Authenticity in Courts: Deepfakes and AI-Driven Legal Analysis

AI is colliding with the justice system in profound ways. A recent Northwestern-led convening of judges, lawyers, scholars, and technologists explored how courts can responsibly harness AI's promise while guarding against its perils.

POTENTIAL BENEFITS OF AI FOR LAW THREATENED BY RISKS, PERCEIVED AND REAL

Artificial intelligence (AI) holds great promise for assisting individuals, lawyers, and judges to improve legal services, legal systems, and the rule of law. But courts across the world are increasingly concerned about AI-generated content, including hallucinated legal citations submitted in briefs and manipulated audio or video submitted as evidence, that challenge traditional notions of authenticity and threaten legal standards for evidence. Deepfakes (synthetic media where a person or object in an image, video, or audio segment is effectively swapped with another's likeness using AI) and other AI-generated evidence in courts pose significant challenges for judges in determining its authenticity, validity, and reliability.

Alongside AI-generated briefs and evidence, courts are grappling with questions about AI's role in the judiciary more broadly. Guidance on when it is appropriate and ethical to utilize AI tools is heavily debated within the legal community, with some states allowing judges full discretion over how to use AI tools and other states cautioning that judges should only use AI for narrow purposes.

AUTHENTICITY IN COURTS: DEEPFAKES AND AI-DRIVEN LEGAL ANALYSIS

AI technologies are transforming nearly every sector of society—and the courts are no exception. In July 2025, Northwestern University professors V.S. Subrahmanian, Walter P. Murphy Professor of Computer Science at the McCormick School of Engineering and Faculty Fellow at the Roberta Buffett Institute for Global Affairs, and Daniel Linna, Senior Lecturer and Director of Law & Technology Initiatives at the Pritzker School of Law and McCormick School of Engineering, convened an invite-only discussion on deepfakes and the use of AI by judges and others in court systems.

The convening brought together approximately thirty federal and state judges, court administrators, legal practitioners, and scholars to explore how AI tools may reshape the administration of justice. At the center of the discussion were two urgent questions: (1) How can courts harness AI to expand access to justice and improve the efficiency and quality of outputs and outcomes? (2) How should courts confront the rising threat of deepfakes and other AI-generated evidence?

AI IN THE COURTS: PROMISE AND PERIL

Judges and practitioners emphasized both the transformative potential of AI and the serious risks it poses. Some participants described how AI-powered tools could help self-represented litigants navigate complex procedures—comparing emerging tools to "TurboTax for legal processes." Others warned of risks when these tools provide inaccurate, misleading, or dehumanizing guidance.

Judges and practitioners discussed the benefits and risks of lawyers and self-represented litigants using AI to draft legal filings. In some

cases, AI helps self-represented litigants improve what they would have submitted alone, helping judges understand their claims and their requested relief. In other cases, AI leads to self-represented litigants filing more and longer documents with numerous citations to irrelevant (or sometimes nonexistent) law and cases, creating burdens on judicial time. "If one litigant consumes more than their share of our time, justice for others suffers," one judge noted. Another suggested that this illustrates why judges and courts will need to use AI themselves.

Participants asked: How can AI tools be designed to enhance accuracy, fairness, and human dignity? How can courts balance efficiency with safeguards against bias and error? Are standing orders requiring disclosure of AI use helpful, or do they unnecessarily stifle innovation? What AI tools should judges and courts use? What training, staffing, and budgets do courts need in an AI-infused world?

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Participants also raised questions of judicial ethics and process. Some judges discussed their use of AI for legal research, drafting routine orders as well as summarizing and extracting information from voluminous evidence. Others asked whether and how judges could ethically use generative AI to draft opinions. Some noted that "writing is thinking"—and that outsourcing this process could undermine deliberation. Others saw potential in AI as a "pure writing tool," capable of improving clarity without replacing judicial reasoning.

Daniel Linna presented research on evaluating the quality of legal work product and guidance produced by AI, including controlled experiments demonstrating how conversational AI tools can be designed to provide reliable, trustworthy guidance to individuals. Linna discussed how legal knowledge representation, retrieval augmented generation (RAG), machine learning, and traditional AI approaches are helping legal-domain-specific AI systems produce valid, reliable outputs. Domain-specific legal tools have access to the cases, laws, and secondary sources needed for legal tasks and they have user interfaces that facilitate the verification of information in outputs. Consumer tools, on the other hand, lack important sources and are not designed for legal workflows, increasing the risk of "hallucinations" and other errors.

Daniel Linna introduces his presentation "AI Use by Litigants, Lawyers, and Courts: Benefits and Risks to Access and Rule of Law."

DEEPFAKES AND THE CHALLENGE OF AUTHENTIC EVIDENCE

V.S. Subrahmanian presented research on the detection of deepfakes, highlighting findings from the Global Online Deepfake Detection System (GODDS), launched in 2024 by Subrahmanian's Northwestern Security & AI Lab (NSAIL). While GODDS has supported journalists worldwide through its combination of technological and human analysis, most technology-based deepfake detectors—particularly for

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video—remain unreliable. Audio detectors show more promise, but malign actors are evolving rapidly, injecting "noise" to evade detection.

The implications for courts are profound. Participants considered scenarios ranging from fabricated videos of domestic violence to disputed digital signatures and documents. Judges stressed that they should not be responsible for detecting deepfakes themselves, asking instead: What processes and rules of evidence can ensure authenticity? Subrahmanian and Linna, with co-authors who are judges, have written about how judges can proactively manage cases involving AI-generated material. They continue to do research on these topics.

V.S. Subrahmanian introduces his presentation "Deepfakes: Generation, Detection, and a Legal Incident."

WHAT'S NEXT: TOWARD POLICY, TOOLS, AND GUARDRAILS

The convening closed with momentum to pursue new collaborations across law, technology, and policy. Participants proposed joint projects ranging from surveys of judges' experiences with AI, to benchmarking legal AI-research platforms, to policy briefs on funding and staffing needs. Many emphasized that education is key. "Across the world and disciplines, we need education on AI," one judge remarked.

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The event underscored that courts face both existential challenges and transformative opportunities in the age of AI. While generative technologies may help expand access to justice, they also risk overwhelming already strained systems and eroding trust in evidence. To move forward responsibly, participants stressed, courts must invest in research, training, and policy guardrails—ensuring that AI serves the rule of law rather than undermining it.

(from left to right) Northwestern University postdoctoral researcher Marco Postiglione, law student research assistant Camden Lee, undergraduate research assistant Shraeya Iyer, Buffett Undergraduate Research Fellow Isabel Gortner, and law student research assistant Siyu Tao discuss insights from the convening.