THE BATTLE BETWEEN AI AND ARTISTS: THE FUTURE OF ART

Bùi Thanh Thoại Trân

Faculty of Information Technology – UEF, tranbtt@uef.edu.vn

Abstract*— The world of art is one that has long been associated with human creativity and expression. So when an Artificial Intelligence (AI)-generated artwork won first place at Art Competitions, many artists were understandably upset. Meanwhile, the concern about who gets credit for AI art is rising. This thesis explores the implications of this development and what it could mean for the future of art.*

Keywords: *AI-generated artwork, artists, credit for AI art, future of art, human art.*

1. Introduction

Artificial Intelligence (AI) is much older than you can imagine. Since 1950s to 1970s, AI has already appeared as neural networks or it was might called thinking machines. From 1980s to 2010s, machine learning has become popular. To our present day, deep learning breakthroughs drive AI boom. In particular, AI was coined long ago, but it has become more trendy thanks to increased date volumes and improvements in computing power and storage.

In 2022, AI finally reached to the point of creating artistic works on its own, which caused colossal anger storms of art communities. The growth of AI-generated images expansion with the copyrights and intellectual property concerns has become the peak controversial topic since then. I will describe this battle into five stages, following Freytag's Pyramid – dramatic structure for storytelling.

The battle between AI and artists is divided into five stages in order: Exposition, Rising action, Climax, Falling action and Resolution.

2. The first stage - Exposition

2.1. The start is here.

In August 2022, The Colorado State Fair Fine Arts Competition, an annual event where awards are given to artists in many different categories, such as painting, quilting, sculpture. Etc. Nevertheless, one entrant Jason M. Allen of Pueblo West, Colo., did not make his entry with as brush or a lump of clay. He created his work with Midjourney, an artificial intelligence program that turns lines of text into hyper-realistic graphics.

Allen's work, "Théâtre D'opéra Spatial", took home the blue ribbon in the fair's contest for emerging digital artists – making it one of the first AI-generated pieces to win such a prize, as well as setting off a fierce backlash from artists who accused him of, essentially, cheating.

On the other side, some people was wondering how he could bend the rules in that competition like that. Reached by phone

Figure 1 Allen's AI-generated work, "Théâtre D'opéra Spatial"

with press later one, Allen defended his work. He said that he had made clear that his work – which was submitted under the name "Jason M. Allen via Midjourney" – was created using AI, and that he had not deceived anyone about its origins. Plus, "I'm not going to apologize for it," he said, "I won, and I did not break any rules".

2.2. The prequel.

Jason M. Allen, 39, runs a studio, Incarnate Games, which makes tabletop games, and he was curious how the new breed of AI image generators would compare with the human artists whose works he commissioned. In Summer 2022, he got invited to a Discord chat sever where people were testing Midjourney – uses a complex process known as "diffusion" to turn text into custom images. Users type a series of words in a message to Midjourney. Seeing the bot spits back images seconds later, which was made Allen became obsessed. According to him, creating hundreds of images in Midjourney and marveling at how realistic they were.

Eventually, Allen got the idea to submit one of his Midjourney creations to the Colorado State Fair, which had a division for "digital art/ digitally manipulated photography." Then he had the images printed on canvas in a local shop and submitted it to the competition. The judges at that time completely had no clue about neither what Midjourney was nor AI-generated images. Their bewildered mind brought Allen a blue ribbon, along with a $300 prize.

2.3. Two sides have been formed.

After his win, Allen posted a photo of his prize work to the Midjourney Discord chat. It made its way to Twitter, where it sparked a furious backlash.

One side defended Allen, saying that using AI to create a piece was no different from using Photoshop or other digital image-manipulation tools, and that human creativity is still required to come up with the right prompts to generated an award-winning piece.

Following this side was the judges of the contest themselves. Olga Robak, a spokeswoman of The Colorado Department of Agriculture, which oversees the state fair, said Allen had appropriately disclosed Midjourney's involvement when submitting his piece. Besides, the category's rules allowed any "artistic practice that uses digital technology as part of the creative or presentation process". As they mentioned before, the two category judges did not know that Midjourney was an AI program, she said, but both subsequently told her that they would have awarded Allen the top prize even if they had.

On the other side, not only creators but also artists question whether companies creating the machine learning models had a legal right to use their works. The principle consideration has always been about whose would take the credit since they began to learn how AI works, as well as has been being trained.

2.3. AI images generators.

AI-generated images, as known as, AI art is any artwork that is created with the use or help of artificial intelligence. We many know well that AI is a field of computer science that builds machines to mimic human thought processes. For AI generates products that are so lifelike, you may think a human produced them. However, there is a dark secret behind them all.

There are three diverse AI generators having an innate capacity of generating images: DALL-E 2, Midjourney, Stable Diffusion. Basically, they are built by scraping millions of images from the open web, then teaching algorithms to recognize patterns and relationships in those images then generate new ones in the same style. That means artists who upload their works to the internet may be unwittingly helping to train their algorithmic competitors. Still, they still have differences in distinct sides.

- ***DALL-E 2*** does not open to the public and was trained off all art. It generates images from textual descriptions, along with the ability to work well on natural human images.
- ***Midjourney*** is available on Discord channel and it was trained

off of DeviantArt – the largest online art gallery and community. It is able to predict the intermate steps between input and output images, as well as export rich color and realistic images in all attempts.

- ***Stable Diffusion*** generates images by diffusing noise. Comparing with the other two, Stable Diffusion has been named "the worst enemy" since it opens to the public and was trained off all art. Plus, it has large community support with its open-source nature.

3. The second stage – Rising action

3.1 "More popular than Picasso".

Have you seen those cool AI-generated image across the Internet? There is a high chance they are based on the works of Greg Rutkowski.

Greg Rutkowski is a Polish digital artist who uses classical painting styles to create dreamy fantasy landscapes. He has made illustrations for games, such as Sony's Horizon Forbidden West, Ubisoft's Anno, Dungeons & Dragons, and Magic: The Gathering. Nevertheless, he has become a sudden hit in the new world of text-to-image AI generation.

Figure 2 Greg Rutkowski, "Dragon's Breath", July 2022.

His distinctive style is now one of the most commonly used prompts in the new open-source AI art generator Stable Diffusion and others. These programs are built by scraping images from the Internet, and of course, without permission and proper attribution to artists, like, Rutkowski.

In 16th September 20222, according to the website Lexica, which has been tracking over 10 million images and prompts generated by Stable Diffusion, Rutkowski's name has been used as a prompt over 93,000 times. This made Rutkowski became the world's most famous artists, along with other world famous artists such as Michelangelo, Pablo Picasso, and Leonardo da Vinci, but unexpectedly, their names brought up only around 2,000 prompts each or less. Rutkowski's name also features as a prompt thousands of times in the Discord of another text-to-image generator, Midjourney.

Figure 3 Stable Diffusion prompted image

Rutkowski at first was surprised but thought it might be a good way in order to reach new audiences. Then he tried searching for his name to see if a piece he had worked on had been published. The online search brought back work that had his name attached to it but was not his. "It's been just a month. What about in a year? I probably will not be able to find my work out there because [the internet] will be flooded with AI art," Rutkowski said. "That's concerning."

These AIs are often trained on datasets, or collections, of millions of images scraped from the internet, including ones that are copyrighted or watermarked. But the artists who created them never consented for their work to be used and surely they don't get a cut of the profit.

"We could say that, ethically, it's stealing," Rutkowski said. He has choose the side to be with.

3.2 Lensa app – too good to be free.

Lensa is an all-in-one image editing app that takes users' photos to the next level. In November 2022, Lensa app was launched, which was created by Prisma Labs. Lensa uses artificial intelligence in order to transform selfies into customised portraits. Speedily, people felt in love with Lensa immediately with millions downloads in December 2022.

Lensa works by allowing users to be whoever they choose to be by scraping images together to create a magical avatar in the blink of an eye. Or that was what people thought initially. Later on, it was found that the third parties involved with Lensa are LAION and Stable Diffusion, I will explain more in the later part.

3.3 Awards got taken. Artworks got stolen.

After Colorado State Fair, there were another two arts competitions that the winners had used AI programs. Moreover, both of them were the photography contests, the DigiDirect's weekly photo contest and the Sony World Photography Award's the World Photography Organization.

As for Australian electronics company photo contest DigiDirect, in 3rd Feb 2023, the first prize was given to "Jane Eykes", who announced her work was "drone shot". Still, post claiming the prize, a studio called Absolutely Ai confessed that they had entered the image under false pretences, declaring "the world's first AI-generated award-winning photograph."

Once again, it started another flame in the battle between AI and artists. It may not be the biggest photo competition, but it was a huge warning for the industry. As the technology improves, it will evolve into progressively challenging to tell which is a genuine photo taken by the hands of a photographer and which is an artificial image spat out by a computer model trained on millions of images.

Figure 2 AI image won a photography contest | Absolutely Ai

On the other side, there were various cases of artworks being stolen by AI-image generators following Greg Rutkowski's case. One of the similar cases as Rutkowski is Fernanda Fernandez, a Brazilian artist. At first, people thought it was just coincidence that they found some pictures that look exactly as Fernandez's drawings, which later they learned it was made by AI. Here is one of evidences that they found:

Figure 3 Fernanda Fernandez, "lanthe", July 2022

Figure 4 AI-generated image, from Artworks by Rokii

The concern about copyrights and intellectual property, one more time, has been accelerated.

4. The third stage - Climax

4.1. An ironic twist.

On December 27, Ben Moran, a digital illustrator based in Vietnam, posted their first artwork, titled "A Muse in Warzone," on the subreddit r/Art on the social news site Reddit. In swift order, however, the artist would find their artwork removed from the forum for violating its strict policy on not sharing AI art, followed by a ban from the 22-million-strong community.

The truth? Moran's artwork was not AI-generated. Moderately, it was actually part of a commission received by their studio, Kart Studio, where Moran serves as lead artist. For this particular illustration, intended to be a book cover, Moran had used Photoshop to rework an earlier draft created by a colleague. "It is like fixing the image and rendering it at the same time," they said of the process. The artwork eventually took about a month to complete.

That the illustration was deemed to be the work of an algorithm naturally shocked Moran, "not because my artwork is being compared to AI art," they told Artnet News in an email. "I was stunned because of the responses. It really hurts when you receive those words as an artist."

4.2. The proof.

Upon receiving the ban, Moran contacted the moderators of r/Art to contest the "punishment," offering to provide evidence, such as layered PSD files, that the work was not created with prompts. According to a screenshot they shared on Twitter, a moderator from the subreddit replied, "Even if you did 'paint' it yourself, it is so obviously an AI-prompted design that it does not matter."

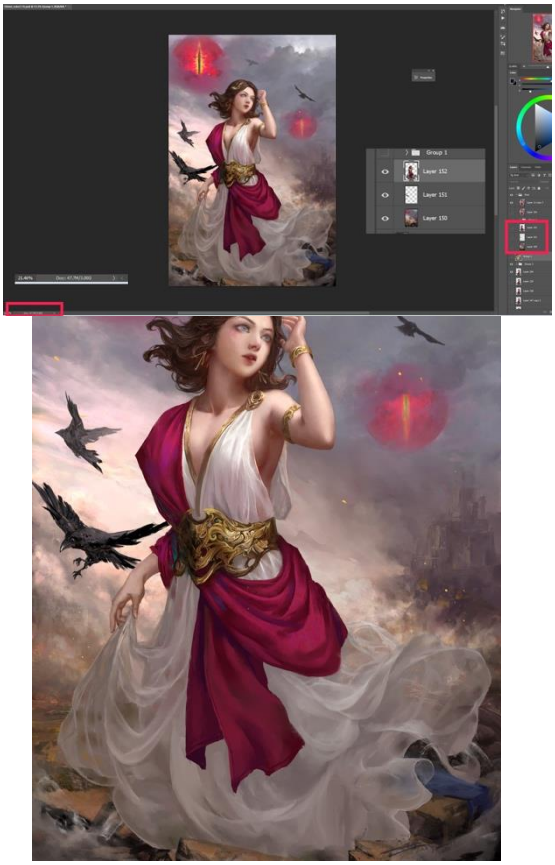

Figure 7 Moran and Kart Studio show the proof

"If you really are a 'serious' artist," the message went on, "then you need to find a different style because A) no one is going to believe you when you say it's not A.I., and B) the A.I. can do better in seconds what might take you hours."

Moran was then muted by the moderator and restricted from contacting them for the next 30 days.

"We are in the world which real artists is being punished because he is the victim of these thief called AI artists?" Moran posted on Twitter.

5. The fourth stage – Falling action

5.1. "NO to AI-generated images" trend.

Couple of months later, after the Colrado State Fair, artists finally gained their strength in order to fight back AI-generated together.

First of all is "NO to AI-generated images" trend. Initially, ArtStation – a platform for artists to showcase their artwork with 3.4 million users per month, was the first ever community stood up to fight for "Human art" side. It was started in Jan 2023 with a famous image "NO TO AI GENERATED IMAGES" on this platform since users found out the community's creators allow AI-generated art on site. Quickly, it became a flood trending everywhere, from ArtStation to Twitter, then Facebook.

Figure 8 Artists protest as ArtStation allows AI-

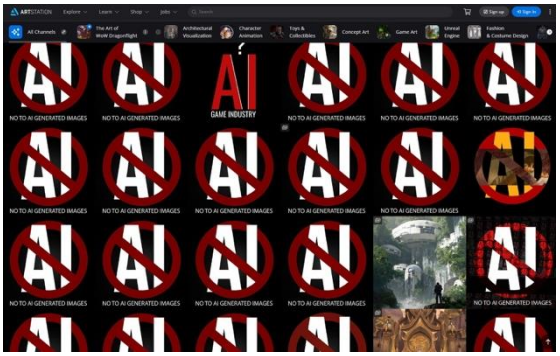

Figure 5 A screenshot that captured the flood trending on ArtStation

5.2. Lensa – a hidden criminal AI.

As I mentioned before that I will tell more detail about Lensa. And now here we are.

What is exactly Lensa? Lensa A.I works by inviting users to upload 10-20 photos of themselves. It uses the open source Stable Diffusion model – the app processes those photos to generate avatars of users that look like they were created by digital artists.

Stability.AI, the company that built Stable Diffusion, trained the model on the LAION-5B data set, which was compiled by the German nonprofit LAION. LAION put the data set together and narrowed it down by filtering out watermarked images and those that were not aesthetic, such as images of logos, says Andy Baio, a technologist and writer who downloaded and analyzed some of Stable Diffusion's data. Baio analyzed 12 million of the 600 million images used to train the model and found that a large chunk of them come from third-party websites such as Pinterest and art shopping sites such as Fine Art America.

Following the website Arstechnica, this LAION database is so indiscriminate about the images it stores that even includes private medical records. It also includes graphic photos of ISIS beheadings, stolen nonconsensual porn and much more. This raised the peak warning about not only copyrights but also hidden crimes behind AI.

6. The final stage – Resolution

6.1. The future of art competitions.

The future of art competitions may be in jeopardy after an AI-generated artwork won first place at a state fair fine arts competition. This has caused many artists to feel threatened and upset, as they believe that their jobs are already at risk of being taken over by machines. While it is appropriate that AI-generated images can be very realistic and lifelike, but they lack of the emotion and creativity that only humans are able to invest into their work. This separates true art from a simple imitation, and it is something that machines have not yet been able to simulate.

Art competitions are likely to become more and more common as AI technology advances. This could eventually lead to a situation where AI-created artworks are the standard, and human-created art is a infrequency. This would be such a blue day for the world of art, as it would symbolize the end of human creativity and expression. Let me wish that this does not overcome and that humans can continue to create unique works of art for several years to come.

6.2. The future of art.

Some artists are concerned that AI-generated artwork could take over the art world, making it difficult for traditional artists to compete. However, others believe that AI-generated artwork can accompaniment traditional art, and that the two can coexist. Eventually, it is up to each individual artist to decide how they feel about AI-generated artwork and whether or not they want to embrace it.

Creators of image generators see them as a tool for artists to expand their possibilities, rather than a threat to their creative professions. In the future, art may become more about collaboration between humans and machines, as AI is used to create new artwork or to enhance existing artwork. As AI technology continues to develop, it is likely that the role of AI in the art world will continue to grow.

7. Conclusion

It is no surprise that AI-generated artwork is becoming more and more common, but it is surprising that an AI-generated artwork won first place at a state fair fine arts competition. This shows how far AI has come in recent years and how much potential it has in the art world. While some artists are pissed off about this, other think it is amazing and cannot wait to see what else AI will create in the future.

For me, AI images, though, I do like them. They remind me of a picture book I once had and spark my love of long established and eccentric looking things, for what that is variety. A lot of AI-generated images I have seen do this – open the door to the alternate, bizzare worlds, which said ton of about the people who request these images. There is a alluring desire to perceive something remarkable which will never happen our reality. But how tightly and terribly joined is this desire for the fantastic to the impish twitch for falsity. AI art makes you feel something or tells a story, it is not genuine or authentic. That is because AI is scanning existing human created art and using that to generate an output. Only human can create artworks that have “soul”.

In my mind, the growth of AI may be marvelous for industry, but not for the art community and artists. AI, of course, is better than our brain. It is a combination of a thousand, or even crazier a million human brains of artists all over the world, so AI can do a ton of work in a precise time. But as I believed, it definitely can cut off all the artist passion, worse, their job and break the art community. I strongly hope that future artists will not lose their devotion because of a technology that can whack together a painting in seconds or the controversies surrounding its progress and disclosure. Stay

strong artists. Do not let the AI stop your drawing career and passion.

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