Verifying Images and Videos

In this lesson we will go over:

What to look for when verifying images and videos.

Reverse image search and detecting GAN-generated images.

Video search and analysis using InVid/WeVerify.

Shallowfakes vs deepfakes and verification approaches.

What to look for in images and videos

Know the weather.

Are there any street names? Logos? Car plates? Transit?

Are there any landmarks in the image like buildings, bridges, statues, mountains?

Does the fake or speech contain unusual patterns? Does something seem off?

Use Google Street View to familiarize yourself with a location.

Let's look at context clues examples

Reverse image search

Isolate the image: **right click > open image in a new tab**

Each search engine has different results. Comparison chart by DomainTools.

	Elements Identified	Faces	Structures	Places	Digital/ Logos	Alternate Sizes	Flipped or Altered
Google	1	Neutral	Great	Great	Great	Good	Neutral
Yandex	2+	Great	Great	Great	Good	Good	Good
Bing	3+	Good	Good	Good	Good	Neutral	Great
TinEye	1	Neutral	Neutral	Neutral	Great	Great	Good

Demo: bit.ly/search-engines-comp

GAN images

What to look for:
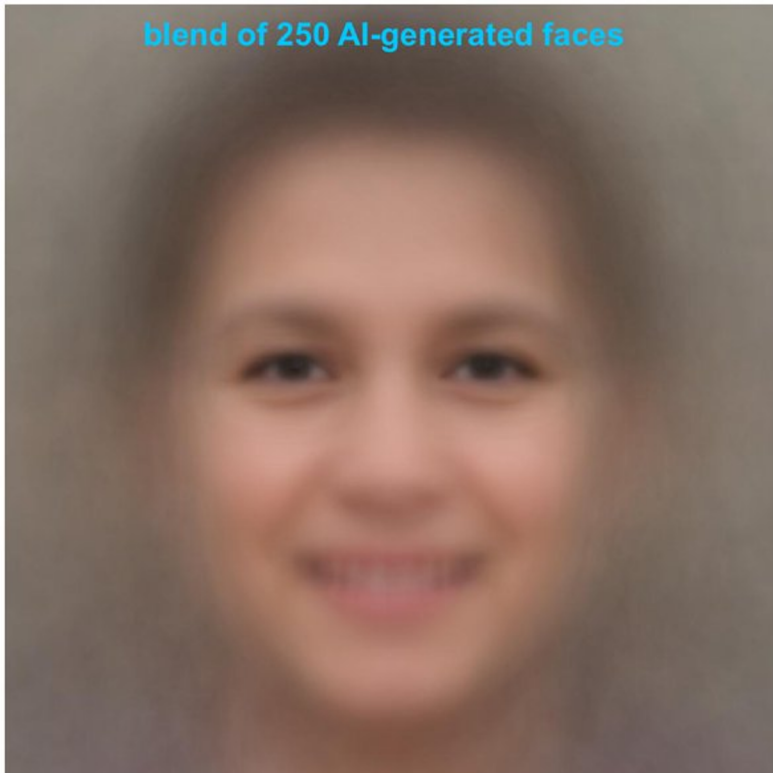
Bleed on hair, ear lobes.

Small details like teeth, eyebrows, hairlines.
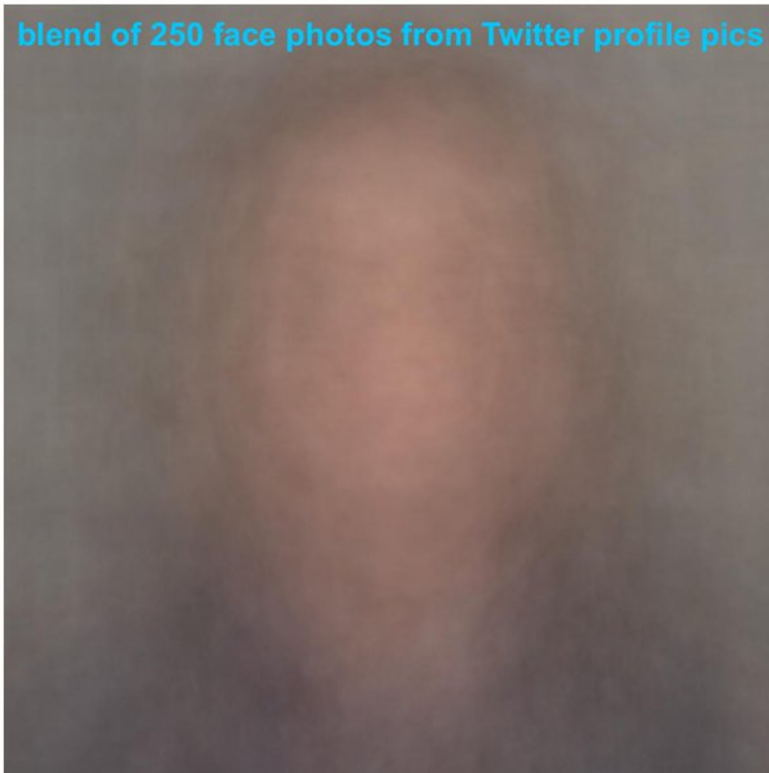
Symmetric detail like glasses, earrings, etc.

Background issues.

One more tip [via @conspirator0](#)

blend of 250 AI-generated faces

blend of 250 face photos from Twitter profile pics

Train yourself: whichfaceisreal.com

Video search

It's always tricky. Our best tool? The **WeVerify** toolkit.

Download here: **bit.ly/video-ext**

Also open video: **bit.ly/invid-ex1**

And this image: **bit.ly/invid-ex2**

Ok, let's take a look.

Shallowfakes/Cheapfakes

Unsophisticated manipulated videos. This can include audio change, slowing a video down, or substituting in another image.

Let's look at an example: **bit.ly/shallowfake-ex**

Deepfakes

Most deepfakes are not used for political purposes. Instead, they're used to target women with online harassment or for satire.

Let's look at the few examples we've seen to know what to look for:

Example one: **bit.ly/deepfakes-trump**

Example two: **bit.ly/deepfakes-gambia**

Final notes

Try different approaches to the same problem.

Look for telling details in faces and surroundings.

Find context through targeted Facebook or Twitter searches.

Remember: Always archive your evidence. Save videos in a separate folder on your computer to avoid archiving errors.