

Week 1 Notes

Background Information

This is my first project creating something substantial using Generative AI. I have created accounts for and have tried using Leonardo.Ai, Ideogram, Copilot, DeepAI, Pixlr, and so far, Ideogram and Copilot seem to be the most useful, but I have run into setbacks due to limitations associated with the free versions of some of these tools.

Goal

I want to create a collection of images featuring my daughter's cat (my "grandcat") depicted as the subject in some of the world's most recognizable paintings with the assistance of Generative AI programs.

First Project: Leonardo DaVinci's *Mona Lisa*

For my first attempt, I am attempting to create an image of my grandcat as *Mona Lisa* by Leonardo DaVinci.

These are some recent photos of the cat, or the subject:







(Photos taken by myself, 2024)

And here is a digitally enhanced image of Leonardo DaVinci's infamous *Mona Lisa* (DaVinci, 1506) painting I found on the internet, which will serve as the context for the AI-generated image:



AI (Louvre Museum, Wikimedia Commons, Public Domain)

Some notable characteristics of DaVinci's paintings, specifically *Mona Lisa*, include attention to detail, use of soft color tones, and her mysterious ambiguous expression that can be interpreted in numerous ways (theartstory.org, 2008-2024). This digitally enhanced image shows the amount of attention that DaVinci paid into the background of this figure as well as the texture of the subject's wardrobe.

For my image, I do not just want an image of *Mona Lisa* with my grandcat's face superimposed onto it. I want it to look as if the cat had posed for DaVinci in the same way that the woman portrayed in his original work may have done. Therefore, I want the cat to look like the actual cat (and not a similar cat), and I want her furry chest and paws to be showing in place of *Mona Lisa*'s fair white human skin and hands.

First Attempts

Here is a progression of sample images I was able to obtain with brief explanations of my respective prompts. I worked on Leonardo.Ai and Ideogram concurrently.

1. My grandcat breed is called Magpie, and its better-known nickname is the Cowcat because the splotch pattern on its coat is reminiscent of a black and white dairy cow. I therefore initially described the cat as “*a magpie or cow cat posing as Mona Lisa*,” and got these types of images:



From Leonardo.Ai

After seeing this type of image, I remembered that magpies are also birds. I am not sure why Leonardo.Ai's first inclination was to generate birds when the concept of bird was not part of my descriptions. But this experience made me realize I should emphasize the concept of cat more.



From Ideogram



From Ideogram



From Ideogram



From Ideogram



From Ideogram

The above images from Ideogram led me to use the cat's official breed name rather than its nickname, which is confusable with another animal, the cow.

2. For my next attempt, I got rid of the nickname of Cowcat from my description and just used Magpie. I also made sure to keep using the term, "cat" repeatedly in my description, "*I want a painting of a small black and white magpie cat posing as Mona Lisa in Mona Lisa's clothing and backdrop...*" Here are the kinds of output I got:



From Leonardo.Ai



From Leonardo.Ai

These images look more like photographs. I knew I had to mention I want an image of a painting. I also wanted the patterns on the cat's face to resemble more, that of my grandcat. The colors on her face are asymmetrical whereas these cats have symmetrical faces.



From Ideogram



From Ideogram

The images I got from Ideogram were more like paintings than photographs. However, the cats had symmetrical faces here as well.

3. My next endeavor was to add very specific descriptions of the cat's face, "*The cat's face is white except her ears and side of the face, which are black, and her left eye is surrounded by black fur. She has green eyes.*"



From Leonardo.Ai



From Leonardo.Ai



From Leonardo.Ai



From Leonardo.Ai

With this program, I have run across firewalls that prevent me from generating images based on verbal descriptions that the program believes could result in “inappropriate” images. I have attempted multiple revisions of my descriptions, avoiding words and phrases that I suspect could be problematic such as “*skin above the dress*,” “*kitten*,” “*dressed*,” but as my descriptions got more detailed in an attempt to provide more precise information so I get the image I am hoping for, the more I have been prevented from moving forward.

In addition, this program did not incorporate my description of the cat itself precisely. It persisted in generated images of a cat with symmetrical facial patterns and I decided that the free version of Leonardo.Ai is incapable of generating an image that I am seeking to create.



From Ideogram



From Ideogram

Ideogram fared better, but I noticed it was hit or miss whether the program got the concept of left and right correctly. The facial expression of the first image is more like Mona Lisa's, but the facial pattern is incorrect. The last image above is the best one I got, however, I wanted Mona Lisa's hands to be replaced by the cat's front paws (and by the way, this image seems to show three hands!).

Ideogram seems to be the better program for my project. However, a limitation to Ideogram is that I can only generate four trials a day.

4. The latest objective was to try to get an image that shows cat paws and chest in place of Mona Lisa's hands and chest. I also wanted the cat's expression to be more like the

original painting. I tried multiple versions and the last one I tried included the prompt, “*The cat is mimicking Mona Lisa’s signature facial expression. I want to see the cat’s white paws coming out of the sleeves and not human hands.*”



From Ideogram



From Ideogram

Yes, I got paws but only in addition to the hands. For some reason, asking for paws resulted in the face changing to the wrong pattern.

I also got output that seemed to be going backwards in terms of moving toward my goal.



From Ideogram



From Ideogram



From Ideogram



From Ideogram

Why? It was almost as if the free version of Ideogram was determined to not let me achieve my goal. The generation of these regressive images cost me my four free daily trials and I feel like I am back to square one.

5. This is when I started trying other platforms. Most were not very good, meaning they were worse off than the last images I got from Ideogram, but Copilot was somewhat interesting. I used the same prompt and got these images, which are all from Copilot:









Based on my work so far, CoPilot may be the best tool. It could be because I have full access to the program whereas with the others, I am limited to using the free versions. CoPilot is the only one that sometimes got the paws correctly.

I had somewhat higher hopes for DaVinci's namesake tool, but Leonardo.Ai seems to be too sensitive to the verbal descriptions used to generate images. Because if this, I ended up with a somewhat awkward description, which still did not work with Leonardo.Ai. The last prompt I used stated, "*A mostly white short-haired green-eyed magpie cat with black ears is dressed up as Mona Lisa. The cat's face has white fur, but the*

sides of its face is black and there is black fur surrounding all of its left eye. The cat is mimicking Mona Lisa's signature facial expression. This cat should not have human hands. The cat is crossing its hairy white paws," and this is what I used consistently for all other programs I tried.

Next week, I will try out CoPilot from scratch, starting with an uncensored prompt to see where it leads me. By the way, I did play around with the magic prompts generated by AI as well to use as my promot, but they tended to result in images that were very unlike what I have in mind.