!nvidia-smi

→ Mon Oct 7 12:09:37 2024

NVIDIA-SMI 535.104.05	Driver	Driver Version: 535.104.05 CUDA Version: 12		
GPU Name Fan Temp Perf 	Persistence-M Pwr:Usage/Cap	1	Volatile Uncorr. ECC GPU-Util Compute M. MIG M.	
0 Tesla T4 N/A 51C P8	Off 10W / 70W		0 0% Default N/A	

1	Processes:								
j	GPU	GI	CI	PID	Type	Process name	GPU Memory		
		ID	ID				Usage		
-	=====								
	No r	unning	processes	found					

from google.colab import drive
drive.mount('/content/drive')

→ Mounted at /content/drive

!pip install diffusers

→ Collecting diffusers

```
Downloading diffusers-0.30.3-py3-none-any.whl.metadata (18 kB)
Requirement already satisfied: importlib-metadata in /usr/local/lib/python3.10/dist-packages (from diffusers) (8.4.0)
Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-packages (from diffusers) (3.16.1)
Requirement already satisfied: huggingface-hub>=0.23.2 in /usr/local/lib/python3.10/dist-packages (from diffusers) (0.24.7)
Requirement already satisfied: numpy in /usr/local/lib/python3.10/dist-packages (from diffusers) (1.26.4)
Requirement already satisfied: regex!=2019.12.17 in /usr/local/lib/python3.10/dist-packages (from diffusers) (2024.9.11)
Requirement already satisfied: requests in /usr/local/lib/python3.10/dist-packages (from diffusers) (2.32.3)
Requirement already satisfied: safetensors>=0.3.1 in /usr/local/lib/python3.10/dist-packages (from diffusers) (0.4.5)
Requirement already satisfied: Pillow in /usr/local/lib/python3.10/dist-packages (from diffusers) (10.4.0)
Requirement already satisfied: fsspec>=2023.5.0 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub>=0.23.2->diffusers) (2024.6.1)
Requirement already satisfied: packaging>=20.9 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub>=0.23.2->diffusers) (24.1)
Requirement already satisfied: pyyaml>=5.1 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub>=0.23.2->diffusers) (6.0.2)
Requirement already satisfied: tgdm>=4.42.1 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub>=0.23.2->diffusers) (4.66.5)
Requirement already satisfied: typing-extensions>=3.7.4.3 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub>=0.23.2->diffusers) (4.12
Requirement already satisfied: zipp>=0.5 in /usr/local/lib/python3.10/dist-packages (from importlib-metadata->diffusers) (3.20.2)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests->diffusers) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests->diffusers) (3.10)
```

```
model index.ison: 100%
                                                                         541/541 [00:00<00:00, 10.8kB/s]
      Fetching 16 files: 100%
                                                                         16/16 [00:43<00:00, 2.89s/it]
      model.safetensors: 100%
                                                                          1.22G/1.22G [00:23<00:00, 33.9MB/s]
      (...)kpoints/scheduler config-checkpoint.json: 100%
                                                                                                 209/209 [00:00<00:00, 907B/s]
      safety_checker/config.json: 100%
                                                                                 4.56k/4.56k [00:00<00:00, 15.5kB/s]
                                                                               592/592 [00:00<00:00, 2.00kB/s]
      text encoder/config.json: 100%
      scheduler/scheduler_config.json: 100%
                                                                                      313/313 [00:00<00:00, 873B/s]
      model.safetensors: 100%
                                                                          492M/492M [00:13<00:00, 74.5MB/s]
     tokenizer/merges.txt: 100%
                                                                            525k/525k [00:00<00:00, 1.27MB/s]
     (...)ature_extractor/preprocessor_config.json: 100%
                                                                                                 342/342 [00:00<00:00, 1.27kB/s]
                                                                        743/743 [00:00<00:00, 3.58kB/s]
      unet/config.json: 100%
      tokenizer/vocab.json: 100%
                                                                            1.06M/1.06M [00:00<00:00, 3.11MB/s]
      tokenizer/special tokens map.json: 100%
                                                                                        472/472 [00:00<00:00, 2.13kB/s]
      tokenizer/tokenizer_config.json: 100%
                                                                                     806/806 [00:00<00:00, 3.29kB/s]
      vae/config.json: 100%
                                                                       551/551 [00:00<00:00, 2.83kB/s]
      diffusion_pytorch_model.safetensors: 100%
                                                                                          3.44G/3.44G [00:42<00:00, 171MB/s]
      diffusion pytorch model.safetensors: 100%
                                                                                          335M/335M [00:08<00:00, 60.3MB/s]
     Loading pipeline components...: 100%
                                                                                     7/7 [00:03<00:00, 1.88it/s]
     /usr/local/lib/python3.10/dist-packages/transformers/tokenization utils base.py:1601: FutureWarning: `clean up tokenization spaces` was not set. It v
        warnings.warn(
      100%
                                                         50/50 [00:10<00:00, 6.54it/s]
from diffusers import StableDiffusionPipeline
import torch
pipe= StableDiffusionPipeline.from pretrained("CompVis/stable-diffusion-v1-4").to("cuda")
prompt = "Lion is swimming in the lake"
with torch.autocast("cuda"):
  result = pipe(prompt)
  image = result.images[0]
  image.save("Lion2 image.png")
```

```
Loading pipeline components...: 100%
                                                                         7/7 [00:02<00:00, 2.99it/s]
     /usr/local/lib/python3.10/dist-packages/transformers/tokenization utils base.py:1601: FutureWarning: `clean up tokenization spaces` was not set. It v
       warnings.warn(
     100%
                                                 50/50 [00:08<00:00, 6.15it/s]
from diffusers import StableDiffusionPipeline
import torch
pipe= StableDiffusionPipeline.from pretrained("CompVis/stable-diffusion-v1-4").to("cuda")
prompt = "Vehicle are flying on the sky"
with torch.autocast("cuda"):
  result = pipe(prompt)
  image = result.images[0]
  image.save("Vehicle.png")
     Loading pipeline components...: 100%
                                                                         7/7 [00:01<00:00, 4.24it/s]
     100%
                                                 50/50 [00:08<00:00, 6.00it/s]
from diffusers import StableDiffusionPipeline
import torch
pipe= StableDiffusionPipeline.from pretrained("CompVis/stable-diffusion-v1-4").to("cuda")
prompt = "plants on the moon "
with torch.autocast("cuda"):
  result = pipe(prompt)
  image = result.images[0]
  image.save("Plants.png")
     Loading pipeline components...: 100%
                                                                         7/7 [00:01<00:00, 3.82it/s]
     100%
                                                 50/50 [00:08<00:00, 5.92it/s]
from diffusers import StableDiffusionPipeline
import torch
pipe= StableDiffusionPipeline.from_pretrained("CompVis/stable-diffusion-v1-4").to("cuda")
prompt = "a girl is flying in the sky"
with torch.autocast("cuda"):
  recult - nine(nromnt)
```