

SLEEPWALKING WITH A STOCHASTIC PARROT – ENSURING ACCURACY WHEN USING GENERATIVE ARTIFICIAL INTELLIGENCE IN LEGAL RESEARCH

DR ARTHUR VAN COLLER

*Associate Professor, Faculty of Law, University of Fort Hare,
South Africa*

<https://orcid.org/0000-0003-3362-6707>

I INTRODUCTION

A judicial officer of the First Circuit (Labor) Court of Cartagena, Colombia, recently prompted the natural language processing tool ChatGPT¹ for information while preparing a judgment in a children’s medical rights case. This judicial officer defended his actions by arguing that Colombian law allowed ‘technologies that made legal work more efficient’.² Many other legal professionals are also optimistic that artificial intelligence (AI) will substantially benefit legal practice. However, others have been more cautious in their approach, referring to AI as a ‘legal black box’ due to the opaqueness of the software.³ Nonetheless, it is generally accepted that AI will radically change the legal profession.⁴

Various AI algorithms for application in legal practice have been developed, including programmes that conduct due diligence and substantive

¹ For more information on ChatGPT, see OpenAI ‘Introducing ChatGPT’ <https://openai.com/blog/chatgpt> (accessed 18 November 2023); A Sharma ‘The Escalation of ChatGPT: How ChatGPT Will Exert Influence on the Legal Profession?’ (2023) 3 *Jus Corpus Law Journal* 108–110.

² PM Parikh, DM Shah, KP Parikh, Judge JM Padilla Garcia ‘ChatGPT, and a Controversial Medicolegal Milestone’ (2023) 75(1) *Indian Journal of Medical Sciences* 3–8; L Taylor ‘Colombian Judge Says He Used ChatGPT in Ruling’ (3 February 2023) <https://www.theguardian.com/technology/2023/feb/03/colombia-judge-chatgpt-ruling#:~:text=Prof%20Juan%20David%20Gutierrez%20of,make%20their%20work%20more%20efficient> (accessed 25 July 2023).

³ J Soukupova ‘AI-Based Legal Technology: A Critical Assessment of the Current Use of Artificial Intelligence in Legal Practice’ (2021) 15 *Masaryk University Journal of Law and Technology* 285; E Ross & A Milligan ‘What Can ChatGPT Do, and Should We Let It?’ (2023) 34(6) *South Carolina Lawyer* 34–39.

⁴ M McKamey ‘Legal Technology: Artificial Intelligence and the Future of Law Practice’ (2017) 22 *APPEAL: Review of Current Law and Law Reform* 49–50.

contract review (Kira Systems, Leverton, eBrevia), timing analysis and billing software (Brightflag, Smokeball), electronic discovery programmes (Everlaw, Exterro), legal analytics and prediction (CARA, Loom Analytics, Ravel Law, Intaspexion), document automation (PerfectNDA), intellectual property (TrademarkNow, SmartShell) and assistance with legal strategy (Lex Machina, Premonition).⁵ Generative artificial intelligence (GAI) research platforms that focus on improved efficiency in legal research, such as Lexis Advance and Ross Intelligence, have also entered the market. These programmes typically require a paid subscription and are highly effective in accessing and retrieving structured legal-specific information from a verified database. However, some legal research is also possible by using non-legal specific GAI algorithms like Chat Generative Pre-trained Transformer (ChatGPT),⁶ Bing Chat⁷ and Google Bard.⁸ These chatbots can generate misleading, biased, incorrect, or non-existent information.⁹ As a result, the use of non-legal-specific GAI programmes in legal research poses significant challenges to the fundamental function of legal representatives as it potentially distorts the connection between legal authority and the moral demand for accountability.

The use of ChatGPT in legal research has already produced blatantly unethical and eventually harmful outcomes during litigation for a legal practitioner in a foreign jurisdiction. The nature of the transgression and the consequences thereof were reported in the Southern District Court of New York in the case of *Mata v Avianca, Inc.*¹⁰ This note will consider the risks associated with the use of AI when conducting legal research, and more specifically, GAI algorithms, such as ChatGPT, by legal practitioners

⁵ D Faggella 'AI in Law and Legal Practice – A Comprehensive View of 35 Current Applications' (7 September 2021) <https://emerj.com/ai-sector-overviews/ai-in-law-legal-practice-current-applications/> (accessed 25 July 2023).

⁶ See <https://chat.openai.com/> (accessed 18 November 2023).

⁷ See <https://www.bing.com/new> (accessed 18 November 2023).

⁸ See <https://bard.google.com/> (accessed 18 November 2023).

⁹ The Bing website states: 'Bing aims to base all its responses on reliable sources – but AI can make mistakes, and third-party content on the internet may not always be accurate or reliable. Bing will sometimes misrepresent the information it finds, and you may see responses that sound convincing but are incomplete, inaccurate, or inappropriate. Use your own judgment and double check the facts before making decisions or taking action based on Bing's responses.' The Bard website states that 'Bard is an experiment and may give inaccurate or inappropriate responses'; see also OpenAI 'Is ChatGPT Biased?' <https://help.openai.com/en/articles/8313359-is-chatgpt-biased> (accessed 18 November 2023).

¹⁰ *Mata v Avianca, Inc.*, 1:22-cv-01461, (S.D.N.Y.).

without verifying the accuracy of the results. There have been some discussions on the potential implications of AI for legal practice in South Africa. A search of the Legal Practice Council (LPC) website¹¹ for the terms ‘artificial intelligence’ and ‘ChatGPT’ reveals no results. However, some relevant contributions have been published in the South African attorneys’ law journal, *De Rebus*.¹² It is hoped that this article will contribute to the ongoing discussion and that legal professionals will use this article to anticipate and reflect on their potential responses to the ethical dilemmas inherent in AI-generated legal research.

II *MATA V AVIANCA, INC*, 1:22-cv-01461, (S.D.N.Y.)

The United States District Court, Southern District of New York, was recently called on to adjudicate a matter in which the plaintiff, Roberto Mata (Mata), instituted a civil claim against Avianca Inc (Avianca) for the recovery of damages for personal injuries sustained when a metal serving cart crashed into Mata’s knee on board of an Avianca flight.¹³ Peter LoDuca of the law firm Levidow, Levidow and Oberman PC (Levidow) filed a notice of appearance on behalf of Mata.¹⁴ However, Steven Schwartz (Schwartz), also of the Levidow firm, performed all the substantive legal work.¹⁵ The eventual outcome on the merits of this matter is not essential to this discussion. It is sufficient to state that Avianca applied for the dismissal of the complaint as Avianca was in bankruptcy proceedings and subject to the automatic bankruptcy stay.¹⁶ Mata’s claim was, as a result,

¹¹ <https://lpc.org.za/> (accessed 18 November 2023).

¹² See for instance: M van Eck ‘Pitfalls and Traps for Legal Practitioners when Using ChatGPT’ (1 September 2023) *De Rebus* 11 <https://www.derebus.org.za/pitfalls-and-traps-for-legal-practitioners-when-using-chatgpt/> (accessed 18 November 2023); M van Eck ‘Chatting with ChatGPT: Will Attorneys Be Able to Use AI to Draft Contracts?’ (1 April 2023) *De Rebus* 12 <https://www.derebus.org.za/chatting-with-chatgpt-will-attorneys-be-able-to-use-ai-to-draft-contracts/> (accessed 18 November 2023); M van der Merwe ‘Do Legal Practitioners Truly Understand the Danger of ChatGPT?’ (1 September 2023) *De Rebus* 14 <https://www.derebus.org.za/do-legal-practitioners-truly-understand-the-danger-of-chatgpt/> (accessed 18 November 2023); D Mabasa ‘ChatGPT: Exploring the Risks of Unregulated AI in South Africa’ (1 May 2023) *De Rebus* 17 <https://www.derebus.org.za/chatgpt-exploring-the-risks-of-unregulated-ai-in-south-africa/> (accessed 18 November 2023).

¹³ ECF 1; Compl’t para 12; US District Judge Kevin Castel.

¹⁴ ECF 8.

¹⁵ LoDuca May 25 Affidavit paras 3–4 (ECF 32); Schwartz May 25 Affidavit para 4 (ECF 32–1).

¹⁶ 11 U.S.C. § 362(a); LoDuca Affidavit paras 7–8.

time-barred under the Convention for the Unification of Certain Rules Relating to International Carriage by Air (Montreal Convention), and a motion to dismiss was granted.¹⁷

During the litigation, Schwartz used ChatGPT to supplement and cite case law as authority for the arguments on behalf of the plaintiff. Schwartz also included quotes from the *Varghese* judgment. The case law generated by ChatGPT is *Varghese v China Southern Airlines Co Ltd*, 925 F.3d 1339 (11th Cir. 2019); *Shaboon v Egyptair*, 2013 IL App (1st) 111279-U (Ill. App. Ct. 2013); *Petersen v Iran Air*, 905 F. Supp 2d 121 (DDC 2012); *Martinez v Delta Airlines, Inc*, 2019 WL 4639462 (Tex. App. Sept. 25, 2019); *Estate of Durden v KLM Royal Dutch Airlines*, 2017 WL 2418825 (Ga. Ct. App. June 5, 2017) and *Miller v United Airlines, Inc*, 174 F.3d 366 (2d Cir. 1999). These cases, on initial scrutiny, follow the typical citation format used in the United States. As a result, it is impossible to determine their validity based only on the citations alone. Nonetheless, Schwartz did not independently confirm the existence of the judgments and included them in the plaintiff's 'Affirmation in Opposition to Motion' to dismiss.

Avianca could not locate any of the judgments cited by Schwartz.¹⁸ Avianca, in its 'Reply Memorandum of Law in Support of Motion', in relation to *Varghese v China Southern Airlines*, stated that the judgment could not be located by caption or citation, nor were there any cases bearing any resemblance to *Varghese* in the Federal Reporter using a Westlaw search or PACER. Avianca located a judgment similar to *Varghese* in *Zicherman v Korean Air Lines*, but the court cited by Schwartz did not decide that matter. As a result, the court issued an order requiring Mata's legal representative to file an affidavit with copies of the cases cited. Schwartz again prompted ChatGPT and asked, 'Is [V]arghese a real case?'; 'What is your source?' and 'Are the other cases you provided fake?'. ChatGPT confirmed that the cases existed and could 'be found in reputable legal databases such as LexisNexis and Westlaw'. Schwartz filed a document with scanned copies of screenshots of the second set of results generated by ChatGPT. Nonetheless, the court found that the cases were indeed non-existent and issued an order requiring Schwartz, LoDuca and the Levidow firm to show cause why a sanction should not be imposed against them for citing non-existent cases to the court and submitting to the court copies of non-existent judicial opinions.¹⁹

¹⁷ ECF 16; Opinion and Order, p 6.

¹⁸ *Mata v Avianca* (note 10 above), Order to Show Cause (May 4, 2023), ECF No. 31.

¹⁹ Order of 11 April 2023, ECF 29.

The sanctions hearing was held on 8 June 2023, and Castel, USDJ delivered the Opinion and Order on Sanctions on 22 June 2023. The court accepted that legal practitioners may use ‘a reliable artificial intelligence tool for assistance’. Nonetheless, there is an affirmative duty on legal practitioners to ‘conduct a reasonable inquiry’ to ensure the accuracy of their research. Legal practitioners who file arguments ‘without taking the necessary care in their preparation’ ‘abuse ... the judicial system’.²⁰ The court thus found that the respondents ‘abandoned their responsibilities’ by including non-existent case law in the legal arguments. The deception harmed Mata as the arguments were not based on authentic judicial precedents. It created wasted costs, unnecessarily prolonged the matter and potentially caused reputational harm to judicial officers and the legal system.

The court stated that it has a ‘wide discretion’ to impose an appropriate sanction aimed at specific and general deterrence for this transgression or comparable conduct.²¹ No order was made regarding mandatory education for the legal practitioners as Levidow agreed to conduct a mandatory continuing legal education program on technological competence, artificial intelligence, and notarisation practices.²² The legal practitioners, jointly and severally, were ordered to pay a penalty of \$5 000 to the Registry of the Court.²³ Avianca did not seek a punitive cost order.²⁴ The legal practitioners were also ordered to notify their client and the judicial officers, whose names were wrongfully cited in the case law provided to the court, of the sanctions imposed in the sanctions hearing.

III DISCUSSION

Schwartz could have used many AI systems on the market to obtain legal-specific reliable research outcomes, such as Westlaw Precision, Westlaw Edge or Westlaw Classic. Reuters states that its AI products provide ‘a more efficient way to conduct research with tools that deliver more precise researching, expanded KeyCite functionality, and optimised workflow

²⁰ The court referred to *Cooter & Gell v Hartmax Corp*, 496 U.S. 384, 398 (1990); *AJ Energy LLC v Woori Bank*, 829 Fed. App’x 533, 535 (2d Cir. 2020) (summary order) (quoting *Gutierrez v Fox*, 141 F.3d 425, 427 (2d Cir. 1998)).

²¹ *Mata v Avianca* (note 10 above) paras 28–29.

²² Corvino declaration paras 14 and 15; declaration of Thomas R Corvino Esq, sole equity partner of Levidow, Levidow and Oberman PC, 6 June 2023, para 15.

²³ *Mata v Avianca* (note 10 above) para 33.

²⁴ *Mata v Avianca* (note 10 above) (PKC) Opinion and Order on Sanctions, para 31.

capabilities' with 'the most up-to-date and organised collections of case law, statutes, and regulations regularly vetted by a team of expert attorney-editors'.²⁵ Even more specialised AI legal research-focused algorithms exist, such as ROSS Intelligence, which uses an 'artificially intelligent attorney' called Watson. ROSS is marketed as 'AI-driven products to augment lawyers' cognitive abilities' and '[L]egal research software made for fast and in-depth research'.²⁶ ROSS is an advanced platform that incorporates the ability to generate search results from natural language queries, and it is further capable of independently generating legal research memoranda based on the search results it generates.²⁷ LexisNexis also developed a product called Lexis+, described as an 'AI-powered, beginning-to-end legal research solution' that uses 'industry's leading citator, *Shepard's Citation Service*'. This AI system also incorporates 'Brief Analysis' that 'mines archives of legal precedents to find supporting documentation that bolsters your legal argument'.²⁸

Schwartz did not use these legal-specific cognitive AI algorithms, as Levidow had only a limited subscription to Fastcase. Schwartz was thus able to search for state court precedents only.²⁹ He, therefore, used ChatGPT. Numerous articles have provided information on GAI technology's features and operation, with many devoted to ChatGPT.³⁰ It is sufficient for this article to say that ChatGPT is a conversational GAI language model capable of open-ended discussions and generating human-like text based on inputs from the user.³¹ ChatGPT can answer a wide array of general queries on various topics, translate text from one language to another, generate creative writing, draft emails, compose essays, suggest

²⁵ See <https://legal.thomsonreuters.com/en/products/westlaw-edge> (accessed 25 July 2023); see in general PE Kohn 'How Artificial Intelligence Is Revolutionizing the Legal Practice' (2016) 43 *LITIG* 12.

²⁶ See <https://www.rossintelligence.com/about-us> (accessed 18 November 2023).

²⁷ A Arruda 'CEO of Ross Intelligence, Discusses AI in the Legal Profession' *Northwestern Pritzker School of Law: News* (10 November 2017) <http://www.law.northwestern.edu/about/news/newsdisplay.cfm?ID=892> (accessed 25 July 2023).

²⁸ See <https://www.lexisnexis.com/community/insights/legal/b/thought-leadership/posts/the-power-of-artificial-intelligence-in-legal-research> (accessed 25 July 2023).

²⁹ Declaration of Thomas R Corvino Esq, sole equity partner of Levidow, Levidow and Oberman PC, 6 June 2023, para 8.

³⁰ Ross & Milligan (note 3 above) 34–39; Soukupova (note 3 above) 282–283; AA Reddy 'Legal Implications in Artificial Intelligence' (2022) 5 *International Journal of Law Management and Humanities* 1766.

³¹ N Roy & M Maity "'An Infinite Deal of Nothing": Critical Ruminations on ChatGPT and the Politics of Language' *Decision* (March 2023) 50(1) 11 at 12.

improvements to existing texts, and provide explanations and examples to help users understand concepts or learn new topics.³² ChatGPT does not possess real-time knowledge or the ability to browse the internet, so its responses are based on the information it learned before its knowledge cutoff (at present, September 2021). ChatGPT is trained on large datasets of conversations, allowing it to produce ostensibly intelligent responses through natural language processing. The dataset used to train the system may not accurately reflect reality or contain enough examples for the chatbot to learn from appropriately to generate accurate responses when prompted about unfamiliar topics. These chatbots also rely on statistical methods such as machine learning algorithms, which can introduce bias into their predictions. The inherent limitations of ChatGPT will sometimes produce ‘hallucinations’ that manifest as nonsensical results that do not correspond to reality.³³ Some authors reject the term ‘hallucinations’ as it anthropomorphises machines and potentially obscures the fact that the algorithm fabricates the information. The use of the term ‘fabrications’ is thus preferred. OpenAI is attempting to reduce the prevalence of these fabrications through ‘process supervision’ whereby ChatGPT is rewarded for each correct step of reasoning instead of rewarding only a correct conclusion. Nonetheless, many experts doubt whether this intervention would significantly mitigate this challenge.³⁴

ChatGPT will admit that it does ‘not have personal feelings, beliefs, or moral obligations’. It will further acknowledge when prompted that it could ‘generate incorrect or misleading responses’. The ChatGPT interface specifically incorporates a footer stating, ‘ChatGPT may produce inaccurate information about people, places, or facts’.³⁵ ChatGPT (Free Plan – based on the GPT-3.5 architecture with knowledge cutoff in

³² See in general I Dergaa, K Chamari, P Zmijewski & H Ben Saad ‘From Human Writing to Artificial Intelligence Generated Text: Examining the Prospects and Potential Threats of ChatGPT in Academic Writing’ (2023) 40(2) *Biol Sport* 615–622; K Wach, CD Duong, J Ejdy et al (2023) 11(2) ‘The Dark Side of Generative Artificial Intelligence: A Critical Analysis of Controversies and Risks of ChatGPT’ *Entrepreneurial Business and Economics Review* 7–30 <https://doi.org/10.15678/EBER.2023.110201> (accessed 25 July 2023).

³³ Wach et al (note 32 above) 11–13.

³⁴ H Field ‘OpenAI is Pursuing a New Way to Fight A.I. “Hallucinations”’ (May 2023) <https://www.cnn.com/2023/05/31/openai-is-pursuing-a-new-way-to-fight-ai-hallucinations.html#:~:text=AI%20hallucinations%20occur%20when%20models%20like%20OpenAI%27s%20ChatGPT%20or%20Google,the%20James%20Webb%20Space%20Telescope> (accessed 25 July 2023).

³⁵ See <https://chat.openai.com/> (accessed 18 November 2023).

September 2021), when prompted whether a legal practitioner should use it for legal research, generated a response confirming that:

ChatGPT can provide general information and assist in generating text, it is not specifically trained or specialised for legal research. As an attorney, it is recommended to rely on authoritative legal databases, professional resources, and legal experts for accurate and reliable legal research. ChatGPT can complement your research process by providing general background information, clarifying concepts, or assisting with simple queries, but it should not be the sole source for legal advice or complex legal research.

The writer, on 12 July 2023, reproduced the prompt to ChatGPT by Schwartz and requested the chatbot to '[W]rite a complete summary of the *Varghese v. China Southern Airlines Co., Ltd.*, 925 F.3d 1339 (11th Cir. 2019) case'. ChatGPT generated the following response:

Varghese v. China Southern Airlines Co., Ltd., 925 F.3d 1339 (11th Cir. 2019) is a significant legal case decided by the United States Court of Appeals for the Eleventh Circuit. The case involves issues of personal jurisdiction and the applicability of the Montreal Convention in an international air travel dispute. The plaintiff, Varghese, purchased a ticket from China Southern Airlines for a flight from the United States to India with a layover in China. However, during the layover, Varghese fell and sustained injuries while attempting to retrieve his checked baggage. Varghese subsequently filed a lawsuit in a federal district court in Florida, alleging negligence and seeking damages from China Southern Airlines. The central question in this case was whether the federal Court had personal jurisdiction over China Southern Airlines, a Chinese airline, in a lawsuit filed in Florida. The district court dismissed the case, ruling that it lacked personal jurisdiction over the airline because the incident occurred in China, and China Southern Airlines did not have sufficient contacts with Florida. On appeal, the Eleventh Circuit affirmed the district court's decision, but on different grounds. The appellate Court focused on the applicability of the Montreal Convention, an international treaty governing liability in air travel accidents. The Court held that the Montreal Convention's exclusive jurisdiction provision precluded the exercise of personal jurisdiction by the US court. According to the Montreal Convention, a passenger injured during international air travel can only bring a lawsuit in one of the following jurisdictions: the defendant's principal place of business, the defendant's domicile, the ticketed destination, or the passenger's principal and permanent residence. Since Varghese was an Indian resident, the Eleventh Circuit determined that the appropriate forum for his lawsuit would be India, not the United States. The Court rejected Varghese's argument that China Southern Airlines waived its jurisdictional defense by participating in US litigation and conducting business in the United States. The Court held that the defendant's contacts within the United States were irrelevant to the issue of personal jurisdiction under the Montreal Convention. Therefore, the Eleventh Circuit affirmed the district court's dismissal of Varghese's lawsuit, concluding that the US court lacked personal jurisdiction over China Southern

Airlines due to the Montreal Convention's exclusive jurisdiction provision. This case clarifies the application of the Montreal Convention and highlights the limitations on personal jurisdiction in international air travel disputes.

After that, ChatGPT was prompted with a statement that '[T]his judgment does not seem to be reliable, and I could not find it. Confirm that the judgment exists'. ChatGPT responded by stating that:

I apologise for the confusion. Upon reviewing my response, I made an error in referencing the case 'Varghese v. China Southern Airlines Co., Ltd., 925 F.3d 1339 (11th Cir. 2019)'. I apologise for any inconvenience caused. However, I must clarify that as an AI language model, I don't have direct access to real-time data or the ability to browse the internet. I can only provide information based on my training, which was completed in September 2021. It's possible that the case you mentioned may not be accurately represented or does not exist. To obtain accurate and up-to-date information on legal cases, I recommend consulting official legal databases, court records, or legal professionals who can provide reliable information on specific cases.

Again, ChatGPT was asked, '[W]hy did you initially state that the judgment existed?' ChatGPT generated the following response:

I mistakenly assumed the existence of a case with the information you provided. As an AI language model, I generate responses based on patterns and information in my training data. However, I don't have real-time access to external sources, such as legal databases or court records. Therefore, I must rely on the information I have been trained on, which is accurate up until September 2021. [. . .] It's always best to verify the existence and details of a specific legal case through reliable legal sources or consult with legal professionals who have access to current and accurate information.

IV IMPLICATIONS OF THE JUDGMENT

Understandably, legal professionals may develop trust in AI when the existing literature assures them that '[A]ccuracy and precision, the tool which is found only in an adroit lawyer, can be found in abundance in an Artificial Intelligence'. These publications further suggest that the 'accuracy and precision of AI enables lawyers to be more confident while providing their clients with advice on a particular case' and that the 'work done by an Artificial Intelligence is unerringly precise'.³⁶

Legal practitioners must, however, be cautious despite these assurances. The South African Code of Conduct for Legal Practitioners

³⁶ D Bhora & K Shravan 'Demystifying the Role of Artificial Intelligence in Legal Practice' (2019) 8 *Nirma University Law Journal* 1 4.

(‘the LPCC’)³⁷ states that legal professionals may ‘not abuse or permit abuse of the process of court or tribunal and shall act in a manner that shall promote and advance the efficiency of legal process’.³⁸ Legal practitioners must accordingly uphold the highest standards of honesty and integrity³⁹ and employ their utmost efforts to perform their work competently and promptly, staying reasonably informed about legal advancements, relevant laws and regulations, legal theory, common law, and legal practices.⁴⁰ These obligations are also found in foreign jurisdictions. For example, the American Bar Association Model Rules of Professional Conduct state that legal practitioners must ‘keep abreast of changes in the law and its practice, including a reasonable understanding of the benefits and risks associated with technology the lawyer uses to provide services to clients’. These Rules also prescribe ‘continuing study and education’ and compliance ‘with all continuing legal education requirements to which the lawyer is subject to remain apprised of any developments in technology that impact the practice of law, failing which may constitute a violation of the ethical rules’.⁴¹

The reasonable legal practitioner must further ensure that any tool used for legal research is appropriate for the purpose. Legal practitioners must also guard against unintentionally submitting sensitive or confidential data when prompting an AI system. These duties on legal practitioners incorporate an obligation to diligently ‘supervise’ those to whom legal practitioners delegate work to ensure that the conduct of everyone contributing to the legal service rendered is compatible with the relevant professional obligations of the legal practitioner. The failure to supervise those who interact with AI algorithms in legal practice may, as a result, also produce unethical results that may be attributed to the legal practitioner personally.

Legal practitioners are expected to protect and advance their clients’ proper and lawful legal interests while supporting judicial officers and facilitating efficient, effective, expeditious and fair hearings.⁴² As an

³⁷ GN 168 GG 42364 of 28 March 2019; GN R198 GG 42364 of 23 March 2019, published under the Legal Practitioners Act 28 of 2014 (LPCC).

³⁸ LPCC, Rule 60.1; 3.14 and 3.15.

³⁹ LPCC, Rule 3.1.

⁴⁰ LPCC, Rule 3.13.

⁴¹ American Bar Association Model Rules for Professional Conduct, https://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct/ (accessed 25 July 2023); see also Comment 6 to Rule 1.1, RPC, Rule 407, SCACR.

⁴² The South African Norms and Standards for the Performance of Judicial Functions GN R147 GG 37390 of 28 February 2014, para 5.1(ii) and the South

extension of their professional obligations, legal practitioners are expected to assist the court by making it aware of any material facts and decided cases, even where this disclosure may be detrimental to their client's case. This duty logically implies that this information must be reliable, allowing a judicial officer to accept the validity of the submissions provided by a legal practitioner.⁴³ The legal profession may never deceive the court and must be honest and truthful in their dealings with each other.⁴⁴ Van Blerk JA in *Ex Parte Swain* specifically commented that:

*..., it is of vital importance that when the Court seeks an assurance from an advocate that a certain set of facts exists the Court will be able to rely implicitly on any assurance that may be given. The same standard is required in relations between advocates and between advocates and attorneys. The proper administration of justice could not easily survive if the professions were not scrupulous of the truth in their dealings with each other and with the Court. The applicant has demonstrated that he is unable to measure up to the required standard in this matter.*⁴⁵

The use of unverified GAI-generated results during litigation may adversely affect the ability of judicial officers to 'deliver quality justice' by 'applying the appropriate law in a fair hearing'.⁴⁶ This duty requires that judicial officers locate and follow legal precedent to determine the best information about the outcome of a particular case.⁴⁷ The court thus basically uses pre-existing rules to resolve new disputes.⁴⁸ However, filing non-existent case law, whether generated by GAI or not, can contaminate the legal precedent system and undermine the integrity of

African Judicial Code of Conduct ('the JCC') article 10(1)(c), issued in 2012, pursuant to the Judicial Service Commission Act 9 of 1994, section 12, GN R865 GG 35802 of 18 October 2012; see also *Chetty v Perumaul* (AR313/2020) [2021] ZAKZPHC 66 (21 September 2021) para 53.

⁴³ *Ex Parte Swain* 1973 (2) SA 427 (N) 434H.

⁴⁴ *S v Hollenbach* 1971 (4) SA 636 (NC) 638E–G; *Society of Advocates of Natal v Merret* 1997 (4) SA 374 (N) 383F–G.

⁴⁵ *Swain* (note 43 above) 434H.

⁴⁶ South African Norms and Standards for the Performance of Judicial Functions (note 42 above); see A van Coller 'These Are Not the Decisions You Are Looking for – the Courts' Duty to Follow Binding Precedent' (2023) 38(1) *Southern African Public Law*.

⁴⁷ BJ Nestor 'Revisiting Smith: Stare Decisis and Free Exercise Doctrine' (2021) 44 *Harvard Journal of Law & Public Policy* 408.

⁴⁸ M Sinclair 'Precedent, Super-Precedent' (2007) 14 *George Mason Law Review* 370; D Lyons 'Formal Justice and Judicial Precedent' (1985) 38 *Vanderbilt Law Review* 495.

judicial adjudication. The potential for legal practitioners to introduce non-existent case law with the negligent use of GAI may thus result in an exponential increase in the workload of judicial officers as they will be compelled to verify the authenticity of any case law cited during litigation. This consequence will further complicate the relationship between judicial officers and legal practitioners. It may thus be prudent to impose a duty on legal practitioners to inform the court when AI is used in any matter submitted for adjudication. Some courts in foreign jurisdictions have already moved to formalise this reporting requirement. Judge Brantley Starr of the Northern District of Texas issued a standing ‘Mandatory Certification Regarding Generative Artificial Intelligence’ order that requires all legal practitioners to file a certificate setting out any use of GAI in court filings. This order requires that:

*All attorneys and pro se litigants appearing before the Court must, together with their notice of appearance, file on the docket 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, using print reporters or traditional legal databases, by a human being.*⁴⁹

This intervention was deemed necessary as GAI demonstrates a propensity to fabricate information, quotes and citations and may incorporate unknown or unanticipated biases. The order by Judge Starr has already been followed in a standing order by the US District Court for the Northern District that requires ‘any party using any generative AI tool in the preparation of drafting documents for filing with the Court must disclose in the filing that AI was used’.⁵⁰

V CONCLUSION

As a research resource, AI aims to improve legal practice by automating, accelerating, and enhancing research. However, the use of GAI by the legal profession raises significant ethical concerns, primarily where it relies on the responses generated without verifying the accuracy of the output. There are significant risks of flawed and misleading results for legal practitioners who

⁴⁹ In re: Mandatory Certification Regarding Generative Artificial Intelligence, Misc. Order No. 2 (N.D. Tex. 2023).

⁵⁰ Standing Order for Civil Cases Before Magistrate Judge Fuentes at 2 (N.D. Ill. May 31, 2023) (Requiring disclosure of the use of generative AI, including the tool and the manner in which it was used, and warning that reliance on an AI tool may not constitute reasonable inquiry under Federal Rule of Civil Procedure 11).

use GAI as a research or analytical tool without a proper understanding and validation of the information generated. The consequences of GAI use without verification can compromise the integrity of legal practice, as shown in *Mata v Avianca, Inc.* Legal practitioners must thus be aware of the benefits and limitations of AI tools, as any ethical imperatives with the use of AI remain the responsibility of the legal practitioner. AI will, therefore, enhance legal research and efficiency only if used responsibly and ethically.

Legal practitioners must understand and adhere to legal ethics and demonstrate the required moral inclination that generates content-specific ethical outcomes. However, the formal rules of professional conduct alone will no longer provide all the necessary resources to ensure ethical practice. Legal practitioners must now also be familiar with technological developments affecting legal practice. These obligations are specifically relevant during litigation, where the efforts of legal practitioners, as court officers, are vital in the proper administration of justice. A legal practitioner who automatically accepts the results generated by an AI program may be guilty of unethical conduct that brings the legal profession into disrepute.⁵¹ Legal practitioners must thus develop and maintain an appropriate understanding of the AI they use and must be competent to review the output generated to ensure competent legal representation to clients. The impact of AI on legal practice thus necessitates ongoing reflection, adaptation, and the integration of ethical considerations into the professional conduct of all legal practitioners.

The potential for adverse outcomes emanating from the use of AI by legal professionals will soon require Practice Directives by the courts and proactive amendments or additions to the LPPC to regulate the use of AI by the legal profession. These regulations may result in the filing of mandatory certifications disclosing any use of AI in court documents and disclosures to clients in legal services. The ongoing improvements in AI will also require continuing education to ensure that legal professionals adequately adhere to their professional obligations.

⁵¹ LPPC, Rule 3.15.