

MISINFORMATION: DEEPPFAKE AND CHEAPFAKE

Workshop created by Yusuf Ganyana (twitter.com/flesymz) for DiGITAL YOU 2022 (#DigitalYou)

Time: 90 minutes

Essential question

How can you tell if a video is real or not?

Established Goal

In this session, participants will learn how evolving technologies can be used to aid in creating deceptive media with the intent to harm people and spread misinformation.

Learning Outcomes

By the end of the lesson, participants will be able to:

- Learn about deep fake and cheap fake
- Learn how and why they are made
- Stay vigilant against misinformation.

Training Session Materials:

- Projector and presentation slides
- Handouts of presentation in case there is no projector
- Copies of workshop schedule
- Copies of handouts and instructions for activities
- Stationery: posters, markers, pens, notepads, sticky notes
- Copy of attendance sheet
- Copies of photo consent form
- Copies of evaluation/survey form

LEARNING OVERVIEW

The technological advancement has resulted in amazing and simple-to-use solutions; anyone with a basic smartphone can easily become a content creator.

Some digital citizens, on the other hand, may abuse the same technology for a variety of reasons, including misinformation. To put this in context, 96% of deepfakes are pornographic as well as targeting and abusing women; the information apocalypse has already begun, and we must learn to navigate it.

As a result, the workshop was developed to assist learners in identifying such devious ploys by asking questions and verifying details before jumping into conclusions.

This workshop was inspired by the Digital Enquirer kit. Please visit [this page](#) to learn more about it.

Workshop type: Offline



FACILITATION NOTES

🕒 INTRODUCTION - 10 minutes

- The host explains housekeeping rules such as:
 - Location of bathrooms
 - Use of cellphones
 - Photo consent,
 - Signing the attendance sheet
 - Share the workshop schedule
- Host to welcome the facilitator(s)
- The facilitator(s) to introduced themselves, give a brief overview of the workshop i.e. title, objectives, and expected outcomes.
- Facilitator(s) should solicit participant expectations and adjust the lesson accordingly.
- Facilitator(s) to give a brief overview of Tactical Tech and the GOETHE INSTITUT.

🕒 ICEBREAKER - 5 minutes

[NOTE] You can use the sample icebreaker below or any other icebreaker that you are comfortable with and that the participants can relate to.

[INVITE] Each participant to introduce themselves and explain whom and why they would wish their face to be swapped with in a deepfake app. It could be a celebrity, a politician, a cartoon character, or anything else.

– MAIN LESSON –

🕒 60 minutes

Note: To get them to relate, show them a deepfake video

DISCUSS

MISINFORMATION: DEEPAKE AND CHEAPEAKE

Workshop created by Yusuf Ganyana (twitter.com/flesymz) for DiGITAL YOU 2022 (#DigitalYou)

[ASK] Have you ever been in a situation where a video or picture purporting to be yours was trending for whatever reasons, or do you know someone who has? For example, a video of you throwing stones at police officers or shouting expletives during a protest?

Share this video: [It's Getting Harder to Spot a Deep Fake Video](#)

[ENCOURAGE] participants to share their experiences, how it made them feel, and what their personal thoughts are on misinformation.

[REMEMBER] Pause periodically to make sure the concept is understood

[ASK] *What are deepfake and cheap fake, and how are they different?*

Response sample

Because of fake news, determining what is real has become increasingly difficult. Both deepfakes and cheap fakes are manipulated videos and images that portray their targets saying and doing things they did not do. However, deepfakes use sophisticated artificial intelligence to alter videos in such a way that fools' viewers and gains a lot of traction through social media, whereas cheap fakes are produced using more accessible and inexpensive technology. Due to this, cheap fakes are more common than deepfakes.

[INVITE] participants to share stories that they believe will have a direct impact on them. For example, have them imagine themselves in a video campaigning for a politician whose ideologies they criticize.

[EMPHASIZE] The Deepfakes technology in particular, has the potential to cause chaos and uncertainty if it is used maliciously by individuals seeking to harm others or spread false information online. They only need your existing photo or video; **[ADVISE]** them to be cautious about what they upload, as it may aid in the creation of false content, and they may end up appearing in pornography or videos that contradict their beliefs.

[PAUSE] Questions?

[ASK] *How are deepfake and cheap fake created?*

Activity

Place the statements below under the appropriate banner.

1. Create realistic-looking fake videos with **AI algorithms**.
2. **Algorithms** capable of producing content based on data input
3. Face swapping in **Photoshop** to replace a portion of a face

MISINFORMATION: DEEPPFAKE AND CHEAPFAKE

Workshop created by Yusuf Ganyana (twitter.com/flesymz) for DiGITAL YOU 2022 (#DigitalYou)

4. Manipulates video **emotions** to generate false content
5. Manipulating content by **speeding** and **slowing** a video or audio

MISINFORMATION: DEEPPFAKE AND CHEAPFAKE

Workshop created by Yusuf Ganyana (twitter.com/flesymz) for DiGITAL YOU 2022 (#DigitalYou)

<i>Deepfake</i>	<i>Cheap fake</i>

Deepfakes are created by generating visually and audibly deceptive content with powerful machine learning algorithms and artificial intelligence techniques, whereas cheap fakes are created with easily accessible and low-cost technology.

[INVITE] participants to watch the videos below.

1. [David Beckham speaks nine languages to launch Malaria Must Die Voice Petition](#)
2. [How we made David Beckham speak 9 languages](#)

[EMPHASIZE] Not every media that appears to be potentially fraudulent is a deepfake/cheap fake.

[PAUSE] Questions?

[ASK] *Where and why is Deepfake/Cheap fake used?*

[POINT OUT]

- Gained popularity by inserting famous actresses into pornographic scenes
- They have evolved into those that harm our girls'/women's reputations aka misinform.
- A hacker can use malware embedded in an enticing deepfake video to launch a phishing attack.
- Deepfake is said to be the future of content creation.

Sample Examples

1. Movies/Acting/Art - Create realistic videos with fictional characters.
2. Blackmail - falsely incriminate a victim
3. Politics - Reputation smearing/ Election manipulation
4. Social media – e.g. Face swapping in snapchat
5. Financial fraud - extortion
6. Social-engineering to steal personal data
7. Phishing scams

[EMPHASIZE] the magnitude of harm done to the victims (mostly women.) Describe how a funny video might be entertaining, but it can destroy a victim's life, which unfortunately cannot be remedied by apologies and will live on the internet forever.

MISINFORMATION: DEEPPFAKE AND CHEAPFAKE

Workshop created by Yusuf Ganyana (twitter.com/flesymz) for DiGITAL YOU 2022 (#DigitalYou)

[PAUSE] Questions?

[ASK] *How do you spot deep fakes/cheap fakes*

Examples

1. Use image reverse search tools such as Tineye and Fake Image Detector.
2. Figures or faces do not blink normally or are blurrier than the background
3. There could be an issue with lip syncing.
4. Uneven skin tone or unnatural skin coloration
5. When the image is moved, it flickers around the edges.
6. Hair, teeth, jewelry, and other fine details are difficult to render.
7. Unusual lighting effects

Activity

[ENCOURAGE] participants to visit [Which Face Is Real](#) and put these tips into practice.

[EXPLAIN] as technology advances, it becomes more difficult to detect deepfakes, but cheap fakes with unnatural human features are easy to spot. If they are unable to pick something with their eyes, they can compensate by doing research to find other clues. For example, if they see a video of someone speaking at an event, advise them to check to make sure the speaker is listed on the event's website.

[PAUSE] Questions?

[ASK] *How can we prevent the misuse and spread of Deepfake/Cheap fake?*

Sample Examples

1. Policies of the government and social media platforms
2. Using watermarks
3. Detect them using algorithms similar to those used to create the deepfake
4. Deeptrace and Reality Defender aim to keep deepfakes out of your life. Are similar to antivirus, but for deepfake
5. Pose questions or request evidence.
6. Double-check the source. Who is the author, is she/he biased? Is the story's URL legitimate, Is the post up to date?
7. Fact-checking, tracing speeches to events or statements, and locating photos by image reverse-search.
8. Respond to misinformation as soon as possible;
9. If you anticipate negative news. Please notify your family and friends.
10. Be aware of fake news and report it when you come across it.

MISINFORMATION: DEEPPFAKE AND CHEAPFAKE

Workshop created by Yusuf Ganyana (twitter.com/flesymz) for DiGITAL YOU 2022 (#DigitalYou)

[EMPHASIZE] They should be more critical of what they see and share online instead of simply jumping to conclusions when they see a video.

[PAUSE] Questions?

Activity

DEEPPFAKE TEST

You can have them work in groups of 5 to brainstorm and confirm answers to the questions in this link: [Spot The Deepfake](#)

Q&A

[ASK] *What questions do you have for me?*

[INVITE] and encourage the participants to ask questions or seek clarification to a point that wasn't clear or to some extent, unmet expectations.

– CONCLUSION –

10 minutes

Deepfake/cheap fake is a promising new technology that has yet to gain widespread acceptance in our society. It, like many other technologies, has benefits and drawbacks. We've learned how it can either harm or help us, with a focus on protecting women, who are the primary target. Yes, there will be a variety of ways to control it over time. But the onus is on us to bring about the change we seek; we should raise public awareness about Deepfake/Cheap fake technology and encourage people to think critically about the media they consume.

Here's what you've learned about this technology so far:

- The difference between deepfake and cheap fake, as well as how they differ,
- How they are made,
- The purpose they serve,
- How to spot them, and prevent their malicious spread.

MISINFORMATION: DEEPPFAKE AND CHEAPFAKE

Workshop created by Yusuf Ganyana (twitter.com/flesymz) for DiGITAL YOU 2022 (#DigitalYou)

- <https://www.historyofinformation.com/detail.php?id=4792>
- <https://www.youtube.com/watch?v=wdiHm30V9jI>
- <https://techvera.com/what-are-deepfakes-and-how-can-we-prevent-their-misuse/>
- <https://www.kaspersky.com/resource-center/threats/protect-yourself-from-deep-fake>

Wrap up 🕒

[DISTRIBUTE] the evaluation form and allow them time to complete it.

[REMEMBER] Gather the forms before they depart.

[THANK] them for their participation, and **[ENCOURAGE]** them to share what they have learned with family and friends.

- END