

JUNE-2023: Vol.- 5 Issue 2

Encode IT

E-Newsletter

Vision:

To be a pre-eminent information technology programme that empowers girls to meet the dynamic demands of Industry & society.

Mission:

- To provide quality education with best resources to achieve academic excellence.
- To create favorable environment that inculcate self-learning, soft skill and adaptability to latest technology.
- To develop competent professionals having highest ethical values and commitment towards the society.

Message from Head of Department

Dear students, colleagues and alumni

I am very happy that our Information Technology department is releasing 2nd issue of volume: 5, quarterly e-newsletter “Encode IT” where we are sharing some of the important news over the past three months. I take this opportunity to thank our staff editorial team for their great effort to make this newsletter. I also invite the readers of ‘Encode IT’ for their contribution and suggestions for the forthcoming issues.

I would like to wish great luck to the students who are passing out this year as 12th batch of DIT, GGP Surat for their bright future. I welcome newly admitted student in our department for academic year: 2023-24. I would like to congratulate all of you and extend my best wishes for your bright future.

Good Luck.



Mrs. Jigna J Desai
Head of Department,
Information
Technology
Department

Midjourney AI



Mr. Rajesh I. Pradhan
Lecturer,
Department of
Information
Technology

Midjourney: The gothic AI image generator challenging the art industry

Yet another AI image generator that is taking over the internet, Midjourney is all about using your imagination.

Artificial intelligence has fundamentally changed the world of art in the last year. Thanks to a host of AI art programs, anyone is able to create whatever image their imagination can produce with just a simple worded prompt.

While a sea of these generators have appeared, one has quickly risen to the top known as Midjourney. Gothic in nature, this program offers a level of realism that is yet to be competed with.

While it isn't without its controversies, Midjourney has drastically pushed the limits of AI art generators, releasing frequent updates with new skills, techniques and advancements in its training database.

So what is Midjourney? How do you use it? And is this standing out as the future of the art world?

What is Midjourney and what can it do?

Midjourney is one of the many AI image generators that have emerged recently. Unlike Dall-E 2 or some of its other competitors, Midjourney offers a more dream-like arty style to your requests.

It will likely appeal to those working within science-fiction literature or artwork that requires a more gothic feel. Where other AI generators lean more towards photos, Midjourney is more of a painting tool.

As the brand's website states, it aims to 'explore new mediums of thought and expanding the imaginative powers of the human species.'

Midjourney asks you to input a worded prompt for an image, for example 'a fox wearing a top hat in the style of a Roald Dahl illustration' and in a few seconds, you'll be returned multiple attempts at this image.

Things can go wrong with your image and the model isn't perfect. For example, it can struggle to generate hands or other complicated objects, and backgrounds can often be blurred or confused, but these are problems you'll find with any of these models.

ability to create complicated geometries using several material types, something traditional manufacturing solutions might not be capable of as efficiently.



Midjourney latest features

Pan feature

Midjourney's latest feature is known as 'pan'. This allows a user to click a set of arrow buttons to extend their image in any direction. This also comes with a feature known as 'remix' which will change the prompt each time you extend the image outwards.

Turbo mode

For two times the price, Midjourney will offer turbo mode, creating images at four times the speed. With the sizeable increase in price, this will only really be necessary for heavy users of Midjourney.

Repeat and permutations

For Pro users of Midjourney, there are features known as 'repeat' and 'permutations'. Between these two tools, any user is able to create up to 64 images simultaneously and ask for up to 40 combinations of prompts in a single query. For example, asking for a (art deco, oil painting) of a (ninja, wizard, priest) giving a mix of these prompts all in one go.

Describe

AI art generators, in their most basic form, are turning words into art. One of the newer features Midjourney added to its platform is the ability to reverse this. This lets any user transform images into words. Simply put in your own image and Midjourney will give you a vivid description back. This is a helpful way to better understand how Midjourney conceptualises words for future prompts.

Midjourney version five - what's different?

The team behind Midjourney have been consistently updating the software since it was first launched. They are now on the fifth iteration.

This, in the team's own words, offers higher image quality, more diverse outputs, wider stylistic range, support for seamless textures, wider aspect ratios, better image promoting, and dynamic range.



Midjourney is more capable of creating faces in the latest version © Midjourney

That is a lot of somewhat vague changes, but in essence this is a focus on higher levels of detail in images. Raindrops, the iris of an eye, or the background of a mountain will all be more hyper realistic. This will allow for more detail to be extracted from more detailed prompts where the model would previously leave extra information out.

This is the version of the model that is now available to all users.

How can you sign up for Midjourney?

Midjourney works slightly differently from most AI tools. While you can sign up directly through the company's website, using the software will require you to download and use Discord – a chat forum-style app.

Once you've been accepted onto Midjourney's Beta, you'll be sent an invite to the Midjourney Discord. This can seem pretty confusing if you haven't used anything similar before but the basics are easy.

You get 25 free queries and then, if you want to keep using the software, you need to sign up for a paid membership (costing between \$8 and \$60 a month depending on the plan you choose).

When you're in the Discord, simply head to any of the 'newbie' channels listed on the left-hand side. Then, type '/imagine' followed by your desired prompt. The bot will respond with four versions of this prompt within a minute.

You can choose to get alternative versions of any of these images, or to upscale one of them to a larger, higher quality image.

In these bot channels where you request your images, other people will also be making requests. It can get a bit hectic in there so keep track of where your image is.

You can see any image you have requested on the Midjourney website.

How does Midjourney work?



For most of the major AI image generators, the creators have offered reams of information on how they work, along with publishing their source code - this isn't the case for Midjourney. The team behind it have kept somewhat quiet on its background and training.

However, it is most likely that Midjourney uses a similar system to both Dall-E 2 and Stable Diffusion, especially as both companies have explained their training methods in detail.

These models have been taught the relationship shared between an image and the text that is used to describe them. Midjourney has stated in the past that, like its competitors, it scraped the internet for images and text to describe them, using millions of published images for training.

The majority of AI image generators with public source code generate these images through a process known as diffusion. Essentially, these models work by adding noise to an image, reducing it to a pixelated mess.

It then learns to recover this data by reversing the noising process. This process is repeated over and over again, training the model to add noise and then remove it again. The model can then apply the denoising process to create realistic images by making small variations to the image.

This is paired with the model's understanding of the relationship between an image and the text used to describe it, helping AI image generators to understand what you are asking for with your prompt.

Not all plain sailing



Like its competitors, Midjourney is not without criticism. There are concerns over copyright, especially since the founder admitted they didn't receive consent from the creators of the art the model was trained on.

With millions of images needed for a model of this size, this would mean copyright infringements in the millions.

This has resulted in both Midjourney and Stable Diffusion getting caught up in a lawsuit brought forward by a team of artists.

"It's [the dataset] just a big scrape of the Internet. We use the open data sets that are published and train across those. I'd say that's something that 100% of people do. We weren't picky," says David Holz, founder of Midjourney, in an interview with Forbes.

In the future, Midjourney are hoping to be able to offer artists the ability to opt out of their images being used in the future.

"The challenge now is finding out what the rules are, and how to figure out if a person is really the artist of a particular work or just putting their name on it," says Holz in his interview with Forbes.

"We haven't encountered anyone who wants their name taken out of the data set that we could actually find in the data set."

In a recent update, the Midjourney team announced that they will now be producing a magazine. This will feature a selection of artwork curated from the 10,000 most highly rated images.

Along with this, the Midjourney magazine will also include interviews with Midjourney community members, talking about their prompts, how they use Midjourney in their creative process and more.

The magazine publishes monthly and will cost \$4 a month. There does, however, remain some questions around the copyright of the images used within the magazine, falling into a grey area of copyright law.

What is Midjourney?

Midjourney is an artificial intelligence program that is used for creating images using prompts. At present, this AI program is only accessible via Discord bot. Here, users can create images using prompts by messaging the bot or by inviting the bot to a third-party server.

Explore [free Artificial Intelligence courses](#)

Steps For Using Midjourney

The following steps are followed for using Midjourney:

- First of all, in order to use Midjourney, you will have to join Discord. You need to visit the homepage and click the 'Join the Beta' button to get started with Midjourney. Then, you will be directed to Discord.
- Register for the Midjourney Discord service and join a Newcomer room. Now, you are able to generate images with Midjourney Bot on any server that has invited the bot. Take a look at the instructions on your server on where to use the bot.
- Now, in order to use the Midjourney Bot, you will need to enter a command so that you can create and modify images. It also helps in monitoring user information and performing useful actions. For generating an image, the user will use the '/imagine' command.
- The bot will automatically reflect the prompt word. So, once you get '/imagine prompt', you will write the set of words based on which you want an image. This will help the bot in understanding your requirement. Variations of a unique image will be created based on your input.

Midjourney AI Commands

There are other commands in Midjourney as well that can be used for creating imaginative and unique images. For more Midjourney AI cheat codes, click [here](#):

Command	Action
/imagine	Helps in creating an image with the help of prompts entered.
/help	Provides information on the Midjourney bot.
/info	Provides information about your plan, usage, queued and running jobs
/subscribe	Allows you to subscribe to the bot
/fast	Expedites the speed of the bot after paying a fee
/relax	Increases the time to accomplish your task
/show	The job will be revived
/private	Paid prompt that helps in keeping your job hidden from public
/public	Everyone can see your job

Department of Information Technology
Celebrates
SHE'NSPIRE 3.0



Venue: Hostel Ground Floor
Time: 4 PM onwards
Date: 9/3/23

"May the wisdom in their minds and the grace in their hearts inspire greatness. Wishing a brilliant Women's Day to all the extraordinary ladies out there!"

PROJECT FAIR-2023

ORGANIZED BY:

DEPARTMENT OF INFORMATION
TECHNOLOGY

DATE: 12/05/2023

VENUE: SARDAR PATEL HALL, GPGS

TIME: 11:00 AM to 03:00 PM

Made with PosterMyWall.com



Orientation Program has been organized for first semester students of IT Department on 17th of September 2022.

Toppers of 1st Semester

Department of Information Technology

Congratulations!!!

1ST SEMESTER TOPPERS

1



SHETA MAITRI
SPI : 9.74

2



CHAURASIA LAXMI
SPI : 9.63

2



KATHIRIYA MOKSHA
SPI : 9.63

2



SHAIKH EZMABANU
SPI : 9.63

3



PATTIWALA KRIPA
SPI : 9.47

3



SARVAIYA MASHIRA
SPI : 9.47

3



SONAR ANJALI
SPI : 9.47

Congratulations to all the students for achieving wonderful results. In
The First Semester Examination...
Keep up the good work!!!

Toppers of 3rd Semester



TOPPERS OF 3RD SEMESTER

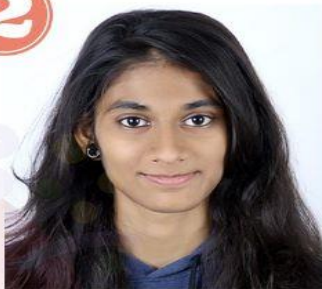
1



DAMASIYA RIDDHI K.

SPI : 10.00

2



AMIPARA TANVI K.

SPI : 9.90

3



DOBARIYA DHRUTI A.

SPI : 9.62

Congratulations to all the students for achieving wonderful results. In
The Third Semester Examination...

Keep up the good work!!!

Department of Information Technology

Congratulations!!!

TOPPERS OF 5TH SEMESTER

1



PATEL HEER
SPI : 9.88

2



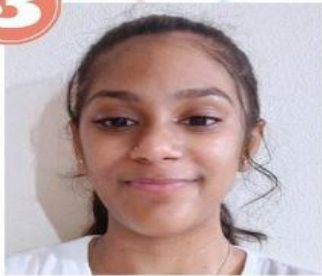
PATEL DHRUVI
SPI : 9.78

3



SHAH FORAM
SPI : 9.66

3



SAVALIYA SNEHA
SPI : 9.66

3



SUPE PAYAL
SPI : 9.66

Congratulations to all the Fifth semester students for achieving wonderful results...

Wish you all the very best for your future endeavors!!!

End Semester Exam: Summer -2023 (Top 3 students)

Sr.no.	Enrollment No.	Name Of Student	Rank	Semester	SPI
1	206150316069	Patel Heer	1	5	9.88
2	206150316043	Patel Dhruvi	2	5	9.78
3	206150316053	Shah Foram	3	5	9.66
4	206150316059	Savaliya Sneha	3	5	9.66
5	206150316035	Supe Payal	3	5	9.66

Sr.no.	Enrollment No.	Name Of Student	Rank	Semester	SPI
1	216150316010	Damasiya Riddhi	1	3	10.00
2	216150316020	Amipara Tanvi	2	3	9.90
3	216150316021	Dobariya Dhruti	3	3	9.62

Sr.no.	Enrollment No.	Name Of Student	Rank	Semester	SPI
1	226150316066	Sheta Maitri	1	1	9.74
2	226150316003	Chaurasia Laxmi	2	1	9.63
3	226150316028	Kathiriya Moksha	2	1	9.63
4	226150316065	Shaikh Ezmabanu	2	1	9.63
5	226150316050	Pattiwala Kripa	3	1	9.47
6	226150316062	Sarvaiya Mashira	3	1	9.47
7	226150316069	Sonar Anjali	3	1	9.47

Puzzles

1. Two trains are traveling towards each other on parallel tracks. The first train is going at 40 mph, and the second train is going at 60 mph. If they are 300 miles apart, and they start at the same time, how long will it take for them to meet?
2. Five years ago, Alice was twice as old as Bob. In ten years, Alice will be 3 times as old as Bob. How old are they now?
3. At what time between 3 and 4 o'clock will the minute and hour hands of a clock be exactly coincident?

Previous Newsletter's Puzzles Answers

Q1: 4

Q2: Rs. 74,730

Q3: 155 degrees

REAL MEANING OF “SUCCESS”

SEE YOUR GOAL

UNDERSTAND THE OBSTACLES

CREATE A POSITIVE MENTAL PICTURE

CLEAR YOUR MIND OF SELF-DOUBT

EMBRACE THE CHALLENGE

STAY ON TRACK

SHOW THE WORLD YOU CAN DO IT



Riddhi Damasiya
Sem: 4th
En.No.-
216150316010
Department of
Information
Technology

Inspiration for Students

Funny it is, being a student
Being told what to do,
Not just at college or school
But at home too.

All this, Is it reality worth it
You may ask yourself, and rightly so,
Doing what your teachers and parents say
Will it reality help you grow.

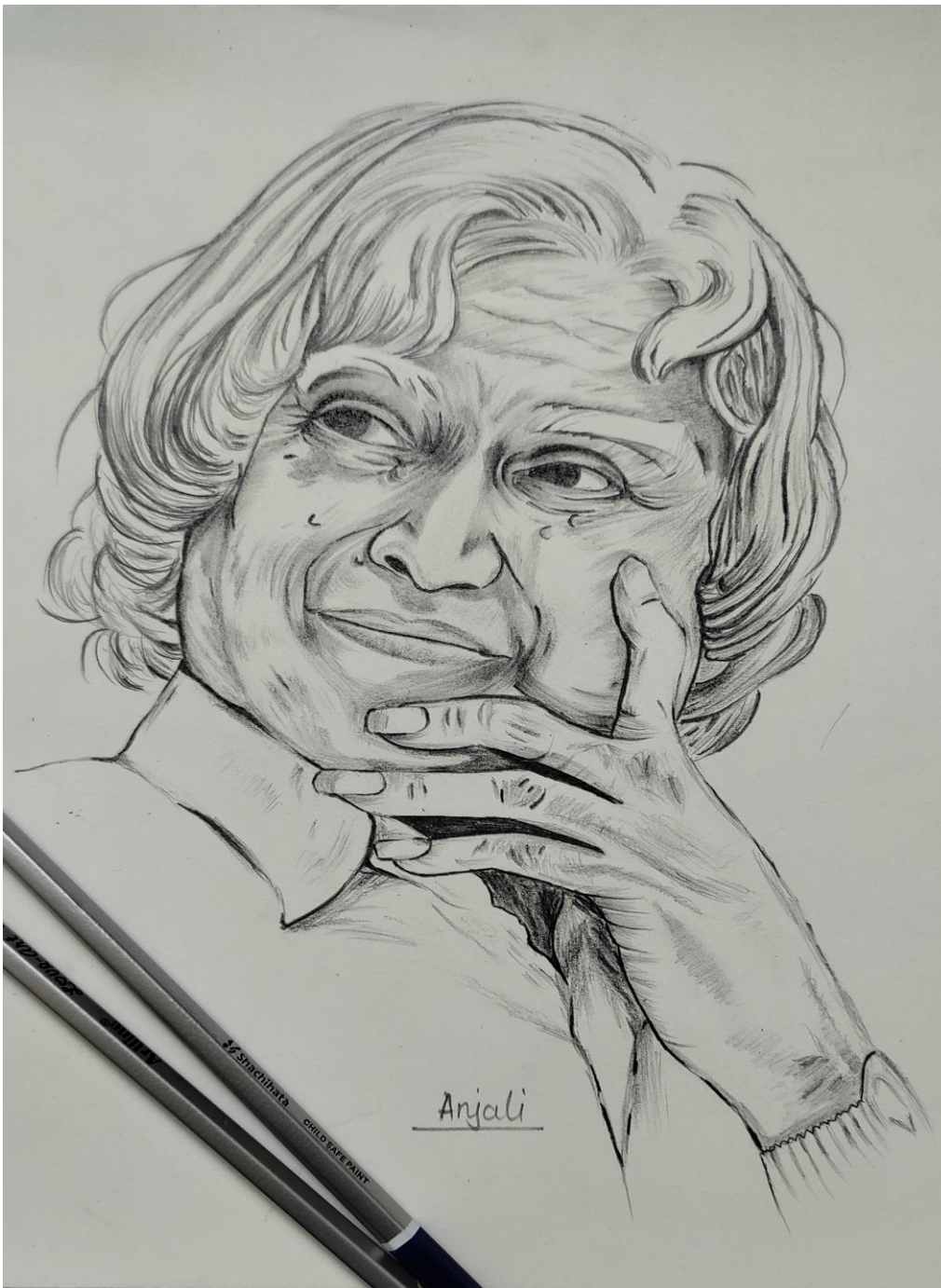
Reasonable, are these doubts
But to find out, there's only one way,
Build yourself, on all that you learn
And keep learning more, day after day.

Be aware, chase what you want
Trust your institutions, trust your goal.

Nothing stops you from being great
As long as you got that fire in your soul...



Riddhi Damasiya
Sem: 4th
En.No.-
216150316010
Department of
Information
Technology



Anjali Sonar
Sem: 2nd
En.No.-
226150316069
Department of
Information
Technology