TOPIC:
On DALL-E - Creating images from text

Abstract

Using a trained neural network on a wide range of pictures this model can produce high-resolution pictures from the text we provide.

As a result, we get to save a lot of time and every image produced will be unique, and will provide the authors permission to share the image without the copyright issue, because the image will be theirs, even if they use DALL-E API.

Keywords: DALL-E, API, Neural Networks, Machine Learning, IT

INTRODUCTION

Overview

DALL-E is an image generation project that has been utilized by OPEN AI. It can generate images totally from scratch and is able to do this just by getting input in a text form from any user. It's recognized that work involving generative models has the potential for significant, broad societal impacts. In the future, Open AI employees said, they will consider the relationship between the models like DALL-E and societal issues like economic impact on certain work processes and professions, the likelihood of bias in model results, and the longer-term ethical issues this technology raises.

History & Background

The name of the software is a combination of the surrealist Spanish artist Salvador Dali and the name of the animated robot character WALL-E from the Pixar film series. We currently have two versions of DALL-E, and neither of their source code is released in public, though we have other projects like Stable-Diffusion as an open source project which was trained using unfiltered data in the internet, and the implementation is available in the huggingface platform.

CONCLUSION & IMPLICATION IN PUBLIC ADMINISTRATION

Here are some of the points I think should be considered when we start using the project and giving it out to the public with other open-source projects like this:

- Rejecting image submissions with realistic faces and attempts to imitate famous people and important political leaders will help to reduce the chance that DALLE will be used to create misleading information.
- Making our content filters more precise to improve their ability to prevent picture uploads and prompts that are against our content policy while still allowing for creative expression.
- Improving human and automated monitoring mechanisms to prevent abuse.

REFERENCES

1. "DALL·E Waitlist". *labs.openai.com*. Retrieved 6 July 2022.
2. James Vincent (29 September 2022). "OpenAI's image generator DALL-E is available for anyone to use immediately". *The Verge*.
3. Lane, Laura (1 July 2022). "DALL-E, Make Me Another Picasso, Please". *The New Yorker*. Retrieved 2 August 2022.
4. Marcus, Gary; Davis, Ernest; Aaronson, Scott (2 May 2022). "A very preliminary analysis of DALL-E 2". arXiv:2204.13807 [cs.CV].
5. *STRICKLAND, ELIZA (14 July 2022). "DALL-E 2's Failures Are the Most Interesting Thing About It". IEEE Spectrum. Retrieved 15 July 2022.*
6. *Heaven, Will Douglas (5 January 2021). "This avocado armchair could be the future of AI". MIT Technology Review. Retrieved 5 January 2021.*
7. *Radford, Alec; Wu, Jeffrey; Child, Rewon; Luan, David; Amodei, Dario; Sutskever, Ilua (14 February 2019). "Language models are unsupervised multitask learners" (PDF). 1 (8). Archived (PDF) from the original on 6 February 2021. Retrieved 19 December 2020.*
8. *Radford, Alec; Narasimhan, Karthik; Salimans, Tim; Sutskever, Ilya (11 June 2018). "Improving Language Understanding by Generative Pre-Training" (PDF). OpenAI. p. 12. Archived (PDF) from the original on 26 January 2021. Retrieved 23 January 2021.*