

Prompt Engineering

Introduction

Creating an image that matches a certain expectation is not as trivial as one might expect. The solution space of the AI model is insanely high. To limit this a well engineered prompt can be used to steer the AI in the right direction. This practice is called Prompt Engineering.

Prompt guides

- https://stable-diffusion-art.com/how-to-come-up-with-good-prompts-for-ai-image-generation/#Some_good_keywords_for_you
- <https://anakin.ai/blog/stable-diffusion-prompt-guide/>
- <https://cheatsheet.md/stable-diffusion/stable-diffusion-prompts-guide.en>
- <https://cheatsheet.md/stable-diffusion/stable-diffusion-webui-styles>
- <https://stable-diffusion-art.com/>
- <https://supagruen.github.io/StableDiffusion-CheatSheet/>

Resource references

- <https://civitai.com/>
- <https://www.mage.space/explore>
- <https://tensor.art/>
- <https://majinai.art/>
- <https://openmodeldb.info/>

Prompt perfecters

Using ChatGPT to optimize the prompt is efficient, because it is not always clear how the AI will respond to a certain prompt. There are templates available to help kickstart the prompt perfecting via ChatGPT.

- <https://www.feedough.com/stable-diffusion-prompt-generator/>
- <https://huggingface.co/spaces/Gustavosta/MagicPrompt-Stable-Diffusion>
- <https://sd-prompt-generator.netlify.app/>

Prompt format

A good prompt exists of (most) of the following topics:

1. Subject(s)
2. Background
3. Medium
4. Artistic style
5. Lighting
6. Resolution

Subject(s)

- Description (What kind of subject is it?)
 - Professions, like: 'artist, magician, knight'
 - Clothes or accessories
 - Body features, like: 'brown hair, blue eyes'
- Action (what is the subject doing?)
 - Running, jumping, dancing, etc.
- Pose (Which pose should the subject have? Only relevant for creatures!)
 - Extract pose from built-in ControlNet and [OpenPose Editor](#).
- Location (Where in the picture should the subject be displayed?)
 - [Regional prompting](#) can be used to indicate a sub region in the picture.
- Orientation (From which direction should the subject be displayed?)
 - Use camera angle descriptions, like: 'low angle'
- Distance (From which distance should the subject be displayed?)
 - Use camera shot descriptions, like: 'medium shot'
 - Use length units, like: 'viewed from 100 meters'

Background

The background gives the total setting in which the picture is presented.

- Seasons (Winter, Spring, Summer, Fall)
- Nature (mountains, beach, hills, grass, desert)
- Human-made environments (hotel, restaurant, road, city)

Medium

The medium is the type of picture, like: illustration, oil painting, 3D rendering, digital art and photography.

Artistic style

The style refers to the artistic style of the image, like: impressionist, surrealist, pop art. The names of famous artists can help. Use the SDXL Styles Editor for quickly selecting a preset.

Lighting

The type of lighting is important, because it has a large impact on the emotional value of a picture, like: studio lighting, warm light, crepuscular rays, rim lighting.

Resolution

Resolution represents how sharp and detailed the image is, like: highly detailed, sharp focus, 8K, HD.

Revision #21

Created 21 February 2024 21:05:21 by Jesse

Updated 2 April 2024 06:31:54 by Jesse