DEEP MEDIA

Detecting deepfakes: A force multiplier for analysts

Generative AI is speeding the manipulation of online media, but modern tools separate fact from fiction

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Open-source intelligence has changed dramatically in the past 10 or 20 years. A vast amount of content is being posted on popular platforms such as TikTok, Instagram and X, as well as others that the average person doesn't hear about. U.S. government leaders need data to make effective decisions, and that data exists in the open-source space.

However, finding the right information is the classic needle-in-a-haystack problem. In the past, traditional OSINT tools have simply surfaced data to analysts and other users, but the best modern tools analyze that data as a pre-processing step.

At Deep Media, we work with various partners to help us integrate our work into other OSINT platforms, and we use artificial intelligence to find the needle in the haystack. We take the 100 million videos, images and audio posted every day and winnow them down to the hundred pieces of media that matter for the individual analyst who is concerned about a specific person in a specific nation-state doing a specific thing.

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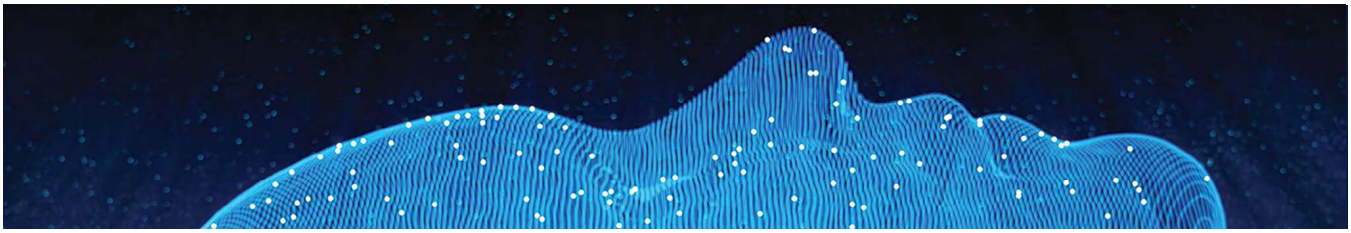
The changing nature of disinformation

The truth is critically important for making effective decisions, but deepfakes and other unethical uses of generative AI disrupt the truth, which represents a systemic risk to the United States military and other government agencies.

Under certain circumstances, as much as 10% of those 100 million videos, images and audio posted daily have some type of AI manipulation. That has grown from just 1% a year ago. We believe that by 2027, as much as 50% of the media posted on the internet will have some type of AI manipulation.

Deepfakes affect military operations and geopolitical relationships. Our adversaries are learning that they can't beat the U.S. on bombs, bullets and personnel, but if they start manipulating information about our economy or elections, they can create internal discord.

The nature of disinformation has changed significantly because of generative AI's accessibility and ease of use. Previously, if someone wanted to create a fake image or video, it cost tens of thousands or even hundreds of thousands of dollars, and it took a long time. People can now create extremely realistic images and videos with a modern app like Kling or Luma and do it for free.



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Promoting the ethical use of AI

At Deep Media, we work tirelessly to make sure the cutting-edge AI models we use to detect media manipulations are as accurate as possible. Such technology will never be 100% accurate because that's not how this works, but we regularly achieve more than 95% accuracy on identifying the use of generative AI in images, audio and videos. That alone is a force multiplier for analysts.

But it's not just about what's real or fake. It's about the potential impact of disinformation. That's why we tell analysts about the harms that a piece of media could have or how it will affect their ability to understand the data and make effective decisions.

Ensuring the ethical use of AI is a complex challenge that can't be resolved by one organization, so we're doing our best to build a community to address it. We are proud partners with the National Institute of Standards and Technology and the Defense Advanced Research Projects Agency's AI Forward initiative. We also work with academia, including SRI International, Purdue University and the University at Buffalo.

When industry, government and academia work together, we can build tools that enable analysts to make the most of OSINT while promoting the ethical use of AI. ■

Rijul Gupta is founder and CEO of Deep Media.