

KENSRI SCHOOL & COLLEGE

KENSRI EXCELLENCE DEVELOPMENT SYSTEM



AI Image Generator

Content Sheet

1. Cover page
2. Content Sheet
3. Background
4. Introduction
5. Did you Know facts
6. Curiosity Questions
7. Possible Answers
8. Hypothesis
9. Synopsis
10. Experiment
11. Observation
12. Result
13. Conclusion
14. Mentor
15. Bibliography

Background

An AI image generator is a type of artificial intelligence system that can create new images or modify existing images based on its training data. These generators often use deep learning techniques, particularly generative adversarial networks (GANs) to create realistic and coherent images.

AI image generators have numerous practical applications. They can be used in art and creative projects to generate unique artwork and designs. They are also employed in industries like entertainment and gaming to create realistic virtual environments and characters. Additionally, image generators have medical applications, such as generating synthetic medical images for research or diagnostic purposes, and in data augmentation to improve training of other AI models.

Introduction

AI image generators are programmes which use artificial intelligence to generate or produce images related to the prompt or topic that we have given. Images generated are always different from last time and also the image generated cannot be found anywhere else because of GANs (generative adversarial networks) which doesn't allow the same algorithm to be repeated even if the prompt given is exactly the same.

In this project, we will use OpenAI and the DALL-E model to create a web app that will generate images from scratch based on the entered text. We can use OpenAI's DALL-E project to achieve this, which is a newly developed software by the OpenAI team, which has also developed the famous ChatGPT, which is used by many students and other people in different fields to create different answers/conversations. We used HTML, JavaScript and OpenAI's DALL-E to achieve an image generator. We type in the text descriptive of the image we need and wait for the results to show up.

Did You Know?

- ▶ AI has been around for decades. While AI is often thought of as a new technology, the concept has been around since the 1950s.
- ▶ AI can create art. AI algorithms can analyse images and create new artwork based on patterns and styles that it has learned.
- ▶ Every AI image generated is always unique and can't be found anywhere else nor be generated again.
- ▶ **AI is already all around us.** AI is already being used in many areas of our daily lives, from voice assistants like Siri and Alexa to recommendation systems on streaming services like Netflix and YouTube.
- ▶ **AI is being used to develop self-driving cars.** Self-driving cars rely on AI to navigate and make decisions on the road.

Curiosity Questions And Answers

Q.Which are the best ai image generators?

ANS.

- ▶ Dall-e
- ▶ Midjourney
- ▶ Dream studio
- ▶ Starry ai

Q.What useful things can be done using this generator?

ANS.

Using this programme, we can create really cool arts,images,etc which can be used as banners and logos .

Curiosity Questions And Answers

Q.How do ai image generators work?

ANS.

There are many mechanisms for creating AI art, including procedural "rules" for generating images using mathematical patterns, algorithms that simulate brush strokes and other painting effects, and artificial intelligence or deep learning algorithms such as generative adversarial networks and transformers.

Q.What is ai image generator?

ANS.

The AI Image Generator is a computer program that uses deep learning algorithms to create realistic images from text descriptions. This algorithm is trained on a dataset of images and their descriptions so that it can learn to generate images that match the descriptions.

Hypothesis

By developing an AI image generator using state-of-the-art deep learning techniques and Generative Adversarial Networks (GANs), I hypothesize that the model will be capable of producing high-quality, diverse, and realistic images across various artistic styles and themes. If the lines of coding and api key work correctly without any issues we can expect a positive outcome which is an image being newly generated, there might be some flaws in the image since the ai is new and still needs to learn

Synopsis

If the lines of coding and api key work correctly without any issues we can expect a positive outcome which is an image being newly generated, there might be some flaws in the image since the ai is new and still needs to learn we will use OpenAI and the DALL-E model to create a web app that will generate images from scratch based on the entered text. We can use open ai's dall e project to achieve this which is a newly software developed by the open ai team which has also developed the famous chat gpt which is used by many students and other people in different feels to create different answers/conversations. We used html, java script and open ai's dall e to achieve an image generator. We type in the text descriptive of the image we need and wait for the results to show up.

Experiment

PROCEDURE: we give the same prompt to the ai image generator that we made 2-3 times, (example- cute dog, handsome person, etc) and check whether if the image generator generates the image according to the prompt and also to check if the images are actually different each time we generate it.

Observation

Once we are done with giving prompt and generating ai images, we can observe that it takes only few seconds to create such great arts. We can create images related to exploited content and deepfakes but we have blocked it because it can lead us to serious trouble.

Result

We have now obtained a newly generated image which has been generated with reference to the text we have typed in as an input

Conclusion

From this we learnt that any image can be generated using this ai programme. We cannot generate images regarding exploited content and deepfakes.

Mentor

Our parents, teachers, classmates and friends helped us make this power project successful.

Bibliography (source)

We got the information from the net, open AI, and google.

Links:-

<https://openai.com>

<https://chat.openai.com>

https://www.youtube.com/watch?v=fU4o_BKaUZE&t=258s