## Deepfake - Images

4 min

While Photoshop has been around for much of the internet, there were always limitations. Photo editing software is complex and requires in-depth knowledge of the software and related concepts such as color theory, shading, and perspective. Because of this, fake content creation was possible but generally time-consuming. Of course, as with many things, AI has come in to reduce limitations previously in place.

How these models work is, in many ways, similar to how deepfake video is created. While various training models and algorithms are available, many deepfake image generation tools leverage a generative adversarial network model. As with the video generation process, two separate models compete against one another. One generates images, and another attempts to identify the generated images from fake images.

Given this technology's vast <u>array</u> of potential use cases, fraudsters and criminals have quickly adopted it. Leveraging deepfake images, they have been able to create images designed to mimic real people, create fake documents, and generate content to support their fraudulent pursuits further.

Despite how far this technology has come, there are imperfections, many of which are recognizable by the average person. And while AI models improve each day, some of their content may still be off.

Let's practice identifying actual people in a set of images. On the right, we have three rows of several images in the browser. In each row, there is an image of a real person. The rest are generated deepfakes of people who don't exist. Select the image and submit the image of the actual person in each row of images.

## **Hints When Identifying Deepfakes:**

When it comes to identifying these deepfakes, there are several key features we can look for:

- A lack of symmetry in accessories such as glasses, earrings, etc.
- Hair may look unnatural. It may be too straight, end abruptly, or shine unnaturally.
- Teeth and other facial features may seem poorly positioned, missing, or modified unnaturally.
- The backgrounds of these images may appear distorted and off.

## Select the AI Created People



