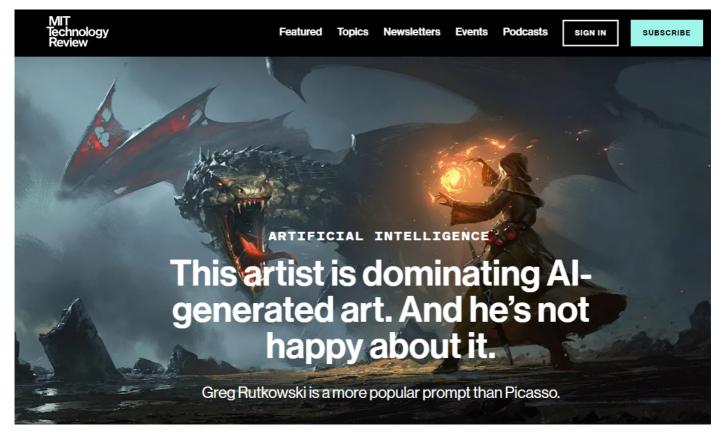
Al for Illustrations - Ethical Aspects

 <u>AI (https://uia.instructure.com/courses/14570/pages/home-ai-short-version)</u> - Ethical Aspects - <u>Next</u> (<u>https://uia.instructure.com/courses/14570/pages/ai-for-illustrations-image-gallery)</u>

Example: Greg Rutkowski - Losing his Income



Source: MIT Technology Review [6]

Greg Rutkowski is a Polish digital artist known for his dreamy fantasy landscapes created in classical painting styles. He has made illustrations for games such as Sony's Horizon Forbidden West, Ubisoft's Anno, Dungeons & Dragons, and Magic: The Gathering.

His distinctive style has become a hit in the new world of text-to-image AI generation.

Greg Rutkowski's name has been used more than 400,000 times since September 2022 to create AI-based art.

The flood of AI art is making it harder to find his work online and affects his visibility and recognition, which are often crucial for an artist's income.

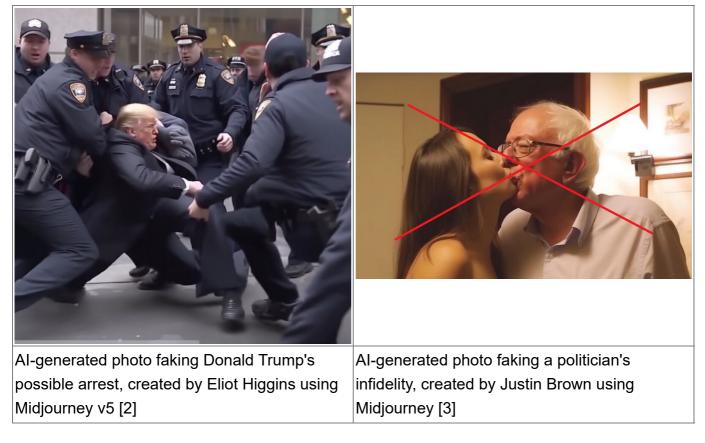
Ethical Aspects

There are a number of ethical challenges associated with using AI image generators:

- 1. **Intellectual property infringement**: Al image generators may use copyrighted works from other artists in their training data, potentially infringing on the original creators' rights.
- 2. Loss of income for professional artists: Al image generators may produce images that are similar in style to those created by professional artists, potentially reducing demand for their work and impacting their income.
- 3. **Job displacement**: As AI image generators become more advanced, they may be able to produce images at a faster rate and lower cost than human artists, potentially leading to job displacement in the creative industry.
- 4. Lack of transparency: It may be difficult to determine how an AI image generator created a particular image, making it challenging to assess whether the image infringes on the rights of others or whether it was created using ethically sourced data.
- 5. **Bias and discrimination**: Al image generators may perpetuate existing biases and discrimination if their training data is not diverse and representative.
- 6. **Authenticity and originality**: Al image generators may produce images that are similar to existing works, raising questions about the authenticity and originality of the generated images.
- 7. **Responsibility and accountability**: It may be difficult to determine who is responsible and accountable for any harm caused by images generated by AI, such as those that perpetuate harmful stereotypes or infringe on the rights of others.
- 8. **Fairness and equality**: The use of AI image generators may disproportionately benefit those with access to the technology, potentially exacerbating existing inequalities in the creative industry.
- 9. **Privacy and consent**: The use of personal data in the training of AI image generators may raise concerns about privacy and consent, particularly if the data is used without the knowledge or permission of the individuals concerned.
- 10. **Impact on artistic expression**: The widespread use of AI image generators may have an impact on artistic expression, potentially leading to homogenization and a reduction in the diversity of styles and perspectives.

Example: Fake images

Users recently got banned from MidJourney for creating fake images of politicians [2,3]:



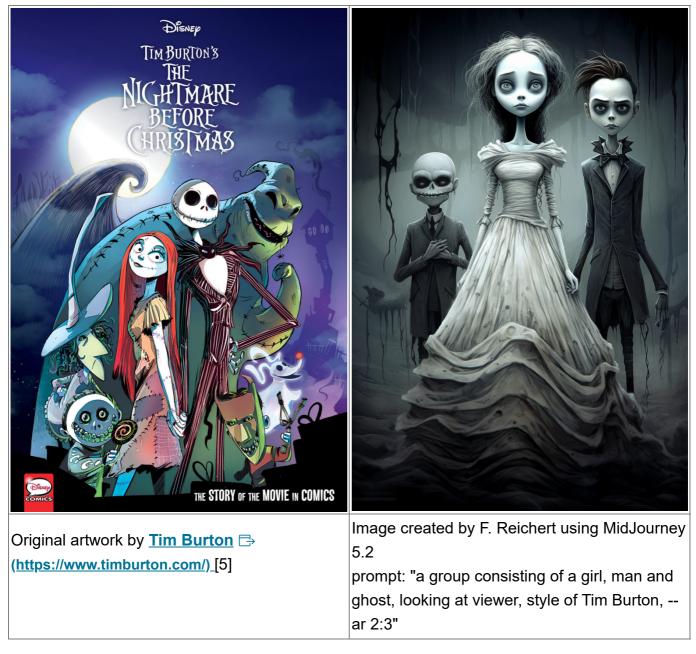
Example: Stealing an artist's style

Stealing an artist's style with an image generator can be problematic for several reasons. First, it can infringe on the artist's intellectual property rights, as their unique style is a product of their creativity and hard work. Using an image generator to replicate their style without permission or compensation can be seen as unfair and disrespectful.

Second, it can also have economic implications for the artist. If their style is easily replicated by an image generator, it may reduce the demand for their original work and impact their income. This can be particularly harmful for artists who rely on their unique style to differentiate themselves in a competitive market.

Finally, it can also have broader implications for the art community as a whole. If image generators are used to replicate the styles of established artists, it may discourage innovation and creativity.

Stealing the style of Tim Burton



Example: Bias

Bias in using an AI image generator is problematic for several reasons:

Fairness: If an AI image generator is biased, it may not fairly represent all groups of people. For example, if the training data mostly consists of images of people from a certain race, the AI might generate images that predominantly represent that race, thereby excluding or misrepresenting others.

Stereotyping: Biased AI can reinforce harmful stereotypes.

Accuracy: Bias can affect the accuracy of the generated images. If an AI is trained on a biased dataset, the images it generates may not accurately represent the diversity of the real world.

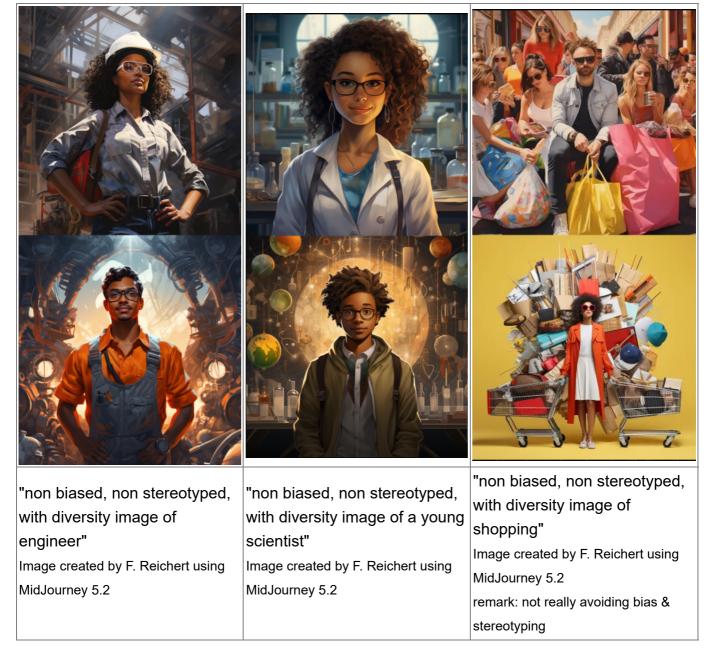
Ethics and Legal Issues: Biased AI can lead to ethical and legal issues. For instance, if an AI image generator is used in a professional setting and it consistently produces biased results, it

could potentially lead to lawsuits or other legal repercussions.

Stereotyping and Bias in images using MidJourney 5.2



Attempts to avoid Stereotyping and Bias in images using Midjourney 5.2



Navigating the Ethical Landscape of AI Image Generation

As the world of AI image generation expands, it unveils an array of potentialities, but not without ethical complications that require careful scrutiny. It is paramount to exercise the responsible use of AI, including respect for the intellectual property of artists, obtaining their consent prior to the usage of their works as training data. Often, AI models train on vast datasets, encompassing millions, if not billions, of images, with the original artists' consent frequently overlooked.

Unethical uses of AI can be wide-ranging and impactful. For instance, maliciously manipulating AI to generate fabricated images can not only tarnish the reputation of the depicted individuals but also lead to adverse repercussions for the perpetrator once the fraud is unveiled.

Advancements in technology frequently outpace the development of corresponding laws and regulations. This gap underscores the present scenario where a powerful tool like AI has been handed over to the public with limited restraints, exacerbating the potential for misuse. The emergence of novel dilemmas associated with AI-generated images necessitates a continual

process of reflection, dialogue, and regulatory updates. As such, it is critical to remain vigilant, advocating for responsible AI usage and fostering an ethical digital landscape.

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References

[1] G. Appel, J. Neelbauer, and D. A. Schweidel. (2023, April 7). <u>Generative AI Has an</u> <u>Intellectual Property Problem</u> ⇒ (https://hbr.org/2023/04/generative-ai-has-an-intellectualproperty-problem). Harvard Business Review. https://hbr.org/2023/04/generative-ai-has-anintellectual-property-problem

[2] K. Devlin and J. Cheetham, "Fake Trump arrest photos: How to spot an Al-generated image, ⇒ (https://www.bbc.com/news/world-us-canada-65069316)." BBC News, 24-Mar-2023.
[Online]. Available: https://www.bbc.com/news/world-us-canada-65069316. [Accessed: 04-Jul-2023].

[3] M. Harrison. (2023, July 2). <u>Guy Banned by Midjourney for Generating Images of</u> <u>Politicians Cheating</u> ⇒ (https://news.yahoo.com/guy-banned-midjourney-generating-images-132407042.html)</u>. Yahoo News. https://news.yahoo.com/guy-banned-midjourney-generatingimages-132407042.html

[4] Tim Burton. (n.d.). <u>*Tim Burton* ⇒ (https://www.timburton.com/)</u>. [Online]. Available: https://www.timburton.com/

[5] Mathias Mothander (n.d). The Art of Al Image Generation: From Technology to Ethics (<u>https://www.preciofishbone.com/knowledge-hub/blog/the-art-of-ai-image-generation-from-</u> technology-to-ethics/). Precio Fishbone. https://www.preciofishbone.com/knowledge-hub/blog/theart-of-ai-image-generation-from-technology-to-ethics/

[6] M. Heikkilä, "<u>This artist is dominating Al-generated art—and he's not happy about it</u> (<u>https://www.technologyreview.com/2022/09/16/1059598/this-artist-is-dominating-ai-generated-art-</u> and-hes-not-happy-about-it/)," Technology Review, Sep. 16, 2022. [Online]. Available: https://www.technologyreview.com/2022/09/16/1059598/this-artist-is-dominating-ai-generated-artand-hes-not-happy-about-it/. [Accessed: Sep. 18, 2023].