

Legal Considerations for Generative AI in Games

U.S. TECH LAW UPDATE¹

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By: Magdalene Bedi | ChatGPT

On January 5, 2021, OpenAI launched DALL-E, a neural network trained on 250 million captioned images collected from the internet that could generate images based on natural language prompts.² Since then, OpenAI has introduced DALL-E 2, which generates more realistic, high-resolution images than its predecessor,³ and ChatGPT, a conversational language model of artificial intelligence capable of answering follow-up questions, admitting its mistakes, challenging incorrect premises, and rejecting inappropriate requests.⁴ A flurry of other text-to-image generators have also emerged, such as Stability AI Ltd.'s ("<u>Stability AI</u>") Stable Diffusion⁵ and Midjourney,⁶ and in only two years, artificial intelligence that can generate novel content ("<u>Generative AI</u>") rather than simply analyzing or acting on existing data, has rapidly become the technology du jour.

January 13, 2023, however, a group of artists filed a class action lawsuit against Stability AI, Midjourney, and Deviant Art based on the companies' text-to-image Generative AI tools, which the complainants allege have infringed on the rights of thousands of artists (the "<u>Artists'</u> <u>Suit</u>"). Although Generative AI has utility to creatives, including game developers, seeking to use Generative AI tools to save money and time while expanding content, the Artists' Suit highlights tension between existing law governing creators' rights and the evolving field of Generative AI. This legal update, drafted with the assistance of OpenAI's ChatGPT,⁷ outlines the questions of ownership and copyright infringement raised by Generative AI tools in appreciation of the fact that some questions are addressed by contract rather than copyright law.

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² OpenAI, <u>DALL-E: Creating Images from Text</u> (January 5, 2021); see also Aditya Ramesh, Mikhail Pavlov, Gabriel Goh, Scott Gray, Chelsea Voss, Alec Radford, Mark Chen, and Ilya Sutskever, <u>Zero-Shot Text-to-Image Generation</u>, ARXIV (February 26, 2021).

³ OpenAI, <u>DALL-E 2</u> (January 2022).

⁴ OpenAI, <u>ChatGPT: Optimizing Language Models for Dialogue</u> (November 30, 2022).

⁵ <u>Stable Diffusion Online</u>.

⁶ Midjourney.

⁷ The authors generated this text in part with GPT-3, OpenAI's large-scale language-generation model. Upon generating draft language, the author reviewed, edited, and revised the language to their own liking and take ultimate responsibility for the content of this publication.



A. <u>Generative AI Models</u>

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Understanding the legal issues implicated by Generative AI requires understanding, at least broadly, how Generative AI models operate. Generative AI models are typically trained on large datasets of existing data, and they use this training data to learn the patterns and characteristics of the data. Once trained, Generative AI models can then generate new data that is similar to the training data but is not identical.

There are several different types of Generative AI models, including:

- i. *Generative Adversarial Networks ("GANs")*. These are a type of AI model that consist of two parts: a generator and a discriminator. The generator generates new data, while the discriminator tries to distinguish the generated data from real data. The two parts of the model are trained together, with the generator trying to create data that the discriminator can't distinguish from real data.⁸
- ii. *Variational Autoencoders ("<u>VAEs</u>")*. These are a type of AI model that learns to represent data in a compact, lower-dimensional space, and then generates new data by randomly sampling from this space.⁹
- iii. *Autoregressive Models*. These models are trained to predict the next element in a sequence, given the previous elements. Once trained, they can generate new sequences that are similar to the training data but never seen before.
- iv. Diffusion Models. These models are trained through an image corruption process in which noise is progressively added to a high-resolution image until only pure noise remains.¹⁰ Such models then learn to reverse this process, beginning from pure noise and progressively removing noise to reach a target distribution.¹¹ In other words, Diffusion Models use data from training images and their associated text to identify the essential qualities of objects and to discover relationships between their fundamental elements. Thus, once trained, Diffusion Models can create entirely new works.

The AI generators named in the Artists' Suit are all Diffusion Models, which are also the most recent innovation in Generative AI. However, each Generative AI model presents technical benefits and challenges, and there is ongoing investment interest in Generative AI models that are not Diffusion Models. Common to the Generative AI models above, and material to the legal implications of Generative AI, is that Generative AI models create new data that is similar to, but not copied from, their training data.

⁹ Joseph Rocca, <u>Understanding Variational Autoencoders (VAEs)</u>, TOWARDS DATA SCIENCE (September 23, 2019).

⁸ Ian J. Goodfellow, Jean Pouget-Abadie, Mehdi Mirza, Bing Xu, David Warde-Farley, Sherjil Ozair, Aaron Courville, and Yoshua Bengio, *Generative Adversarial Networks*, ARXIV (June 14, 2014).

 ¹⁰ Jonathan Ho and Chitwan Saharia, <u>High Fidelity Image Generation Using Diffusion Models</u>, GOOGLE RESEARCH (July 16, 2021).
¹¹ Id.

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B. <u>Video Game Application</u>

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In recent years, Generative AI has been used to create new and unique game content, improve game physics, and create more realistic and believable characters. Some applications of Generative AI in games are still speculative but present novel approaches for game developers to save money and time while expanding content. The use cases for Generative AI in games include:

- i. *Game Art.* One of the more immediate applications for Generative AI in video games is the creation of game art. Generative AI can be used to create unique game art, such as character models, environments, and other game assets. This can help to create a more visually interesting and engaging game experience. This also opens up the possibility of creating games with a limitless variety of art styles, giving the developer more creative freedom, and the player more diverse gaming experiences. Tools for generating game art are already launching; for example, Scenario, accessible via the web, mobile, or API, allows artists and game developers to create their own image generators trained on the specific styles of their games.¹² By providing their own training data to custom generators, game developers can produce potentially hundreds of entirely new game assets that are style-consistent with the developers' art direction.¹³
- ii. *Procedural Content Generation.* One of the most common ways that generative AI is used in video games is through procedural content generation. This is the process of using algorithms, which can but does not necessarily include AI algorithms, to automatically generate game levels, landscapes, and other game assets. This can be useful for creating a large number of unique and diverse game environments, without the need for manual creation. This can save time and money for game developers, while also providing players with a more dynamic and varied gaming experience. Procedural content generation is widely used in open-world games where players explore and interact with the landscape, such as Minecraft and Terraria, and can be used for randomized enemies and loot systems such as in Borderlands.¹⁴
 - iii. NPCs. Another way that Generative AI is used in video games is through the creation of non-player characters (NPCs). These are characters that are controlled by the game's AI rather than by players. Generative AI can be used to create unique, believable NPCs with their own personalities, behaviors, and speech. These NPCs can help create a more immersive game world for the player, making the game more engaging and interesting. In February 2023, NetEase Inc. announced that it would introduce the first in-game iteration of Chat GPT in Justice Online Mobile, an upcoming MMO title, to allow players to chat with NPCs who will then react to the players in unique ways that impact the game.¹⁵
 - iv. *Character Animation*. Similar to Generative AI's application to NPCs, Generative AI may also be used to improve the realism of game characters' motor skills, simulating

¹² Kyle Wiggers, <u>Scenario lands \$6M for its AI platform that generates game art assets</u>, TECHCRUNCH (January 19, 2023). ¹³ Id

¹⁴ Zhenyuan Shen, <u>Procedural Generation in Games: Focusing on Dungeons</u>, SHS WEB OF CONFERENCES (August 2022).

¹⁵ Paul Tassi, *ChatGPT Is Coming to Video Games, God Help Us All*, FORBES (February 16, 2023).

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dynamic, life-like behaviors.¹⁶ Animated characters trained on AI-driven and physicsbased models are capable of realistically transitioning between different motions even when the transitions were not present in the characters' training data.¹⁷ Models like NVIDIA's Adversarial Skill Embeddings can be used to create more realistic and dynamic character animation in the game, allowing for more realistic interactions between the player and the game world.¹⁸ This could help to create a more immersive and believable gaming experience.

- v. *In Game Items*. In addition to these examples, generative AI may be used to create unique game items, such as weapons, armor, and other equipment. This could help to create a sense of progression and reward for the player, as they acquire new and more powerful items throughout the game. Roblox, for example, is testing a tool that would allow players to create in-game items such as buildings, terrain, and avatars; change the appearance and behavior of such items; and give them new interactive properties by typing what the player wants to achieve in natural language rather than code.¹⁹ The Generative AI model would then generate the code necessary to execute the players' natural commands.²⁰
- vi. *Sound Design*. Generative AI can be used to create unique sound effects and music, which can help to create a more immersive and engaging game experience while saving game developers money and time on sound design. Although not yet released, Google is developing MusicLM, a model generating high-fidelity music from text descriptions.²¹ In addition to generating short samples of songs, MusicLM can take several text descriptions written in sequence and create a musical narrative ranging several minutes in length.²² MusicLM is also capable of building on existing melodies while respecting accompanying text prompts. The model is imperfect and not yet publicly available but presents an early glimpse into Generative AI's potential for game sound design.²³

1. Copyright

Although there are present, emerging, and potential applications for Generative AI as a tool for creatives, some AI generators have been met by confusion and anger from artist communities due to uncertainty about how Generative AI impacts creators' rights with respect to training data and generated content. For game developers, generative AI poses two core issues: (i) who owns the content generated by AI, and (ii) does training data used without the consent of the data owners violate their copyright?

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¹⁶ Xue Bin Peng, Yunrong Guo, Lina Halper, Sergey Levine, and Sanja Fidler, <u>ASE: Large-Scale Reusable Adversarial Skill</u> <u>Embeddings for Physically Simulated Characters</u>, GTTHUB (July 2022).

¹⁷ Id. ¹⁸ Id.

¹⁹ Will Knight, <u>Roblox Is Bringing Generative AI to Its Gaming Universe</u>, WIRED (February 17, 2023).

²⁰ Id.

²¹ Andrea Agostinelli, Timo I. Denk, Zalán Borsos, Jesse Engel, Mauro Verzetti, Antoine Caillon, Qingqing Huang, Aren Jansen, Adam Roberts, Marco Tagliasacchi, Matt Sharifi, Neil Zeghidour, and Christian Frank<u>. *MusicLM: Generating Music From Text*</u>, GOOGLE RESEARCH (January 27, 2023).

²² Id. ²³ Id.

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Ownership of AI-Generated Content Α.

The first core issue presented by Generative AI is that of ownership: who owns the copyright to content produced by Generative AI? If ownership isn't clear, or if content generated by AI is public domain, then game developers will be limited in their ability to protect that content against infringement by others. Under U.S. copyright law, content entirely generated by AI does not have a human author and is thus not afforded copyright protection.²⁴ However, video games will not lose copyright protection in their entirety if only some elements of a video game are AI-generated.

The Copyright Act of 1976 (the "Copyright Act") protects "original works of authorship fixed in any tangible medium"²⁵ by granting exclusive rights to the authors of copyrightable subject matter. While the Copyright Act does not define the term "author," courts and the US Copyright Office ("USCO") have determined that authors must be human.²⁶ However, on September 15, 2022, the USCO departed from prior precedent²⁷ and granted U.S. copyright for an 18-page comic book titled Zarya of the Dawn registered by Kris Kashtanova.²⁸ The artwork was generated by the text-to-image AI generator Midjourney, but Kashtanova wrote the story, created the layout, and made artistic choices to piece the images together.²⁹ Kashtanova registered Zarya of the Dawn as a visual arts work and stated in the registration statement that the work was "AI-assisted.," with Kashtanova listed as the sole author.³⁰

On November 8, 2022, however, the USCO initiated a proceeding to revoke copyright protection for Zarya of the Dawn, stating that copyrightable works require human authorship and that Kashtanova had failed to disclaim the Midjourney-generated content.³¹ Then, on February 21, 2023, the USCO clarified its revocation by cancelling the original certificate of registration and issuing a new one that covers only the expressive material created by Kashtanova, which includes the written story and the selection and arrangement of images and text. According to the USCO, "Rather than a tool... controlled and guided to reach... [the] desired image, Midjourney generates images in an unpredictable way. Accordingly, Midjourney users are not the "authors" for copyright purposes of the images the technology generates."³² The USCO concluded that the use of Midjourney as a tool "does not diminish the human mind that conceived, created, selected, refined, cropped, positioned, framed, and arranged all the different elements" of Zarva of the Dawn, thus affirming copyright protection for human-created elements of AI-assisted works.³³

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²⁴ See Copyright Review Board, Re: Second Request for Reconsideration for Refusal to Register A Recent Entrance to Paradise (Correspondence ID 1-3ZPC6C3; SR # 1-7100387071).

²⁵ 17 U.S.C. § 102(a).

²⁶ See Naruto v. Slater, 888 F.3d 418 (9th. Cir. 2018).

²⁷ See Copyright Review Board, Re: Second Request for Reconsideration for Refusal to Register A Recent Entrance to Paradise (Correspondence ID 1-3ZPC6C3; SR # 1-7100387071).

²⁸ Kyle Barr, Artist Claims First U.S. Copyright for Graphic Novel Featuring AI Art, GIZMODO (September 26, 2022). ²⁹ Id.

³⁰ Id.

³¹ Franklin Graves, U.S. Copyright Office Backtracks on Registration of Partially AI-Generated Work, IP Watchdog (November 1.2022).

³² Copyright Review Board, Re: Zarya of the Dawn (Registration # VAu001480196) (February 21, 2023). ³³ Id.



Video games are not treated as the sum of their parts for the purposes of copyright protection. "A valid copyright extends only to copyrightable subject matter,"³⁴ and, for video games, the United States favors a "distributive classification", whereby each creative element of a game is protected separately according to its specific nature.³⁵ Creative elements include the game's sound design, art, animation, text, source code, and object code.³⁶ Thus, whether copyright protection extends to elements of a video game will depend on whether each element was produced by a human or an AI generator.³⁷ Although the USCO may decline to register some elements of a video game due to the participation of an AI generator, other elements may still be protected. Thus, game developers must take care to limit use of Generative AI to assets which are not likely to be copied or misappropriated, or which the developers don't mind being copied or appropriated, since the USCO is unlikely to extend copyright protection to AI-generated assets absent a change in law. Game developers may also consider including use restrictions in their own license agreement with end users to provide some contractual protection against the unauthorized use of AI-generated content in their games.

B. Copyright Infringement Based on Training Data

The second core issue presented by Generative AI is whether using data to train Generative AI models without the data owners' permission constitutes copyright infringement. Such copyright infringement may occur when training data is input into Generative AI models, and in the subsequent content produced by such Generative AI models.

i. Data Input

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While some AI generators, like those published by OpenAI, decline to disclose the data used to train their models, other AI generators, like Stable Diffusion and Midjourney, use opensource data sets that are scraped from the web without the data owners' permission. The Copyright Act protects authors' exclusive rights to reproduce and distribute their copyrighted works, which means that so scraping copyrighted works without a license could constitute copyright infringement.³⁸

However, the open-source datasets used by popular AI generators may not constitute reproductions of copyrighted works, since the works are not reproduced in the data set.³⁹ Instead, the data sets provide links to the copyrighted works, but do not copy and store the works.⁴⁰ Additionally, even if using such data sets for training Generative AI models did constitute reproduction and distribution of copyright works, such use may fall under the fair use exception to copyright.

Fair use is an affirmative defense to allegations of copyright infringement, meaning a defense that, if found to be applicable, will negate criminal liability or civil liability, even if the

³⁴ Star Athletica, LLC v. Varsity Brands, Inc., 137 S. Ct. 1002, 1005 (2017).

³⁵ Andy Ramos Gil de la Haza, *Video Games: Computer Programs or Creative Works?* WIPO (August 2014).

³⁶ Id.

³⁷ *Id.* ³⁸ 17 U.S.C. § 106.

³⁹ See Aaron Moss, <u>Artists Attack AI: Why The New Lawsuit Goes Too Far</u>, COPYRIGHT LATELY (January 23, 2023). ⁴⁰ Id.



defendant to an action committed the alleged acts.⁴¹ Whether a particular use constitutes a fair use is determined on a case-by-case basis.⁴² In each case, a court will consider four factors: (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.⁴³

No U.S. court has ever decided whether fair use applies to training data for Generative AI models. However, in an analogous context, the US Court of Appeals for the Second Circuit held that Google's unauthorized digitization of books so they could be searched electronically constituted fair use.⁴⁴ OpenAI asserted in a submission to the US Patent and Trademark Office that because training AI systems is highly transformative, and so long as long as the corpus of copied training data is not made accessible to the reading public, training AI by inputting copyrighted works constitutes fair use.⁴⁵ However, absent court interpretation or applicable legislation, whether training date for Generative AI models constitutes fair use remains uncertain.

ii. Content Output

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But, even if training AI models on copyrighted data is considered fair use, the same may not necessarily apply to generating content, which is also acknowledged in OpenAI's above referenced submission. In other words, even if it's legal to use someone else's data to train a generative AI model without any issues, such model's generated output might infringe copyright law if the original artists did not license their works for such use. This is because included among the exclusive rights extended by copyright is the right to prepare derivative works based upon the copyrighted work.

A derivative work is based on one or more pre-existing works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted.⁴⁶ Derivative works must incorporate elements of the original work.⁴⁷ Determining whether a generative AI model is producing a derivative work of pre-existing content may be difficult, since although Generative AI models create works similar to their training data, such works are not exact copies of their training data.

Further, the output produced by Generative AI is not merely a collage of copied elements from the training data; instead, the content is wholly new data, produced based on the Generative AI models' understanding of the essential elements of a concept prompted in text. However, if a Generative AI model is not fed a diverse enough data set, then the Generative AI's understanding

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⁴¹ Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569 (1994).

⁴² Id.

⁴³ Id.

⁴⁴ The Authors Guild, Inc. v. Google, Inc., 804 F.3d 202 (2d Cir. 2015).

 ⁴⁵ OpenAI, <u>Comment Regarding Request for Comments on Intellectual Property Protection for Artificial Intelligence Innovation</u>.
⁴⁶ 17 U.S.C. § 101.

⁴⁷ Id.



of the essential elements of a concept may appear very similar to how those elements are presented in the training data.

Another issue in determining whether AI-generated content is a derivative work is determining whether such content is sufficiently original to be considered as a derivative work. To be considered derivative, works must be original and possess a minimal degree of creativity.⁴⁸ It is not clear whether content generated by an AI model is capable of expressing creativity. Some AI generators, such as Midjourney, are coded such that their content output possesses a consistent style, demarking their overall look and feel as having been generated by Midjourney's Generative AI model.⁴⁹ However, the nascent nature of Generative AI means that neither courts nor the USCO have made a definitive ruling on whether such measures reflect a minimal degree of creativity.

Some AI image generators allow users to prompt images that reflect an existing artist's style, the output of which more closely resembles unlicensed derivative works. For example, Stable Diffusion users began including fantasy artist Greg Rutkowski's name in text prompts to generate dreamy, fantastical images like the scenes Rutkowski is known to illustrate.⁵⁰ However, art style cannot be copyrighted, and if generated images only imitate ideas, concepts, or the look of particular mediums, such as charcoal or oil paint, then such images are not infringing on copyrightable content, even if they are reminiscent of an existing artist's portfolio.⁵¹ Instead, to constitute an unlicensed derivative work, AI-generated images must copy an existing artist's "expression," which is a combination of a variety of factors such as composition, content, style, framing, color, narrative, and artistic intent.⁵² Although that can occur in AI-generated art, and often does for particularly famous public domain pieces, such as Vincent van Gogh's Starry Night, it's unlikely to occur unless the artist is well represented in the training dataset.⁵³ Further, some developers, like OpenAI, filter out instances of replication caused by images that are replicated many times in the training dataset by removing images that are visually similar to other images in the dataset.⁵⁴ Thus, outside of discrete instances of replication, it's unclear if works generated by AI are derivative works of the AI's training data.

2. Contractual Provisions

Although issues of ownership and copyright infringement relating to Generative AI may be undecided in copyright law, contractual provisions in the form of an end user license agreement or terms of service can allocate ownership and risk according to contract law. To sample emerging trends, we reviewed the contractual provisions of six popular AI generators: DALL-E 2, ChatGPT, Midjourney, Stable Diffusion, and DeviantArt's DreamUp. DALL-E 2

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⁴⁸ Id.

⁴⁹ James Vincent, <u>'An engine for the imagination': the rise of AI image generators, An interview with Midjourney founder David</u> <u>Holz</u>, VENTUREBEAT (August 2, 2022).

⁵⁰ Kashmir Hill, *This Tool Could Protect Artists From A.I.-Generated Art That Steals Their Style*, NEW YORK TIMES (February 13, 2023).

⁵¹ See Steinberg v. Columbia Pictures Industries, Inc., 663 F. Supp. 706 (S.D.N.Y. 1987); see also Dave Grossman Designs, Inc. v. Bortin, 347 F. Supp. 1150 (N.D. Ill. 1972).

⁵² Id.

⁵³ Andres Guadamuz, <u>Copyright infringement in artificial intelligence art</u>, TECHNOLLAMA (August 11, 2022).

⁵⁴ OpenAI, DALL · E 2 Pre-Training Mitigations (June 28, 2022).



and ChatGPT are both governed by Open AI's terms of use, while Stability Diffusion and DreamUp are both governed by the same open-source license, although DreamUp has additional terms of service. Apart from ChatGPT, all generators reviewed are text-to-image generators.

In each AI generators' terms of service, the creators of the AI generators disclaim liability and provide no warranties for the content produced by the AI generators. Each of the terms of service also provide use guidelines for the sort of content users may prompt the AI generators to produce, requiring that users refrain from prompting the AI generators to create harmful, sexual, violent, or offensive content, and requiring that users refrain from intentionally violating the rights of others.

Where there was some divergence is in licensing and ownership provisions. OpenAI assigns the user of its generators all rights and interest to the content generated by its AI, but include limitations designed to avoid conflicting ownership claims when similar content is produced for more than one user. Notably, Midjourney can use content generated by the AI generator anyway it wants, including allowing others to use the content. Thus, Midjourney may not be the right AI generator for a game developer that wants protectable assets. Finally, neither Stability Diffusion nor DreamUp claim any rights to generated content. Contractual provisions relating to ownership are summarized in the table below.

AI Generator	License	Ownership
Open AI (DALL-E 2 & ChatGPT)	Terms of Use ⁵⁵	User owns all text prompt-based input, and, subject to compliance with the Terms of Service, OpenAI assigns to the user all its right, title and interest in and to content generated by its AI. However, content that is requested by and generated for other users is not considered the user's content, even if it's the same or similar to content requested by and generated for the user. The Terms of Use contradicts a statement to
		VentureBeat, in which an OpenAI spokesperson said, "OpenAI retains ownership of the original image primarily so that we can better enforce our content policy." ⁵⁶
Midjourney	Terms of Service, ⁵⁷ Attribution- NonCommercial 4.0 International ⁵⁸	The user grants Midjourney a perpetual, worldwide, non- exclusive, sublicensable, no-charge, royalty-free, irrevocable copyright license to the text and image prompts the user inputs, and to the content produced by the service at the user's direction.

⁵⁵ OpenAI, <u>Terms of Use</u>.

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⁵⁶ Sharon Goldman, <u>Who owns DALL-E images? Legal AI experts weigh in</u>, VENTUREBEAT (August 16, 2022).

⁵⁷ Midjourney, <u>Terms of Service</u>.

⁵⁸ Attribution-NonCommercial 4.0 International.



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		The user owns all content the users create with the Services, unless the user is (1) a nonpaid member, in which case the license is for noncommercial use only and requires attribution to Midjourney; or (2) an employee or owner of a company with more than US\$1,000,000 a year in gross revenue, in which case the user must purchase a corporate membership plan to use Midjourney or copy the content output for the user's company.
Stable	CreativeML	Stability AI claims no rights in the output the user
Diffusion	Open RAIL-M ⁵⁹	generates using Stable Diffusion. The user is accountable for the output and its subsequent uses. No use of the output can contravene any provision as stated in the license. About copyright, Stable Diffusion Online states on its Frequently Asked Questions page: "The area of AI- generated images and copyright is complex and will vary from invitabilitien to invitabilitien "
D T		rom jurisaiction to jurisaiction.
DreamUp	CreativeML Open RAIL-M, ⁶⁰ Terms of Service ⁶¹	DreamUp claims no rights in the output the user generates using DreamUp. The user is accountable for the output and its subsequent uses. No use of the output can contravene any provision as stated in the license.
		In jurisdictions where DreamUp is designated as the copyright holder, DreamUp passes the copyright to the user.

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 ⁵⁹ <u>CreativeML Open RAIL-M.</u>
⁶⁰ <u>CreativeML Open RAIL-M.</u>
⁶¹ DreamUp, <u>Terms of Service</u>.