

Friday Special

AI-generated artwork causing stir among artists

Turanur Islam

AI-generated artwork, a new genre of art created by artificial intelligence-based algorithms by writing some text descriptions in English, has caused one of the greatest stirs among artist community.

Though platforms researching AI text-to-image projects are slowly opening their services to public, every platform is running out of subscription capacity within a month and sometimes a week. Millions of AI-based images and artworks are generated every day.

The internet is flooded with mind-blowing concepts of generating artwork just by writing some simple texts in the prompt (the input field in a text-based user interface screen for an operating system (OS) or program).

This has created an opportunity for non-artist and amateurs to create mind-blowing artworks of any concept and genre without any experience. People are now creating images that were not possible before for everyone.

Traditional artists create art spending hours while AI takes minutes to output similar results and some experts are calling it 'Plagiarism by machine'. However, AI does not create an image out of nowhere, rather it analyzes the existing database, learns from it and generates image. We, humans similarly make art using our past experience, philosophy of life, imagination and creativity.

The concept of generating images and art is not something new but within the last six months, almost all artists and tech enthusiasts are using commercial platforms like Open AI's DALL-E or open-source platforms like Midjourney, StyleGAN and Stable Diffusion.

One of the first generations of AI image generators AARON was devel-



oped by Harold Cohen, an English artist in the late 1960s. Later IBM, Microsoft and Google tried to improve the idea but DALL-E, Midjourney and Stable Diffusion became the major players in the market.

Art has always been very much subjective and relied upon the opinion of the viewers but these platforms use millions of images found on online with their descriptive information generating images which captivate millions of people.

Artists and amateurs are testing their creativity, generating new ideas from AI outputs to create their work. AI can generate future project plans for artists, framing ideas for photographers, and characters for animation, video games and fiction. This way AI is also enhancing human

creativity while saving time.

Though the outputs are not perfect in the current state, the way its popularity is growing and how major tech giants are investing in these fields also raises a question - will AI replace human artists?

At the 2022 Colorado State Fair's annual art competition, an image generated with Midjourney AI won the first prize over other artists who spent hours creating digital artworks. Yet, comprehension and appreciation of art are widely considered exclusively human capabilities. This instance has made artists concerned about their future.

However, enthusiasts and artists working or testing these platforms are saying AI is revolutionizing digital art but it won't affect the existing art mediums. "Did photography replace tra-

ditional art? So won't AI," questioned one on a social media platform.

The way these tools work is quite fascinating. For example, DALL-E derived from the names of famous Pixar character Wall-E and Spanish surrealist artist Salvador Dalí creates images seen never before and artwork by using OpenAI models called CLIP (Contrastive Language-Image Pre-training) and Diffusion Model.

CLIP trains the model using hundreds of million images and associated captions to recognize the similarity between the image and its caption. This process helps the AI to learn which English text is associated with which object or style.

And then comes the Diffusion model, which works differently and intricately. To make it simple, we can think

of a solved puzzle mixed up and then solve again by AI. This way, the model takes a perfect image, adds noise and randomly scrambles its pixels and then it denoises the image again pixel by pixel. This way it learns to generate new images.

DALL-E also has a text encoding to image encoding process called prior which takes the text input and maps them to process the initial command. Midjourney AI and Stable Diffusion also use similar models but outputs are different because of the different parameters they use.

DALL-E trains its models using images found on the internet whereas Midjourney AI trains using images from DeviantArt. On the other hand, Stable Diffusion is trained using 256 Nvidia A100 GPUs at Amazon Web

Service and details are proprietary to the developers.

However, these models are not perfect at this moment but the way it is gaining popularity and how the major tech giants are investing make experts think about the commercial aspects of these platforms.

Developers working in NFT and Crypto market are developing tools that incorporate AI-generated NFTs and sell them using cryptocurrency.

In 2018, Christie's, a British auction house, auctioned the first AI art titled 'Portrait of Edmond Belamy' for \$432,500. In 2022, many auction houses and online platforms are selling AI arts on regular basis like the UnRealArt exhibition.

XANA, a platform built for Metaverse 10,000 AI-based Japan anime-inspired unique avatars that they sold as NFTs. These NFTs also provide special privileges for the Metaverse. Some other artists are selling AI-generated artworks as NFT on independent platforms. Developers are jumping to grab the market.

LinkedIn founder and tech entrepreneur Reid Hoffman released a small collection of AI-generated art for sale as a part of market research and one piece of 'art' called mangata was sold on an NFT marketplace for \$24,000.

At this time, no one can precisely say anything about the future of AI art platforms but we can predict the momentum as AI is making an impact on our day-to-day life. As AI is taking over every aspect of technology, we cannot but have to live in an AI-powered world.

Though art was considered a window of a person's soul, now we are creating art looking through a computer's window. We have to wait to find out whether AI replaces human creativity or boosts human creativity.

Dhaka North wins Bloomberg Philanthropies Award for creating greener spaces

Staff Correspondent

Dhaka North City Corporation has been announced as one of the ten winners of the C40 Cities Bloomberg Philanthropies Awards 2022.

The awards were announced at the C40 World Mayors Summit in Buenos Aires, Argentina on Thursday (October 19 local time), said a DNCC press release.

DNCC Mayor Atiqul Islam received the award, given under the 'United in building climate resilience' category for the expansion of green spaces to create a greener, more inclusive and liveable city in Dhaka North City Corporation.

Awards were given out in five categories that align with this year's summit theme, 'United in Action'. The categories are — United to accelerate immediate action in critical sectors, United to clean the air we breathe, United in building climate resilience, United to innovate and United in building a climate movement.



After receiving the award, DNCC Mayor Atiqul said, "In this time of Covid-19, climate change and conflict, we must remain united and remember that no one is safe unless everyone is safe. Human civilisation may even face extinction."

This year, 70 cities competed for the prestigious awards. The other award-winning cities are, Addis Ababa in Ethiopia, Amsterdam in the Netherlands, Beijing

in China, Pune in India, Metropolitan Area of Guadalajara in Mexico, Freetown in Sierra Leone, São Paulo in Brazil, Seattle in the USA, Tokyo in Japan and Kuala Lumpur in Malaysia.

The awards celebrate pioneering climate projects led by cities around the world, recognising mayors and encouraging friendly competition between cities keen to demonstrate their successful climate actions and raise global ambition. Seven prior editions of the awards programme have taken place to showcase some of the world's most ambitious climate projects and amplify best practices.

C40 is a network of nearly 100 mayors of the world's leading cities committed to delivering the urgent action needed to confront the climate crisis. Bloomberg Philanthropies invests in 941 cities and 173 countries around the world to ensure better, longer lives for the greatest number of people.

Cyclone threat brews over bay

Staff Correspondent

A low-pressure area formed over North Andaman Sea, adjoining areas of South Andaman Sea and southeast Bay of Bengal is likely to intensify into a cyclonic storm and reach West Bengal, Bangladesh coasts on October 25, said India Meteorological Department.

According to an IMD bulletin, under the influence of a cyclonic circulation over North Andaman Sea and neighbourhood, a low-pressure area formed over North Andaman Sea and adjoining areas of South Andaman Sea and southeast Bay of Bengal on Wednesday and it persisted over the same region on Thursday.

It is very likely to move west-north-west wards and concentrate into a depression over east central and adjoining southeast Bay of Bengal around October 22 and into a deep depression on October 23.



PILLARS OF CREATION

AFP. Washington

The James Webb Space Telescope captured the iconic "Pillars of Creation," huge structures of gas and dust teeming with stars, NASA said Wednesday, and the image is as majestic as one could hope.

The twinkling of thousands of stars illuminates the telescope's first shot of the gigantic gold, copper and brown

columns standing in the midst of the cosmos.

At the ends of several pillars are bright red, lava-like spots. "These are ejections from stars that are still forming," only a few hundred thousand years old, NASA said in a statement.

These "young stars periodically shoot out supersonic jets that collide with clouds of material, like these thick pillars," the US space agency added.

Sri Lanka into Super 12, Netherlands join them

AFP. Geelong



Opener Kusal Mendis slammed a 44-ball 79 as Asian champions Sri Lanka beat the Netherlands by 16 runs to sweep into the Super 12 stage of the Twenty20 World Cup on Thursday, where they were joined by the Dutch despite their defeat.

The world's eighth-ranked team plundered 162-6 in Geelong, blasting 102 of them off the final 10 overs, to set a big target which the Netherlands were unable to reach, finishing on 146-9.

But the men in orange still went through after United Arab Emirates won their first-ever game at a T20 World Cup to upset Namibia by seven runs.

The Africans would have joined Sri Lanka in the next round rather than the Dutch had they won, but against the odds, the UAE restricted them to 141-8 as they chased 149 for victory.

For the Netherlands, it is the second time they have got this far after also making the grade in 2014, when they topped their group and then

sensationally beat England. It is the third successive time Sri Lanka have reached the Super 12 and they will be hoping to repeat their heroics from 2014, when Dinesh Chandimal skippered them to the title.

But it was a rocky road to get there, stunned by Namibia in the tournament's opening game before crushing UAE then the Dutch.

"We knew that we could be the number one in this group, but we missed out in the first match," said Sri Lanka skipper Dasun Shanaka.

"The boys have done well though, especially the bowling group. I knew the wicket was two-paced, so we wanted to bowl well in the first 10 overs and then control the game."

After winning the toss and choosing to bat, Sri Lanka started slowly with Pathum Nissanka and Mendis plodding to just 22 off the first five overs.

Great moment

Nissanka was dropped in the fifth over, but came undone on 14 when hostile pace bowler Paul Van Meek-



Sri Lanka's Chamika Karunaratne plays a shot during the ICC men's Twenty20 World Cup 2022 cricket match between Netherlands and Sri Lanka at Kardinia Park in Geelong on Thursday

- AFP Photo

eren returned to the attack and sent down a yorker. Dhananjaya de Silva followed him back to the pavilion the next ball, out lbw, as Sri Lanka lived dangerously with countless chances falling just short of the fielders.

Charith Asalanka and Mendis knuckled down in a 60-run stand to step up the run rate before Asalanka was caught behind off all-rounder Bas de Leede for 31.

Mendis brought up his ninth T20 half-century with a six, then smacked successive sixes in the penultimate over, before he was out going for another boundary, almost carrying his bat.

Despite missing injured pace spearheads Dushmantha Chameera and Pramod Madushan, a Sri Lankan attack with replacements Lahiru Kumara and Binura Fernando kept the Dutch at bay early on.