial Technological Competence

As AI enters the chambers of judges, a key ethical issue will be the technological competence of judges in using or overseeing AI. Judges, like attorneys, have a general duty of competence. The American Bar Association modified Model Rule of Professional Responsibility 1.1 requiring attorney competence in 2012 to add a new comment (Comment 8) mandating that lawyers “should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology.”²⁵ Forty states have adopted a similar requirement for technological competence by attorneys.²⁶ However, no similar addendum has been made to the judicial duty of competence, despite recommendations that such an amendment is necessary.²⁷ Nonetheless, even without such an amendment, it is reasonable to construe the existing judicial duty of competence to include technological competence, especially given the increasingly prominent role technology plays in society and the legal system. And yet given this prominence of technology, it might be a good idea for states to expressly add a duty of technological competence to their canons of judicial ethics.²⁸

One state, Michigan, has recently done exactly that. On October 27, 2023, the State Bar of Michigan issued an ethical advisory opinion on judicial technological competence expressly titled “Judicial Officers Must Maintain Competence with Advancing Technology, Including But Not Limited to Artificial Intelligence.”²⁹ The advisory opinion states that “[j]udicial officers, like lawyers, have an ethical obligation to maintain competence with and further educate themselves on advancing technology, including but not limited to artificial intelligence.”³⁰ The opinion bases this conclusion on the general duty of competence required of judges, which implicitly requires that “[a]s the use of technology increases, so does the requirement to maintain competence on what is available, how it is used, and whether the use of the technology in question would affect

²⁵ American Bar Association, Rule 1.1 Competence – Comment, Comment 8 Maintaining Competence (emphasis added), https://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct/rule_1_1_competence/comment_on_rule_1_1/?login (last visited June 13, 2024).
²⁸ See id.
³⁰ Id. at 1.
a judicial decision.”  

The advisory opinion cautions that AI can result in inaccurate citations and biased reasoning, but “when, properly used, AI is an asset for the legal community, such as creating accurate content for pleadings and legal summaries, providing efficiency in docket management and legal research, and supplying answers to questions based on algorithms used by technological programs.” Moreover, “AI is becoming more advanced every day and is rapidly integrating within the judicial system, which requires continual thought and ethical assessment of the use, risks, and benefits of each tool.” The advisory opinion concludes that “[j]udicial officers have an ethical obligation to understand technology, including artificial intelligence, and take reasonable steps to ensure that AI tools on which their judgment will be based are used properly and that the AI tools are utilized within the confines of the law and court rules. Further, as AI rapidly advances, judicial officers have an ethical duty to maintain technological competence and understand AI’s ethical implications to ensure efficiency and quality of justice.”

This well-crafted and balanced advisory opinion was based on the Michigan ethical canon requiring judges “to “be faithful to the law, and maintain professional competence in it.” This Michigan competency requirement is virtually identical to a similar requirement in other states, and thus the extrapolation of the canon to require technological proficiency in AI would presumably apply to judges in other states.

B. Other State Policies on Judicial Use of AI

West Virginia has taken a slightly different approach. Instead of elaborating that the judicial duty of competence incorporates a duty of technological competence like Michigan did, the West Virginia Judicial Investigation Commission issued an advisory opinion on October 13, 2023 that detailed how judges and their clerks should or should not use generative AI in preparing their decisions. The opinion first affirms the general direction of the Michigan advisory opinion that the duty of judicial competence includes the duty to be competent in understanding technologies such as AI: “Judges have a duty to remain competent in technology, including AI. This duty in ongoing.” The advisory opinion then goes further and specifically advises judges on their use of AI in preparing judicial opinions. The advisory opinion recommends that “a judge may use AI for research purposes but may not use it to decide the outcome of a case. The use of AI in drafting opinions or orders should be done with extreme caution.” Among the cautions

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31 Id.
32 Id. at 2.
33 Id. at 3.
34 Id. at 4.
35 Id. at 4-5.
38 Id.
39 Id at 5.
provided to judges are the risk of entering confidential case or personal information into a generative AI tool that could leak into the open internet and the potential for biased outputs by AI systems.  

Several other state judiciaries have created committees to examine court use of AI and have already issued, or will likely issue, additional advisory opinions that address the ethics of judicial use of AI. The Utah Judicial Council adopted “Interim Rules on the Use of Generative AI” on October 25, 2023. These Interim Rules state that “Judges and court employees should recognize the limitations of generative AI and may not rely solely on Al-generated content. Generative AI tools are intended to provide assistance and are not a substitute for judicial, legal or other professional experience.” The Interim rules state that generative AI tools may only be used for specified purposes, which include “preparing educational materials,” “legal research,” “preparing draft documents,” and to test reading comprehension of public documents to ensure a document is accessible to a self-represented litigant. The negative inference of this list is that generative AI should not be used to draft a final version of any decision or order issued by the court, but can be used to research and prepare draft documents in the process of deciding a case. 

The Utah Interim Rules state that judges and court employees may only use approved generative AI tools for court-related court and on court-owned devices, which at the time of adoption of the Interim Rules consisted of ChatGPT (version 3 or 4), Claude.ai (Beta) and Bard (Experiment). One problem in specifying specific approved AI tools is that the technology is changing so fast – since the Utah list was published in October 2023 OpenAI has released ChatGPT Omega (or ChatGPTo), Anthropic has released Claude2 and now Claude3 to replace Claude (beta) on the Utah list, Google has replaced Bard listed by Utah with Gemini, and new products have been released such as Meta’s Llama3 and Westlaw’s and Lexis’s generative AI offerings. Therefore, Utah’s list of specific approved generative AI tools is seriously outdated just six months after it was approved, and it is not clear how Utah is updating its obsolete list.

Utah’s Interim Rules do have some other valuable requirements. It warns AI users that because AI systems are trained on data created by humans, “generative AI tools have been known to produce outputs that inadvertently promote stereotypes, reinforce prejudices, or exhibit unfair biases.” The Interim Rules also require that any court personnel that use generative AI tools must first complete court-approved training prior to use, and all employees must disclose any use of generative AI tools to judicial officers. In addition, because of the potential for leakage of confidential information, the Interim Rules prohibit any non-public court information, any personally-identifying information, or “any information from a case that could lead someone to identify the specific case in question or individuals involved in the case” may not be “entered, submitted, or otherwise disclosed to any generative AI tool.”

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40 Id. at 4-5.
42 Id. at 1.
43 Id. at 2.
44 Id. at 1. A footnote added that “[t]he IT department is also reviewing Casetext CoCounsel.” Id. n. 2.
45 Id. at 1.
46 Id.
47 Id.
further specify that no documents filed in a case or submitted for filing “may be shared through generative AI tools,” even if the document is public.48

Perhaps the most important element of the Utah Interim Rules from an ethical perspective is that the rules make expressly clear that any individual using generative AI in the court system is ethically responsible for the content produced. Thus Rule 1 of the Interim Rules states: “You are responsible: Any use of generative content is ultimately the responsibility of the person who uses it.”49

New Jersey has also adopted an AI guidance document for judges, in the form of a “Statement of Principles,” issued by the New Jersey Supreme Court in January 2024.50 The Statement notes the positive contributions that AI can bring to the courts: “Expanded Judiciary use of AI aims to improve effectiveness and consistency in court services, including case management, court administration, public accessibility, and transparency.”51 Accordingly, “the New Jersey Judiciary envisions the ongoing seamless integration of Artificial Intelligence (AI) technologies to further enhance court processes, improve and sustain services to the public, and uphold the rule of law.”52 However, “[j]udges and their staff may use AI only for select purposes, such as for preliminary gathering and organization of information. AI will never be used to replace the autonomy of judges but may serve as a tool to support and enhance judicial functions.”53 The New Jersey Statement of Principles warns judges and their staff to carefully monitor AI systems “to identify and remedy potential sources and effects of bias, to the extent possible,”54 and also to protect the confidentiality of any information shared with an AI system.55

As a final example of state judicial statements on court use of AI, Connecticut released a 21-page comprehensive guidance for the judicial branch’s use of AI on February 1, 2024.56 The over-arching theme of this document is captured by the motto of “Meaningful Guardrails + Workforce Empowerment and Education + Purposeful Use = Responsible AI Innovation.”57 The document puts forward a positive vision on how AI can be successfully employed by the courts, provided there is appropriate safeguards and education. It sets forth various policies and procedures “concerning the development, procurement, implementation, utilization, and ongoing assessment of systems that employ AI.”58 The guidance includes a comprehensive AI impact assessment methodology to ensure that AI is used in a safe, reliable, and unbiased manner that protects confidential and privileged information.59

48 Id. at 2.
49 Id. at 1 (bold in original).
51 Id.
52 Id. at 1.
53 Id.
54 Id.
55 Id. at 2.
57 Id. at 1.
58 Id. at 4.
59 Id. at 13-21.
Several other states have established AI judicial committees that have already issued guidance documents or are in the process of developing such guidance. This list includes Connecticut, Texas, and Arizona.

C. National AI Ethics Actions for Legal System

At the national level, the National Center for State Courts (NCSC) has created an “AI Rapid Response Team” in association with the Conference of Chief Justices to provide guidance and assist courts in implementing rapidly evolving AI technology. To that end, the NSSC AI Rapid Response Team has created a series of “interim guidance” documents for courts, with topics such as “Getting Started,” “Talking Points,” “Platform Considerations,” and “Developing an Internal AI Use Policy.” These one-page guidance documents recommend clear and concrete steps that courts can implement to take advantage of AI within ethical boundaries. As one of the guidance documents states, “AI is already having an impact on the courts and we must be prepared and forward thinking when it comes to addressing how AI can be used effectively, efficiently and ethically to promote the administration of justice.”

Also at the national level, the American Bar Association (ABA) adopted a resolution in 2019 that urged “courts and lawyers to address the emerging ethical and legal issues related to the usage of artificial intelligence (“AI”) in the practice of law including: (1) bias, explainability, and transparency of automated decisions made by AI; (2) ethical and beneficial usage of AI; and (3) controls and oversight of AI and the vendors that provide AI.” The ABA has more recently established an AI Task Force with the mission to: “(1) address the impact of AI on the legal profession and the practice of law, and related ethical implications; (2) provide insights on developing and using AI in a trustworthy and responsible manner; and (3) identify ways to

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69 Supra note 66.
address AI risks.”

One of the express priority areas the Task Force will address is AI and the Courts.

With respect to the federal courts, the Federal Judicial Center published a lengthy guide to AI for judges in 2023. At least one federal court (the 9th Circuit) has established an advisory committee to guide it on its use and treatment of AI. U.S. Supreme Court Chief Justice John Roberts devoted his entire year-end report on the federal courts in 2023 on the impact of technology and AI on the courts, concluding: “I predict that human judges will be around for a while. But with equal confidence I predict that judicial work – particularly at the trial level will be significantly affected by AI. Those changes will involve not only how judges go about doing their job, but also how they understand the role that AI plays in the cases that come before them.”

D. International Precedents and Lessons

Additional insights and precedents on the ethical dimensions of judicial use of AI come from the experiences in other nations. In particular, the United Kingdom (UK) has been proactive in addressing judicial use of AI. In December 2023, the UK Courts and Tribunals Judiciary issued a guidance allowing for the limited use of AI by judges in researching and writing opinions. Shortly thereafter, a prominent judge in England publicly disclosed that he used generative AI to write parts of his judicial opinions by asking the AI tool to generate summaries of relevant legal doctrines that he is familiar with and can insert into his opinion after reviewing it for accuracy. The judge found this approach to be a valuable timesaver to prepare the text on a subject he was familiar with and could confidently ensure the accuracy of the AI-generated content.

Judges in other countries have also acknowledged using AI to draft judicial opinions or orders. For example, judges in Mexico, Peru, India and Dubai have reportedly used generative AI tools to draft decisions or orders. China has probably been the most aggressive in incorporating AI into its judicial system - judges in China frequently rely on centralized AI systems to address AI risks.

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72 Id.
78 Id.
79 Id.
to issue or recommend decisions. Another country where the judiciary has been very proactive in employing AI is Brazil, which has huge backlog of pending appeals. Courts are therefore deploying AI to help reduce this backlog by automating the decision-making on pending appeals and utilizing AI to draft judicial opinions. This has resulted in the nightmare scenario for many judges in which an AI-drafted judicial opinion allegedly included a fabricated case citation apparently caused by a generative AI hallucination. No U.S. judge has acknowledged using AI to write their court opinions to date, and this type of mistake involving a judge citing fabricated case citations in one of the major ethical deterrents to judicial use of AI.

E. Conclusions on Ethics of Judicial Use of AI

Integrating all the guidances, precedents and experiences summarized above, several clear conclusions about the ethics of judicial use of AI become clear. First, the generic judicial duty of competency incorporates judicial competence in technology including AI, given the significant and growing importance of technology in society and the legal system. Thus all judges should become educated on the benefits and pitfalls of judicial use of AI, including the ethical implications. Second, AI should not be used to reach decisions or draft final opinions or orders at this time, given the potential for fabricated citations or facts, and other current limitations of AI at this time. “While AI can and does assist judges in a variety of ways, judges will always have the responsibility of exercising their own judgment: the human trait of independent judgment.” Although this may change in the future, for now AI should only be used for researching and initial drafting of documents, as well as administrative applications. The final decisions of courts must continue to be written and approved by human judges for the time being. Finally, any judicial use of AI must be careful to avoid disseminating biases and stereotypes


84 Amy Guthrie, Brazil’s Overwhelmed Judiciary, Desperate for Help, Turns to Artificial intelligence, LAW.COM (Jan. 16, 2024), https://www.law.com/international-edition/2024/01/16/brazils-overwhelmed-judiciary-desperate-for-help-turns-to-artificial-intelligence/ (Brazilian courts have a backlog of almost 80 million cases awaiting decision).


87 In addition to the judicial canon requiring competency, Canon 1 of the ABA Model Code of Judicial Conduct also requires judges to “uphold and promote the independence, integrity and impartiality of the judiciary....” which will require judges to exhibit wisdom in using and reviewing AI “to enhance integrity and impartiality, tempered by human judgment.” Greenstein, supra note 21. See also New York State Bar Association (NYSBA) Task Force on AI, Report and Recommendations of the New York State Bar Association Task Force on Artificial Intelligence 39 (Apr. 6, 2024), https://aboutblaw.com/BDWQ (also relying on Canon 1 for source of judicial ethical obligations with respect to AI).

88 NYSBA, Task Force on AI, Report and Recommendations of the New York State Bar Association Task Force on Artificial Intelligence, at 39 (relying on Canon 1 of the ABA Model Code of Justice requiring judges to promote “independence, integrity and impartiality”).
that AI systems are prone to reproduce, and must also be careful to avoid leaking confidential case or personal information.

It should also be noted that courts are using AI, and will increasingly use AI in the future, for a number of applications beyond the judicial chambers where AI can be used to help prepare legal opinions. Courts are also using AI in a growing number of ways including to operate chatbots that interact with the public and litigants, to automate filing of case submissions, to assist with hiring, promotion and payment of court staff, to triage and sort case assignments to judges, and many other functions. Judges with administrative responsibilities will need to supervise these applications of AI to ensure that they do not violate ethical rules relating to privacy, confidentiality, bias and discrimination.

II. Judicial Oversight of Ethical Use of AI by Litigants

A. Supervision of Fabricated Citations by Attorneys

In addition to evaluating the ethical aspects of their own use of AI, judges also have the responsibility for overseeing the ethical use of AI by lawyers and litigants in their courtrooms. This has been most pronounced by the repeated actions of lawyers or pro se litigants filing pleadings with courts that contain fabricated citations created by so-called “hallucinations” by generative AI programs. This tendency of generative AI programs to simply make up citations or facts is well-documented, and relates to their function of generating unique or novel responses to prompts rather than just regurgitating verbatim the content that were trained on. One study of medical use of ChatGPT found that ChatGPT 3.5 fabricated in whole or in part over 98 percent of medical citations, whereas ChatGPT 4 fabricated approximately twenty percent of its citations. While the drop from 98 to 20 percent fabrications in the five months between the release of ChatGPT 3.5 in November 2022 and the release of ChatGPT 4 in March 2023 is an impressive improvement, the fact that 20 percent of medical citations are still false is problematic. It is likely that similar rates of fabrication occur for legal documents produced by generative AI.

An attorney who files a pleading with the court that contains fabricated citations (or facts) is violating that attorney’s ethical duties of competence and candor to the tribunal. As

89 Greenstein, supra note 21.
93 Varun Magesh et al., Hallucination-Free? Assessing the Reliability of Leading AI Legal Research Tools 1 (2024), https://dho.stanford.edu/wp-content/uploads/Legal_RAG_Hallucinations.pdf (“While hallucinations are reduced relative to general-purpose chatbots (GPT-4), we find that the AI research tools made by LexisNexis (Lexis+ AI) and Thomson Reuters (Westlaw AI-Assisted Research and Ask Practical Law AI) each hallucinate between 17% and 33% of the time.”).
mentioned above, the ABA added comment 8 to the Rule 1.1 requirement for competency to expressly require technological competence by an attorney:

To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.94

As AI has quickly become a mainstay of society and legal practice, the duty of technological competence encompasses understanding of the potential pitfalls of generative AI, especially by any attorney who intentionally uses generative AI tools to prepare a court filing.

Perhaps not surprisingly, there have already been a number of incidents in which attorneys have been caught filing briefs with courts containing AI-fabricated citations. The first and most highly publicized case was in the Southern District of New York federal district court, where attorney Steven A. Schwartz filed a brief containing six non-existent citations generated by ChatGPT.95 Apparently the attorney had not previously practiced in federal court, and did not have access to a research database with federal case law, so asked ChatGPT for some supporting precedent. ChatGPT obliged by providing six case citations to support the counsel’s argument, including full text opinions of the fictional cases when the citations were questioned. The opposing counsel first called attention to the fake citations,96 but Federal District Court Judge Castel was confronted with an issue of first impression. Specifically, what consequences should result when an attorney unintentionally cites fake cases generated by AI in a court submission?

After conducting a special hearing on the matter, Judge Castel found that the attorney and his firm had violated Rule 11 by acting in bad faith to mislead the court, and imposed sanctions of $5000.97 The judge noted that “there is nothing inherently improper about using a reliable artificial intelligence tool for assistance,” but “existing rules impose a gatekeeping role on attorneys to ensure the accuracy of their filings.”98 The attorney and his law firm “abandoned their responsibilities when they submitted non-existent judicial opinions with fake quotes and citations created by the artificial intelligence tool ChatGPT, then continued to stand by the fake opinions after judicial orders called their existence into question.”99 The judge also ordered the offending counsel and his firm to send letters to the judges who allegedly issued the six bogus decisions cited by ChatGPT, explaining what happened and apologizing for relying on the bogus opinions.100

Perhaps even more influential than the specific sanction issued in this case was the compelling description by the judge of the harms that can result from citing hallucinated citations:

94 ABA, Model Rules of Professional Responsibility, Rule 1.1 Competence – Comment 8, https://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct/rule_1_1_competence/comment_on_rule_1_1/ (last visited June 13, 2024).
96 Id.
98 Id. at 448.
99 Id.
100 Id. at 466.
Many harms flow from the submission of fake opinions. The opposing party wastes time and money in exposing the deception. The Court’s time is taken from other important endeavors. The client may be deprived of arguments based on authentic judicial precedents. There is potential harm to the reputation of judges and courts whose names are falsely invoked as authors of the bogus opinions and to the reputation of a party attributed with fictional conduct. It promotes cynicism about the legal profession and the American judicial system. And a future litigant may be tempted to defy a judicial ruling by disingenuously claiming doubt about its authenticity.¹⁰¹

Unfortunately, this highly-publicized first example of attorneys being fooled into citing fake cases generated by generative AI did not stop other lawyers from committing similar ethical errors. There have been several subsequent cases in which an attorney was found to have cited fake cases generated by AI in a court submission:

- A Colorado attorney filed a pleading with a Colorado state court that contained several fake citations generated by AI.¹⁰² When the court confronted the attorney about this, he initially falsely attributed the fake citations to a legal intern.¹⁰³ The Colorado Supreme Court’s attorney discipline office upheld a one-year suspension followed by a two-year probation of the attorney. He was held to have failed to meet the duty of competence, failed to act with reasonable diligence and promptness when representing a client, and knowingly made a false statement of material fact or law to a court.¹⁰⁴

- In a January 11, 2024 opinion, a New York state court struck the reply brief filed by a litigant because five of the six citations in the brief were fake citations created by AI.¹⁰⁵ The court noted that “[a]though the Court is dubious about using AI to prepare legal documents, it is not necessarily the use of AI in and of itself that causes such offense and concern, but rather the attorney’s failure to review the sources produced by AI without proper examination and scrutiny.”¹⁰⁶ In addition to rejecting the flawed reply brief and denying the motion which the brief was filed in support of, the court also indicated that sanctions against the offending attorney would be appropriate and would be considered in a future hearing.¹⁰⁷

- The United States Court of Appeals for the Second Circuit dismissed an appeal filed by an attorney that included a false citation generated by AI in her brief on January 30, 2024.¹⁰⁸ The false citation appeared to be discovered by the court itself rather than opposing counsel. The offending attorney was referred for investigation of possible disciplinary enforcement.¹⁰⁹

¹⁰¹ Id. at 448-49.
¹⁰³ Id.
¹⁰⁴ Id.
¹⁰⁶ Id.
¹⁰⁷ Id. at 621-22.
¹⁰⁸ Park v. Kim, 91 F.4th 610 (2d Cir. 2024).
¹⁰⁹ Id. at 616.
On February 12, 2024, a state court in Massachusetts sanctioned an attorney $2000 for filing several pleadings containing “hallucinated” fake citations generated by AI. The court itself seemed to discover the fake citations, noting that something seemed amiss with the cited authorities and spending “several hours” investigating the non-existent precedents. The attorney blamed the errors on his younger lawyer assistants, and expressed remorse to the court and confessed his ignorance about AI. In a 16-page opinion on the misuse of AI by attorneys, the court acknowledged its sanction of $2000 was “mild,” but warned that “[t]he blind acceptance of AI-generated content by attorneys undoubtedly will lead to other sanction hearings in the future, but a defense based on ignorance will be less credible, as the dangers associated with the use of Generative AI systems become more widely known.”

On March 8, 2024, a federal district judge from the Middle District of Florida suspended an attorney for one year for filing a brief containing AI-created fabricated cases in violation of the rules of the court and Florida’s Rule of Professional Conduct. The matter had been referred to the court’s grievance committee, which found that the attorney’s conduct went “beyond a lack of due diligence as some of his legal authorities were completely fabricated.” The court’s Grievance Committee stated that while “we understand that artificial intelligence is becoming a new tool for legal research, it can never take the place of an attorney’s responsibility to conduct reasonable diligence and provide accurate legal authority to the Court that supports a valid legal argument.”

Former Trump attorney Michael Cohen through his attorney David Schwartz, filed a motion for early termination of his supervised release. Cohen, who is disbarred, assisted his lawyer by providing some citations produced by Google Bard, which turned out to be fake. Neither Cohen nor Schwartz realized the citations were fake, nor did the opposing counsel representing the United States. Another lawyer brought on to assist Cohen realized the citations were fake and notified the court. The court denied Cohen’s motion, but decided not to impose sanctions, as there was no deliberate bad faith. Cohen had already been disbarred and thus was no longer subject to the rules of professional conduct, and Schwartz’s “citation to non-existent cases is embarrassing and certainly negligent,

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111 Id. at 3-4.
112 Id. at 5.
113 Id. at 15-16.
116 Id. at 10.
118 Id. at *2.
119 Id. at *6.
120 Id.
perhaps even grossly negligent. But the Court cannot find that it was done in bad faith.”

In the first year since the release of ChatGPT4, there have been at least seven cases where attorneys were discovered to have filed pleadings with a court that contained AI-generated fake citations. Of course, there may have been additional transgressions that were not detected by either the judge or opposing counsel. In the cases that were detected, judges were called on to play a major role. First, it was the judge who discovered the fake citations in several of the cases, not the opposing counsel. This suggests that judges must be vigilant of fake citations in court filings, and cannot rely solely on opposing counsel to detect the fabrications. Second, it was judges that had to decide what penalty should be imposed on the offending counsel. In these initial cases, the penalty varied from no penalty and just a warning to disbarment. In several of the cases, the judge expressly was lenient because of the novelty of the AI deception, and the determination that the attorney was not aware of this risk. Presumably these arguments for leniency will be less powerful going forward, as attorneys should be on notice from these various cases and warnings from numerous sources about the risks of AI hallucinations. But the problem is unlikely to go away altogether as long as generative AI tools continue to hallucinate, as busy attorneys will likely continue to rely on these tools that can often generate useful text in a very short time, yet are prone to occasional fake citations or facts.

B. Judicial Standing Orders on Generative AI

In response to this initial wave of incidents in which attorneys were caught filing briefs with fabricated citations, several judges issued standing orders restricting the use of AI by attorneys filing documents in their courtrooms. These standing orders differed in significant ways. Some applied just to generative AI, while others applied to any type of AI. Some

121 Id.


123 See, e.g., Magistrate Judge Gabriel A. Fuentes, N.D. Ill., Standing Order For Civil Cases Before Magistrate Judge Fuentes (May 31, 2023), https://www.ilnd.uscourts.gov/_assets/_documents/_forms/_judges/Fuentes/Standing%20Order%20For%20Civil%20Cases%20Before%20Judge%20Fuentes%20rev’d%205-31-23%20(002).pdf (“Any party using any generative AI tool to conduct legal research or to draft documents for filing with the Court must disclose in the filing that AI was used, with the disclosure including the specific AI tool and the manner in which it was used.”).

124 See, e.g., In The United States District Court For The Eastern District of Pennsylvania Standing Order Re: Artificial Intelligence (“AI”) In Cases Assigned To Judge Baylson (June 6, 2023), https://www.paed.uscourts.gov/sites/paed/files/documents/procedures/Standing%20Order%20Re%20Artificial%20Intelligence%206-6-23.pdf (“If any attorney for a party, or a pro se party, has used Artificial Intelligence (“AI”) in the preparation of any complaint, answer, motion, brief, or other paper, filed with the Court, and assigned to Judge Michael M. Baylson, MUST, in a clear and plain factual statement, disclose that AI has been used in any way in the preparation of the filing, and CERTIFY, that each and every citation to the law or the record in the paper, has been verified as accurate.”).
prohibited the use of AI altogether, while others required notice of the use of AI and attestation that all citations had been independently verified to be accurate.

While the rationale for such standing orders is clear from the initial wave of attorney transgressions, expert opinion has now turned against such judicial special orders. Not only are the requirements inconsistent, but as AI has quickly been integrated into virtually all software programs, the use of AI is quickly becoming ubiquitous. For example, Google search uses AI, and is now incorporating Google’s Generative AI program Gemini. Westlaw and Lexis have been using AI for many years, and have now integrated generative AI into their platforms. Some judges have tried to distinguish in their orders some accepted platforms (Westlaw, Lexis, Google and Bing) while banning all others, but such a strategy will quickly be outdated and confusing. For example, Microsoft is in the process of integrating its generative AI Co-Pilot product into its Windows 365 offerings, including Word. Microsoft and other computer manufacturers have also announced they will soon start producing laptop computers in which AI is built into the computer itself, making use of AI unavoidable. So now not only will virtually any software program or computer an attorney uses incorporate AI, but AI can be used for many different functions, not simply drafting text. It can be used for research, for outlining, for answering specific questions, for editing and grammar review, and other applications.

Louisiana judge Scott Schlegel, a leading judicial expert on AI, asks whether courts with standing orders “require a certification if a lawyer simply uses generative AI to clean up a few paragraphs that don’t even contain a single case citation?” Indeed, expert opinion on AI use recommends this type of iterative use of AI for more limited steps in researching and drafting

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125 See, e.g., Christopher A. Boyko, United States District Judge for N.D. Ohio, Court’s Standing Order on the Use of Generative AI (undated), https://www.ohnd.uscourts.gov/sites/ohnd/files/Boyko.StandingOrder.GenerativeAI.pdf (last visited June 13, 2024) (“no attorney for a party, or a pro se party, may use Artificial Intelligence (‘AI’) in the preparation of any filing submitted to the Court.”).

126 See, e.g., Judge Brantley Starr, U.S. District Court for the Northern District of Texas, Mandatory Certification Regarding Generative Artificial Intelligence (undated), https://www.txnd.uscourts.gov/judge/judge-brantley-starr (last visited June 13, 2024) (attorneys must file a certificate “attesting either that no portion of any filing will be drafted by generative artificial intelligence (such as ChatGPT, Harvey.AI or Google Bard) or that any language drafted by generative artificial intelligence will be checked for accuracy.”).


128 Hon. Michael J. Newman, United States District Court Southern District Of Ohio Western Division, at Dayton, Standing Order Governing Civil Cases (Dec. 18, 2023), https://www.ohsd.uscourts.gov/sites/ohsd/files/MJN%20Standing%20Civil%20Order%20eff.%2012.18.23.pdf (“No attorney for a party, or a pro se party, may use Artificial Intelligence (‘AI’) in the preparation of any filing submitted to the Court. ... The Court does not intend this AI ban to apply to information gathered from legal search engines, such as Westlaw or LexisNexis, or Internet search engines, such as Google or Bing.”).


131 Scott Schlegel, A Call for Education Over Regulation: An Open Letter.
documents rather than asking the AI to just spew an entire document.\textsuperscript{132} Thus, requiring an attorney to certify every use of AI in preparing their filings seems unduly burdensome and wasteful. A more effective and sensible strategy is to remind attorneys they have a duty to ensure the validity of all their arguments, including supporting citations, pursuant to Rule 11 and their ethical duty of competence (ABA Model Rule 1.1(8)) and candor to the tribunal (ABA Model Rule 3.3).

\textbf{C. Other Attorney Ethical Responsibilities with AI}

The courts directly enforce these ethical duties of attorneys when they are the party directly impacted by the attorney malfeasance. AI raises many other ethical challenges for attorneys, including the duty of confidentiality (ABA Model Rule 1.6(a)), the duty to consult the client (ABA Model Rule 1.4), the duty to supervise assistants (ABA Model Rule 5.3), and the duty to charge reasonable fees (ABA Model Rule 1.5).\textsuperscript{133} Several states have adopted guidance for attorneys on how existing rules of professional responsibility for attorneys will apply to AI.\textsuperscript{134} Most of these ethical responsibilities relate to the relationship between attorneys and their clients, and so judges don’t usually have a direct role in overseeing these actions, unless they serve on an attorney discipline committee or are assigned an attorney malpractice case involving mishandling of AI by an attorney defendant.

While judges usually will not have a direct role in overseeing compliance with these attorney ethical responsibilities, it will be prudent for judges to be aware of the ethical tensions and challenges that lawyers will face in implementing AI in their practices. One never knows when an AI-related attorney ethical issue will pop up in a judge’s work. For example, a judge in Canada recently reduced an attorney’s request for legal fees on the ground that had the attorney used AI rather than human labor to do much of the routine work in the case, the fees would have been substantially less.\textsuperscript{135} In reducing the attorney fees to which the attorney was entitled, the judge in this case was indirectly enforcing the attorney’s ethical responsibility to charge their client a reasonable fee.

\textsuperscript{132} Daniel Schwarz & Jonathan H. Choi, \emph{AI Tools for Lawyers: A Practical Guide} 108 MINN. L. REV. 1.6-7 (2023); Ethan Mollick, \emph{CO-INTELLIGENCE: LIVING AND WORKING WITH AI} 56-61 (2024).


D. Pro Se Litigants

In addition to their duty to supervise the ethical responsibilities of attorneys practicing before them, judges face at least two other important ethical issues with respect to the litigants appearing before them—(i) pro se litigants and (ii) deep fakes. AI presents a double-edged sword with respect to pro se litigants. It is well-known that there is a huge access to justice problem in the United States, where many people cannot afford lawyers to litigate their legal problems. An increasing number of litigants in U.S. courts represent themselves as pro se litigants. The quality of their court filings is often problematic, and many judges spend much time (and patience) trying to assist pro se litigants get a fair hearing in court. Generative AI can help these pro se litigants prepare better written and researched briefs, thus enhancing the pursuit of justice.136 Courts in many states are also using AI to help pro se litigants prepare various court forms.137

On the other hand, pro se litigants’ use of generative AI increases the problem of fabricated citations. Without an attorney who has a professional responsibility to ensure that the facts and citations in a brief are accurate, pro se litigants have less knowledge, ability, and duty to prevent fake citations. While a pro se litigant is still responsible for submitting true and accurate pleadings, they are not subject to the normal channels of attorney discipline and responsibility. At a practical level, pro se litigants will often lack access to legal databases they can access to check the veracity of the case law that their generative AI tool cites. With the current state of the technology, we know that a significant percentage of such citations will be fabricated.

There has already been one case in which a pro se litigant was discovered to have cited fake citations created by AI. In February 2024, a Missouri Court of Appeals sanctioned a pro se litigant for filing an appellate brief in which 22 of the 24 case citations were fabricated.138 The court stated that it generally tries to provide pro se litigants some leeway, but “[f]iling an appellate brief with bogus citations in this Court for any reason cannot be countenanced and represents a flagrant violation of the duties of candor” all litigants owe the Court.139

This Missouri case is just the tip of the iceberg, as multiple other cases have been reported of pro se litigants citing fake citations generated by AI.140 This mix of beneficial and problematic applications of AI by pro se litigants presents a dilemma for judges. Some have responded by discouraging pro se litigants from using generative AI; one judge even adopted a special order specifically prohibiting only pro se litigants from using generative AI. This puts pro se litigants at an even greater disadvantage, and exacerbates the access to justice problem. A better approach might be to encourage pro se litigants to consult with legal aid groups or even some online sites to double-check the accuracy of their citations.141 Another dimension is that there has already been at least one reported example of a powerful litigant using generative AI against a series of

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139 Id. at *4.
141 NYSBA, supra note 88, at 41-43.
poor pro se litigants and apparently routinely using fake citations that the pro se litigants are unable to verify or challenge.

Judges will need to be the backstop to detect such fake citations and protect pro se litigants from such abusive processes. A judge has considerable leeway in choosing whether and how to sanction a litigant who has engaged in fake citations or other misconduct. However, in most jurisdictions, sanctions are most appropriate where a litigant or their attorney submits a “knowingly false statement” or engages in “deliberate indifference.” Thus, a powerful litigant that knowingly uses fake citations to exploit a pro se adversary would seem to be the strongest case for sanctions. Alternatively, where a litigant’s actions indicate “[m]ere negligence or ignorance of the facts or law,” which will often be the case with a pro se litigant, the argument for sanctions is weakest.

E. Deep Fakes

The final ethical issue (at least to date) that judges need to be prepared to respond to regarding AI in the courtroom is the potential for “deep fakes.” AI, and particularly generative AI, has made it relatively easy to cheaply and quickly create fake images, video, or audio. This capability has already presented significant problems outside the courtroom, in uses such as nonconsensual pornography, political misinformation, extortion, false celebrity endorsements, and conspiracy mongering. Courtrooms are also at risk of being manipulated by AI-created fake images and videos, as image and video evidence is increasingly used in trials with the proliferation of smart phones with cameras, closed-circuit television cameras, body cameras, and home surveillance cameras. In fact, there have already been reports of AI-created fake evidence being introduced as evidence in court cases.

Recent rule changes in the Federal Rules of Evidence, and similar changes in state rules, have made it harder to detect deep fake evidence. In 2017, Federal Rule of Evidence 902 was amended to simplify the admission of audiovisual evidence by making certain types of digital evidence self-authenticating. The intent of this amendment was to lessen the authentication standard in order to make it easier and cheaper for parties to introduce these materials into evidence. Under this revised rule, the authentication of digital evidence is presumed unless the opposing counsel raises objections. In the era of AI deep fakes, this likely requires a level of

143 Id.
146 See generally Fed. R. Evid. 902.
technological sophistication that many attorneys lack. If the opposing attorney does not challenge the deep fake evidence, or even if opposing counsel does challenge it, it will be up to the trial judge to determine if evidence has been manipulated by AI. This will impose a significant new responsibility and burden on judges to protect the integrity of trials.\textsuperscript{148}

In addition to detecting or confirming the attempted introduction of deep fake evidence, deep fakes will create two other complexities for judges. Some litigants may attempt to discredit or block valid evidence by alleging that the evidence is a deep fake. This potential to use the deep fake phenomenon to cast doubt on valid evidence has been called the “liar’s dividend.”\textsuperscript{149} Again, there have already been examples of attorneys trying to exploit the liar’s dividend by alleging that valid evidence may be a deep fake. In a case involving a fatal accident in which a plaintiff died relying on Tesla’s alleged self-driving capability, the plaintiff’s attorney attempted to introduce into evidence a video of an interview with Tesla CEO Elon Musk in which he states that the “Model S and Model X [Tesla] at this point can drive autonomously with greater safety than a person [can].”\textsuperscript{150} Musk’s lawyers attempted to cast doubt on the authenticity of the video by claiming that “like many public figures, [Musk] is the subject of many deepfake videos and audio recordings that purport to show him saying and doing things he never actually said or did.”\textsuperscript{151} Although in this case the judge rejected Musk’s argument,\textsuperscript{152} there will no doubt be further attempts to question valid evidence using contrived deep fake claims that judges will need to rule on.

The second complication that judges will face relating to deep fakes is that AI may be used to clarify or repair damaged or blurry pictures or videos to make it clearer to the fact-finder. In some cases, this might be a valid and useful technique to make evidence more understandable. In other cases, however, the use of AI may cross the line and embellish or alter the evidence in such a way that it misleads the viewer. A judge in Washington State recently had to make a determination of whether the AI manipulation of a cell phone video of a murder was a useful clarification or an improper embellishment, eventually ruling it was the latter and impermissibly altered the meaning of the evidence.\textsuperscript{153} Although the decision in this first case of its kind seemed relatively straightforward, future cases are likely to present much closer questions for judges to adjudicate.

\textbf{Conclusion}

Judges are busy people, with heavy caseloads and burdensome responsibilities. AI has the potential to add to judicial workloads and challenge their technological competence in the new

\textsuperscript{148} Rebecca Delfino, \textit{Deepfakes on Trial: A Call to Expand the Trial Judge’s Gatekeeping Role to Protect Legal Proceedings From Technological Fakery}, 74 \textit{HASTINGS L. J.} 293, 325 (2023).


\textsuperscript{150} Shannon Bond, \textit{People are Trying to Claim Real Videos are Deepfakes. The Courts are Not Amused}, NPR (May 8, 2023), https://www.npr.org/2023/05/08/1174132413/people-are-trying-to-claim-real-videos-are-deepfakes-the-courts-are-not-amused.

\textsuperscript{151} Id.


era of AI. Judges will need to carefully navigate the ethics of their own use of AI and that of their staff, as well as supervise and enforce against the unethical use of AI by litigants in their courtrooms. At the same time, as many judicial organizations, bar associations and other legal groups have recognized, AI has the potential to make legal practice, including judicial decision-making, more efficient and informed.\footnote{154} Judges will need to walk this delicate tightrope between beneficial applications of AI and the ethical pitfalls this technology can create. As AI continues its rapid advance and evolution, courts will need to continually respond to the new research and tools, and the new practical and ethical issues these advances present. As the Wisconsin Supreme Court noted, “[t]he justice system must keep up with the research and continuously assess the use of these tools.”\footnote{155}