

# OArb Enters the Age of Artificial Intelligence

By Amy Schmitz and Colin Rule

## Introduction

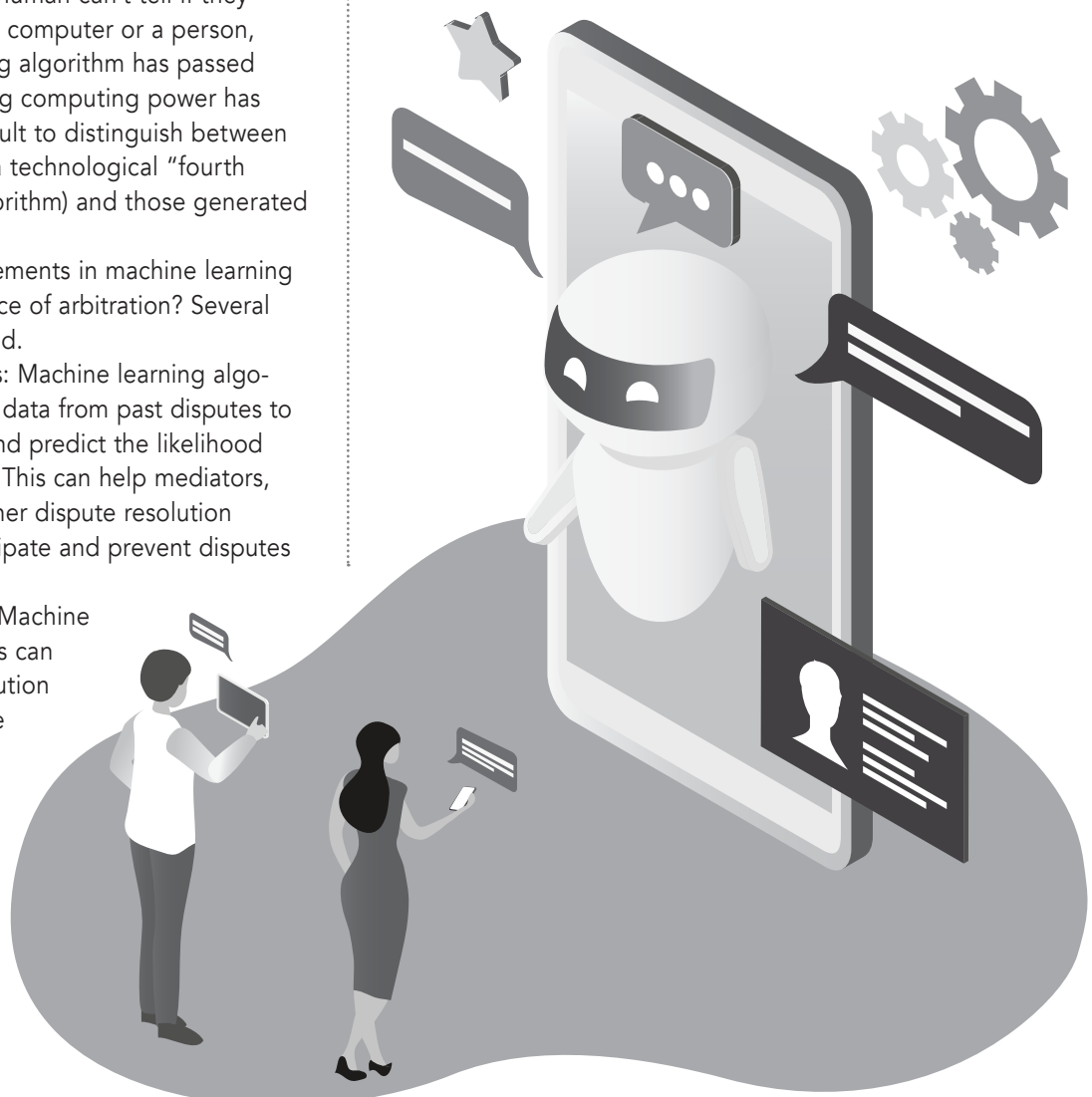
You may have heard of the Turing Test, devised by Alan Turing in 1950. The test focuses on “a machine’s ability to exhibit intelligent behavior equivalent to, or indistinguishable from, that of a human.”<sup>1</sup> In this test, a human interacts via text message with a computer running a machine learning algorithm. If the human can’t tell if they are communicating with a computer or a person, then that machine learning algorithm has passed the Turing Test. Expanding computing power has made it increasingly difficult to distinguish between responses generated by a technological “fourth party” (the computer algorithm) and those generated by a human third party.

What do these improvements in machine learning mean for the future practice of arbitration? Several opportunities jump to mind.

1. Predictive analytics: Machine learning algorithms can analyze data from past disputes to identify patterns and predict the likelihood of future disputes. This can help mediators, arbitrators, and other dispute resolution professionals anticipate and prevent disputes before they arise.
2. Decision support: Machine learning algorithms can help dispute resolution professionals make more informed decisions by providing them with insights and recommendations based on data analysis. For example, an algorithm could

analyze data from past disputes to identify common factors that led to successful resolutions and suggest strategies for resolving similar disputes in the future.

3. Automated dispute resolution: Machine learning algorithms can be used to automate certain aspects of the dispute resolution



process, such as document analysis and contract interpretation. This can help to speed up the process and reduce the workload for dispute resolution professionals.

4. Enhanced collaboration: Machine learning algorithms can facilitate collaboration between dispute resolution professionals by providing them with real-time data and analytics that can help them make more informed decisions.

Overall, the use of machine learning in dispute resolution has the potential to improve the efficiency and effectiveness of the process, helping to resolve disputes more quickly and accurately.<sup>2</sup>

Now consider that we didn't write the points above. Starting with "Predictive analytic" and ending with "resolve disputes more quickly and accurately," a new algorithm called ChatGPT<sup>3</sup> wrote that passage. We asked the algorithm to respond to the question, "how will machine learning change the practice of dispute resolution?" The response easily passes the Turing Test.

Similar machine-learning powered tools could conceivably be created and trained to consider the arguments of both parties to an arbitration and render a decision. They could provide responses around the clock, asking for only a penny's worth of energy as compensation, and they never need a break. Such tools will likely be imperfect and inaccurate at the beginning. However, they will continually learn and improve. With each case, they will become smarter, especially as the technologies they leverage become more powerful.

We have observed the development of artificial intelligence (AI) tools over the past twenty years, and for a long time, the hype outpaced the reality. But the equation has changed in the past year. Driven by rapid growth in computing power and storage capability, new AI tools are making the concept of "robot arbitrators" more of a reality. We now believe we will see AI-powered evaluative dispute

resolution processes emerge over the next three to five years (although they may be nonbinding at the start). Indeed, the interest in ChatGPT suggests that 2023 will be the breakthrough year for AI in dispute resolution.

## The Growth of OArb

During the past ten years, we have seen a steady expansion in online arbitration (or as Amy first labeled it in 2010, "OArb"<sup>4</sup>). In general, arbitration clauses have become the norm, not only in commercial business-to-business contracts, but also in business-to-consumer, employment, and even cryptocurrency contracts.

Arbitration makes sense in many technical areas that require expert arbitrators. Further, at the international level, arbitration provides a neutral forum and enforceable awards under the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York Convention), both significant benefits. Additionally, in the US, courts usually enforce arbitration clauses under the Federal Arbitration Act (FAA), along with efficiency-focused arbitration and contract jurisprudence. This is true if arbitration clauses are included in e-contracts per the Electronic Signature Act (ESign).

Building on these benefits of arbitration generally, OArb adds the use of technology to promote efficient and flexible dispute resolution that ends in a final determination of a dispute by a neutral third party. For example, OArb may use asynchronous and/or synchronous communications. It also may involve text-only or virtual hearings, or a mixture of both. OArb's use of technology allows parties to upload and submit supporting documentation to support their claims. Online hearings save time and cost, and they eliminate the stress of traveling to and attending in-person sessions. OArb systems may even provide more accurate and complete redress for consumers than class actions, which have been criticized for providing insufficient and inequitably distributed relief



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in some cases. OArb may also incorporate new and emerging technologies, such as blockchain and smart contracts for enforcement, predictive analytics to aid decision-making, and virtual reality, which expands voice while avoiding violence.

OArb is a distinct subset of online dispute resolution (ODR) more generally because it culminates in a final award rendered by a third-party neutral under the FAA and the New York Convention. Moreover, use of OArb has spiked during the COVID-19 pandemic. Online meeting technologies such as Zoom, Skype, Google Meet, WebEx, and Teams have made virtual hearings relatively cheap and easy. Further, during the COVID-19 lockdown, individuals became accustomed to online communications. Even in large-dollar claims, such as international construction deals, COVID-19 prompted parties to arbitrate online. Parties had grown eager to resolve their disputes, and arbitrators began ordering virtual arbitration, even over parties' objections. Even after the end of COVID-19 lockdowns, parties have increasingly embraced virtual platforms as their best, safest, and most convenient means for

moving forward. OArb has become the new normal in many contexts.

### Opportunities for AI in OArb

The idea of AI arbitrators continues to loom large. What if we could use an AI arbitrator instead of an arbitrator who bills \$400 per hour and requires many hours to sift through legal briefs and supporting documentation? What if AI could more effectively review documents and render decisions than a human arbitrator? Does that mean arbitrators will become useless? This concern is not unique to arbitrators, of course; other practitioners in well-paid professions, like finance and medicine, express similar fears.

And the logical next question is this: if AI does in fact replace human arbitrators, who will ensure that the people programming the AI are not putting their fingers on the scale? As a profession, we have devoted significant time and energy to developing ethical rules for arbitrators, and we have systems in place to ensure that human arbitrators play by those rules. It is much harder to look into the "eyes" of an AI robot (webcams?) to evaluate whether it plans to respect rules around confidentiality, neutrality, and privacy.

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ODR scholarship has largely eschewed the language of AI to describe the roles technology can play in the arbitration process, perhaps for the reasons described above. Most ODR theory has instead embraced the concept of the “fourth party.” In this paradigm, the disputants are party one and party two, the arbitrator is party three, and technology (in all its forms) is party four. This conceptualization emphasizes the collaboration between human neutrals and technology; some tasks the third party performs best and some tasks the fourth party performs best. The primary question instead becomes how to optimize the partnership to achieve our shared objective: fairly resolving the dispute at hand.

We have nonetheless stalled in this partnership. Machine learning in arbitration has great potential and could make the fourth party smarter. We believe 2023 will be the year of expanding the role of the fourth party in OArb. Through this partnership, humans can benefit from natural language processing, predictive analytics, document analysis, agreement technologies, and the like. As computer processors become more powerful and can store an increasing amount of information, the power of machine learning will continue to grow.

## Conclusion

Of course, we must guard due process and consider the finality of OArb in using these technological tools. Arbitration, again, is unique due to its finality. At this stage, we need a “human in the loop” to safeguard fairness, empathy, and other human aspects of dispute resolution. Human experience, sensitivity, and proclivity for flexibility still bring value to the OArb table.

For this and other reasons, arbitrators should not fear technological developments. While the disruptions AI introduces present risks, they also present opportunities. AI and machine learning are just tools, and as with all tools, we need to set rules and guidelines to minimize the risk of harm. We must

ensure that the fourth parties we work with are under human control, that AI tools are constantly reviewed and reviewable, and that all software is transparently monitored to ensure its compliance with the ethical guidelines that govern our field.

Used correctly, these tools will expand the reach of arbitration into dispute types and geographies that were previously unserved. This could result in significantly expanded access to justice around the world, including enhanced fairness and justice for more people. Many questions still need to be answered, and many best practices and ethical rules are yet to be devised. But the promise outweighs the pitfalls. We should work together to develop optimal machine learning mechanisms that, acting as fourth party partners, can best assist us achieve fair resolutions for parties. ■

## Endnotes

- 1 Encyclopedia Britannica, *Turing Test* (January 31, 2023), <https://www.britannica.com/technology/Turing-test>.
- 2 Amy J. Schmitz and John Zeleznikow, *Intelligent Legal Tech to Empower Self-Represented Litigants*, 23 *Columbia Sci. and Tech. L. Rev.* 142-190 (2022).
- 3 Open AI, *Chat GPT: Optimizing Language Models for Dialogue* (January 31, 2023), <https://openai.com/blog/chatgpt/>.
- 4 Amy J. Schmitz, “Drive-Thru” *Arbitration in the Digital Age: Empowering Consumers through Regulated ODR*, 62 *Baylor L. Rev.* 178-244 (2010).



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