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ARTIFICIAL INTELLIGENCE (AI) AND THE PRACTICE OF LAW

*Judge Xavier Rodriguez**

From quill pens to mobile devices, how to practice law is constantly evolving. “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”¹ The growth of artificial intelligence (“AI”) applications is just the latest incarnation of these developments. As lawyers have been required to adapt to these developments, the adaptable lawyer will need to determine when and if to incorporate AI into his or her practice. Such incorporation could help reduce the costs of legal services while increasing quality, expand the availability of legal services, and allow lawyers to get more done in less time. By automating repetitive and mundane processes, those lawyers particularly skilled in using AI to their advantage will be able to spend more time on case analysis and crafting legal arguments. AI is poised to reshape the legal profession. But AI will require courts, rules committees, and ethics bodies to consider some of the unique

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1. MODEL RULE PROF’L CONDUCT r. 1.01 cmt. 8 (AM. BAR ASS’N).

challenges that AI presents. It will require attorneys to evaluate whether to use such products, and the risks associated with any use. Attorneys using AI tools without checking on the accuracy of their output are responsible for the consequences of incorporating inaccurate information into their work product.² This article seeks to provide attorneys with a baseline understanding of AI technology and recommends areas where state bars, courts, rules committees, and attorneys may wish to undertake further study and potential rule changes.

Although AI tools are rapidly developing, no doubt there will be future governmental scrutiny and consumer input into this technology. In July 2023, the Federal Trade Commission began to investigate OpenAI, creator of ChatGPT,³ to determine whether the tool has harmed consumers through its collection of data and how personal data is used.⁴ The Securities and Exchange Commission has likewise begun to propose new regulatory requirements to address risks associated with the use of

2. See, e.g., Michael Loy, *Legal Liability for Artificially Intelligent Robot Lawyers*, 26 LEWIS & CLARK L. REV. 951, 957–58 (2022) (discussing how attorneys have a duty to accept ultimate responsibility for the use of robot lawyers as software tools).

3. This article makes several references to ChatGPT because it was one of the first developers to garner significant publicity. But there are several other text generators in this space (e.g., Claude 2, Google Bard AI, Bing AI Chat, Perplexity AI, and others), as well as many other AI tools now on the market. In addition to these commercial products, some law firms (e.g., Dentons) have now launched their own versions of a large language model (LLM). This article should not be interpreted as making any type of endorsement or nonendorsement of any product or law firm.

4. Cat Zakrzewski, *FTC investigates OpenAI over data lead and ChatGPT's inaccuracy*, WASH. POST (July 13, 2023), <https://www.washingtonpost.com/technology/2023/07/13/ftc-openai-chatgpt-sam-altman-lina-khan/> (discussing how analysts have called OpenAI's ChatGPT the fastest-growing consumer app in history).

AI.⁵ ChatGPT's co-founder recently testified before Congress, requesting that Congress enact regulatory policy in these areas, partly to avoid navigating a patchwork of state laws.⁶ Indeed, some commentators question whether generative AI tools will ever gravitate to the necessary level of accuracy, so as to justify their use.⁷ As global entities and states in the United States consider whether to restrict the harvesting of certain data that is ingested into AI tools for training purposes, it is uncertain how any such restrictions may affect the ability of AI tools to produce results with accuracy. If AI tools ingest generative AI results, some experts in the field question whether "data inbreeding" may result that may produce inaccurate results.⁸ It is important for practitioners to monitor this rapidly changing landscape.

This article, however, does not undertake to make any comment on the larger policy issues surrounding artificial intelligence. For example, the American Bar Association in 2023 adopted Resolution 604 that sets forth guidelines requiring AI

5. Press Release, U.S. Sec. Exch. Comm'n, SEC Proposes New Requirements to Address Risks to Investors From Conflicts of Interest Associated With the Use of Predictive Data Analytics by Broker-Dealers and Investment Advisers (July 26, 2023) (on file with the U.S. Sec. Exch. Comm'n), <https://www.sec.gov/news/press-release/2023-140>.

6. Cecilia Kang & Cade Metz, *F.T.C. Opens Investigation into ChatGPT Maker Over Technology's Potential Harms*, N.Y. TIMES (July 13, 2023), <https://www.nytimes.com/2023/07/13/technology/chatgpt-investigation-ftc-openai.html>.

7. See Ted Chiang, *ChatGPT is a blurry Jpeg of the Web*, THE NEW YORKER (Feb. 9, 2023), <https://www.newyorker.com/tech/annals-of-technology/chat-gpt-is-a-blurry-jpeg-of-the-web> (analogizing what generative AI does to compressing data as akin to what happens when a file is compressed to a jpeg and loses certain attributes—known as lossy compression).

8. See Maggie Harrison, *When AI Is Trained on AI-Generated Data, Strange Things Start to Happen*, FUTURISM (Aug. 2, 2023), <https://futurism.com/ai-trained-ai-generated-data-interview?ref=refind> (interview with Richard G. Baraniuk, Sina Alemohammad & Josue Casco-Rodriguez).

developers to ensure their products are subject to human oversight and are transparent. This article assumes that policymakers will in the future enact regulatory or statutory requirements in this area,⁹ and accordingly this article will focus on issues practicing attorneys are likely to encounter and steps state bars and related entities should consider.

Some AI issues are raised only briefly here and will require resolution from legislative bodies, courts, and governmental agencies

AI implicates several intellectual property and other considerations that are important for lawyers to be aware of in order to advise clients. For example, to “what extent should AI be considered a legal person and for what purposes?”¹⁰ Who (if

9. See, e.g., *Blueprint for an AI Bill of Rights: Making Automated Systems Work for the American People*, THE WHITE HOUSE OFFICE OF SCI. AND TECH. POL’Y (Oct. 2022) [hereinafter *Blueprint for an AI Bill of Rights*], <https://www.whitehouse.gov/ostp/ai-bill-of-rights/>; ARTIFICIAL INTELLIGENCE RISK MANAGEMENT FRAMEWORK (AI RMF 1.0), THE NAT’L INST. OF STANDARDS AND TECH. (NIST) (Jan. 2023), <https://doi.org/10.6028/NIST.AI.100-1> (a set of standards for the design, development, use, and evaluation of AI products); *Adverse action notification requirements in connection with credit decisions based on complex algorithms*, CONSUMER FIN. PROT. BUREAU, Circular 2022-03 (May 26, 2022), https://files.consumerfinance.gov/f/documents/cfpb_2022-03_circular_2022-05.pdf (The Consumer Financial Protection Bureau (CFPB) May 2022 guidance to financial institutions regarding algorithmic credit decisions and creditor reporting obligations). See also Gibson Dunn, *Artificial Intelligence and Automated Systems 2022 Legal Review* (January 25, 2023), <https://www.gibsondunn.com/artificial-intelligence-and-automated-systems-2022-legal-review/> (summarizing U.S. state and federal legislative, regulatory and policy developments).

10. Fredric I. Lederer, *Here there be Dragons: The Likely Interaction of Judges with the Artificial Intelligence Ecosystem*, 59 THE JUDGES’ J. 12 (Feb. 3, 2020). See also Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 16190 (Mar. 16, 2023), <https://www.federalregister.gov/documents/2023/03/16/2023-05321/copyrig>

anyone) owns a patent for a device designed by AI?¹¹ Who is liable in tort for damages caused by an AI system?¹² Will the ubiquitous use of AI facial recognition devices on public streets trigger a violation of the Fourth Amendment?¹³ Does the “scraping” of data from the internet and other sources violate any copyright works?¹⁴ Can an AI company be sued for defamation if its product manufactures a defamatory statement about a person or entity?¹⁵ This article merely references the likelihood of these developments and defers on these issues for consideration at a later date by courts and governmental agencies.

ht-registration-guidance-works-containing-material-generated-by-artificial-intelligence (the U.S. Copyright office has taken the position that AI-generated works cannot be copyrighted); Franklin Graves, *DC Court Says No Copyright Registration for Works Created by Generative AI*, IPWATCHDOG (Aug. 19, 2023), <https://ipwatchdog.com/2023/08/19/copyright-registration-works-created-by-generative-ai/id=165444/> (J. Beryl Howell agreed, stating in an August 2023 opinion that “[h]uman authorship is a bedrock requirement of copyright”).

11. U.S. Patent Application No. 16/524,350, Unpublished (filed July 29, 2019) (DABUS, applicant). *See also* Thaler v. Vidal, 43 F.4th 1207 (Fed. Cir. 2022); Thaler v. Perlmutter, No. 1:22-cv-1564, 2023 WL 5333236 (D.D.C. Aug. 18, 2023) (AI-generated works cannot be copyrighted); U.S. Patent and Trademark Office, *Artificial Intelligence*, <https://www.uspto.gov/initiatives/artificial-intelligence>.

12. Lederer, *supra* note 10.

13. *Id.*

14. Winston Cho, *Scraping or Stealing? A Legal Reckoning Over AI Looms*, THE HOLLYWOOD REP. (Aug. 22, 2023), <https://www.hollywoodreporter.com/business/business-news/ai-scraping-stealing-copyright-law-1235571501/> (AI companies contend that their practice of inputting data from the internet and other sources constitutes “fair use” under copyright law).

15. Ryan Tracy, *Some of the Thorniest Questions About AI Will be Answered in Court*, WALL ST. J. (Aug. 23, 2023), <https://www.wsj.com/tech/ai/some-of-the-thorniest-questions-about-ai-will-be-answered-in-court-e7fd444b> (also mentioning issues such as can AI be used by healthcare insurance carriers to review claims and whether AI tools violate privacy laws).

An Introduction to AI

AI is ubiquitous and already in devices we use daily, including our smartphones and cars. “We routinely rely on AI-enriched applications, whether searching for a new restaurant, navigating traffic, selecting a movie, or getting customer service over the phone or online.”¹⁶ To remain proficient and competent in the practice of law, lawyers must have a basic understanding of the technology and terminology used in AI.

AI “refers to computer systems and applications that are capable of performing functions normally associated with human intelligence, such as abstracting, reasoning, problem solving, learning, etc.”¹⁷ “AI applications employ algorithmic models that receive and process large amounts of data and are trained to recognize patterns, thus enabling the applications to automate repetitive functions as well as make judgments and predictions.”¹⁸ “Machine learning is a subset of AI. It refers to humans training machines to learn based on data input [M]achine learning looks for patterns in data to draw conclusions. Once the machine learns to draw one correct conclusion,

16. FINAL REPORT, NATIONAL SECURITY COMMISSION ON ARTIFICIAL INTELLIGENCE at 33 (2021), <https://www.nscai.gov/wp-content/uploads/2021/03/Full-Report-Digital-1.pdf>.

17. CYNTHIA CWIK, PAUL W. GRIMM, MAURA GROSSMAN & TOBY WALSH, ARTIFICIAL INTELLIGENCE AND THE COURTS: MATERIAL FOR JUDGES, ARTIFICIAL INTELLIGENCE, TRUSTWORTHINESS, AND LITIGATION, AM. ASS’N FOR THE ADVANCEMENT OF SCI. (Sept. 2022), available at <https://doi.org/10.1126/aaas.adf0786>.

18. Leslie F. Spasser, Denver K. Ellison & Brennan Carmody, *Artificial Intelligence Law and Policy Roundup*, LEGALTECH NEWS (Mar. 1, 2023), <https://www.law.com/legaltechnews/2023/03/01/artificial-intelligence-law-and-policy-roundup/> (Mar. 1, 2023).

it can apply those conclusions to new data.”¹⁹ “Natural language processing (NLP) is another subfield of AI NLP enables computers to read text or hear speech and then understand, interpret, and manipulate that natural language Using NLP, computers are able to analyze large volumes of text data . . . to identify patterns and relationships This type of AI in law can be applied to help complete tasks like document analysis, eDiscovery, contract review, and legal research.”²⁰ The models powering platforms used for generating text are called large language models, or LLMs.

Much attention has recently been focused on ChatGPT, an AI chatbot created by OpenAI, powered by an LLM trained on a massive dataset to generate human-like responses. But ChatGPT and similar models are only one type of AI, commonly referred to as “generative AI.” “Generative AI is a specific subset of AI used to create new content based on training on existing data taken from massive data sources in response to a user’s prompt, or to replicate a style used as input. The prompt and the new content may consist of text, images, audio, or video.”²¹

Indeed, as one example, electronic research platforms such as Westlaw and LexisNexis are incorporating generative AI capabilities into their platforms.²² Some eDiscovery vendors have likewise begun to incorporate generative AI into their

19. *AI for Lawyers: What is AI and How Can Law Firms Use It?* CLIO, <https://www.clio.com/resources/ai-for-lawyers/lawyer-ai/> (last visited Sept. 26, 2023).

20. *Id.*

21. Maura Grossman, Paul Grimm, Daniel Brown & Molly Xu, *The GPT Judge: Justine in a Generative AI World*, 23 DUKE LAW & TECH. REV. 8 (forthcoming Oct. 2023), available at <https://ssrn.com/abstract=4460184>.

22. See Westlaw Precision, <https://legal.thomsonreuters.com/en/products/westlaw-precision> (last visited Sept. 26, 2023), and Lexis+, <https://www.lexisnexis.com/en-us/products/lexis-plus.page> (last visited Sept. 26, 2023).

platforms, aiming to improve efficiencies in the discovery process.²³ Still, the current state of developments is a work in progress, and there have been conspicuous examples of the technology failing to work properly.²⁴ AI platforms have also been developed for legal writing,²⁵ contract management, due diligence reviews, litigation forecasting, predictions of judicial rulings, and juror screening,²⁶ and nonprofit legal organizations have been experimenting with how to implement bots to

23. It may be possible within a short timeframe for eDiscovery platforms to use generative AI to help locate potential sources of relevant information, and assist with the preservation, collection, and review of relevant data. See *From Bleeding Edge to Leading Edge: GAI and Reciprocal Intelligence in eDiscovery*, COMPLEXDISCOVERY (Aug. 20, 2023), <https://complexdiscovery.com/from-bleeding-edge-to-leading-edge-gai-and-reciprocal-intelligence-in-ediscovery/>. But cost savings in these areas may need to be offset by the need for additional quality control and validation of results. See *Even FLOE? A Strategic Framework for Considering AI in eDiscovery*, COMPLEXDISCOVERY (Aug. 10, 2023), <https://complexdiscovery.com/even-floe-a-strategic-framework-for-considering-ai-in-ediscovery/>.

24. In perhaps the most notable example, a ChatGPT-generated legal brief included six fictitious cases. The lawyers who submitted the brief were sanctioned as a result. See Sara Merken, *New York Lawyers Sanctioned for Using Fake ChatGPT Cases in Legal Brief*, REUTERS (June 26, 2023), <https://www.reuters.com/legal/new-york-lawyers-sanctioned-using-fake-chatgpt-cases-legal-brief-2023-06-22/>.

25. For example, Clearbrief claims to strengthen legal writing in Microsoft Word by using AI to examine discovery, exhibits, pleadings, and other documents and displaying the citations to the source documents. It also claims to create a hyperlinked timeline. See Bob Ambrogi, *New AI Features in Clearbrief Create Hyperlinked Timelines and Allow Users To Query Their Documents*, LAWSTATES (Aug. 15, 2023), <https://www.lawnext.com/2023/08/exclusive-new-ai-features-in-clearbrief-create-hyperlinked-timelines-and-allow-users-to-query-their-documents.html>.

26. See *Voltaire Uses AI and Big Data to Help Pick Your Jury*, ARTIFICIAL LAWYER (April 26, 2017), <https://www.artificiallawyer.com/2017/04/26/voltaire-uses-ai-and-big-data-to-help-pick-your-jury/>.

complete legal forms.²⁷ Sullivan & Cromwell has recently announced that it has been investing in LAER.AI to develop an AI Discovery Assistant. The intent is to bring an AI product to market that will accompany an attorney to depositions and trials, having already “digested” the case, “listened” to the testimony, and then suggests questions. One of the products already put in use, AIDA (AI Discovery Assistant), conducts document review.²⁸

AI developments have taken place at a rapid pace not anticipated by the legal community.²⁹ While these developments have been impressive, there is a need for education in the legal community to understand errors or “hallucinations” that may occur in the output of the LLMs powering these platforms. Attorneys and courts need to be aware of both the benefits and limitations that these AI platforms present.

Potential Limitations of Current Generative AI Platforms

Depending on the AI platform, several potential limitations should be considered. Issues to be considered include, but are not limited to, the following: “Was the data used to train the system skewed or complete? Is it representative of the target

27. See Paul W. Grimm, Maura R. Grossman & Gordan V. Cormack, *Artificial Intelligence as Evidence*, 19 NW. J. TECH. & INTELL. PROP. 9, 34–35 (2021). This article is also very useful for a more detailed discussion of what is AI and its historical development.

28. See Patrick Smith, *Sullivan & Cromwell’s Investments in AI Lead to Discovery, Deposition ‘Assistants,’* THE AM. LAWYER (Aug. 21, 2023).

29. It has been widely reported that ChatGPT 3.5, which was introduced in March 2022, scored about the bottom 10th percentile on a simulated bar exam, but GPT4, introduced in March 2023, scored at the 90th percentile on the same exam. See Barry Dynkin & Benjamin Dynkin, *AI Hallucinations in the Courtroom: A Wake-Up Call for the Legal Profession*, N.Y. LAW J. (June 14, 2023) <https://www.law.com/newyorklawjournal/2023/06/14/ai-hallucinations-in-the-courtroom-a-wake-up-call-for-the-legal-profession/>.

population on which the system will be used? If the AI system was trained with historical data that reflects systemic discrimination, how was this addressed? Were variables incorporated that are proxies for impermissible characteristics (e.g., zip code or arrest records, which may correlate with and therefore incorporate race)? What assumptions, norms, rules, or values were used to develop the system? Were the people who did the programming themselves sufficiently qualified, experienced and/or diverse to ensure that there was not inadvertent bias that could impact the output of the system? Did the programmers give due consideration to the population that will be affected by the performance of the system?"³⁰ Most importantly, was the AI system specifically designed to be used by lawyers and the legal profession?

As noted by John Naughton, certain large language models "crawled" or "harvested" an enormous amount of data on which the model could be trained.³¹ The LLM then "learned" from the dataset through neural networks.³² This allows the LLM to compose text "by making statistical predictions of what is the most likely word to occur next in the sentence that they are constructing."³³ But "[o]ne of the oldest principles in computing is GIGO – garbage in, garbage out. It applies in spades

30. CWIK ET AL., *supra* note 17, at 20.

31. John Naughton, *The World has a big Appetite for AI – but we Really Need to Know the Ingredients*, THE GUARDIAN (Aug. 21, 2023), <https://www.theguardian.com/commentisfree/2023/aug/19/the-world-has-a-big-appetite-for-ai-but-we-really-need-to-know-the-ingredients>.

32. See also Timothy B. Lee & Sean Trott, *A jargon-free explanation of how AI large language models work*, ARS TECHNICA (July 31, 2023), <https://arstechnica.com/science/2023/07/a-jargon-free-explanation-of-how-ai-large-language-models-work/>.

33. Naughton, *supra* note 31.

to LLMs, in that they are only as good as the data on which they have been trained.”³⁴

The above questions require exploration because of the potential for bias in AI systems. “[M]achine-learning algorithms are trained using historical data, [thus] they can serve to perpetuate the very biases they are often intended to prevent. Bias in training data can occur because the training data is not representative of a target population to which the AI system will later be applied.”³⁵ This may or may not be as great a concern in the context of generative AI platforms like ChatGPT, but in the context of lawyers or clients using AI for hiring decisions or judges using AI platforms for bail decisions, bias in the underlying data set is an issue that requires scrutiny. Some researchers are focusing on ways to mitigate such biased models.³⁶ The American Bar Association, among other groups,³⁷ has suggested that lawyers might violate ABA Model Rule of Professional Conduct 8.4’s prohibition against engaging in discriminatory conduct using biased AI platforms. It is uncertain whether mere use of AI tools that subsequently are shown to be flawed would violate certain state-specific Rules of Professional Conduct.

Another concern with certain AI algorithms and their outputs may be the lack of proper testing for reliability for use in

34. *Id.*

35. See Grimm, Grossman & Cormack, *supra* note 27, at 42–47.

36. Hammaad Adam, Aparna Balagopalan, Emily Alsentzer, Fontini Christia & Marzyeh Ghassemi, *Mitigating the impact of biased artificial intelligence in emergency decision-making*, COMMUN. MED. 2, 149 (2022), available at <https://doi.org/10.1038/s43856-022-00214-4>.

37. See Julia Brickell, Jeanna Matthews, Denia Psarrou & Shelley Podolny, *AI, Pursuit of Justice & Questions Lawyers Should Ask*, BLOOMBERG LAW (Apr. 2022), <https://www.bloomberglaw.com/external/document/X3T91GR8000000/tech-telecom-professional-perspective-ai-pursuit-of-justice-ques>.

the legal profession.³⁸ Attorneys should also be cautious about using an AI platform that was originally intended for a certain use and applying it for another use without adequate testing for validity—this is sometimes known as “function creep,” the widening of a technology or system beyond its original intended use.³⁹

Finally, current pricing may pose a temporary obstacle to widespread adoption. As of August 2023, pricing for the largest GPT-4 model is \$.06 for every 1,000 tokens (about 750 words) input. And \$.12 for every thousand tokens output.⁴⁰ If entire case files were inputted, costs could be significant. As with all technology, as the technology improves and competition grows, these costs are likely to decline.

It should be noted, however, that many concerns over AI have been based on earlier versions. “When OpenAI launched its first large language model, known as GPT-1 in 2018, it had 117 million parameters—a measure of the system’s scale and complexity. Five years later, the company’s fourth-generation model, GPT-4, is thought to have over a trillion.”⁴¹ As these tools mature, their accuracy will likely greatly improve.

38. See Grimm, Grossman & Cormack, *supra* note 27, at 48–51.

39. See *id.* at 51.

40. Dan Diette, *What will Generative AI and LLMs mean for eDiscovery?*, COMPLETE DISCOVERY SOURCE (Aug. 10, 2023) <https://cdslegal.com/insights/ai/what-will-generative-ai-and-llms-mean-for-ediscovery/>.

41. Ian Bremmer & Mustafa Suleyman, *The AI Power Paradox, Can States Learn to Govern Artificial Intelligence— Before it’s Too Late?* FOREIGN AFFAIRS (Aug. 16, 2023) (also noting that “AI could be used to generate and spread toxic misinformation, eroding social trust and democracy; to surveil, manipulate, and subdue citizens, undermining individual and collective freedom; or to create powerful digital or physical weapons that threaten human lives. AI could also destroy millions of jobs, worsening existing inequalities and creating new ones; entrench discriminatory patterns and distort decision-making by amplifying information feedback loops; or spark unintended and

Potential Opportunities That AI may Offer the Legal Industry

Many law firms share the same challenges—rising overhead costs (particularly wages), increasingly complex cases, and the historical reliance on manual processes that are inefficient, reduce productivity, and result in increased costs largely absorbed by clients. AI tools offer the prospect to automate and possibly improve several operations, including legal research, document review, and client communication. The use of AI could also free lawyers to work on issues of strategic importance—both improving the experience of practicing law while at the same time providing more value to the client. In addition, AI's ability to analyze large amounts of data can reduce the risk of human error and increase confidence in the accuracy of the results produced.

But large language models, such as ChatGPT, have recently exposed a weakness—hallucinations or errors. Although why errors occur is not fully understood, generally the LLMs hallucinate because the underlying language model compresses the language it is trained on and reduces/conflates concepts that oftentimes should be kept separate. Ultimately, the LLM is a probabilistic model and generates text, as opposed to true or false answers.⁴² New models, however, are being developed that are being built on archives of legal documents to improve the accuracy of an answer. These new generative AI programs designed for the legal industry may improve accuracy to queries posed; quickly review thousands of pages of documents, expediting due diligence tasks and early case assessment of litigation; and

uncontrollable military escalations that lead to war AGI could become self-directed, self-replicating, and self-improving beyond human control.”).

42. *How Chatbots and Large Language Models Work*, CODE.ORG (Aug. 15, 2023), <https://www.youtube.com/watch?v=X-AWdfSFCHQ> (A video on how LLMs work and further explaining hallucinations).

draft summaries or contract language. In sum, the potential exists to reduce legal costs. That said, lawyers will still have to verify output and provide “human judgment” to the issue at hand.

It is expected that AI tools will be able to: (1) facilitate alternative dispute resolution (ADR) by providing early insights into disputes, (2) predict case outcomes, (3) engage in scenario planning and predict negative outcomes, (4) assist with case management and calendaring/deadlines, (5) conduct contract review and due diligence tasks, (6) automate the creation of forms and other legal documents, (7) assist with discovery review and production, (8) assist with the ability to detect personal identifying information, confidential health information, or proprietary or trade secret information, (9) enhance marketing and social media presence, (10) translate data into another language, (11) automate billing, and (12) expedite and lower the cost of legal research and regulatory compliance. In addition, counsel may be able to use AI tools to engage in strategic planning with their clients by running analyses of the client’s financial statements and other data.⁴³ That said, many other non-AI tools can assist with these tasks. Ultimately, attorneys and clients will need to evaluate whether the benefits of this new technology outweigh any costs or privacy or security concerns.

As lawyers contemplate how they may incorporate AI tools into their practice, the following concerns should be addressed:

Duty to Protect Client Confidential Information and use of AI Tools

ABA Model Rule of Professional Conduct 1.6 provides that an attorney generally may not reveal confidential information.

43. CLIENT COLLABORATION: THE EVOLUTION IN LAW FIRMS, THOMSON REUTERS (2023), *available at* <https://legal.thomsonreuters.com/content/dam/ewp-m/documents/legal/en/pdf/white-papers/client-collaboration-white-paper-the-evolution-in-law-firms-us-tr3462238.pdf>.

Protective orders issued by individual courts impose even more stringent requirements—including, for instance, that attorneys verify the permanent destruction of discovery materials at the end of a case. Attorneys considering using AI platforms should take care not to disclose confidential information inadvertently by inputting such information into a prompt or uploading confidential information into the AI platform for processing, particularly when the AI system is open source, such as the free version of ChatGPT, and the terms of service may not guarantee confidentiality.

Some AI platforms may save data, such as query history, to train and improve their models. Individuals working for those “free” platforms could potentially be viewing sensitive client data or attorney work product. Other AI platforms may not use prompts or inputted data to train. If using paid subscription services, an argument exists that such confidentiality concerns are mitigated due to the terms of service agreements entered with those paid commercial providers.⁴⁴ Another concern, however, is the concern that exists with any third-party provider—that is the potential that the AI provider is itself hacked in a cybersecurity incident and client data is taken. As always, due diligence must be exercised to satisfy that reasonable security measures are in place with any third-party provider. Further, sometimes additional requirements are imposed on the lawyer, such as an obligation to destroy information upon the conclusion of a matter. Sometimes that obligation is mandated contractually or

44. See John Tredennick & William Webster, *Attorneys using AI shouldn't worry about waiving privilege*, LAW360 (Aug. 22, 2023), <https://www.law360.com/articles/1706972/attorneys-using-ai-shouldn-t-worry-about-waiving-privilege> (arguing that paid commercial licensed products generally contain nondisclosure and nonuse provisions in their terms of use and the expectation of privacy in those products is as strong as those contained in Microsoft 365 licenses).

sometimes included in a protective order or other discovery stipulation or protocol. A lawyer uploading documents into an AI tool may be unable to certify that the information was destroyed unless it confirms that this is covered by the platform's terms of service.

On the other hand, AI can be used to secure information sharing and address privacy concerns. AI-powered redaction tools could possibly automatically identify personally identifiable information (PII) and redact that material from large data sets.⁴⁵ AI-powered redaction tools reduce the risk of accidentally disclosing sensitive data because of human error. An attorney using AI platforms and redaction tools must weigh the benefits and risks associated with both.

Law Firm (and Corporate) Policies

Law firms (and corporations) should consider implementing an AI policy to provide guidance to their employees on the usage of AI. At the end of the spectrum, some firms may completely ban the use of AI platforms. As discussed in this article, this approach may be largely unworkable and fail to prepare the law firm for the realities of the modern practice of law. A better approach may be to instruct employees that they are responsible for checking any AI's output for accuracy, they should consider whether the output of any AI platform is biased, that all appropriate laws be complied with, and they evaluate the security of

45. Sriharsha M S, *Detecting and redacting PII using Amazon Comprehend*, AWS MACHINE LEARNING BLOG (Sept. 17, 2020), <https://aws.amazon.com/blogs/machine-learning/detecting-and-redacting-pii-using-amazon-comprehend> (This early customer use case breaks down a real-time analysis of how Amazon Comprehend automatically identifies and redacts PII).

any AI platforms used before inputting any confidential information.⁴⁶

Use of AI-generated motions or briefs for court use

Although AI tools are vastly improving, attorneys should never file any AI-generated document without reviewing it for accuracy. This includes not only checking to ensure that the facts stated are correct and that legal authorities cited are accurate, but that the quality of analysis reflects good advocacy. Federal Rule of Civil Procedure 11 provides: “By presenting to the court a pleading, written motion, or other paper . . . an attorney or unrepresented party certifies that to the best of the person’s knowledge, information, and belief, formed after an inquiry reasonable . . . (1) it is not being presented for any improper purpose, . . . (2) the claims, defenses, and other legal contentions are warranted by existing law or by a nonfrivolous argument . . . (3) the factual contentions have evidentiary support or, if specifically so identified, will likely have evidentiary support after a reasonable opportunity for further investigation or discovery” ABA Model Rule of Professional Conduct 3.3 states a “lawyer shall not knowingly (1) make a false statement of fact or law to a tribunal or fail to correct a false statement of material fact or law previously made to the tribunal by the lawyer; [or]

46. See Task Force on Responsible Use of Generative AI for Law (June 2, 2023), COMPUTATIONAL LAW, <https://law.mit.edu/ai> (lawyers should adhere to the following principles in all usage of AI applications: Duty of Confidentiality to the client, Duty of Fiduciary Care, Duty of Client Notice and Consent, Duty of Competence in the usage and understanding of AI applications, Duty of Fiduciary Loyalty to the client, Duty of Regulatory Compliance and respect for the rights of third parties, and Duty of Accountability and Supervision to maintain human oversight over all usage and outputs of AI applications); Shanq Simmons, *A Chief Legal Officer’s Guide to building a corporate AI Policy*, EVERLAW (Aug. 11, 2023), <https://www.lexology.com/library/detail.aspx?g=c5f2bb0c-c09c-4908-aff0-46efedc69755>.

(2) fail to disclose to the tribunal legal authority in the controlling jurisdiction known to the lawyer to be directly adverse to the position of the client and not disclosed by opposing counsel” As a result, if lawyers are already required to make a reasonable inquiry, it is likely unnecessary for judges to issue additional standing orders requiring lawyers to declare whether they have used AI tools in preparing documents and certifying that they have checked the filing for accuracy.

What remains unclear is whether AI platforms are equivalent to a nonlawyer requiring supervision, as contemplated by ABA Model Rule of Professional Conduct 5.3. It is also uncertain whether negligent reliance on AI tools can establish a violation of these rules, and whether lawyers must exercise “supervisory authority” over the AI platform, such that the lawyer must make “reasonable efforts” to ensure that the AI platform’s output is compatible with the attorney’s professional obligations. Rules Committees and Committees on Professional Ethics may wish to consider strengthening the language of their rules to clarify their scope.

While there has already been substantial publicity about inaccurate ChatGPT outputs and why attorneys must always verify any draft generated by any AI platform,⁴⁷ the bar must also consider the impact of the technology on pro se litigants who use the technology to draft and file motions and briefs.⁴⁸ No

47. See, e.g., *Mata v. Avianca*, No. 22-cv-01461, 2023 WL 3698914 (S.D.N.Y. May 26, 2023) (lawyers sanctioned for citing to nonexistent cases that were “hallucinated” by ChatGPT and the brief was not verified by the attorney before filing).

48. See *Berman v. Matteucci*, No. 6:23-cv-00660 (D. Or. July 10, 2023) (a pro se prisoner filed a belated habeas petition arguing that his use of ChatGPT helped him discover new arguments to advance. The Court denied the application for habeas, not because of any error in the ChatGPT results, but because the petitioner did not understand how his claim was still untimely).

doubt pro se litigants have turned to forms and unreliable internet material for their past filings, but ChatGPT and other such platforms may give pro se litigants unmerited confidence in the strength of their filings and cases, create an increased drain on system resources related to false information and nonexistent citations, and result in an increased volume of litigation filings that courts may be unprepared to handle.

Evidentiary Issues in Litigation

Generally, relevant evidence is admissible.⁴⁹ Lawyers who intend to offer AI evidence, however, may encounter a challenge to admissibility with an argument that the AI evidence fails the requisite authenticity threshold,⁵⁰ or should be precluded by Rule 403 (“evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury”).⁵¹

Although the current version of the Rules of Evidence may be flexible enough and sufficient to address challenges to the introduction of AI-created evidence, the rules of procedure or scheduling orders should ensure that adequate deadlines are set for any *Daubert* hearing. “[J]udges should use Fed. R. Evid. 702 and the *Daubert* factors to evaluate the validity and reliability of the challenged evidence and then make a careful assessment of the unfair prejudice that can accompany the introduction of inaccurate or unreliable technical evidence.”⁵²

49. See FED. R. EVID. 402.

50. See FED. R. EVID. 901(a).

51. See FED. R. EVID. 403.

52. Grossman, Grimm, Brown & Xu, *supra* note 21 (offering “practical, step-by-step recommendations for courts and attorneys to follow in meeting the evidentiary challenges posed by GenAI”).

AI evidence may require that the offering party disclose any training data used by the AI platform to generate the exhibit. If a proprietary AI platform is used, the company may refuse to disclose its training methodology, or a protective order may be required. Courts are currently split on how to treat platforms using proprietary algorithms. In a case out of Wisconsin, a sentencing judge used a software tool called Correctional Offender Management Profiling for Alternative Sanctions (COMPAS), which uses a proprietary algorithm, to sentence a criminal defendant to the maximum sentence.⁵³ In that case, the Supreme Court of Wisconsin held that the circuit court's consideration of a COMPAS risk assessment at sentencing did not violate a defendant's right to due process because the circuit court explained that its consideration of the COMPAS risk scores was supported by other *independent factors*, and its use was *not determinative* in deciding whether the defendant could be supervised safely and effectively in the community.⁵⁴ Coming to the opposite conclusion, a district court in Texas held that Houston Independent School District's value-added appraisal system for teachers posed a realistic threat to protected property interests because teachers were denied access to the computer algorithms and data necessary to verify the accuracy of their scores, which was enough to withstand summary judgment on their claim for injunctive relief under the Fourteenth Amendment.⁵⁵ These cases demonstrate how the latter is the better approach. AI evidence requires a balancing between protecting the secrecy of proprietary algorithms developed by private commercial enterprises and due process protections against substantively unfair or mistaken deprivations of life, liberty, or property.

53. State v. Loomis, 881 N.W.2d 749 (Wis. 2016).

54. *Id.*

55. Hous. Fed'n of Teachers, Local 2415 v. Hous. Indep. Sch. Dist., 251 F. Supp. 3d 1168 (S.D. Tex. 2017).

Further, a pretrial hearing will likely be required for a trial court to assess the degree of accuracy with which the AI system “correctly measures what it purports to measure” or otherwise “demonstrates its validity and reliability.”⁵⁶ One obstacle that may be encountered is “explainability.” That is how one explains how the AI model generated its output. “[M]ore sophisticated AI methods called deep neural networks [are] composed of computational nodes. The nodes are arranged in layers, with one or more layers sandwiched between the input and the output. Training these networks—a process called deep learning—involves iteratively adjusting the weights, or the strength of the connections between the nodes, until the network produces an acceptably accurate output for a given input. This also makes deep networks opaque. For example, whatever ChatGPT has learned is encoded in hundreds of billions of internal weights, and it’s impossible to make sense of the AI’s decision-making by simply examining those weights.”⁵⁷ Simply put, this is the so-called “black box” phenomenon. “The selection of training data, as well as other training decisions, is [initially] human controlled. However, as AI becomes more sophisticated, the computer itself becomes capable of processing and evaluating data beyond programmed algorithms through contextualized inference, creating a ‘black box’ effect where programmers may not have visibility into the rationale of AI output or the data components that contributed to that output.”⁵⁸ The above statement is not without controversy. Some argue that AI platforms cannot go beyond their programmed algorithms. Even AI tools that have been programmed to modify themselves can only do so

56. CWIK ET AL., *supra* note 17, at 12.

57. Stephen Ornes, *Peering into the Black Box of AI*, PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA (PNAS) (May 24, 2023), <https://doi.org/10.1073/pnas.2307432120>.

58. Spasser, Ellison & Carmody, *supra* note 18.

within the original parameters programmers set up. “Deep Learning” tools may differ from AI tools that are considered “Machine Learning.” Nevertheless, Federal Rule of Evidence 702 requires that the introduction of evidence dealing with scientific, technical, or specialized knowledge that is beyond the understanding of lay jurors be based on sufficient facts or data and reliable methodology that has been applied reliably to the facts of the particular case.⁵⁹ “Neural networks develop their behavior in extremely complicated ways—even their creators struggle to understand their actions. Lack of interpretability makes it extremely difficult to troubleshoot errors and fix mistakes in deep-learning algorithms.”⁶⁰

The AI developers may be unable to explain fully what the platform did after the algorithm was first created, but they may be able to explain how they verified the final output for accuracy. But AI models may be dynamic if they are updated with new training data, so even if a specific model can be tested and validated at one point in time, later versions of the model and its results may be significantly different.

An immediate evidentiary concern emerges from “deep-fakes.” Using certain AI platforms, one can alter existing audio or video. Generally, the media is altered to give the appearance that an individual said or did something they did not.⁶¹ The

59. Grimm, Grossman & Cormack, *supra* note 27, at 95–97. *See also* FED. R. EVID. 702 (b)-(d).

60. Ben Dickson, *What is Deep Learning?* PCMAG (May 18, 2023), <https://www.pcmag.com/news/what-is-deep-learning>.

61. *See* John M. McNichols, *How Real are Deepfakes?*, AMERICAN BAR ASSOCIATION (Aug. 23, 2023), <https://www.americanbar.org/groups/litigation/publications/litigation-news/technology/how-real-are-deepfakes/> (noting that the Congressional Research Service warned of deepfakes’ potential to access classified information, falsely depict public figures as making inappropriate statements, or influencing elections and the failure of Congress to pass legislation criminalizing their use).

technology has been improving rapidly. “What is more, even in cases that do not involve fake videos, the very existence of deep-fakes will complicate the task of authenticating real evidence. The opponent of an authentic video may allege that it is a deep-fake to try to exclude it from evidence or at least sow doubt in the jury’s minds. Eventually, courts may see a ‘reverse CSI effect’ among jurors. In the age of deepfakes, jurors may start expecting the proponent of a video to use sophisticated technology to prove to their satisfaction that the video is not fake. More broadly, if juries—entrusted with the crucial role of finders of fact—start to doubt that it is possible to know what is real, their skepticism could undermine the justice system as a whole.”⁶²

Although technology is now being created to detect deep-fakes (with varying degrees of accuracy),⁶³ and government regulation and consumer warnings may help,⁶⁴ no doubt if evidence is challenged as a deepfake, significant costs will be expended in proving or disproving the authenticity of the

62. Riana Pfefferkorn, *‘Deepfakes’ in the Courtroom*, 29 B.U. PUB. INT. L. J. 245 (2020).

63. *Id.* at 268. (“So-called ‘verified media capture technology’ can help ‘to ensure that the evidence [users] are recording . . . is trusted and admissible to courts of law.’ For example, an app called eyeWitness to Atrocities, ‘allows photos and videos to be captured with information that can firstly verify when and where the footage was taken, and secondly can confirm that the footage was not altered,’ all while the company’s ‘transmission protocols and secure server system . . . create[] a chain of custody that allows this information to be presented in court.’”).

64. Top technology firms including Google, Amazon, Microsoft, Meta, and ChatGPT-maker OpenAI recently signed a White House pledge to develop “tools to alert the public when an image, video or text is created by artificial intelligence, a method know as ‘watermarking.’” *See also* Cat Yakrzewski, *Top tech firms sign White House pledge to identify AI-generated images*, WASH. POST (July 21, 2023), <https://www.washingtonpost.com/technology/2023/07/21/ai-white-house-pledge-openai-google-meta>.

exhibit through expert testimony.⁶⁵ “The proposed changes to Fed. R. Evid. 702, which become effective on December 1, 2023, make clear that highly technical evidence, such as that involving GenAI and deepfakes, create an enhanced need for trial judges to fulfill their obligation to serve as gatekeepers under Fed. R. Evid. 104(a), to ensure that only sufficiently authentic, valid, reliable—and not unfairly or excessively prejudicial—technical evidence is admitted.”⁶⁶

AI in Law Enforcement

If not already implemented by law enforcement agencies, the probability that AI platforms will be used to track, assess, and predict criminal behavior is probable.⁶⁷ By collecting data on movements, occurrences, time of incidents, and locations, AI tools can flag aberrations to law enforcement officials. Such analyses can allow law enforcement agencies to predict crimes, predict offenders, and predict victims of crimes.⁶⁸ Criminal defense attorneys encountering situations where their clients have been arrested because of AI tools will need to evaluate whether any due process or Fourth Amendment violations can be asserted in this context.

65. Pfefferkorn, *supra* note 62, at 267 (“We can foresee that evidentiary challenges to suspected deepfakes will add significantly to case timelines, and also ‘will likely increase the cost of litigation because new forensic techniques and expert witnesses aren’t cheap.’ Litigators will have to manage their clients’ expectations accordingly.”).

66. Grossman, Grimm, Brown & Xu, *supra* note 21, at 18.

67. See Grimm, Grossman & Cormack, *supra* note 27, at 36–41.

68. See HIMANSHU ARORA, ARTIFICIAL INTELLIGENCE IN LAW ENFORCEMENT: USE-CASES, IMPACT ON FUNDAMENTAL RIGHTS AND ETHICAL REFLECTIONS (2023).

AI and the Criminal Justice System

Some benefits and risks associated with AI adoption in the criminal justice system are apparent. Early adopters, for instance, are using AI-powered document processing systems to improve case management. A new system in Los Angeles recently helped a public defender help a client avoid arrest after the attorney was alerted by the system to a probation violation and warrant.⁶⁹ Lawyers involved in the California Innocence Project are using Casetext's CoCounsel, an AI tool, to identify inconsistencies in witness testimony.⁷⁰

Already tools have been produced that assist courts with bail evaluation and sentencing decisions. However, past platforms of these types have been the subject of some immense scrutiny as being unreliable and biased.⁷¹ Racial bias has seeped into some earlier programs because of inputs such as home residence being used in the algorithms.⁷² Given the presence of racially segregated neighborhoods, these algorithms produced bail recommendations that were unintentionally biased. The effect of implementing AI in place of human-decision making was

69. Keely Quinlan, *L.A. County's Public Defender Uses AI to Improve Client Management*, STATESCOOP (July 12, 2023), <https://statescoop.com/la-county-public-defender-ai-aws>.

70. Matt Reynolds, *California Innocence Project harnesses generative AI for work to free wrongfully convicted*, ABAJOURNAL (Aug. 14, 2023), <https://www.abajournal.com/web/article/california-innocence-project-harnesses-generative-ai-for-work-to-free-wrongfully-convicted>.

71. See also Jeff Larson, Surya Mattu, Lauren Kirchner & Julia Angwin, *How We Analyzed the COMPAS Recidivism Algorithm*, PROPUBLICA (May 23, 2016), <https://www.propublica.org/article/how-we-analyzed-the-compas-recidivism-algorithm>; Julia Dressel & Hany Farid, *The accuracy, fairness, and limits of predicting recidivism*, SCIENCEADVANCES (Jan. 17, 2018), <https://www.science.org/doi/10.1126/sciadv.aao5580>. But see *State v. Loomis*, 881 N.W.2d 749 (Wis. 2016).

72. See, e.g., *Loomis*, 881 N.W.2d 749 (Wis. 2016).

recently studied by a group of researchers. The surprising results showed that models trained using common data-collection techniques judge rule violations more harshly than humans would. “If a descriptive model is used to make decisions about whether an individual is likely to reoffend, the researchers’ findings suggest it may cast stricter judgements than a human would, which could lead to higher bail amounts or longer criminal sentences.”⁷³ Another study found that participants who were *not* inherently biased were nevertheless strongly influenced by advice from biased models when that advice was given prescriptively (i.e., “you should do X”) versus when the advice was framed in a descriptive manner (i.e., without recommending a specific action).⁷⁴

Courts and probation offices that are considering adopting these platforms should inquire into how the platform was built, what factors are being considered in producing the result, and how bias has been mitigated.⁷⁵ Further, if such platforms are used in the bail consideration or sentencing process, they should be used only as a nonbinding recommendation given the complexity and impact of such decisions.

73. Adam Zewe, *Study: AI models fail to reproduce human judgements about rule violations*, MIT NEWS (May 10, 2023), <https://news.mit.edu/2023/study-ai-models-harsher-judgements-0510>. See also Aparna Balagopalan, et al., *Judging fact, judging norms: Training machine learning models to judge humans requires a modified approach to labeling data*, 9 SCIENCE ADVANCES (May 10, 2023), <https://doi.org/10.1126/sciadv.abq0701>.

74. Adam et al., *supra* note 36. (“Crucially, using descriptive flags rather than prescriptive recommendations allows respondents to retain their original, unbiased decision-making.”)

75. *Id.*

AI and Employment Law

Some AI platforms contend that the use of their products could accelerate the hiring process and reduce the potential for discrimination allegations.⁷⁶ Law firms or clients seeking to use these AI platforms should understand that such platforms should be vetted for bias and accuracy. Attorneys counseling employers also need to be aware of the limitations of any such platforms. Efforts should be made to ensure that “explainability” of the platform’s results can be produced. As with all tools that are used to monitor or measure employee actions and performance, privacy and discrimination concerns should be considered.⁷⁷ If law firms or clients use third parties to handle their human resource needs, a review of what, if any, AI platforms are used and how should be made. In addition, lawyers working in this area should monitor developments in this field, such as guidance being developed by the Equal Employment Opportunity Commission⁷⁸ and the National Labor Relations Board.⁷⁹

76. See, e.g., Keith E. Sonderling, Bradford J. Kelley & Lance Casimir, *The Promise and The Peril: Artificial Intelligence and Employment Discrimination*, 77 U. MIA. L. REV. 1, 4 (2022). This paper also provides an excellent summary on how Title VII, Americans with Disabilities Act, and Age Discrimination in Employment Act claims may arise in the AI context.

77. See Annelise Gilbert, *EEOC Settles First-of-Its-Kind AI Bias in Hiring Lawsuit*, BLOOMBERG LAW (Aug. 10, 2023), <https://news.bloomberglaw.com/daily-labor-report/eec-settles-first-of-its-kind-ai-bias-lawsuit-for-365-000>, (allegations that employers’ AI tools rejected older applicants in violation of the Age Discrimination in Employment Act).

78. See U.S. Equal Emp’t Opportunity Comm’n, *Artificial Intelligence and Algorithmic Fairness Initiative*, <https://www.eeoc.gov/ai> (last visited Sept. 25, 2023).

79. See NLRB General Counsel Memo GC 23-02, *Electronic Monitoring and Algorithmic Management of Employees Interfering with the Exercise of Section 7 Rights* (Oct. 31, 2022), <https://www.nlr.gov/guidance/memos-research/general-counsel-memos> (warning that AI tools that conduct

A recent example is a New York City law requiring transparency and algorithmic audits for bias. New York City Local Law 144 of 2021 regarding automated employment decision tools prohibits employers and employment agencies from using an automated employment decision tool unless the tool has undergone a bias audit within one year of the use of the tool, information about the bias audit is publicly available, and certain notices have been provided to employees or job candidates.⁸⁰

AI and eDiscovery

How generative AI and LLMs will be incorporated into eDiscovery remains uncertain. Discovery is generally conducted by implementing a legal hold when the duty to preserve evidence has been triggered. Later, key players and other data custodians are interviewed to determine what, if any, relevant evidence the custodian or source (e.g., email server) may possess. Then relevant data is gathered and usually sent to a vendor for processing and uploading onto a platform where the documents can be reviewed and tagged for relevance, privilege, or both. Usually, parties agree to search terms to ensure that relevant documents are procured and produced. In larger cases, parties may opt to use technology-assisted review (TAR) platforms where a “seed set” is reviewed by a person knowledgeable on the file, and then the TAR platform “learns” from the “seed set” and

workplace surveillance might interfere with worker rights protected under the NLRA). *See also* New York City Automated Employment Decision Tools law, N.Y. CITY LOCAL LAW 144 (2021) (requiring candidate notice before AI tool use for employment purposes, and annual bias audit); Illinois Artificial Intelligence Video Interview Act (AIVIA), 820 ILL. COMP. STAT. 101-260 (2020) (providing interviewee rights for AI use in video interviews); MD. H.B. 1202 (2023) (requiring notice and consent for facial recognition services in pre-employment interviews).

80. N.Y. CITY LOCAL LAW 144 (2021).

automatically reviews the remaining documents for relevancy and privilege without human input.

It is expected that the natural language search capabilities of LLMs will be incorporated into eDiscovery platforms at some point. This will allow AI to recognize patterns and identify relevant documents. Unstructured data (e.g., social media and collaborative platforms like Slack or Teams) can be reviewed by the AI tool. Theoretically, collection and review costs could be dramatically lessened, and attorney fees reduced. Another possibility is that AI will be used to augment the document gathering and review process, as well as assist with privilege review. For example, the Clearbrief platform, among others, is already being used for this purpose, with the underlying source documents visible in Microsoft Word so the user can verify the AI suggestions of documents. Users can then share a hyperlinked version of their analysis with the cited sources visible so the recipient can also verify the relevance of the source document.

AI and Health Care Law

It is widely expected that AI tools will be more routinely deployed in the diagnosis of diseases and treatment. Lawyers practicing in the healthcare industry will need to consider issues of bias in the AI tool's seed set that may lead to accuracy problems.⁸¹ They will also need to understand how these tools can be employed in a way that complies with healthcare-specific regulatory requirements—in particular privacy requirements imposed by the Health Insurance Portability and Accountability Act of 1996 (HIPAA). As with other issues raised above, liability for any misdiagnosis or treatment resulting from the use of an AI tool will require future judicial resolution.

81. See, e.g., Starre Vartan, *Racial Bias Found in a Major Health Care Risk Algorithm*, SCIENTIFIC AMERICAN (Oct. 24, 2019), <https://www.scientificamerican.com/article/racial-bias-found-in-a-major-health-care-risk-algorithm/>.

AI and Immigration Law

AI tools have already been implemented by immigration law practitioners in completing U.S. Citizenship forms and tracking their status.⁸² AI tools have been helpful in this area, where often the same data must be filled in multiple forms. Again, as with all forms that are generated, it is still the responsibility of the attorney to review for accuracy any forms completed by an AI tool.

The Need for Attorneys to Monitor Regulatory and Statutory AI Developments

To adequately counsel clients, attorneys will need to keep abreast of regulatory and statutory developments in this area. Some states have already passed legislation related to employing AI.⁸³ In addition, the Equal Employment Opportunity Commission,⁸⁴ the Federal Trade Commission, and the White House Office of Science and Technology Policy⁸⁵ have all issued guidelines on the use of AI.⁸⁶ In April 2021, the European Commission proposed the first EU regulatory framework for AI. The Consumer Financial Protection Bureau issued interpretative guidelines that require lending companies to provide notices to credit applicants of the specific reasons they were denied credit, to

82. *Immigration Law Enhanced with AI*, FILEVINE, <https://www.filevine.com/platform/immigrationai/> (last visited Sept. 26, 2023). See also *Visalaw.ai* (last visited Sept. 26, 2023).

83. The Electronic Privacy Information Center summarizes state AI laws and legislation. See AI Policy, <https://epic.org/issues/ai/ai-policy/> (last visited Sept. 26, 2023).

84. Artificial Intelligence and Algorithmic Fairness Initiative, *supra* note 78.

85. Blueprint for an AI Bill of Rights, *supra* note 9.

86. See, e.g., Spasser, Ellison & Carmody, *supra* note 18. See also Blueprint for an AI Bill of Rights, *supra* note 9.

include arguably whether AI was used in that decision making process.⁸⁷ The EU Artificial Intelligence Act sets forth the world's first rules on AI and is anticipated to go into effect by the end of 2023.⁸⁸

AI and the Impact on Individual Privacy

As more states enact privacy statutes, attorneys should know about how such statutes may affect the ability of their clients to sell data they collect and how such statutes may impact what data they are even allowed to store or process. AI algorithms require large sets of data to confidently produce their results. This data is scraped from many sources, and questions are being raised as to whether consumers have provided informed consent to the storage, use, and resale of any data collected⁸⁹ regarding their purchases, internet viewing, medical data, etc.⁹⁰ Companies may also need to be able to quickly respond to consumer requests about data collected, as well as requests to delete the data. For attorneys with clients gathering data from

87. *Adverse action notification requirements in connection with credit decisions based on complex algorithms*, *supra* note 9.

88. *EU AI Act: first regulation on artificial intelligence*, EUROPEAN PARLIAMENT (June 08, 2023), <https://www.europarl.europa.eu/news/en/lines/society/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence>.

89. At least one lawsuit has been filed in federal court arguing that Google's BARD AI product is "secretly stealing everything ever created and shared on the internet by hundreds of millions of Americans" and "putting the world at peril with untested and volatile AI." See *J.L. et al. v. Alphabet Inc., et al.*, No. 23-cv-0344078 (N.D. Cal. July 11, 2023) (putative class action on behalf of all persons whose personal information was used as training data).

90. See Grimm, Grossman & Cormack, *supra* note 27, at 53–57.

overseas, the European Union General Data Protection Regulation⁹¹ and the E.U. Artificial Intelligence Act⁹² should be considered given that any data privacy violations could result in large fines.⁹³

AI and Use by Pro Bono and Nonattorney Providers

AI platforms offer the possibility of expanding the ability of pro bono providers to provide legal resources to those otherwise unable to afford an attorney. Relativity, an eDiscovery provider, has been providing an AI product, Translate, to legal aid organizations. The advantages provided by AI in helping to close the access-to-justice gap, however, need to be weighed by pro bono providers. AI tools cannot replace human interaction, evoke empathy, or adequately address nuances that may not be adequately expressed by a nonlawyer using the AI tool. Pro Bono providers will need to exercise care that any advice or work product generated by the AI tool is vetted for accuracy

91. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data, and Repealing Directive 95/46/EC (General Data Protection Regulation), 2016 O.J. (L 119/1), available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32016R0679#PP3Contents>.

92. Artificial Intelligence Act, Amendments adopted by European Parliament on June 14, 2023, on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts (COM(2021)0206-C9-0146.2021-2021/0106(COD))), https://www.europarl.europa.eu/doceo/document/TA-9-2023-0236_EN.html.

93. *Id.* (administrative fines of up to €30 million or 6 percent of the total worldwide annual turnover depending on the severity of the infringement are set as sanctions for noncompliance with the AI act). See also General Data Protection Regulation, *supra* note 91, art. 83 (administrative fines up to €20 million or up to 4 percent of the total worldwide annual turnover of the preceding financial year, whichever is higher).

prior to being delivered to the client. Attorneys using AI tools without checking on the accuracy of their output may ultimately bear sole or joint liability with the AI provider.⁹⁴ This article expresses no comment on whether AI tools used without attorney oversight could be construed as engaging in the unauthorized practice of law.⁹⁵ Further, any liability for advice or filings generated by a “robot lawyer” will need to be adjudicated by the courts. An example of a so-called “robot lawyer” could be DoNotPay, a platform that uses a chatbot to help contest parking tickets.⁹⁶

AI and ADR

Largely because of the COVID pandemic, many mediators and arbitrators shifted to an online platform to conduct mediations and arbitrations (so-called ODR or online dispute resolution). AI tools might help improve accessibility to the alternative dispute resolution (ADR) process in both the physical (live) and ODR sessions. Arbitrators could benefit from AI tools to help summarize large data sets and generate insights. Without the parties’ consent, an issue exists as to whether this would

94. See, e.g., Michael Loy, *Legal Liability for Artificially Intelligent Robot Lawyers*, 26 LEWIS & CLARK L. REV. 951, 957–58 (2022).

95. See *Unauthorized Prac. of L. Comm. v. Parsons Tech., Inc.*, 179 F.3d 956 (5th Cir. 1999) (sale and distribution of Quicken Family Lawyer product was found by the trial court to constitute unauthorized practice of law but vacated by the Fifth Circuit because of the amendment to Texas Government Code Annotated § 81.101: “the ‘practice of law’ does not include the design, creation, publication, distribution, display, or sale . . . [of] computer software, or similar products if the products clearly and conspicuously state that the products are not a substitute for the advice of an attorney”).

96. See Sara Merken, *Lawsuit pits class action firm against ‘robot lawyer’ DoNotPay*, REUTERS (Mar. 9, 2023), <https://www.reuters.com/legal/lawsuit-pits-class-action-firm-against-robot-lawyer-donotpay-2023-03-09/>. See also Faridian v. DoNotPay, Inc., No. CGC-23-604987 (Cal. filed Mar. 3, 2023).

constitute some ethically impermissible *ex parte* communication, or an inappropriate review of material not submitted in the arbitration proceeding itself. Mediators, however, in some cases could use such AI tools to help guide the parties to an understanding of any weakness in their case. Some mediation platforms have been developed already that offer asynchronous, virtual mediation. Maintaining confidentiality and security of any documents posted to such sites will be essential. As discussed below in the discussion of virtual courts, at present the efficacy of an entirely online ODR session driven by an AI tool without a human neutral does not seem to be an option that would effectively resolve most disputes. In any event, its value in small claims court and other cases with a small monetary amount in controversy should be explored.

In 2016, British Columbia launched the Civil Resolution Tribunal (“CRT”), the first online tribunal to implement ODR mechanisms in Canada. CRT is part of the British Columbia public justice system and aims to provide an accessible and affordable way of resolving civil disputes. In July 2023, CRT closed 51 Strada property claims, 287 small claims, 56 motor vehicle injury/accident benefits/accident responsibility claims, and four miscellaneous cases.⁹⁷ There is little independent research on the effectiveness of the CRT, but the aggregate participant satisfaction survey results for 2022/23 show 78 percent of the participants who responded would recommend the CRT to others.⁹⁸ For low-value matters in particular, the benefits of a speedy resolution may outweigh the risks.

97. CRT Key Statistics, CIVIL RESOLUTION TRIBUNAL (Aug. 3, 2023), <https://civilresolutionbc.ca/blog/crt-key-statistics-july-2023/>.

98. CIVIL RESOLUTION TRIBUNAL, <https://civilresolutionbc.ca/> (last visited Sept. 26, 2023).

AI and Use in Law Firm Marketing

AI platforms can offer instructions on how to create or improve websites, and build content on the site, as well as generate ideas for advertisements, marketing materials, and social media postings. Smaller law firms who do not have the resources of a marketing person might benefit from this assistance, so long as any content is proofed and verified to comply with existing attorney advertising regulations.⁹⁹ Chatbots could assist with client communications, onboarding, and responding to routine questions. That said, care should be exercised to ensure that an improper attorney-client relationship has not been established and that confidentiality is maintained. Answering substantive queries from clients using a chatbot is not advised. But since failure to keep clients informed about the status of their matter is often an item of grievance, chatbots could assist in this regard.

In addition, the development of image-generating AI (e.g., Dall-E 2) may offer law firms the ability to generate unique graphics¹⁰⁰ that otherwise would have been too expensive for inclusion in their marketing.

Additional Training or Skillsets Required

If AI tools are used, AI should be used to complement human judgment. Lawyers and legal professionals should contemplate how to leverage this collaboration effectively and

99. MODEL RULES PROF'L CONDUCT r. 7.1-3 (AM. BAR ASS'N).

100. This article does not opine as to whether any AI-generated graphic may be entitled to trademark or copyright protection, as that issue will need to be resolved through the intellectual property regulatory and litigation process. *See also* Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, *supra* note 10 (the U.S. Copyright office has taken the position that AI-generated works cannot be copyrighted); Graves, *supra* note 10 (J. Beryl Howell agreed, stating in an August 2023 opinion that “[h]uman authorship is a bedrock requirement of copyright”).

efficiently.¹⁰¹ Prior to using any AI tool, lawyers should consider what processes currently used could be improved through AI technology. If AI tools are adopted, personnel will likely require training on how to properly construct prompts/queries and how to evaluate any results. Akin to Boolean searches that require some knowledge of how to construct a “good” search, AI tools require “good” prompts.¹⁰² One advantage of generative AI prompts and responses is that the tool has “thread” conversations. A person can ask clarifying questions. Users can ask the AI tool to clarify previous responses or ask the AI tool to customize the tone or persona of the response. Personnel will also need training on compliance with confidentiality concerns, as well as considerations involving bias. Some commentators envision a new category of employee being trained – a “prompt engineer.”

AI and Cybersecurity Concerns

AI will likely be used by bad actors to penetrate law firm and client IT systems. As noted by Bloomberg Law News, even before the advent of AI, financial fraud scams have proliferated. Concerns now have arisen that AI voice-synthesizing tools

101. See Barclay T. Blair et al., *Law Firms of the Future Will be Different in Three Critical Ways*, U.S. LAW WEEK (Aug. 21, 2023), <https://news.bloomberglaw.com/us-law-week/law-firms-of-the-future-will-be-different-in-three-critical-ways> (arguing that AI will augment the work attorneys perform and be woven into daily tasks such as word processing, timekeeping, and communication platforms. Secondly, AI will assist in the review of evidence and drafting of briefs. Because these transformative processes will displace routine tasks and the billings associated with these tasks, lawyers will need to focus on complex problem solving and strategic thinking).

102. See, e.g., MAXWELL TIMOTHY, UNLOCKING THE POTENTIAL OF CHATGPT, ADVANCED PROMPTING TECHNIQUES TO GET MORE OUT OF CHATGPT (2023) (ebook), available at <https://www.makeuseof.com/unlock-secrets-of-chatgpt-with-free-ebook-unlocking-the-potential-of-chatgpt/>.

could allow scammers to download short voice samples of individuals from social media, voicemail messages, or videos and create new content that would enable a false transaction to occur.¹⁰³ To counter these threats, some banks have deployed suspicious transaction detection systems using NLP models.¹⁰⁴ Though adoption of AI by threat actors is currently still limited to social engineering, AI has the potential to affect the threat landscape in two key aspects: “the efficient scaling of activity beyond the actors’ inherent means; and their ability to produce realistic fabricated content toward deceptive ends.”¹⁰⁵ On August 9, 2023, the Biden Administration together with the Defense Advanced Research Projects Agency launched a two-year \$20 million “AI Cyber Challenge” to identify and fix software vulnerabilities using AI.¹⁰⁶ Law firms should adopt a “proactive approach to breach preparedness by understanding the full scope of costs, conducting simulations, involving key stakeholders, and implementing the right technology solutions.”¹⁰⁷ To this end, the National Institute of Standards and Technology

103. Nabila Ahmed, et al., *Deepfakes are Driving a Whole New Era of Financial Crime*, BLOOMBERG LAW (Aug. 23, 2023), <https://news.bloomberglaw.com/privacy-and-data-security/deepfakes-are-driving-a-whole-new-era-of-financial-crime>.

104. *Id.*

105. Michelle Cantos, Sam Riddell & Alice Revelli, *Threat Actors are Interested in Generative AI, but Use Remains Limited*, MANDIANT (Aug. 17, 2023), <https://www.mandiant.com/resources/blog/threat-actors-generative-ai-limited> (Google’s Mandiant has tracked treat actors’ use of AI since 2019).

106. *Biden-Harris Administration Launches Artificial Intelligence Cyber Challenge to Protect America’s Critical Software*, THE WHITE HOUSE (Aug. 9, 2023), <https://www.whitehouse.gov/briefing-room/statements-releases/2023/08/09/biden-harris-administration-launches-artificial-intelligence-cyber-challenge-to-protect-americas-critical-software>.

107. *Understanding the economic impact of a breach*, CYBERSCOOP (July 31, 2023), <https://cyberscoop.com/video/understanding-the-economic-impact-of-a-breach/>.

(NIST) released the AI Risk Management Framework (AI RMF 1.0) to better manage risks to individuals, organizations, and society. The Framework was published on January 26, 2023, along with a companion NIST AI RMF Playbook, AI RMF Explainer Video, an AI RMF Roadmap, AI RMF Crosswalk, and various Perspectives.¹⁰⁸ Attorneys and law firms can use the Framework to develop their own best practices and standards for using AI systems and managing the many risks of AI technologies.

Ethical Implications of Billing Practices and AI

How should attorneys bill for the use of AI? It is anticipated that law firms will need to hire staff with a greater understanding of technology and data. How does that overhead get absorbed? How does a court determine what is a “reasonable fee” if AI is employed? If a firm makes an investment in AI and then employs that tool to provide value for the client, should the law firm be able to charge for that? State ethic opinion letters are needed to provide guidance in this area, as well as the use of technology generally.

Minimum Continuing Legal Education—Technology Hour Component

Florida and North Carolina have amended their MCLE requirements to add a requirement that attorneys complete some hours of continuing education dedicated to technology concerns. Cybersecurity, privacy concerns, and AI concerns should also lead other states to consider amending their MCLE requirements. In addition, many state CLE regulatory bodies restrict granting MCLE credit for technology courses under the assumption they are not substantive “legal” content. This

108. NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY, AI RISK MANAGEMENT FRAMEWORK (AI RMF 1.0) (Jan. 2023), *available at* <https://www.nist.gov/itl/ai-risk-management-framework>.

restriction should also be reviewed, since the demarcation between substantive legal education, ethics, and use of technology are now blurred. The state of New York now requires continuing legal education credits to be obtained regarding cybersecurity, privacy issues, and data protection.¹⁰⁹

Law Schools

In many respects, the learning needs for the provision of technologically enhanced legal services mirror the “21st century skills” seen in other professions, such as data-oriented and agile thinking, but law students are traditionally not educated in these skills or the field of digital technology in general.¹¹⁰

Given that technology will play a more prominent role in the practice of law, law schools should consider adding to the course offerings additional classes centered on technological and data literacy.¹¹¹ Law schools should prioritize allowing law students access to AI tools and the ability to practice using them in a guided classroom setting. Additionally, law schools should create clear guidelines and update their university policies to include permitted and prohibited uses of generative AI for both staff and students. It is likely that many high school and college students will become dependent on generative AI, and so

109. New York State CLE Program Rules, 22 NYCRR § 1500.2(h), available at <https://www.nycourts.gov/LegacyPDFS/attorneys/cle/17a-Rules-1500-2h-Cybersecurity-Definition.pdf>.

110. Václav Janeček, Rebecca Williams & Ewart Keep, *Education for the provision of technologically enhanced legal services*, 40 COMPUT. LAW & SEC. REV. (Apr. 2021), <https://doi.org/10.1016/j.clsr.2020.105519>.

111. See, e.g., Tammy Pettinato Oltz, *Educating Robot-Proof Attorneys*, 97 N.D. L. REV. 185 (2022) (discussing the introductory technology course introduced at University of North Dakota School of Law).; JOSEPH E. AOUN, *ROBOT-PROOF: HIGHER EDUCATION IN THE AGE OF ARTIFICIAL INTELLIGENCE* (2017) (discussing the need for universities to broaden their technology offerings and the need for students to better understand technology).

practical and legal reasoning skill sets may require reinforcement in law school. Law schools will need to reflect on how to react to this challenge.

AI Impact on the Judiciary and Judicial Training

As discussed above, AI issues will inevitably appear before judges, and judicial officers should be cognizant of the fundamentals.

Some judges (primarily federal) have entered orders requiring attorneys to disclose whether they have used AI tools in any motions or briefs that have been filed. This development first occurred because an attorney in New York submitted a ChatGPT-generated brief to the court without first ensuring its correctness. The ChatGPT brief contained several hallucinations and generated citations to nonexisting cases. In response, some judges have required the disclosure of any AI that the attorney has used. As noted above, that is very problematic considering how ubiquitous AI tools have become. Likely these judges meant to address whether any generative AI tool had been used in preparing a motion or brief. That said, if any order or directive is given by a court, it should merely state that attorneys are responsible for the accuracy of their filings. Otherwise, judges may inadvertently be requiring lawyers to disclose that they used a Westlaw or Lexis platform, Grammarly for editing, or an AI translation tool.¹¹²

112. See Maura R. Grossman, Paul W. Grimm & Daniel G. Brown, *Is Disclosure and Certification of the Use of Generative AI Really Necessary*, 107 JUDICATURE (forthcoming Oct. 2023) (arguing that Federal Rules of Civil Procedure 11 and 26(g) are sufficient and that individualized standing orders are unnecessary and deter the legitimate use of GenAI applications); Isha Marathe, *4 Generative AI Issues That Are Likely Keeping Judges Up At Night*, LEGALTECH NEWS (Aug. 10, 2023), <https://www.law.com/legaltechnews/2023/08/10/4-generative-ai-issues-that-are-likely-keeping-judges-up-at-night/>.

In addition, for the reasons discussed above, judges and law clerks should be cautious in using generative AI tools in rendering decisions and drafting opinions. At least two foreign judges have acknowledged using ChatGPT to verify their work.¹¹³ In some state court systems, judges are not provided with law clerks. The temptation to augment their staff with an AI tool may exist. The ABA Model Code of Judicial Conduct is written using broad language. Arguably a judge relying solely on an AI tool, with no subsequent verification, could violate Canon 1 (Upholding the integrity and independence of the Judiciary), but the Code is remarkably silent about principles of impartiality, integrity, transparency, avoiding advocacy, and considering diverse perspectives and interpretations of the law. State Commissions on Judicial Conduct may wish to consider whether to amend their codes considering generative AI developments.

Another concern raised about using AI in adjudicative systems is the possibility that AI adjudication will make the “legal system more incomprehensible, data-based, alienating, and disillusioning.”¹¹⁴ Historically, the law has valued explicit reasoning stated in a judicial opinion. But AI may adjudicate based on

113. See *Colombian judge uses ChatGPT in ruling on child's medical rights case*, CBS NEWS (Feb. 2, 2023), <https://www.cbsnews.com/news/colombian-judge-uses-chatgpt-in-ruling-on-childs-medical-rights-case/> (“In this case, [Judge] Padilla said he asked the bot: “Is autistic minor exonerated from paying fees for their therapies?” among other questions. It answered: “Yes, this is correct. According to the regulations in Colombia, minors diagnosed with autism are exempt from paying fees for their therapies.”). See also Aman Gupta, *This Indian court has used ChatGPT on a criminal case*, MINT (Mar. 29, 2023), <https://www.livemint.com/news/india/this-indian-court-has-used-chatgpt-on-a-criminal-case-11679977632552.html> (prompting ChatGPT “What is the jurisprudence on bail when the assailants assaulted with cruelty?” and then denying the defendant’s application for bail).

114. Richard M. Re & Alicia Solow-Niederman, *Developing Artificially Intelligent Justice*, 22 STAN. TECH. L. REV. 242 (2019).

the analysis of a vast amount of data without constructing any explanation.¹¹⁵ Nonquantifiable values like mercy presumably would not be considered by the AI tool.¹¹⁶ No doubt “human judging” has its flaws and biases. Unlike humans, computers never get tired or sick or have a bad day. Data-driven decision-making is consistent and predictable. But, as thought is given as to how far AI adjudicative models should be deployed, there will be a tension and tradeoff between the AI’s capacity for efficiency and mass deployment and the desire for procedural due process and transparency.¹¹⁷ Courts probably will not wish to pursue a “smart court” model of justice now being implemented in some Chinese cities. In the latter model, AI tools generate pleadings for litigants, analyze the litigation risk and issue a judgment—all done virtually.¹¹⁸

115. *Id.* at 246.

116. *Id.* at 247. *See also* Charles Lew, *The AI Judge: Should Code Decide Your Fate?* FORBES (Aug. 22, 2023), <https://www.forbes.com/sites/forbesbusinesscouncil/2023/08/22/the-ai-judge-should-code-decide-your-fate/?sh=13543c654597> (arguing that AI may be fair but would lack the “intangible human qualities of empathy, sensory perception and comprehension of contexts such as cultural, historical and social factors that influence and impact critical decision making.” At the same time, the author promotes the use of prudent AI tools to counter the public perception that our current court system no longer delivers impartial or nonbiased rulings).

117. Re & Solow-Niederman, *supra* note 114, at 255–69.

118. *See, e.g.,* Ummey Sharaban Tahura & Niloufer Selvadurai, *The Use of Artificial Intelligence in Judicial Decision-Making: The Example of China*, <https://www.ijlet.org/wp-content/uploads/2023/03/2022-3-1-20.pdf> (last visited Sept. 26, 2023) (discussing the pros and cons of “smart courts”—human judges are more inconsistent than AI systems because of personal values and “irrelevant extraneous factors.” AI tools, however, reflect the mindset of the code writer and how the tool was trained, leading to bias concerns). *See also* Council of Bars and Law Societies of Europe, CCBE Statement on the Use of AI in the Justice System and Law Enforcement (May 25, 2023) (“The CCBE is convinced that effective human oversight of the use of AI tools in the field of justice is a precondition of a justice system governed by the rule of law and

The Federal Judicial Center and corresponding state agencies should consider providing additional training and resources to judicial officers regarding AI.¹¹⁹

Concluding Remarks

AI platforms will probably not replace lawyers any time soon. Through gains in efficiencies there may, however, be fewer attorneys and paralegals needed in the long term.¹²⁰ It is likely that lawyers and paralegals will be able to identify and retrieve relevant information from large data volumes more readily. Initial drafts of contracts and pleadings produced by AI platforms may result in time efficiencies but will still require

stresses that the decision-making process must remain a human driven activity. In particular, human judges must be required to take full responsibility for all decisions and a right to a human judge should be guaranteed at all stages of the proceedings.”). *But see* Frederick Pinto, *Can AI Improve the Justice System?*, THE ATLANTIC (Feb. 13, 2023) (“Judges who are free from external meddling are nevertheless subject to a series of *internal* threats in the form of political prejudice, inaccurate prediction, and cognitive error In such cases—and many more—less humanity could lead to more fairness Justice may be blind, but human beings are fallible. Our thinking is clouded by more prejudices than we can count, not to mention an excessive confidence in our judgment. A fairer legal system may need to be a little less human.”).

119. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has recently established a massive online open course (MOOC) that explores admissibility of AI-generated evidence and virtual and augmented reality in courts. *See* AI and the Rule of Law: Capacity Building for Judicial Systems, UNESCO (Aug. 2, 2023), <https://www.unesco.org/en/artificial-intelligence/rule-law/mooc-judges>.

120. *But see* David Runciman, *The end of work: which jobs will survive the AI revolution?*, THE GUARDIAN (Aug. 19, 2023), https://www.theguardian.com/books/2023/aug/19/the-end-of-work-which-jobs-will-survive-the-ai-revolution?mc_cid=b8afd98c13&mc_eid=a950705c7a (“[w]orries about automation displacing human workers are as old as the idea of the job itself.” Yet also acknowledging that the “experience of work is far more likely to involve a portfolio of different occupations”).

attorney review and validation. Still, the overall result may lessen costs to the client and make justice more accessible to unrepresented parties. It is likely that because of this increase in automation, lawyers will need to focus on “strategic and other higher-value work.”¹²¹

121. Natalie A. Pierce & Stephanie L. Goutos, *Why Law Firms Must Responsibly Embrace Generative AI*, at 22 (June 14, 2023), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4477704.