

AI Authentic Values: Who is Responsible When the System Trains Itself?

Research title: The effects and affects of synthetic media on replicating the human likeness

Jack Nelligan

Introduction

Generative Artificial Intelligence (Gen AI) is shaping the role of the creative professional e.g. a Photographer, illustrator or motion graphics practitioner, and their working processes within creative entertainment industries (Marr 2021). The speed by which Gen AI technology is advancing is high paced. New releases of Gen AI software from large multinational digital companies are well-documented in this increasingly competitive space (Makasarashvili and Giguashvili 2023; Marr 2021; Riparbelli 2023). The rush to produce the most efficient Gen AI system for financial gains is incessant (Riparbelli 2023).

Target Audience

The target audience consisted of 18- to 35-year-olds. The participants were asked to consider the authenticity of imagery used for political advertisements. For example, could they identify that the Gen AI imagery is firstly, fake, then secondly, how its use may be interpreted within political campaigns.

Research

While researching the Gen AI topic within the creative / political sphere it became clear that some members of the general public may find it increasingly difficult to determine what is real and what is Gen AI or fake. In that sense (Stone 2023), looked at the implications of not regulating the use of AI in the political sphere: In the past few years, several democratic governments have published their National AI Strategies (NASs). These documents outline how AI technology should be implemented in the public sector and explain the policies that will ensure the ethical use of personal data (Javadi et al. 2021). Next, (Marr 2021) excavate the Artificial Intelligence (AI) and Machine Learning system. They also consider AI training sets and Large Language Models (LLM) and the automated interpretation of images on social media platforms (Makasarashvili and Giguashvili 2023).

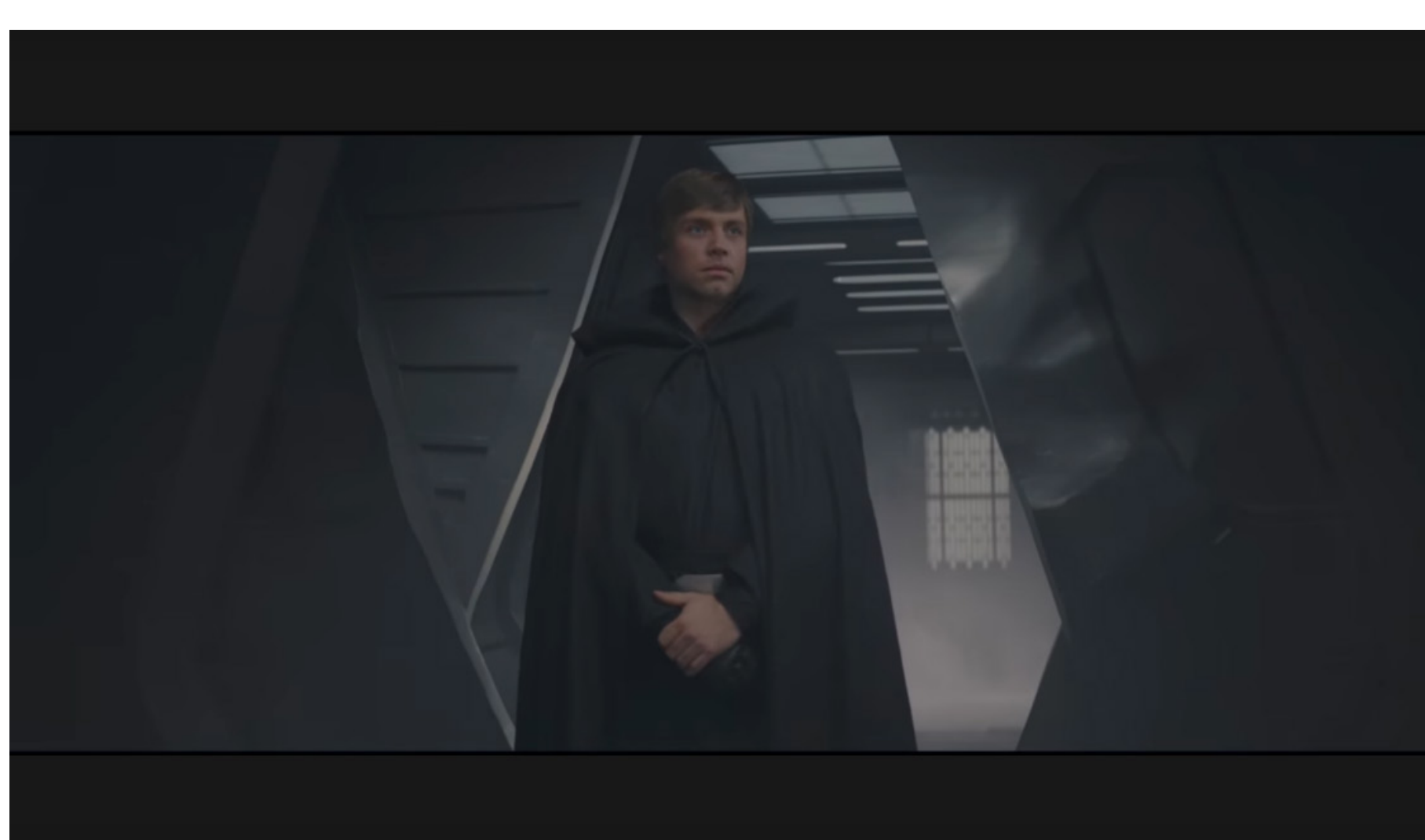


Figure 1 The Mandalorian (2019)

Not only is the speed of developing new Gen AI tools accelerating, but also the speed by which creative content is produced by Gen AI tools (Javadi et al. 2021). For example, a simple textual description of an object, person, or environment, can generate an image within two minutes (Javadi et al. 2021). Were once a commissioned photographer would produce a series of photographs for a client, a line of text (a text prompt) can replicate this process with varying success in an extremely short space of time (Stone 2023). A well-crafted text prompt can produce photographic, illustrative and motion graphic material (Makasarashvili and Giguashvili 2023). Therefore, the ethical responsibilities relating to the role of the creative in current industries is in flux.

Aim

The aim of this project was to highlight the technological advancements and ethical responsibilities that the use of Gen AI tools may have if unregulated on the creative industries.



Implementation

For this project a deepfake manipulation of former US President Donald Trump was created using a Gen AI workflow. The existing Trump footage was overlaid onto original real-life footage of a different persons face. Then, Gen AI software such as Deepface lab was used to create a convincing deepfake model of Trump from the alternative real-life face footage. This enabled the test of the Gen AI work flow; the project also has subtle links with my dissertation, The effects and affects of synthetic media on replicating the human likeness. In both cases the research examines the impact of Gen AI software in the creative, entertainment industries as well as political campaigns. It will be interesting to consider how Gen AI usage will continue to develop in these areas.

Objectives

The project objective is to encourage creative practitioners to discuss the impact that Gen AI tools may have on their existing roles within their creative field. In order to achieve this, a fictional Political advertising campaign was created using Gen AI tools. The fictional political campaign used Gen AI tools as a means to investigate the Gen AI workflow. Then, the fictional Political Ad Campaign and fictional political candidate project would become the topic of discussion during its preview at the Fis 2024 exhibition.

Conclusion

The research process for this project became difficult to manage at times due to the rapid evolving nature of Gen AI software releases. Overall, it was an enjoyable research experience. The various aspects of producing a Gen AI video was a challenge. However, this was a key part of the individual project and learning experience. The Gen AI software, while impressive is still in its early stages of development. Video footage for the political ad campaign required a lot of time to produce. This was due to the merging of the Gen AI footage and real footage coming together to form one seamless video piece. As Gen AI software keeps progressing, ideas for future research could examine if the imagery created by Gen AI is accepted as a creative output in its own right by society.

Bibliography

1. Askari, J. (2022) *Deepfakes and Synthetic Media: What are they and how are techUK members taking steps to tackle misinformation and fraud*. Available from: <https://www.techuk.org/resource/synthetic-media-what-are-they-and-how-are-techuk-members-taking-steps-to-tackle-misinformation-and-fraud.html> [accessed 8 April 2024 a].
2. Crawford, K. and Paglen, T. (2021). *Excavating AI: the politics of images in machine learning training sets*. AI & SOCIETY[online], 8 June 2021. Available from: <https://link.springer.com/10.1007/s00146-021-01162-8> [accessed 17 May 2024].
3. Javadi, S.A., Norval, C., Cloete, R. and Singh, J. (2021). *Monitoring AI Services for Misuse*. In: *Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society*. Virtual Event USA: ACM, pp.597–607. Available from: <https://dl.acm.org/doi/10.1145/3461702.3462566> [accessed 17 May 2024].
4. Nelligan, J. (2024). *The effects and affects of synthetic media on replicating the human likeness*. [Thesis - published pending]. Dundalk: Dundalk Institute of Technology.

