Generative AI: IP and Copyright Issues in Education and Learning

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Generative AI and Intellectual Property (IP)

- **Generative AI** is the use of machine learning algorithms to generate new content, e.g. text, images, and music.

- However, ownership of IP and protection of the content generated by Generative AI is complex and depends on, e.g.

  - ownership of the input data used to train the Generative AI;

  - specific algorithms used in the generative process; and
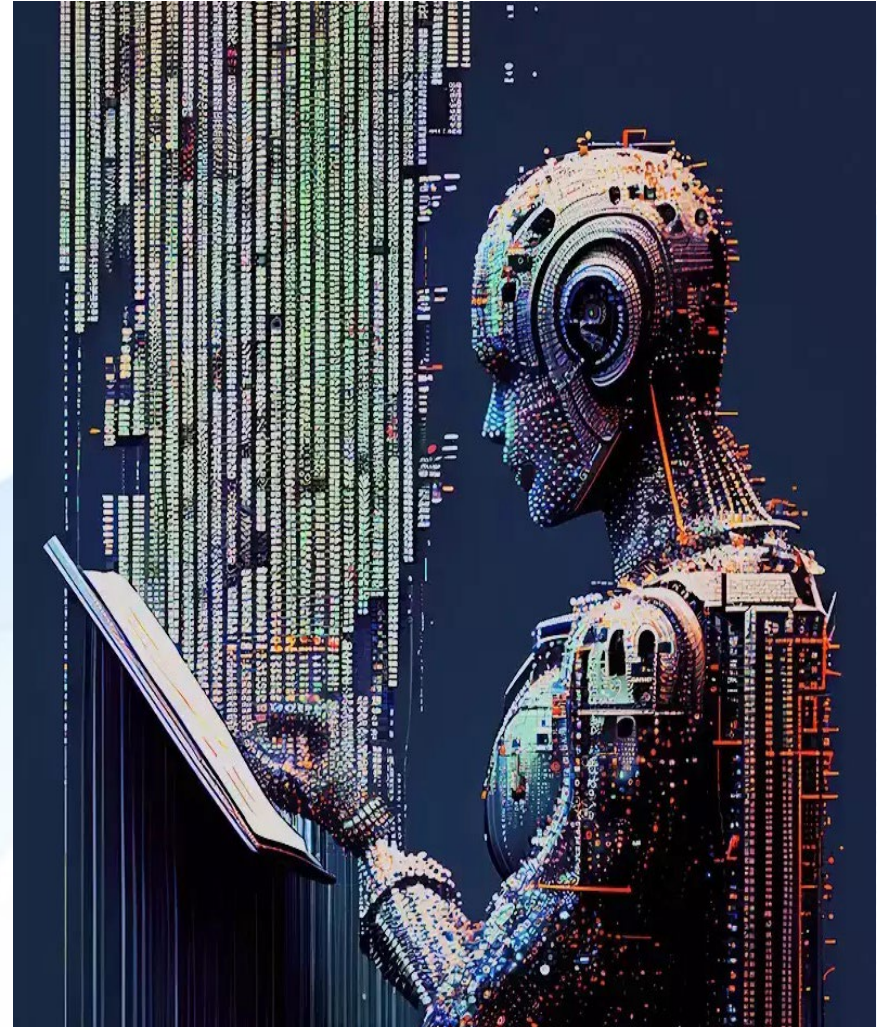
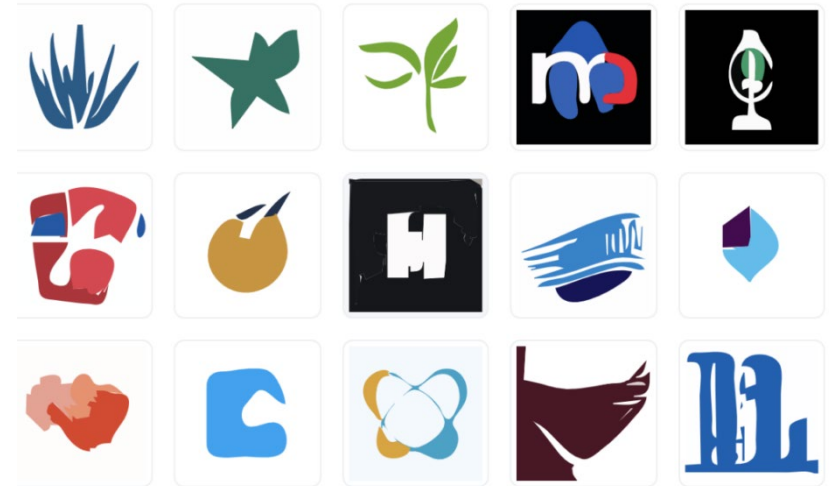 - intended use of the generated content.

Illustration by Muhabit ul haq via AI

Generative AI and Intellectual Property (IP)

- A company may own the IP rights to a logo generated by Generative AI, but would need to ensure that the trade mark (and copyright) are protected.

- Likewise, for a new song created by Generative AI, the IP ownership may depend on factors such as the source of the input data, the specific algorithms used, and the intended use of the song.

AI Generated Work – 3-D Model Creation

Nextech3D.AI Files Patent For Breakthrough Generative AI For 3D-Model Creation

By **Nextech** on Mar 9, 2023 7:30:00 AM

5 min read

nextech3D.ai
your metaverse company

GENERATIVE AI PATENT

"Generative AI for 3D Model Creation from 2D Photos using Stable Diffusion with Deformable Template Conditioning"

The Company has developed and launched game-changing artificial intelligence (AI) for the $5.5trillion dollar ecommerce industry accelerating the transition from 2D photos to 3D models

Is Generative AI Output Protected under IP Law?

- It depends, and varies depending on the:

  - IP laws of the respective jurisdiction that govern the AI and the creation of the work;

  - Degree of human input and involvement and AI platform in generating the output;

  - IP provisions under the Terms & Conditions of the AI platform.

- Copyright law is based on the general principle that only content created by human beings can be protected. As such, AI outputs can be owned by a human, but a computer programme or AI can never be the author or owner of the IP.

- Example – as the algorithms underpinning ChatGPT were developed at OpenAI, the company may hold copyright protection over those, but may not extend to chatbot responses.

AI Generated Work – "Théâtre D'opéra Spatial"

Created using AI image generator tool Midjourney,
which changes lines of text into realistic graphics.

Generative AI in Creating Written Content

CNET's AI Journalist Appears to Have Committed Extensive Plagiarism

CNET's AI-written articles aren't just riddled with errors. They also appear to be substantially plagiarized.

https://futurism.com/cnet-ai-plagiarism

BuzzFeed Is Quietly Publishing Whole AI-Generated Articles, Not Just Quizzes

These read like a proof of concept for replacing human writers.

https://futurism.com/buzzfeed-publishing-articles-by-ai

Major News Site Warns ChatGPT Is Inaccurate, Announces Plans to Use It Anyway

"AI at Insider: We can use it to make us faster and better."

https://futurism.com/insider-chatgpt-plans

Infringement Risks of using Generative AI

- Two (2) potential infringement risks with a Generative AI's learning/training and its generative processes:

  - **Make copies of a work** – if the learning/training process requires copies from a data set containing copyrighted works, the rights of the holders of the data used in these processes may be infringed.

  - **Prepare derivative works** – besides the above, the output produced will also resemble, or completely reproduce, parts of those copyright works, thereby, potentially infringing the rightsholder's right to make derivative works.

- Besides copyright (esp. literary, artistic and musical works), other IP rights such as trade mark and database rights can also be infringed by Generative AI.

Potential Defining Moment for AI and IP?

gettyimages® **vs** stability.ai

Getty Images

Getty Images Statement

Jan 17, 2023 | PDF

This week Getty Images commenced legal proceedings in the High Court of Justice in London against Stability AI claiming Stability AI infringed intellectual property rights including copyright in content owned or represented by Getty Images. It is Getty Images' position that Stability AI unlawfully copied and processed millions of images protected by copyright and the associated metadata owned or represented by Getty Images absent a license to benefit Stability AI's commercial interests and to the detriment of the content creators.

Getty Images believes artificial intelligence has the potential to stimulate creative endeavors. Accordingly, Getty Images provided licenses to leading technology innovators for purposes related to training artificial intelligence systems in a manner that respects personal and intellectual property rights. Stability AI did not seek any such license from Getty Images and instead, we believe, chose to ignore viable licensing options and long-standing legal protections in pursuit of their stand-alone commercial interests.

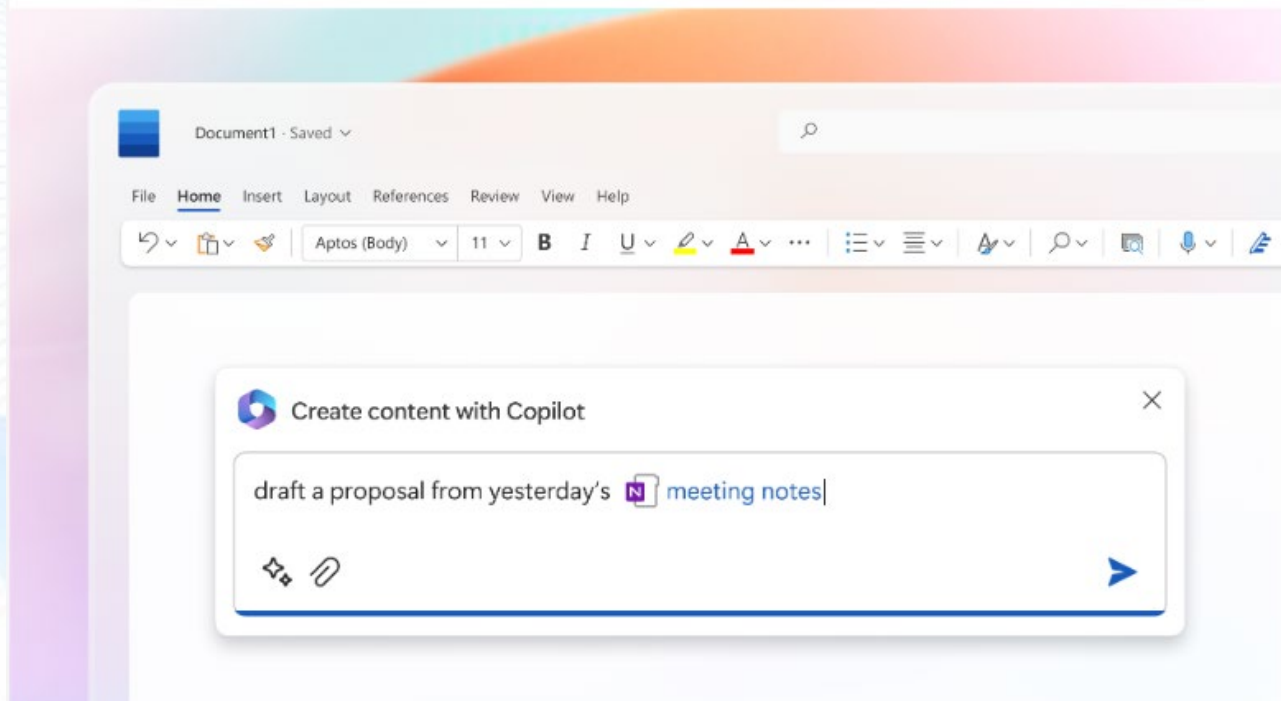https://newsroom.gettyimages.com/en/getty-images/getty-images-statement

See also:
https://fingfx.thomsonreuters.com/gfx/legaldocs/byvrlkmwnve/GETTY%20IMAGES%20AI%20LAWSUIT%20complaint.pdf

Generative AI in Education and Learning

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https://nolej.io/nolej-ai

https://www.grammarly.com/grammarlygo

https://soundful.com/

Generative AI in Education and Learning

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Have you ever been curious about learning something but didn't know where to start?
Have you ever read something super interesting, then forgotten about it minutes later?
Have you ever wanted to build a consistent learning habit but find yourself too tired after work to engage your mind?
We did. That's why we built Kinnu.

kinnu.xyz – A gamified learning engine through building a platform of learning pathways, incorporating content from Generative AI in addition to human review and editing.

Issues & Limitations of Generative AI

- **Plagiarism/Copyright Infringement** – Generative AI repeats or paraphrases data sourced from the Internet.

- **Authorship** – closely related to the issue of plagiarism, as to how much of a Generative AI's output belongs to the user's iterative prompts vs the developers of the system vs the authors and creators of its training data.

- **Fairness and Bias** – algorithms are only as unbiased as the data they are trained on. Ensure "clean" data sets.

Issues & Limitations of Generative AI

- **Efficacy** – as they are unsupervised in their development, Generative AI may "hallucinate" by generating untrue responses/false information to cover "gaps".

- **Security/Privacy** – new information that is inputted becomes part of the data repository and is made publicly available to other users. Need to ringfence.

- **Detection** – in response to plagiarism, systems are being designed to detect content created by Generative AI, e.g. TurnItIn detection feature.

The Future

- Generative AI has the potential to complement educators, EdTech and learners both in and out of the classroom.

- However, most IP legal frameworks were not drafted with AI technology in mind, so IP laws will need to evolve in future to take into account, e.g. use of copyrighted material to train and generate content, authorship, and ownership of the output.

- SUSS programmes in this space:

  - [Graduate Certificate in Artificial Intelligence for Business](#)

  - [Graduate Diploma in Artificial Intelligence for Business](#).

Thank You!

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