

# 1

## Introduction

*Jesse Beatson, Jill R Presser,  
and Gerald Chan*

I. Defining AI .....	5
II. Classifying AI .....	7
III. AI and Litigation .....	8
IV. The Structure of this Book: Four Points of Interaction .....	9
A. AI as Decision-Maker .....	9
B. AI and Evidence Law .....	11
C. AI as the Subject of a Lawsuit .....	12
D. AI-Enabled Litigation Tools .....	13
V. Concluding Thoughts .....	13

Artificial intelligence (AI) was once a science fiction plotline and a topic at niche conferences. Now AI is a multibillion-dollar industry and a major force in society.<sup>1</sup> Today's AI programs perform astonishing feats, including medical diagnosis, autonomous driving, content creation, legal analysis, and even therapy and management.<sup>2</sup>

We should brace for further disruption. As journalist Graeme Wood said, "Change has never happened this fast before, and it will never be this slow again."<sup>3</sup> Notably, AI has been dubbed the "fastest moving technology."<sup>4</sup>

But what is AI?

Marketing materials hype AI as delivering untold commercial advantage to those who wield its power.<sup>5</sup> Hollywood tends to use AI as a "character" in scripts to tell

- 1 For AI as a multibillion-dollar industry, see MarketsandMarkets, Press Release, "Artificial Intelligence Market Worth \$190.61 Billion by 2025 with a Growing CAGR of 36.6%," online: <<https://www.marketsandmarkets.com/PressReleases/artificial-intelligence.asp>>. For AI as a major force in society, Canadian examples include Canada investing in "AI Superclusters" and the president of the Treasury Board now doing double duty as the minister of digital government. See "Innovation Superclusters Initiative" (last modified 22 January 2021), online: *Innovation, Science and Economic Development Canada* <<http://www.ic.gc.ca/eic/site/093.nsf/eng/home>>; "The Honourable Joyce Murray P.C., M.P." (last modified 18 January 2021), online: *Government of Canada* <<https://www.canada.ca/en/government/ministers/joyce-murray.html>>.
- 2 AI also does transcription through natural language processing; see Otter online: <<https://otter.ai/login>>. For medical diagnosis, see Jun Wu, "AI and Medical Diagnosis," *Medium* (23 May 2019), online: <[https://medium.com/@junwu\\_46652/ai-and-medical-diagnosis-261218de33a0](https://medium.com/@junwu_46652/ai-and-medical-diagnosis-261218de33a0)>. For discovery, see James M Lee, "AI Speeds Document Discovery, Giving Law Firms a Leg Up" (27 August 2019), online: *IBM* <<https://www.ibm.com/blogs/client-voices/ai-speeds-document-discovery>>. For management, see Josh Dzieza, "How Hard Will the Robots Make Us Work?," *The Verge* (27 February 2020), online: <<https://www.theverge.com/2020/2/27/21155254/automation-robots-unemployment-jobs-vs-human-google-amazon>>. For therapy, see "Computers and Therapy," online: *AI-Therapy* <<https://www.ai-therapy.com/articles/computers-and-therapy>>. For another example, see IBM recently sending an AI robot called CIMON into space, where it interacts with astronauts at the International Space Station: Till Eisenberg & Aisha Walcott, "CIMON, the AI-Powered Robot, Launches a New Era in Space Travel" (10 September 2019), online: *IBM* <<https://www.ibm.com/blogs/client-voices/cimon-ai-robot-launches-new-era-space-travel>>; "CIMON Brings AI to the International Space Station," online: *IBM* <[https://www.ibm.com/thought-leadership/innovation\\_explanations/article/cimon-ai-in-space.html](https://www.ibm.com/thought-leadership/innovation_explanations/article/cimon-ai-in-space.html)>.
- 3 "In Case You Missed It in 2017: The Velocity of Change" (16 January 2018), online (webcast): *BrightTALK* <<https://www.brighttalk.com/webcast/8855/295609/in-case-you-missed-it-in-2017-the-velocity-of-change>>. Ray Kurzweil introduced the "law of accelerating returns" in *The Age of Spiritual Machines: When Computers Exceed Human Intelligence* (New York: Penguin Books, 2000).
- 4 Peter Brown, "Artificial Intelligence: The Fastest Moving Technology," *Law.com* (9 March 2020), online: <<https://www.law.com/newyorklawjournal/2020/03/09/artificial-intelligence-the-fastest-moving-technology/?sreturn=20200619170523>>.
- 5 A company titled "Just Add AI" sums this up; see their webpage: <<https://www.justadd.ai/en/solutions>>.

versions of the Frankenstein story—a product of human ingenuity that turns against its creators.<sup>6</sup>

In *Litigating Artificial Intelligence*, we cut through both the hype and dystopian imagery. Our aim is to equip you with a nuanced understanding of AI and the issues it raises for law and legal practice.

This chapter begins by reflecting on some different approaches to defining and classifying AI. It continues with a brief discussion about the role of litigation in addressing harms and injustices caused by AI. It then provides a 30,000-foot view of this book’s structure and contents and offers some concluding thoughts.

In Chapter 2, Ryan Fritsch lays further groundwork. He surveys AI’s footprint on law and society, providing important context for readers new to the world of AI.

## I. Defining AI

John McCarthy coined the term “artificial intelligence” in 1956. He defined AI as “the science and engineering of making intelligent machines.”<sup>7</sup> More recent definitions describe AI as “the capability of a machine to imitate intelligent decision-making in a given domain” and “the ability of a computer ... to do tasks that are usually done by humans because they require human intelligence and discernment.”<sup>8</sup> The basic building blocks of AI are generally recognized as math (algorithms), computer programming (software), and data (training inputs). Essentially, AI is algorithmic software that accomplishes cognitive tasks such as learning, reasoning, and self-correction.

What does it mean for a machine or software program to exhibit intelligence? Intelligence is defined by *Lexico* as the “ability to acquire and apply knowledge and skills.”<sup>9</sup> More than ever before, the intelligence part of the term “AI” is apt: contemporary AIs are competent learners and knowledge-appliers. With continuing increases in computing power, storage capacity, algorithmic sophistication, and the quantity and accessibility of training data, the cognitive acuity of AI is only bound to grow.

6 See e.g. the *Terminator* franchise (Skynet), *2001: A Space Odyssey* (HAL 9000), *The Matrix* (the agents), and *Westworld* (the hosts).

7 John McCarthy, “What Is Artificial Intelligence?” (12 November 2007) at 2, online (pdf): *Stanford University* <<http://jmc.stanford.edu/articles/whatisai/whatisai.pdf>>; see also “Reference Terms,” sub verbo “artificial intelligence,” online: *ScienceDaily* <[https://www.sciencedaily.com/terms/artificial\\_intelligence.htm](https://www.sciencedaily.com/terms/artificial_intelligence.htm)>.

8 This first definition was proposed by Paul Horbal & Paul Blizzard in “Primed for AI—The Basics of Artificial Intelligence and Machine Learning” (13 May 2020), online (webinar): <<https://www.bereskinparr.com/event/bereskin-parr-llp-1650>>. The second definition is from *Encyclopedia Britannica*; see BJ Copeland, “Artificial Intelligence,” online: <<https://www.britannica.com/technology/artificial-intelligence>>.

9 *Lexico*, sub verbo “intelligence,” online: <<https://www.lexico.com/en/definition/intelligence>>; see also Shane Legg & Marcus Hutter, “A Collection of Definitions of Intelligence” (15 June 2007), online (pdf): *Arxiv* <<https://arxiv.org/pdf/0706.3639.pdf>>.

Although AI's growth potential is theoretically exponential, it is important to acknowledge the distinction between intelligence and consciousness. IBM's Watson, a powerful AI, defeated its human rivals on "Jeopardy!" But as John Searle observed, Watson didn't know it had won.<sup>10</sup> It is unknown if the progression of AI will ever lead to a self-aware machine.<sup>11</sup> If it does, we would not simply be dealing with artificial *intelligence* but artificial *sentience*—a new threshold that has variously been described as strong AI, artificial general intelligence, and artificial superintelligence. Such a creation would blur the line between tool and entity. It may also constitute what Elon Musk called "our biggest existential threat."<sup>12</sup>

A more mundane question arises from AI's growing sophistication: are the parameters of AI static or dynamic? If the yardstick for what counts as AI shifts over time, then what begins as AI might subsequently be thought of as mere software.

The label "AI" does indeed appear to have a relative aspect. A phenomenon named the "AI effect" was described by the co-founder of *WIRED* magazine, Kevin Kelly:

In the past, we would have said only a superintelligent AI could drive a car, or beat a human at Jeopardy! or chess. But once AI did each of those things, we considered that achievement obviously mechanical and hardly worth the label of true intelligence. Every success in AI redefines it.<sup>13</sup>

Kelly alluded to a moment in 1996 when Deep Blue became the first computer to beat a reigning chess grandmaster. Some contemporaries viewed Deep Blue as the dawning

10 The Watson model is also incapable of performing other tasks, such as driving a car or preparing a legal memo. Other AI programs capable of those functions, however, do exist. See John Searle, "Watson Doesn't Know It Won on 'Jeopardy!,'" *Wall Street Journal* (23 February 2011), online: <<https://www.wsj.com/articles/SB10001424052748703407304576154313126987674>>.

11 Mark Tegmark made a distinction between sapience (the ability to think intelligently) and sentience (the ability to subjectively experience qualia) and suggested that as we "prepare to be humbled by ever smarter machines" we revise our identity from *Homo sapiens* to "*Homo sentiens*"; see Max Tegmark, *Life 3.0: Being Human in the Age of Artificial Intelligence* (New York: Knopf, 2017) at 314.

12 Musk even more provocatively called the creation of artificial general intelligence (AGI) "summoning the demon"; see Matt McFarland, "Elon Musk: 'With Artificial Intelligence We Are Summoning the Demon,'" *The Washington Post* (24 October 2014), online: <<https://www.washingtonpost.com/news/innovations/wp/2014/10/24/elon-musk-with-artificial-intelligence-we-are-summoning-the-demon/>>. Some make a distinction between AGI and a further level of intelligence called "superintelligence." A number of tests have been theorized for confirming AGI, including whether a machine can fool a person into believing it's a human (Turing), enter a home and figure out how to make coffee (Wozniak), enroll in a university and obtain a degree (Goertzel), and achieve high performance in an economically important job (Nilsson).

13 Kevin Kelly, "The Three Breakthroughs That Have Finally Unleashed AI on the World," *WIRED* (27 October 2014), online: <<https://www.wired.com/2014/10/future-of-artificial-intelligence/>>.

of a new era of machine superiority. By today's standards, Deep Blue more closely resembles a giant calculator than the leading edge of technology. If it is still appropriate to call Deep Blue AI, it is relegated to a low tier.

The AI effect suggests that there will be greater confidence in labelling a newer technology AI, whereas older technology, once firmly considered AI (when it was new), may no longer be widely considered or called AI.

## II. Classifying AI

What types of AI presently exist? There is no industry or government standard for classifying AI. Three widely used schemas for classification are introduced below. They are neither mutually exclusive nor exhaustive.<sup>14</sup>

The first schema categorizes AI based on how it is applied—for example, object and facial recognition, game-playing, fraud detection, chatting, diagnosis, and decision support. This type of categorization recognizes that AI applications are purpose-built: each must be constructed and trained separately as there is no general AI that can do everything.

A second schema divides AI into two camps based on its technical foundations: explicitly coded, rule-based algorithms (expert systems) and trained, self-learning, and rule-inferring algorithms (machine learning).<sup>15</sup> Expert systems have been around much longer. They are built using “if this, then do that” statements and gain proficiency in a task by being programmed with information derived from human experts. Machine learning programs, on the other hand, alter themselves and “learn” through exposure to data. A subtype of machine learning, called “deep learning,” employs neural networks that mimic the architecture of the human brain.<sup>16</sup>

A third schema places AI in four buckets according to cognitive skill level.<sup>17</sup> Reactive machines are the most basic AI and have no ability to learn from experience (e.g., Deep Blue). Limited memory AI learns from historical data to inform decisions (most AI today is of this variety). Theory of mind AI can discern the needs, emotions, and

14 Another schema, not included in this section for the sake of brevity, divides the AI field into seven patterns: hyperpersonalization, autonomous systems, predictive analytics and decision support, conversational/human interactions, patterns and anomalies, recognition systems, and goal-driven systems. See Kathleen Walch, “The Seven Patterns of AI,” *Forbes* (17 September 2019), online: <<https://www.forbes.com/sites/cognitiveworld/2019/09/17/the-seven-patterns-of-ai/?sh=eb46be612d01>>.

15 Jesse Beatson, “AI-Supported Adjudicators: Should Artificial Intelligence Have a Role in Tribunal Adjudication?” (2018) 31:3 *Can J Admin L & Prac* 307.

16 See e.g. Eric Yates, “What Is the Difference Between AI, Machine Learning, and Deep Learning?” (14 March 2019), online: *Towards Data Science* <<https://towardsdatascience.com/clarity-around-ai-language-2dc16fdb6e82>>.

17 Arend Hintze, “Understanding the Four Types of AI, from Reactive Robots to Self-Aware Beings,” *The Conversation* (13 November 2016), online: <<https://theconversation.com/understanding-the-four-types-of-ai-from-reactive-robots-to-self-aware-beings-67616>>.

thought processes of entities around it (this is still largely theoretical). Finally, self-aware AI—science fiction at this point—possesses sentience and has the capacity to form its own goals and act upon them.

Each of these schemas asks a different question: the first, “How is this AI used?”; the second, “How does this AI gain its intelligence?”; and the third, “How intelligent is this AI?”

### III. AI and Litigation

The legal profession’s digital-era journey is accelerating. Virtual courtrooms, video conferencing, and e-filing became necessary countermeasures to COVID-19 shut-downs. These measures may become a significant part of the “new normal.” The next major frontier is AI. Some complex tasks performed by lawyers and adjudicators are already being outsourced to or augmented by AI.<sup>18</sup>

AI holds the promise of enabling more equitable and cost-effective access to legal services. Adjudication-assisting AI may help clear backlogs. However, although AI’s entrance into the legal field will benefit some stakeholders, it will invariably create barriers for others. With reduced costs and easier access to legal intervention, the number of litigated matters could increase and create new challenges. Furthermore, irresponsible and unethical uses of AI can cause harms. Lawyers who use AI must continue to meet ethical standards of practice, whereas adjudicators who deploy AI must do so in ways consistent with procedural and substantive rights.

The use of AI will have to be regulated. This is one important step in preventing or at least mitigating harms. However, regulation will not always be effective. Political will may be insufficient in regulating certain aspects or applications of AI. When regulations do come into force, if the available range of penalties is trivial compared to what can be gained by breaking the rules, deterrence is weak.

Litigation will be needed to define how regulations apply, resolve grey areas, and fill regulatory gaps. The use of AI will also generate many issues for which litigation may be the best recourse. Government agencies’ use of AI to determine social assistance eligibility, although streamlining the process, may fail to account for and accommodate special circumstances. AI’s deployment in bail and sentencing is a situation ripe for litigation given claims of algorithmic bias and inadequate transparency.<sup>19</sup> AI programs that make recommendations to police departments about which neighbourhoods to attend, based on historical data, invite legal challenge to the extent that these

18 Presently, we are seeing this trend more in the United States than in Canada. For an article on the use of AI in the US legal context, see Lauri Donahue, “A Primer on Using Artificial Intelligence in the Legal Profession,” *JOLT Digest* (3 January 2018), online: <<https://jolt.law.harvard.edu/digest/a-primer-on-using-artificial-intelligence-in-the-legal-profession>>.

19 See Julia Angwin et al, “Machine Bias,” *ProPublica* (23 May 2016), online: <<https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>>.

outputs exacerbate overpolicing of marginalized communities.<sup>20</sup> AI's use in autonomous military weapons raises alarm bells and may most effectively be addressed through the frameworks of international humanitarian and human rights law. AI-embedded consumer products, from virtual assistants to self-driving cars, might cause harms or violate rights, compelling litigation in response.

The algorithms behind these AI applications have been kept away from court scrutiny in some jurisdictions through assertions of intellectual property and trade secrets. This complicates efforts to achieve greater transparency and protect procedural and substantive rights through court challenges.<sup>21</sup> This issue is further discussed elsewhere, primarily within Part II of this book.

## IV. The Structure of this Book: Four Points of Interaction

*Litigating Artificial Intelligence* is designed as a playbook for confronting AI and a guide for using it. We structured the book to cover four distinct points where litigators will encounter AI in their practices:

1. challenging a decision rendered or informed by AI (Part II: AI as Decision-Maker);
2. dealing with AI-based evidentiary issues (Part III: AI and Evidence Law);
3. suing or defending a party for selling and/or designing AI products that cause alleged harms (Part IV: AI as the Subject Matter of a Lawsuit); and
4. deciding which AI tools to use in your own legal practice (Part V: AI-Enabled Litigation Tools).

These four sections are briefly introduced below.

### A. AI as Decision-Maker

AI's growing sophistication raises a novel question for decision-making bodies: to what extent should human decision-making be supplemented by computer software?

20 See Meredith Whittaker et al, "AI Now Report 2018" (December 2018), online (pdf): *AI Now Institute* <[https://ainowinstitute.org/AI\\_Now\\_2018\\_Report.pdf](https://ainowinstitute.org/AI_Now_2018_Report.pdf)>; Kate Crawford et al, "AI Now Report 2019" (December 2019), online (pdf): *AI Now Institute* <[https://ainowinstitute.org/AI\\_Now\\_2019\\_Report.pdf](https://ainowinstitute.org/AI_Now_2019_Report.pdf)>.

21 See the *State v Loomis* case in the United States, 881 NW2d 749 (Wis 2016), cert denied, *Loomis v Wisconsin* 137 S Ct 2290 (2017). For articles on this case, see Ellora Israni, "Algorithmic Due Process: Mistaken Accountability and Attribution in *State v. Loomis*," *JOLT Digest* (31 August 2017), online: <<https://jolt.law.harvard.edu/digest/algorithmic-due-process-mistaken-accountability-and-attribution-in-state-v-loomis-1>>; "State v. Loomis: Wisconsin Supreme Court Requires Warning Before Use of Algorithmic Risk Assessments in Sentencing" (2017) 130:5 Harv L Rev 1530, online: <<https://harvardlawreview.org/2017/03/state-v-loomis>>.

The use of AI to supplement or substitute for human expertise in public decision-making is sometimes called automated decision-making (ADM). In the Government of Canada’s Directive on Automated Decision-Making, the term “automated decision system” is defined as follows:

Any technology that either assists or replaces the judgement of human decision-makers. These systems draw from fields like statistics, linguistics, and computer science, and use techniques such as rules-based systems, regression, predictive analytics, machine learning, deep learning, and neural nets.<sup>22</sup>

As this definition indicates, AI does not need to replace human adjudicators altogether. The more likely scenario is hybrid decision-making. This is often described in the AI literature as the “centaur model.” In this idealized model, humans and AI each play a role in the decision-making process that is best suited to their respective skill sets.<sup>23</sup> The driving notion is that relying solely on human analytical skills may not be realistic or aspirational given the limitations of human decision-makers and the backlogs that institutions face.

Time will tell if, together, humans and AI can deliver adjudicative outcomes justly, efficiently, and transparently. A number of issues could compromise the viability and desirability of such a system. Those who are subject to hybrid decisions may not always be informed that AI was involved. The adjudicator in question could be influenced by a phenomenon called automation bias, where technology-based recommendations have a strong, perhaps outsized, impact over how humans render decisions. This raises the question of whether AI is the de facto decision-maker in such cases. Even if AI only contributed to part of an ultimate determination, knowing the nature of this contribution and to what extent it influenced the outcome would be relevant on appeal. However, extracting and evaluating this information are easier said than done. If there is no initial disclosure of the AI’s use and no audit trail owing to the opacity of the algorithm’s operations and/or to proprietary claims of ownership, the opportunities for recourse and challenge are limited and may be fully stymied.

Despite the aforementioned concerns, automated decision-making is increasingly used in the administrative, criminal, immigration, and law enforcement contexts. Some examples include a criminal court judge considering an algorithmically generated risk score in bail or sentencing, a front-line administrative decision-maker relying on an algorithm to allocate social benefits or pre-screen immigration applications, and a

22 “Directive on Automated Decision-Making” (last modified 5 February 2019), App A, online: *Treasury Board of Canada Secretariat* <<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32592#appA>>.

23 For examples of hybrid decision-making, see Michael William Dockstator, *Administrative Intelligence: Exploring Balanced Human-AI Decision-Making Relationships in Canadian Administrative Contexts* (Master’s Thesis, University of Toronto, 2019), online (pdf): <[https://tspace.library.utoronto.ca/bitstream/1807/100117/1/Dockstator\\_Michael\\_William\\_201911\\_MIS\\_thesis.pdf](https://tspace.library.utoronto.ca/bitstream/1807/100117/1/Dockstator_Michael_William_201911_MIS_thesis.pdf)>.



police officer attending a location and/or making an arrest based on the recommendation of predictive policing software.

When AI is leveraged in adjudication, how can we ensure that it is performing as intended, that it is free of bias and errors, and that it is reviewable by a court? The chapters in this section discuss substantive and tactical issues that litigators should consider when their clients are the subject of AI-informed adjudicative decisions:

- Kate Robertson and Jill Presser offer an in-depth analysis of the issues faced by litigators in criminal law, for example, when AI is deployed by criminal courts and police departments, in Chapter 3;
- Lorne Sossin covers the topic of AI and administrative law in Chapter 4;
- Petra Molnar discusses the current expansion of AI in immigration law in Chapter 5; and
- Jill Presser, Jesse Beatson, and Kate Robertson provide guidance on navigating tactical challenges and practical considerations that may arise in litigating AI in Chapter 6.

## B. AI and Evidence Law

AI surrounds us, and its use creates new evidentiary issues. Litigators will have a role to play in helping courts understand the implications of dealing with evidence in an AI context.

The emerging capabilities of AI present novel issues for authenticating evidence. Video evidence has long been considered a gold standard in capturing “what happened.” Now those with technical know-how can leverage AI technology to create convincing false media called “deepfakes.”<sup>24</sup> Approaches to evidence authentication should adapt to take into account AI-enabled forgeries and phony media.

Another evidentiary concern arises where an AI program is used by one party (e.g., the prosecution in criminal cases) as incontrovertible fact evidence. The opposing party may want to challenge the AI’s reliability and draw attention to any built-in biases. What safeguards exist to ensure that algorithmic evidence is sufficiently reliable to be admitted into a courtroom? How does the *Mohan* standard for expert evidence apply in this brave new world?

AI’s use by government agencies will create unique complications in the evidentiary realm. Consider the following scenario: An intelligence agency deploys AI to anticipate criminal activity in the national security realm. This information is shared with a law enforcement body, which makes an arrest and lays charges. The AI-generated information is then relied upon by the prosecution. The software development company could assert proprietary interests to prevent the AI’s software from being disclosed.

24 Britt Paris & Joan Donovan, “Deepfakes and Cheap Fakes: The Manipulation of Audio and Visual Evidence” (18 September 2019), online: *Data & Society* <<https://datasociety.net/library/deepfakes-and-cheap-fakes>>.

Furthermore, the intelligence agency may seek to prevent disclosure of the data sets on which the AI was trained due to national security concerns. A litigator may have multiple grounds to challenge the admissibility of such evidence.

The above issues are covered in detail in the following chapters:

- Gerald Chan and Mabel Lai cover the twin topics of admission of algorithmically generated evidence and admission of human expert evidence about AI in Chapter 7, and
- Leah West delves into the issue of national security prosecutions in Chapter 8.

### C. AI as the Subject of a Lawsuit

AI is increasingly embedded in consumer products (making them “smart”).<sup>25</sup> These developments raise questions regarding the process for establishing tort and even criminal liability.

Imagine, for example, a client seeking to sue in tort for an accident caused by a self-driving car. Under what conditions do those injured in such a crash have a claim against the autonomous vehicle’s manufacturer and/or its software’s designers? Algorithms enabling autonomous driving will have explicit programming for what to do to avoid or limit damage in a collision. Does it matter to a claim if the offending vehicle was programmed to prioritize the safety of its own passengers at the expense of the other party in a collision scenario? These and other related questions are explored here.

This part of the book tells litigators how to navigate legal claims involving objects embedded with AI:

- Ren Bucholz and Andy Yu survey the law of torts and contracts in a discussion of AI and civil liability in Chapter 9;
- Jill Presser explores the domain of criminal liability, which carries the most severe penalties that can be levied for harms caused by AI products, in Chapter 10; and
- Christopher Nam of the Office of the Judge Advocate General examines issues pertaining to AI-embedded military weapons in Chapter 11.

---

25 Similarly, experimental projects seek to build AI into public spaces, such as Sidewalk Labs in Toronto. The Canadian Civil Liberties Association commenced legal proceedings against the project based on the theory that it constituted unlawful surveillance; see “CCLA Commences Proceedings Against Waterfront Toronto” (16 April 2019), online: *Canadian Civil Liberties Association* <<https://ccla.org/ccla-commences-proceedings-waterfront-toronto>>. Sidewalk Labs recently announced that it would not be proceeding with its smart city project at Waterfront Toronto; see Daniel L. Doctoroff, “Why We’re No Longer Pursuing the Quayside Project—And What’s Next for Sidewalk Labs,” *Medium* (7 May 2020), online: <<https://medium.com/sidewalk-talk/why-were-no-longer-pursuing-the-quayside-project-and-what-s-next-for-sidewalk-labs-9a61de3fee3a>>.

## D. AI-Enabled Litigation Tools

New AI tools are being developed for lawyers that can perform aspects of legal practice, such as document review, legal research and writing, negotiating settlements in the online dispute resolution (ODR) context, and predicting the outcomes of cases. Many law firms are procuring AI tools or developing them in-house. Lawyers who understand these tools will be able to innovate their practices and provide clients with a competitive edge.

Efficiencies gained from AI-powered litigation tools may eventually create new norms of professional conduct and responsibility. Courts may increasingly expect lawyers to use AI tools to assist in delivering high-quality, efficient, and cost-effective legal services.<sup>26</sup>

E-discovery tools have grown in sophistication, from keyword searching through gigabytes of data to connecting strings of emails and searching documents for concepts. Legal research tools by companies such as Casetext, ROSS Intelligence, and Doctrine are changing how firm resources are allocated.<sup>27</sup> ODR and AI are being used in various contexts today, and soon there will be more public and private examples of AI-powered ODR, such as software that facilitates negotiation. Finally, litigation outcome prediction software can provide a best guess about the outcome of a case by comparing the facts of that case against relevant precedent. The software's predictions can help the lawyer plan litigation strategies, fast-track settlement negotiations, and reduce the number of cases that go to trial.

The following chapters provide further discussion of the AI tools built for use in legal practice:

- Colin Stevenson and Jesse Beatson offer an overview of AI tools and the issues they raise for legal practitioners and their clients in Chapter 12;
- Maura Grossman and Gordon Cormack discuss e-discovery tools in Chapter 13;
- Carla Swansburg covers AI tools for legal research and brief-writing in Chapter 14;
- Chris Bentley describes the field of AI-empowered ODR in Chapter 15; and
- Anthony Niblett discusses predictive analytics tools that are used to forecast court outcomes in Chapter 16.

## V. Concluding Thoughts

Litigators will soon be tested on their AI proficiency. First, as AI-based adjudication is increasingly normalized, litigators will need to be able to seek disclosure of algorithms, challenge their operation, and pursue redress. Second, litigators and courts

<sup>26</sup> See *Cass v 1410088 Ontario Inc*, 2018 ONSC 6959.

<sup>27</sup> As this chapter was being finalized, ROSS Intelligence closed its operations due to its involvement in ongoing litigation.

will be faced with the challenge of distinguishing digitally doctored media and bona fide evidence in an era of deepfakes. Third, alleged harms caused by AI-embedded products will require novel, complex arguments to either launch or defend against civil and criminal liability claims. Fourth, as legal practices embrace AI tools, wielding these tools effectively will be a new factor for litigators in best serving their clients and gaining a competitive advantage.

Readers of *Litigating Artificial Intelligence* will benefit from the insights and perspectives of its contributors, which include a judge, an academic, a bar association past president, a former attorney general, a law commission lawyer, a Crown attorney, criminal defence counsel, and a legal tech company co-founder, among others. We curated these contributions to provide readers with a sense of fluency and sure-footedness in dealing with AI as it further disrupts law and society.

As Mireille Hildebrandt wrote, lawyers should “get [their] act together” when it comes to engaging with AI.<sup>28</sup> This effort will be crucial, she noted, for “democratic participation in law-making, contestability of legal effect and transparency of how citizens may be manipulated by the invisible computational backbone of our rapidly and radically changing world.”<sup>29</sup> The duty of legal practitioners is to protect clients’ rights and interests while safeguarding the integrity and underlying values of the legal process. Given the potential impact of AI on everyday life, there may be even wider responsibilities on lawyers in shaping the guardrails on AI.

The toolkit for effectively litigating AI will continue to develop over time. This book aims to provide readers with a crucial head start.

---

28 Mireille Hildebrandt, “Law as Information in the Era of Data-Driven Agency” (2016) 79:1 Mod L Rev 1 at 1, DOI: <[10.1111/1468-2230.12165](https://doi.org/10.1111/1468-2230.12165)>.

29 *Ibid* at 1-2.