

Activity: Artist Unknown

Instructions and Task

With Dall-E 2, Craiyon¹ or other AI-operated image generators, it is now possible to create realistic images of objects, landscapes and even people. This activity demonstrates the difficulty of distinguishing digital products created with generative AI systems from real-life representations. Based on this, problems such as deepfakes or fake personas whose images and CVs adorn social media profiles can be discussed. AI-generated images can be analysed in more detail: What characteristics can be found that can be used to distinguish a generated face from a real one, for example? (see West and Bergstrom [2019]). The functionality of technology used to generate such AI artefacts, e. g. GANs (Generative Adversarial Network), can be explained afterwards.

The activity is carried out as a traffic light survey. The teacher prepares a presentation (see template) and fills it with AI-generated and real images or videos. As there are still uncertainties regarding copyright for AI-generated artefacts, no complete material with AI artefacts can currently be offered, only a list of sources for these can be provided. There is a green button for real artefacts and a red button for AI-generated artefacts below each illustration. In class, each student now needs two different coloured pens, which he/she holds up according to his/her assessment of the representation. The individual decisions and the actual correct assignment are discussed jointly.

¹ <https://labs.openai.com/>, <https://www.craiyon.com/>

AI artefact link list

- Face portraits: <https://thispersondoesnotexist.com/>
- Food, animals, objects: <https://openai.com/dall-e-2>
- AI plays Super Mario: <https://www.youtube.com/watch?v=qv6UVOQOF44>
- AI plays Bach: <https://www.youtube.com/watch?v=QiBM7-5hA6o> or <https://www.youtube.com/watch?v=X72YHyaTIUE>
- Various pieces of music: <https://www.youtube.com/playlist?list=PLv7BOfa4CxsHAMHQjOScPXSbgBILgIRPo>

Human products link list

- Super Mario video: <https://www.youtube.com/c/KingBoo97>
- No Copyright Nature Videos: <https://www.youtube.com/c/audiolibrary-channel>
- Animation video: <https://www.youtube.com/watch?v=ujr3OVgKK8Q>
- No Copyright Songs: <https://instrumentalfx.co/download-top-15-best-no-copyright-songs-ncs-2017/> or <https://www.youtube.com/watch?v=XwmpmLVG7hO>
- Food: <https://webneel.com/daily/1-food-hyper-realistic-painting-tom-martin> or <http://wallpapersdsc.net/wp-content/uploads/2016/09/Junk-Food-Pictures.jpg> or pxhere.com/de/ [Creative Commons]
- Several portrait photos:
 - <https://www.sarahkastner.de/templates/yootheme/cache/Honey-Foto-90fae6d2.jpeg>
 - <https://fotografie.at/galerie/image/479030-m%C3%A4nnerportrait-hans-aus-indien/>
 - https://upload.wikimedia.org/wikipedia/commons/e/ee/Peter-siegele_2017_portraitfoto.jpg
 - https://upload.wikimedia.org/wikipedia/commons/1/1c/Peter_Moser_Portraitfoto_720.jpg
 - https://upload.wikimedia.org/wikipedia/commons/4/44/Portraitfoto_von_J%C3%B6rn_Ipsen.jpg
 - <https://www.das-portrait.com/wp-content/uploads/2022/04/fotostudio-das-portraitfrankfurt-portraitfoto-slide-1.jpg>
 - <https://image.jimcdn.com/app/cms/image/transf/dimension=1024x2048:format=jpg/path/s2047a22fa41leadc/image/i4bcb8a8185144d96/version/1483175995/image.jpg>
 - <https://pixnio.com/free-images/2017/02/25/2017-02-25-07-04-03.jpg>
 - <https://www.publicdomainpictures.net/pictures/240000/nahled/woman-blue-eyes-portrait.jpg>
 - <https://pixnio.com/free-images/2017/03/22/2017-03-22-12-07-37.jpg>
 - <https://pixnio.com/de/menschen/frauen/frau-glamour-portrait-madchen-frau-menschengesicht-schon-attraktiv>
 - <https://pixnio.com/de/menschen/frauen/frau-mode-portrait-glamour-auge-huebschesmaedchen-gesicht-attraktive>