

text-to-images

September 27, 2023

```
[1]: %pip install --quiet --upgrade diffusers transformers accelerate  
      ↪invisible_watermark mediapy
```

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1.1/1.1 MB  
16.8 MB/s eta 0:00:00  
  Installing build dependencies ... done  
  Getting requirements to build wheel ... done  
  Preparing metadata (pyproject.toml) ... done  
7.6/7.6 MB  
64.5 MB/s eta 0:00:00  
258.1/258.1 kB  
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45.2 MB/s eta 0:00:00  
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62.6 MB/s eta 0:00:00  
  Building wheel for diffusers (pyproject.toml) ... done
```

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[2]: use_refiner = False
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[3]: import mediapy as media  
      import random  
      import sys  
      import torch  
  
      from diffusers import DiffusionPipeline  
  
      pipe = DiffusionPipeline.from_pretrained(  
          "stabilityai/stable-diffusion-xl-base-1.0",  
          torch_dtype=torch.float16,  
          use_safetensors=True,  
          variant="fp16",
```

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    )

if use_refiner:
    refiner = DiffusionPipeline.from_pretrained(
        "stabilityai/stable-diffusion-xl-refiner-1.0",
        text_encoder_2=pipe.text_encoder_2,
        vae=pipe.vae,
        torch_dtype=torch.float16,
        use_safetensors=True,
        variant="fp16",
    )

    refiner = refiner.to("cuda")

    pipe.enable_model_cpu_offload()
else:
    pipe = pipe.to("cuda")

```

The cache for model files in Transformers v4.22.0 has been updated. Migrating your old cache. This is a one-time only operation. You can interrupt this and resume the migration later on by calling ``transformers.utils.move_cache()``.

Oit [00:00, ?it/s]

Downloading (...)ain/model_index.json: 0%| | 0.00/609 [00:00<?, ?B/s]

Fetching 19 files: 0%| | 0/19 [00:00<?, ?it/s]

Downloading (...)_encoder/config.json: 0%| | 0.00/565 [00:00<?, ?B/s]

Downloading (...)okenizer_config.json: 0%| | 0.00/737 [00:00<?, ?B/s]

Downloading (...)cheduler_config.json: 0%| | 0.00/479 [00:00<?, ?B/s]

Downloading (...)ncoder_2/config.json: 0%| | 0.00/575 [00:00<?, ?B/s]

Downloading model.fp16.safetensors: 0%| | 0.00/246M [00:00<?, ?B/s]

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Downloading (...)tokenizer/merges.txt: 0%| | 0.00/525k [00:00<?, ?B/s]

Downloading (...)cial_tokens_map.json: 0%| | 0.00/460 [00:00<?, ?B/s]

Downloading (...)okenizer_config.json: 0%| | 0.00/725 [00:00<?, ?B/s]

Downloading model.fp16.safetensors: 0%| | 0.00/1.39G [00:00<?, ?B/s]

Downloading (...)kenizer_2/merges.txt: 0%| | 0.00/525k [00:00<?, ?B/s]

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Downloading (...)tokenizer/vocab.json: 0%| | 0.00/1.06M [00:00<?, ?B/s]

Downloading (...)d76f/vae/config.json: 0%| | 0.00/642 [00:00<?, ?B/s]

Downloading (...)del.fp16.safetensors: 0%| | 0.00/5.14G [00:00<?, ?B/s]
 Downloading (...)kenizer_2/vocab.json: 0%| | 0.00/1.06M [00:00<?, ?B/s]
 Downloading (...)del.fp16.safetensors: 0%| | 0.00/167M [00:00<?, ?B/s]
 Downloading (...)del.fp16.safetensors: 0%| | 0.00/167M [00:00<?, ?B/s]
 Loading pipeline components...: 0%| | 0/7 [00:00<?, ?it/s]

[4]:

```

#prompt = "a photo of Pikachu fine dining with a view to the Eiffel Tower"
#prompt = "a photo of beautiful shri ram and sita "
#prompt = "19-year-old woman" by Steve McCurry, 35mm, F/2.8, insanely detailed,
↳and intricate, character, hypermaximalist, elegant, ornate, beautiful,
↳exotic, revealing, appealing, attractive, amative, hyper-realistic, super
↳detailed, popular on Flickr"
#prompt = "Full body portrait of a beautiful and sexy young woman. She is
↳swedish and wears a Skim dress. She is 18. Large eyes, large lips, small
↳nose, summer evening. Looks like Christina Hendricks. Photograph taken with
↳Canon EOS R3."
#prompt = "Portrait of a beautiful young woman. She is swedish and wears a tight
↳black dress. She is 18."
#prompt = "A photo of beautiful harry potter"
prompt="solar eclipse!, Nicolas Delort, splash art, reverse graffiti, Alex
↳Maleev, Yoji Shinkawa, professional ominous concept art, by artgerm and greg
↳rutkowski, an intricate, elegant, highly detailed digital painting, concept
↳art, smooth, sharp focus, illustration, in the style of simon stalenhag,
↳wayne barlowe, and igor kieryluk."
#prompt = "Fairly multilayered tree house in world tree, decorating flowers,
↳mirror water, mysterious fog, scatter drawing, Complex, multilayered
↳fortress, sunset, another world, lingt art, detail, 32k resolution, oil
↳painting, hyperrealism, Award-winning"
#prompt = "garden, 5'3 feet girl, indian skin body, black eye lens, little bit
↳long hair, school dress that include blue frock and half sleeves shirt that
↳has white line on blue shirt, left side VBES name badge, white socks, black
↳girl shoe"
#prompt="Palace, 5'8 feet man, american skin body, blue eye lens, medium hair,
↳white shirt, black blazzer that include black pant, also white horse"
#prompt="Imagine your ideal dream home, a place where you can create the
↳perfect living environment for yourself and your family. Describe this dream
↳home in vivid detail, from its location and architectural style to its
↳interior design and features. What makes it your dream home? How does it
↳reflect your personal tastes, lifestyle, and aspirations? Explore every
↳aspect of this dream home, from the layout of the rooms to the outdoor
↳spaces and amenities. Let your imagination run wild and paint a picture of
↳your dream home that captures your vision of the perfect place to live."
  
```

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#prompt= "Beyond the walls of your dream home, what does your outdoor paradise
↳look like? Describe the landscape design, gardens, and outdoor amenities
↳that surround your dream house. Is there a sparkling pool, a lush green
↳lawn, or a tranquil patio where you can relax? How does the outdoor space
↳enhance your overall living experience?"
#prompt="human genome labrotary where a scientist making experiment on pink
↳colour gene in white cat and light blue colour dog."
seed = random.randint(0, sys.maxsize)

images = pipe(
    prompt = prompt,
    output_type = "latent" if use_refiner else "pil",
    generator = torch.Generator("cuda").manual_seed(seed),
).images

if use_refiner:
    images = refiner(
        prompt = prompt,
        image = images,
    ).images

print(f"Prompt:\t{prompt}\nSeed:\t{seed}")
media.show_images(images)
images[0].save("output.jpg")
print('')

```

Token indices sequence length is longer than the specified maximum sequence length for this model (78 > 77). Running this sequence through the model will result in indexing errors

The following part of your input was truncated because CLIP can only handle sequences up to 77 tokens: ['.']

Token indices sequence length is longer than the specified maximum sequence length for this model (79 > 77). Running this sequence through the model will result in indexing errors

The following part of your input was truncated because CLIP can only handle sequences up to 77 tokens: ['luk.']

0%| | 0/50 [00:00<?, ?it/s]

Prompt: solar eclipse!, Nicolas Delort, splash art, reverse graffiti, Alex Maleev, Yoji Shinkawa, professional ominous concept art, by artgerm and greg rutkowski, an intricate, elegant, highly detailed digital painting, concept art, smooth, sharp focus, illustration, in the style of simon stalenhag, wayne barlowe, and igor kieryluk.

Seed: 5663765503220735112

<IPython.core.display.HTML object>

[4] :