

Study says blockchain could help combat AI misinformation

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Two Master of Accounting students in the UO's Lundquist College of Business are shaking up the academic publishing world with a new paper on a timely topic: artificial intelligence and blockchain.

Jordan Brewer and Dhru Patel are interested in the intersection of accounting technology and how blockchain could help address some of the more concerning areas of AI.

The [article](#) "Navigating the challenges of generative technologies: Proposing the integration of [artificial intelligence](#) and blockchain," is scheduled for publication in the journal *Business Horizons* and is co-authored with Alex Murray, an assistant professor of management and adviser to the student club Oregon Blockchain Group, along with Dennie Kim at the Darden School of Business at the University of Virginia.

It's relatively rare even for doctoral students to co-publish [research papers](#) with a faculty mentor, and it's almost unheard of for students at the master's level to publish, let alone on their first try and with no revisions requested.

In fact, the article is being fast-tracked for publication because it addresses the modern topic of misinformation distribution, including deepfake videos, pictures and text, Murray said.

In their paper, Dhru, Brewer, Murray and Kim propose a responsibility and transparency-centered solution involving blockchain, the online ledger system used for cryptocurrency and other transactions. Specifically, the authors describe how integrating blockchain ledgers into AI addresses several of its current challenges, including "hallucinations" linked to biases and hate speech.

Their proposed solution would help ensure [factual information](#) and accountability to help prevent misuse.

"In the absence of meaningful regulations on AI, we suggest ways in which a technological infrastructure built on blockchain can mitigate the detrimental effects of AI," Murray said.

In other words, integrating blockchain technology into AI enhances reliability and accountability, all while keeping people's data private, Patel explained.

Brewer and Patel are members of the Oregon Blockchain Group, which was formed to educate and empower on blockchain and other cutting-edge technologies. Patel serves as executive adviser, and Brewer is director of venture capital.

Both are on track to graduate this June with jobs lined up at public accounting firms. Jordan is headed to Morgan Stanley in New York, and Dhru will join PWC in San Francisco.

Patel said he has been involved in the technology for some time. He was particularly interested in how integrating blockchain could positively change the culture aspect of the world-changing technology of AI.

Brewer said the project has only accelerated his interest in the topic.

"I plan to continue to write and keep these topics top of mind in the accounting industry," he said. "I'm interested in how research could turn toward enhancing human productivity rather than replacing it, and how we can make gains in our output as a society. Maybe the United States could earn enough GDP to erase our debt. If anything can enhance productivity to that level, I think it will be AI."

Up next for the Lundquist College team is additional research, following up on things they learned from the current project. Patel said the research raised several issues that can be pursued further.

One topic they want to delve into is how AI tools are being used and influenced by major industry players, while the public is still struggling just to get an even footing in the fast-moving AI world.

"Collective organization could overpower corporations," Patel said. "We are looking into creating incentive structures around that."

In the end, Murray said AI has the power to restructure the ways people interact as a society, positively and negatively. "Through a techno-deterministic lens, we won't love the outcomes given how the tech has advanced so far," Murray said. "Left on the current path—without the transparency, verifiability and decentralization of [blockchain](#)—AI will likely be used to automate and surveil, particularly by unscrupulous governments and organizations."

More information: Jordan Brewer et al, Navigating the challenges of generative technologies: Proposing the integration of artificial intelligence and blockchain, *Business Horizons* (2024). [DOI: 10.1016/j.bushor.2024.04.011](#)

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