

PROTECTING GOD'S CHILDREN
Vol. 23 No. 9 (September 2024)
Artificial Intelligence - Deepfakes and Child Abusers
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Introduction

Law enforcement has established that preferential-type child abusers, and sometimes situational-type child abusers, almost always maintain a "collection." Those collections generally consist of pornography, child pornography (better known as child sexual abuse materials, or CSAM), and "trophies," or "souvenirs" of the sexual abuse of a child.

Abusers, while perusing their collections, will often manipulate some of the photos or images of children for their own sexual purposes. Sadly, the abuser manipulation or editing of images of children has increasingly become more problematic with the use of technology. In fact, this abuse changed dramatically in 2023/2024 with the use of artificial intelligence, or what is commonly known as "AI."



Background

Child abusers manipulating the images of children in their collections is not a new phenomenon. One early technique was the "cut and paste" method. With scissors, the abuser would cut a child's face or particular body part from a photograph. The clipping would then be pasted onto another photograph, which created a sexually suggestive depiction.

Another image manipulation technique involved child abusers filming videos of themselves in sexually suggestive poses or during a self-sexual activity. The molesters would then edit and combine the suggestive video of themselves into a second video with children, which essentially resulted in a video depicting child sexual abuse.

Additional image manipulation techniques were developed as an unintended consequence of the Internet and social media. By way of example, for many years, parents should be aware of the danger of posting innocent images of their children on social media. During the COVID-19 pandemic, the term "sharenting" was dubbed to describe parents who "over-share" and frequently post numerous images and videos of their children's lives and interactions online. Unfortunately, child abusers troll social media, and the Internet in general, looking for images of children to capture and modify into something lewd and pornographic.

Artificial intelligence

Artificial intelligence, or AI, is technology that enables computers and machines to simulate human intelligence and problem-solving capabilities. AI can perform tasks that would otherwise require human intelligence or intervention.¹

The Logic Theorist was a program funded by Research and Development (RAND) Corporation, and initially designed to mimic the problem-solving skills of a human. It is considered by many to be the first artificial intelligence program and was presented in 1956 at the Dartmouth Summer Research Project on Artificial Intelligence (DSRP AI), which was hosted by John McCarthy and Marvin Minsky. In this historic conference, McCarthy, imagining a great collaborative effort, brought together top researchers from various fields for an open-ended discussion on artificial intelligence, the term which he coined at the very event.²

From 1957 to the 1980's, AI continued to grow and flourish. Computers could store larger amounts of information and became faster, cheaper, and more accessible. Machine learning algorithms also improved, and people got better at knowing which algorithm to apply to their problem. Today we live in the era of "big data," an age in which we have the capacity to collect and sift through huge quantities of information too cumbersome for a person to process. Digital assistants, GPS guidance, autonomous vehicles, and generative AI tools, like Open AI's Chat GPT, are just a few examples of the AI that is exploding in world news, business and in our daily lives.

Of course, people with inappropriate, unsafe or abusive intentions are also taking advantage of the exploding AI technology. This was seen recently in January 2024, when innocent images taken of Taylor Swift were manipulated using an AI tool into "deepfake" sexually explicit content and were then posted online, and viewed over 45 million times before they were taken down. In this same way, new AI technology has become more accessible and made it easier for child abusers to create and share explicit images of children.

AI - Deepfakes and child abusers

A deepfake is an artificial image or video (or a series of images) generated by a special kind of machine learning called "deep" learning, hence the name, "deepfake."³ This is much different than the use of apps like Photoshop, Face swap, Snapchat, etc., some of which are designed for amusement and clearly fake. Deepfakes are far more dangerous, as the application of deep learning that is used to produce the false image creates an environment in which humans frequently cannot discern whether the images or videos are real or fake.

Today child abusers are increasingly using publicly-available AI platforms to create and then distribute deepfake CSAM, which is criminally referred to as child pornography. For instance, in May 2024, the FBI arrested a Wisconsin man for creating and distributing approximately 13,000 "hyper-realistic images of nude and semi-clothed prepubescent children," several of whom were involved in sexually explicit conduct. Evidence from the Wisconsin man's laptop allegedly showed he used a popular "Stable Diffusion" AI model, first released in 2022, which turns text descriptions into photo-realistic images. This is only one example of many.

According to a U.S Department of Homeland Security publication, AI allows for the creation of CSAM in a variety of ways:

- Abusers can use AI to take an image of a child and make it appear as though the child is nude or the child is engaged in sexual acts.
- Abusers can use AI to create an image of a child being sexually abused via text prompts.
- Abusers can use AI to teach other abusers how to engage with children online (i.e., grooming).
- Abusers can re-victimize CSAM victims repeatedly, by using AI to edit previously created and shared CSAM to create new CSAM.

Conclusion

Over the years, law enforcement has repeatedly found that child abusers are on the cutting edge of technology and use that technology for the sexual exploitation of children. If you become aware of any sexually explicit images or videos, please contact the National Center for Missing and Exploited Children's Cyber Tipline at <https://report.cybertip.org/>. You can also contact law enforcement.

Editor's Note:

VIRTUS offers these additional tips to combat the very real issue of deep-fake and exploitive use of child images:

- If you encounter deepfake images of children, youth, or people who appear to be minors (or if you suspect child sexual exploitation), make a report to Report.CyberTip.org (<https://report.cybertip.org/>) or call the National Center for Missing & Exploited Children (NCMEC) at 1-800-843-5678. These reports are reviewed and routed to the law enforcement agency who can best handle them. You do not need to share your name or contact information to make a report. They can also connect you with resources for victims and their families.
- To cut down on the available material that can be exploited and collected by others, limit or eliminate your own innocent sharing of images of children in your care. This should be considered even when you have the maximum security settings applied to your social media or sharing accounts-as people are often exploited through the people they know or with whom they are connected.
- Inform yourself of the Internet Watch Foundation's "Think before you share" campaign and facilitate open, healthy communication with the children and youth in your care. The underlying concepts of the campaign help to raise awareness of the risks of sharing unsafe content and to encourage thoughtful decision making, which is increasingly helpful as children become more autonomous as they grow.
<https://www.iwf.org.uk/about-us/our-campaigns/think-before-you-share/>
- If children have shared or posted explicit content, help them to know that there is hope, and that not all is lost. As part of your proactive conversations, tell them about this tool-ideally before they encounter problems:
<https://takeitdown.ncmec.org/>

References

- 1 IBM.com, Think 2024, Artificial Intelligence
- 2 Harvard Graduate School of Arts and Science, Blog, Special edition on Artificial Intelligence, August 28, 2017, Rockwell Anyoha
- 3 University of Virginia, UVA Information Security Services, What the Heck is a Deep Fake, 2024