

Petro's second illustration

Notes on the creation process

I felt it was worthwhile to share my insights and give a little insight into the process of creating illustrations for the novel "Copernicus". Since at this stage Petro's second illustration was quite a challenge for me, I will focus on it. Of course, I realize that for a considerable number of people these notes may be of little interest, but at the same time for some they may be an interesting extension or even inspiration.

I create illustrations for Copernicus using a leading graphics generator based on artificial intelligence algorithms. Despite its considerable capabilities, at this stage there are times when generating some details is not a simple task. One such challenge is obtaining photorealistic images of characters with consistently the same appearance.

We take Petro's first illustration as our base.



In the second illustration of Petro I wanted to get:

- A profile view showing more of the character.
- Show Petro without glasses.
- Correct his figure to be somewhat athletic (as described in the book).
- Change the background behind him to a room in Guinevere, Corsica.
- Place him in an armchair with a smartphone in his hand.
- Try to show a connected Copernicus, too.
- And most important: keep the resemblance from the face as much as possible.

To generate images, we create a so-called "prompt", which is a set of descriptions and commands based on which the artificial intelligence will try to generate 4 images (4 images per 1 prompt). Such a prompt can also contain a link to another image so that the AI has a reference point.

So we paste our first illustration of Petro in the introduction of the prompt (as a reference point), and then we try something like this.

Age 22, as it generates with an appearance older than the stated age.

<https://s.mj.run/cNmmBoasCqw> A very detailed photo-realistic photography of IT professional, 3/4 profile, glamour, age 22, wearing jeans and a black t-shirt, round metal glasses on the neckline of the shirt, sits in an armchair in a luxurious modern millionaire's apartment, in his hand holds a smartphone, connected to the smartphone with a white cable is a silver box the size of a cigarette lighter, in the top of the silver box glows a blue LED, use Nikon D850 DSLR 4k with a 100mm lens to capture ultra-detailed photography with sharp lines and textures. Photorealistic shot from a high-budget film production in 2022, 8K, --ar 16:9 --iw 2 --style raw --s 100



That is, as we can see, not quite what we wanted to get. A big influence here probably had a parameter `--iw 2`, which increases the suggestion

of the preview image. In only three variants it holds the smartphone. Glasses across the line.

Ok, so maybe now let's drop --iw 2, and add --no glasses, which in theory should remove the glasses.



It's already a little better, there's an armchair, a position in profile, a smartphone, a room in the background completely from another story, but we'll get to that later, well, and without glasses in only one picture. The resemblance to Petro from the first illustration faintly, as --iw removed. But that will be worked out later, you have to start somewhere.

Ok, how about the background now. One way to get the desired effect is to generate the individual elements separately and then combine them. This is perhaps such a prompt.

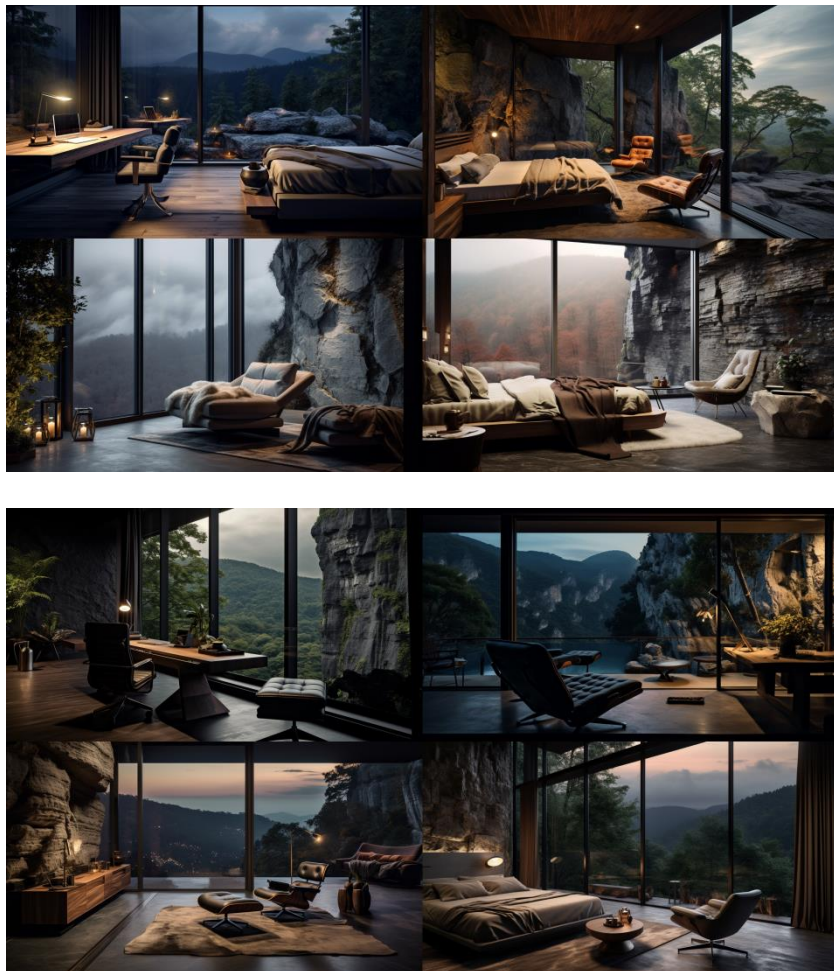
A very detailed photo-realistic photography of luxury apartment for one person in a private millionaire's house, modern design, one large bed, desk, armchair, Use Nikon D850 DSLR 4k with a 100mm lens to capture ultra-detailed photography with sharp lines and textures. Photorealistic shot from a high-budget film production in 2022, 8K, extremely detailed photo, very high quality photography --ar 16:9 --style raw --s 100



Something too bright, and the scene in the novel is night, so let's add night to the prompt.



And outside the window, not skyscrapers, but the rocks and trees of Corsica.



Ok, but night is not likely, more like evening.
I learned that the magic words "night vision" can
work better, so I add to the prompt and enhance
with the parameter ::2



Better now. So it was time to combine the
background of the room in Corsica, the first
illustration of Petro and a smartphone with
Copernicus.

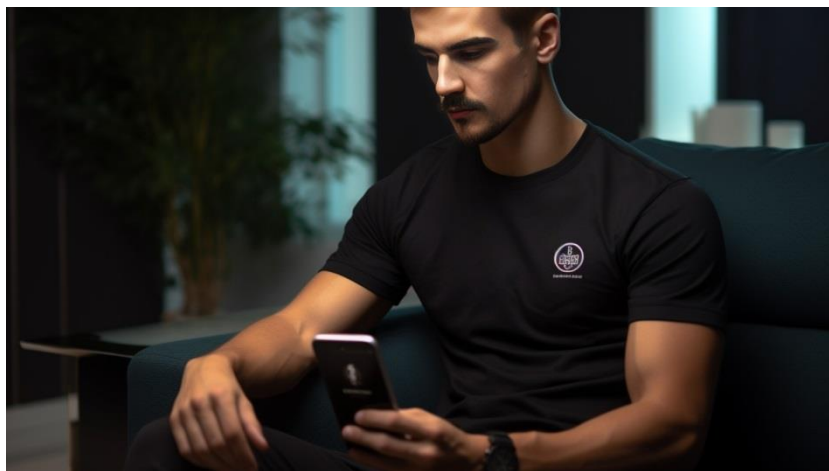


The most important thing is that it came out without glasses. Copernicus with cable and silver box doesn't catch too much.

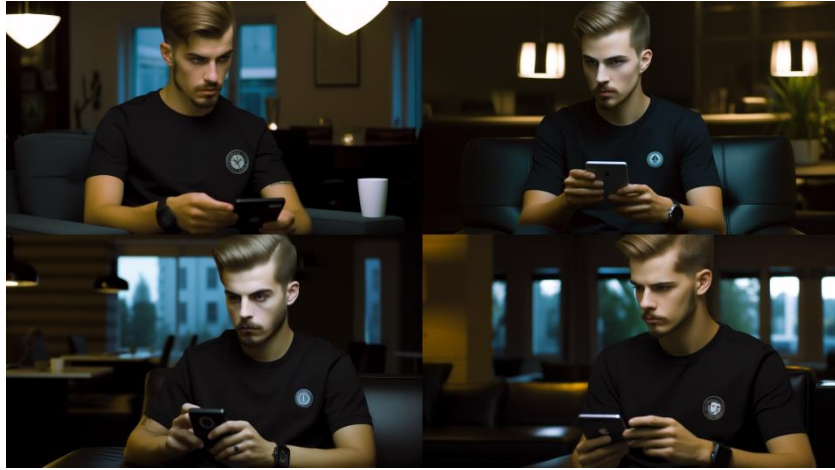




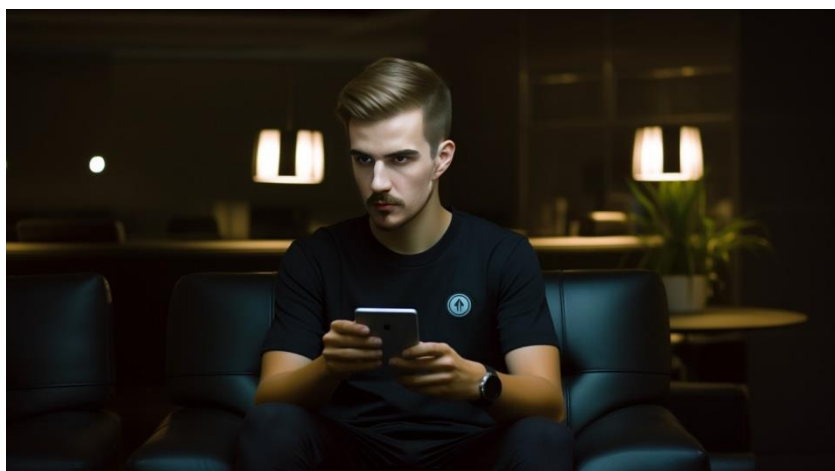
Now let's try to replace the facial features with an extension that makes this possible. Based on Petro's first illustration, I created a matrix of facial features to be swapped.



Let's say ok, however, I would prefer it to show Petro's eyes more. So let's add "eyes on camera" to the prompt.

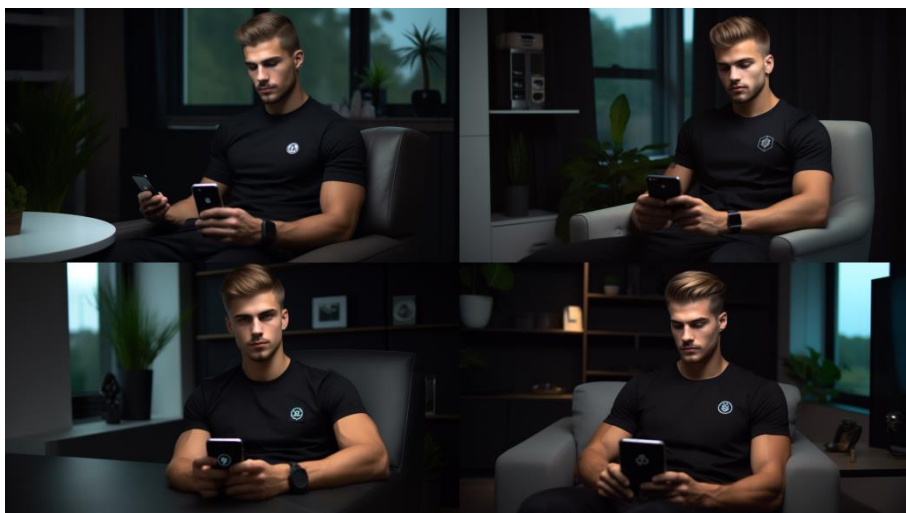


And swap to Petro's features.



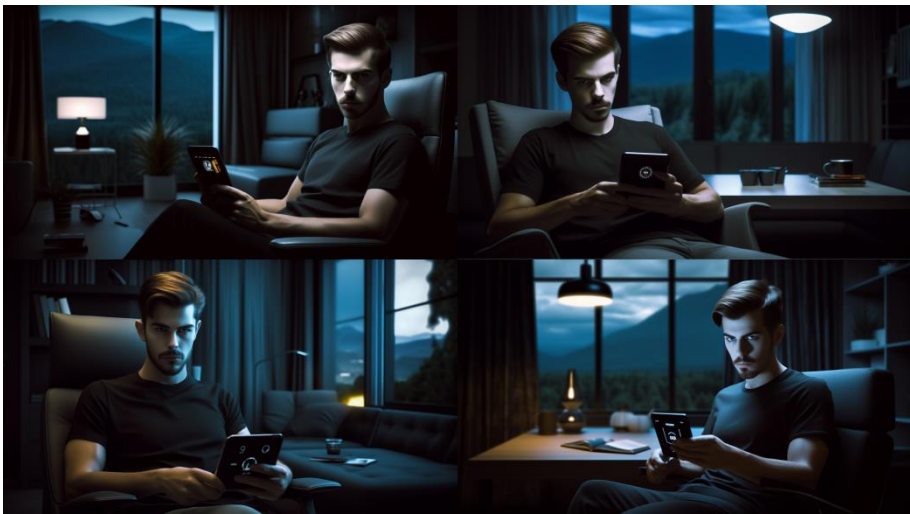
I am not entirely satisfied with such a result. So I'm running a whole series of further trials, making various adjustments to the prompt, combining existing images, etc. Most of the images below have Petro's first illustration included as a base, but towards the end I also tried some images without this base.



















The above variant fits me best. No glasses, he's holding a smartphone, hairstyle similar to the first illustration only a bit fancier. Already in the generated image he resembles Petro from the first illustration, but let's still apply a facial feature swap.

