

!nvidia-smi

Sun Jul 27 05:48:52 2025

NVIDIA-SMI 550.54.15				Driver Version: 550.54.15				CUDA Version: 12.4			
GPU Name				Persistence-M	Bus-Id		Disp.A	Volatile	Uncorr.	ECC	
Fan	Temp	Perf	Pwr:Usage/Cap				Memory-Usage	GPU-Util	Compute	M.	M.
0	Tesla	T4	Off		00000000:00:04.0		Off			0	
N/A	45C	P0	27W / 70W		644MiB / 15360MiB			0%	Default	N/A	
Processes:											
GPU	GI	CI	PID	Type	Process name				GPU Memory		
	ID	ID							Usage		

Text Generator Model Using Huggingface Transformer + GPT2 Model

```
from collections.abc import Generator
from transformers import pipeline
```

```
generator = pipeline("text-generation", model= 'gpt2')
response = generator("what is Hugging Face", max_length = 50,num_return_sequences=1)
print(response[0]['generated_text'])
```

```
set to use cuda:0
```

ion was not explicitly activated but `max_length` is provided a specific value, please use `truncation=True` to explicitly truncate the
`pad_token_id` to `eos_token_id`:50256 for open-end generation.
`max_new_tokens` (=256) and `max_length` (=50) seem to have been set. `max_new_tokens` will take precedence. Please refer to the document
Hugging Face on the Face and how do you deal with it?)

shame that, because of some of the more egregious things, we have to wait for the new season of the show to come out.

now, I'm on my own.

t that I'm opposed to it - I just don't think it's a great idea.

point, it's not a great idea.

I've tried it once before, and I think it's a good idea.

etimes I feel like I don't know if it's going to work.

ant to do them with a little more nuance.

n to doing it all with a little more perspective.

know, this season of the show is kind of just starting to get started, so I think it's a good idea to give me some ideas.

like we'll be able to bring in some of the other characters that come in.

iously you have a lot of new things coming in, so I'm not sure what those are.

re not going to have a lot of new characters.

NER (Named Entity Recognition)

```
from transformers import pipeline
```

```
ner = pipeline('ner', grouped_entities=True)
entities = ner('Hugging Fscs is based on NYC and Partner with Google $200 dollar price')
print(entities)
```

⚡ No model was supplied, defaulted to dbmdz/bert-large-cased-finetuned-conll03-english and revision 4c53496 (<https://huggingface.co/dbmdz/bert-large-cased-finetuned-conll03-english>)
Using a pipeline without specifying a model name and revision in production is not recommended.
Some weights of the model checkpoint at dbmdz/bert-large-cased-finetuned-conll03-english were not used when initializing BertForTokenClassification from the checkpoint of a model trained on another task or with a different architecture.
- This IS expected if you are initializing BertForTokenClassification from the checkpoint of a model trained on another task or with a different architecture.
- This IS NOT expected if you are initializing BertForTokenClassification from the checkpoint of a model that you expect to be exact Device set to use cuda:0
[{'entity_group': 'ORG', 'score': np.float32(0.47314808), 'word': 'F', 'start': 8, 'end': 9}, {'entity_group': 'ORG', 'score': np.float32(0.47314808), 'word': 'F', 'start': 8, 'end': 9}]
/usr/local/lib/python3.11/dist-packages/transformers/pipelines/token_classification.py:181: UserWarning: `grouped_entities` is deprecated. Please use `grouped_entities_together` instead.
warnings.warn()

```
from transformers import pipeline

ner = pipeline('ner', grouped_entities=True)
entities = ner('My name is Janhavi')
print(entities)
```

⚡ No model was supplied, defaulted to dbmdz/bert-large-cased-finetuned-conll03-english and revision 4c53496 (<https://huggingface.co/dbmdz/bert-large-cased-finetuned-conll03-english>)
Using a pipeline without specifying a model name and revision in production is not recommended.
Some weights of the model checkpoint at dbmdz/bert-large-cased-finetuned-conll03-english were not used when initializing BertForTokenClassification from the checkpoint of a model trained on another task or with a different architecture.
- This IS expected if you are initializing BertForTokenClassification from the checkpoint of a model trained on another task or with a different architecture.
- This IS NOT expected if you are initializing BertForTokenClassification from the checkpoint of a model that you expect to be exact Device set to use cuda:0
[{'entity_group': 'PER', 'score': np.float32(0.90683293), 'word': 'Janhavi', 'start': 11, 'end': 18}]
/usr/local/lib/python3.11/dist-packages/transformers/pipelines/token_classification.py:181: UserWarning: `grouped_entities` is deprecated. Please use `grouped_entities_together` instead.
warnings.warn()

✓ Sentiment Analysis

```
!pip install transformers datasets
```

⚡ ready satisfied: transformers in /usr/local/lib/python3.11/dist-packages (4.53.3)
ready satisfied: datasets in /usr/local/lib/python3.11/dist-packages (4.0.0)
ready satisfied: filelock in /usr/local/lib/python3.11/dist-packages (from transformers) (3.18.0)
ready satisfied: huggingface-hub<1.0,>=0.30.0 in /usr/local/lib/python3.11/dist-packages (from transformers) (0.33.4)
ready satisfied: numpy>=1.17 in /usr/local/lib/python3.11/dist-packages (from transformers) (2.0.2)
ready satisfied: packaging>=20.0 in /usr/local/lib/python3.11/dist-packages (from transformers) (25.0)
ready satisfied: pyyaml>=5.1 in /usr/local/lib/python3.11/dist-packages (from transformers) (6.0.2)
ready satisfied: regex!=2019.12.17 in /usr/local/lib/python3.11/dist-packages (from transformers) (2024.11.6)
ready satisfied: requests in /usr/local/lib/python3.11/dist-packages (from transformers) (2.32.3)
ready satisfied: tokenizers<0.22,>=0.21 in /usr/local/lib/python3.11/dist-packages (from transformers) (0.21.2)
ready satisfied: safetensors>=0.4.3 in /usr/local/lib/python3.11/dist-packages (from transformers) (0.5.3)
ready satisfied: tqdm>=4.27 in /usr/local/lib/python3.11/dist-packages (from transformers) (4.67.1)
ready satisfied: pyarrow>=15.0.0 in /usr/local/lib/python3.11/dist-packages (from datasets) (18.1.0)
ready satisfied: dill<0.3.9,>=0.3.0 in /usr/local/lib/python3.11/dist-packages (from datasets) (0.3.8)
ready satisfied: pandas in /usr/local/lib/python3.11/dist-packages (from datasets) (2.2.2)
ready satisfied: xxhash in /usr/local/lib/python3.11/dist-packages (from datasets) (3.5.0)
ready satisfied: multiprocess<0.70.17 in /usr/local/lib/python3.11/dist-packages (from datasets) (0.70.16)
ready satisfied: fsspec<=2025.3.0,>=2023.1.0 in /usr/local/lib/python3.11/dist-packages (from fsspec[http]<=2025.3.0,>=2023.1.0->datasets) (2025.3.0)
ready satisfied: aiohttp!=4.0.0a0,!4.0.0a1 in /usr/local/lib/python3.11/dist-packages (from fsspec[http]<=2025.3.0,>=2023.1.0->datasets) (4.0.0a1)
ready satisfied: typing-extensions>=3.7.4.3 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub<1.0,>=0.30.0->transformers) (4.12.0)
ready satisfied: hf-xet<2.0.0,>=1.1.2 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub<1.0,>=0.30.0->transformers) (1.2.0)
ready satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (from requests->transformers) (3.4.2)
ready satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from requests->transformers) (3.10)
ready satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests->transformers) (2.5.0)
ready satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests->transformers) (2025.7.14)
ready satisfied: python-dateutil>=2.8.2 in /usr/local/lib/python3.11/dist-packages (from pandas->datasets) (2.9.0.post0)
ready satisfied: pytz>=2020.1 in /usr/local/lib/python3.11/dist-packages (from pandas->datasets) (2025.2)
ready satisfied: tzdata>=2022.7 in /usr/local/lib/python3.11/dist-packages (from pandas->datasets) (2025.2)
ready satisfied: aiohappyeyeballs>=2.5.0 in /usr/local/lib/python3.11/dist-packages (from aiohttp!=4.0.0a0,!4.0.0a1->fsspec[http]<=2025.3.0,>=2023.1.0->datasets) (2.5.0)
ready satisfied: aiosignal>=1.4.0 in /usr/local/lib/python3.11/dist-packages (from aiohttp!=4.0.0a0,!4.0.0a1->fsspec[http]<=2025.3.0,>=2023.1.0->datasets) (1.4.0)
ready satisfied: attrs>=17.3.0 in /usr/local/lib/python3.11/dist-packages (from aiohttp!=4.0.0a0,!4.0.0a1->fsspec[http]<=2025.3.0,>=2023.1.0->datasets) (25.0.0)
ready satisfied: frozenlist>=1.1.1 in /usr/local/lib/python3.11/dist-packages (from aiohttp!=4.0.0a0,!4.0.0a1->fsspec[http]<=2025.3.0,>=2023.1.0->datasets) (1.5.0)
ready satisfied: multidict<7.0,>=4.5 in /usr/local/lib/python3.11/dist-packages (from aiohttp!=4.0.0a0,!4.0.0a1->fsspec[http]<=2025.3.0,>=2023.1.0->datasets) (6.1.0)
ready satisfied: propcache>=0.2.0 in /usr/local/lib/python3.11/dist-packages (from aiohttp!=4.0.0a0,!4.0.0a1->fsspec[http]<=2025.3.0,>=2023.1.0->datasets) (0.2.0)
ready satisfied: yarl<2.0,>=1.17.0 in /usr/local/lib/python3.11/dist-packages (from aiohttp!=4.0.0a0,!4.0.0a1->fsspec[http]<=2025.3.0,>=2023.1.0->datasets) (1.17.0)
ready satisfied: six>=1.5 in /usr/local/lib/python3.11/dist-packages (from python-dateutil>=2.8.2->pandas->datasets) (1.17.0)

```
from transformers import pipeline

classifier = pipeline("sentiment-analysis")
result = classifier("I love Hugging Face Library Very Much, it is so nice")
print(result)
```

⚡ No model was supplied, defaulted to distilbert/distilbert-base-uncased-finetuned-sst-2-english and revision 714eb0f (<https://huggingface.co/distilbert/distilbert-base-uncased-finetuned-sst-2-english>)
Using a pipeline without specifying a model name and revision in production is not recommended.
Device set to use cuda:0
[{'label': 'POSITIVE', 'score': 0.999874472618103}]

```
from transformers import pipeline
```

```
classifier = pipeline("sentiment-analysis")
result = classifier("The Food is not tasty")
print(result)
```

⚠ No model was supplied, defaulted to distilbert/distilbert-base-uncased-finetuned-sst-2-english and revision 714eb0f (<https://huggingface.co/distilbert/distilbert-base-uncased-finetuned-sst-2-english>)
Using a pipeline without specifying a model name and revision in production is not recommended.
Device set to use cuda:0
[{'label': 'NEGATIVE', 'score': 0.9997794032096863}]

```
!pip install gradio
```

```
Requirement already satisfied: gradio in /usr/local/lib/python3.11/dist-packages (5.38.1)
Requirement already satisfied: aiofiles<25.0,>=22.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (24.1.0)
Requirement already satisfied: anyio<5.0,>=3.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (4.9.0)
Requirement already satisfied: brotli>=1.1.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (1.1.0)
Requirement already satisfied: fastapi<1.0,>=0.115.2 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.116.1)
Requirement already satisfied: ffmpy in /usr/local/lib/python3.11/dist-packages (from gradio) (0.6.1)
Requirement already satisfied: gradio-client==1.11.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (1.11.0)
Requirement already satisfied: groovy~=0.1 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.1.2)
Requirement already satisfied: httpx<1.0,>=0.24.1 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.28.1)
Requirement already satisfied: huggingface-hub>=0.28.1 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.33.4)
Requirement already satisfied: jinja2<4.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (3.1.6)
Requirement already satisfied: markupsafe<4.0,>=2.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (3.0.2)
Requirement already satisfied: numpy<3.0,>=1.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (2.0.2)
Requirement already satisfied: orjson~=3.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (3.11.0)
Requirement already satisfied: packaging in /usr/local/lib/python3.11/dist-packages (from gradio) (25.0)
Requirement already satisfied: pandas<3.0,>=1.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (2.2.2)
Requirement already satisfied: pillow<12.0,>=8.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (11.3.0)
Requirement already satisfied: pydantic<2.12,>=2.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (2.11.7)
Requirement already satisfied: pydub in /usr/local/lib/python3.11/dist-packages (from gradio) (0.25.1)
Requirement already satisfied: python-multipart>=0.0.18 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.0.20)
Requirement already satisfied: pyyaml<7.0,>=5.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (6.0.2)
Requirement already satisfied: ruff>=0.9.3 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.12.4)
Requirement already satisfied: safehttpx<0.2.0,>=0.1.6 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.1.6)
Requirement already satisfied: semantic-version~=2.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (2.10.0)
Requirement already satisfied: starlette<1.0,>=0.40.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.47.2)
Requirement already satisfied: tomllkit<0.14.0,>=0.12.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.13.3)
Requirement already satisfied: typer<1.0,>=0.12 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.16.0)
Requirement already satisfied: typing-extensions~=4.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (4.14.1)
Requirement already satisfied: uvicorn>=0.14.0 in /usr/local/lib/python3.11/dist-packages (from gradio) (0.35.0)
Requirement already satisfied: fsspec in /usr/local/lib/python3.11/dist-packages (from gradio-client==1.11.0->gradio) (2025.3.0)
Requirement already satisfied: websockets<16.0,>=10.0 in /usr/local/lib/python3.11/dist-packages (from gradio-client==1.11.0->gradio) (13.1)
Requirement already satisfied: idna>=2.8 in /usr/local/lib/python3.11/dist-packages (from anyio<5.0,>=3.0->gradio) (3.10)
Requirement already satisfied: sniffio>=1.1 in /usr/local/lib/python3.11/dist-packages (from anyio<5.0,>=3.0->gradio) (1.3.1)
Requirement already satisfied: certifi in /usr/local/lib/python3.11/dist-packages (from httpx<1.0,>=0.24.1->gradio) (2025.7.14)
Requirement already satisfied: httpcore==1.* in /usr/local/lib/python3.11/dist-packages (from httpx<1.0,>=0.24.1->gradio) (1.0.9)
Requirement already satisfied: h11>=0.16 in /usr/local/lib/python3.11/dist-packages (from httpcore==1.*->httpx<1.0,>=0.24.1->gradio) (0.14.0)
Requirement already satisfied: filelock in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.28.1->gradio) (3.18.0)
Requirement already satisfied: requests in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.28.1->gradio) (2.32.3)
Requirement already satisfied: tqdm>=4.42.1 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.28.1->gradio) (4.67.1)
Requirement already satisfied: hf-xet<2.0.0,>=1.1.2 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.28.1->gradio) (1.2.0)
Requirement already satisfied: python-dateutil>=2.8.2 in /usr/local/lib/python3.11/dist-packages (from pandas<3.0,>=1.0->gradio) (2.9.0)
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.11/dist-packages (from pandas<3.0,>=1.0->gradio) (2025.2)
Requirement already satisfied: tzdata>=2022.7 in /usr/local/lib/python3.11/dist-packages (from pandas<3.0,>=1.0->gradio) (2025.2)
Requirement already satisfied: annotated-types>=0.6.0 in /usr/local/lib/python3.11/dist-packages (from pydantic<2.12,>=2.0->gradio) (0.7.0)
Requirement already satisfied: pydantic-core==2.33.2 in /usr/local/lib/python3.11/dist-packages (from pydantic<2.12,>=2.0->gradio) (2.33.2)
Requirement already satisfied: typing-inspection>=0.4.0 in /usr/local/lib/python3.11/dist-packages (from pydantic<2.12,>=2.0->gradio) (0.10.0)
Requirement already satisfied: click>=8.0.0 in /usr/local/lib/python3.11/dist-packages (from typer<1.0,>=0.12->gradio) (8.2.1)
Requirement already satisfied: shellingham>=1.3.0 in /usr/local/lib/python3.11/dist-packages (from typer<1.0,>=0.12->gradio) (1.5.4)
Requirement already satisfied: rich>=10.11.0 in /usr/local/lib/python3.11/dist-packages (from typer<1.0,>=0.12->gradio) (13.9.4)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.11/dist-packages (from python-dateutil>=2.8.2->pandas<3.0,>=1.0->gradio) (1.17.0)
Requirement already satisfied: markdown-it-py>=2.2.0 in /usr/local/lib/python3.11/dist-packages (from rich>=10.11.0->typer<1.0,>=0.12->gradio) (3.0.0)
Requirement already satisfied: pygments<3.0.0,>=2.13.0 in /usr/local/lib/python3.11/dist-packages (from rich>=10.11.0->typer<1.0,>=0.12->gradio) (2.19.1)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (from requests->huggingface-hub>=0.28.1->gradio) (3.4.0)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests->huggingface-hub>=0.28.1->gradio) (2.3.0)
Requirement already satisfied: mdurl~=0.1 in /usr/local/lib/python3.11/dist-packages (from markdown-it-py>=2.2.0->rich>=10.11.0->typer<1.0,>=0.12->gradio) (0.1.2)
```

```
import gradio as gr
from transformers import pipeline

# Load the sentiment analysis pipeline
classifier = pipeline("sentiment-analysis")

def analyze_sentiment(text):
    result = classifier(text)[0]
    label = result['label']
    score = result['score']
    return f"Sentiment: {label} (confidence: {score:.2f})"

# Gradio Interface
gr.Interface(
    fn=analyze_sentiment,
    inputs="text",
    outputs="text",
    title="Sentiment Analysis",
```

```
description="Enter a sentence to analyze its sentiment"
).launch()
```

model was supplied, defaulted to distilbert/distilbert-base-uncased-finetuned-sst-2-english and revision 714eb0f (<https://huggingface.co/distilbert/distilbert-base-uncased-finetuned-sst-2-english>)
 Using a pipeline without specifying a model name and revision in production is not recommended.
 Device set to use cuda:0
 Looks like you are running Gradio on a hosted Jupyter notebook, which requires `share=True`. Automatically setting `share=True` (which enables public URL sharing) on public URLs.
 Gradio notebook detected. To show errors in colab notebook, set debug=True in launch()
 Running on public URL: <https://103f926927973039ec.gradio.live>
 Your share link expires in 1 week. For free permanent hosting and GPU upgrades, run `gradio deploy` from the terminal in the working directory.

Sentiment Analysis


Enter a sentence to analyze its sentiment

<div>text</div> <div>Generative Ai Model</div>	<div>output</div> <div>Sentiment: POSITIVE (confidence: 0.91)</div>
--	---

Clear

Submit

Flag

Use via API  · Built with Gradio  · Settings 

Text To Image Model Using Diffusion Pipeline

```
from diffusers import StableDiffusionPipeline
import torch

model_id = "sd-legacy/stable-diffusion-v1-5"
pipe = StableDiffusionPipeline.from_pretrained(model_id, torch_dtype=torch.float16)
pipe = pipe.to("cuda")

prompt = "a photo of an Peacock Feather"
image = pipe(prompt).images[0]

image.save("Peacock Feather.png")
```



Loading pipeline components...: 100%

7/7 [00:31<00:00, 8.27s/it]

100%

50/50 [00:08<00:00, 6.05it/s]


```
import gradio as gr
from diffusers import StableDiffusionPipeline
import torch

model_id = "sd-legacy/stable-diffusion-v1-5"
pipe = StableDiffusionPipeline.from_pretrained(model_id, torch_dtype=torch.float16)
pipe = pipe.to("cuda")

def generate_image(prompt):
    image = pipe(prompt).images[0]
    return image

# UI
gr.Interface(
    fn=generate_image,
    inputs=gr.Textbox(
        label="Enter your prompt",
        placeholder="a photo of an astronaut riding a horse on mars"
    ),
    outputs=gr.Image(),
    title="Text to Image Generation"
).launch()
```

```
),  
outputs=gr.Image(type='pil', label='Generated Image'),  
title="Janhavi Landge Text - Image Generator",  
description="Enter your prompt and see your generated image"  
)launch()
```

 ing pipeline components...: 100% 7/7 [00:23<00:00, 5.10s/it]
looks like you are running Gradio on a hosted Jupyter notebook, which requires `share=True`. Automatically setting `share=True` (b notebook detected. To show errors in colab notebook, set debug=True in launch()
nning on public URL: <https://8e0d6407824e2cfa65.gradio.live>
share link expires in 1 week. For free permanent hosting and GPU upgrades, run `gradio deploy` from the terminal in the working

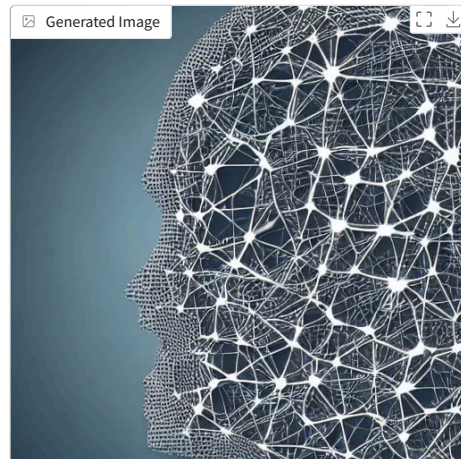
Enter your prompt and see your generated image

Enter your prompt

Genrative Ai

Clear

Submit



Flag

Start coding or [generate](#) with AI.