



OpenAI's Multilingual Magic: Video Translator & Transcriber

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- ..
- content
- sample_data

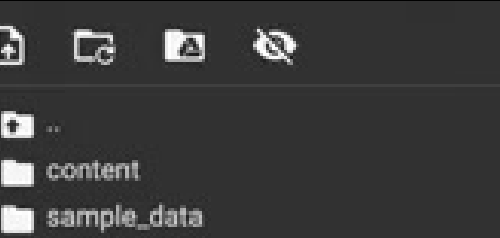
Pre-reqs



```
1 # @title Pre-reqs
2 ! pip install moviepy
3 ! pip install openai
4 ! add-apt-repository -y ppa:savoury1/ffmpeg4
5 ! apt-get -qq install -y ffmpeg
```



```
Requirement already satisfied: moviepy in /usr/local/lib/python3.10/dist-packages (1.0.3)
Requirement already satisfied: decorator<5.0,>=4.0.2 in /usr/local/lib/python3.10/dist-packages (from moviepy) (4.4.2)
Requirement already satisfied: tqdm<5.0,>=4.11.2 in /usr/local/lib/python3.10/dist-packages (from moviepy) (4.66.2)
Requirement already satisfied: requests<3.0,>=2.8.1 in /usr/local/lib/python3.10/dist-packages (from moviepy) (2.31.0)
Requirement already satisfied: proglog<=1.0.0 in /usr/local/lib/python3.10/dist-packages (from moviepy) (0.1.10)
Requirement already satisfied: numpy>=1.17.3 in /usr/local/lib/python3.10/dist-packages (from moviepy) (1.25.2)
Requirement already satisfied: imageio<3.0,>=2.5 in /usr/local/lib/python3.10/dist-packages (from moviepy) (2.31.6)
Requirement already satisfied: imageio-ffmpeg>=0.2.0 in /usr/local/lib/python3.10/dist-packages (from moviepy) (0.4.9)
Requirement already satisfied: pillow<10.1.0,>=8.3.2 in /usr/local/lib/python3.10/dist-packages (from imageio<3.0,>=2.5->moviepy) (9.4.0)
Requirement already satisfied: setuptools in /usr/local/lib/python3.10/dist-packages (from imageio-ffmpeg>=0.2.0->moviepy) (67.7.2)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests<3.0,>=2.8.1->moviepy) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests<3.0,>=2.8.1->moviepy) (3.6)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests<3.0,>=2.8.1->moviepy) (2.0.7)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests<3.0,>=2.8.1->moviepy) (2024.2.2)
Collecting openai
  Downloading openai-1.12.0-py3-none-any.whl (226 kB)
    226.7/226.7 kB 5.0 MB/s eta 0:00:00
Requirement already satisfied: anyio<5,>=3.5.0 in /usr/local/lib/python3.10/dist-packages (from openai) (3.7.1)
Requirement already satisfied: distro<2,>=1.7.0 in /usr/lib/python3/dist-packages (from openai) (1.7.0)
Collecting httpx<1,>=0.23.0 (from openai)
  Downloading httpx-0.27.0-py3-none-any.whl (75 kB)
    75.6/75.6 kB 10.0 MB/s eta 0:00:00
Requirement already satisfied: pydantic<3,>=1.9.0 in /usr/local/lib/python3.10/dist-packages (from openai) (2.6.1)
Requirement already satisfied: sniffio in /usr/local/lib/python3.10/dist-packages (from openai) (1.3.0)
Requirement already satisfied: tqdm>4 in /usr/local/lib/python3.10/dist-packages (from openai) (4.66.2)
Requirement already satisfied: typing-extensions<5,>=4.7 in /usr/local/lib/python3.10/dist-packages (from openai) (4.9.0)
Requirement already satisfied: idna>=2.8 in /usr/local/lib/python3.10/dist-packages (from anyio<5,>=3.5.0->openai) (3.6)
Requirement already satisfied: exceptiongroup in /usr/local/lib/python3.10/dist-packages (from anyio<5,>=3.5.0->openai) (1.2.0)
Requirement already satisfied: certifi in /usr/local/lib/python3.10/dist-packages (from httpx<1,>=0.23.0->openai) (2024.2.2)
Collecting httpcore==1.* (from httpx<1,>=0.23.0->openai)
  Downloading httpcore-1.0.4-py3-none-any.whl (77 kB)
    77.8/77.8 kB 10.9 MB/s eta 0:00:00
Collecting h11<0.15,>=0.13 (from httpcore==1.*->httpx<1,>=0.23.0->openai)
  Downloading h11-0.14.0-py3-none-any.whl (58 kB)
    58.3/58.3 kB 8.3 MB/s eta 0:00:00
Requirement already satisfied: annotated-types>=0.4.0 in /usr/local/lib/python3.10/dist-packages (from pydantic<3,>=1.9.0->openai) (0.6.0)
Requirement already satisfied: pydantic-core==2.16.2 in /usr/local/lib/python3.10/dist-packages (from pydantic<3,>=1.9.0->openai) (2.16.2)
Installing collected packages: h11, httpcore, httpx, openai
Successfully installed h11-0.14.0 httpcore-1.0.4 httpx-0.27.0 openai-1.12.0
Repository: 'deb https://ppa.launchpadcontent.net/savoury1/ffmpeg4/ubuntu/ jammy main'
Description:
FFmpeg 4.4.4 builds (& associated multimedia packages) for Xenial & newer.
```



```
[ ] 11 print("downloading video")
12 r = requests.get(video_url, stream=True)
13 with open(video_path, "wb") as file:
14     for chunk in r.iter_content(chunk_size=1024):
15         if chunk:
16             file.write(chunk)
```

Downloading video



Separate Audio from Video

```
1 # @title Separate Audio from Video
2 from moviepy.editor import VideoFileClip
3
4
5 print("Separating audio from video")
6
7 video = VideoFileClip(video_path)
8
9 audio_path = f"{base_path}extracted_audio.mp3"
10 video_without_audio_path = f"{base_path}video_without_audio.mp4"
11 audio = video.audio
12 audio.write_audiofile(audio_path)
13
14 video_without_audio = video.without_audio()
15
16 video_without_audio.write_videofile(video_without_audio_path)
```

```
... Separating audio from video
MoviePy - Writing audio in content/extracted_audio.mp3
MoviePy - Done.
Moviepy - Building video content/video_without_audio.mp4.
Moviepy - Writing video content/video_without_audio.mp4

t: 98%|██████████| 12640/12914 [07:04<00:06, 40.27it/s, now=None]
```

Transcribe the Audio

```
[ ] 1 # @title Transcribe the Audio
2 from openai import OpenAI
3 from google.colab import userdata
4 openai_api_key = userdata.get('openai_api_key')
5
6 print("Transcribing audio")
7
8 client = OpenAI(api_key=openai_api_key)
9 audio_file = open(audio_path, "rb")
10 transcript = client.audio.transcriptions.create(
```

*** Please always see <https://launchpad.net/~savoury1> for general updates about this Launchpad site before contacting me or reporting any bugs! ***

*** Big thanks to all those who have donated to support this project, you are very directly helping to keep it alive! To all who have not donated: please do so if you can afford it, this project depends on donat

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Update (5 Apr 2023): FFmpeg 4.4 builds from today onwards are now generic, in that they are similar to current Ubuntu 22.04 Jammy FFmpeg builds. All of the dated updates below still apply to the FFmpeg 4.x build

Update (24 Jan 2023): FFmpeg 4.4 builds now have AMD AMF (Advanced Media Framework) support, using latest headers from AMF 1.4.29 (released today).

Update (23 Oct 2022): FFmpeg 4.4 builds now have rav1e (new Rust-based AV1 encoder) support & are also built with nv-codec-headers 11.1.5.1 (latest).

Update (6 Apr 2022): FFmpeg 4.4 builds now have Netflix VMAF support, with thanks to Frank B. (equal #1 patron of these PPAs) for suggesting/testing!

Update (8 May 2021): FFmpeg 4.4 uploads from today onwards are built with these additional optional libraries: glslang (shader support), SVT-AV1 (scalable AV1 encoder), zimg (scaling, colorspace conversion, dith

```
=====
FFmpeg 4 - media tool (Xenial & newer)
=====
```

aom (3.7.1), aribb24 (1.0.3+git20160115), chafa (1.12.4), chromaprint (1.5.1), cJSON (1.7.15), codec2 (1.2.0), cppzmq (4.9.0), dav1d (1.3.0), ffmpeg (4.4.4), ffms2 (2.23), flac (1.4.3), fluidsynth (2.3.4), fontc

Focal & Jammy: libdecor-0 (0.2.1 for libSDL2 >= 2.0.20)

Focal only: libdbl-perl (1.19 = libdeflate / renamed source for i386)

Bionic & Focal: snapd-glib (1.60 for PipeWire >= 1.0.1-1ubuntu3~)

Xenial & Bionic: alsa-{lib,plugins,tools,topology-conf,ucm-conf,utils} (1.2.2), alsa-oss (1.1.8), alsa-plugins-extra (1.1.0), alsaequal (0.6), fftw3 (3.3.8), fribidi (1.0.8), glib2.0 (2.64.6), gobject-introspect

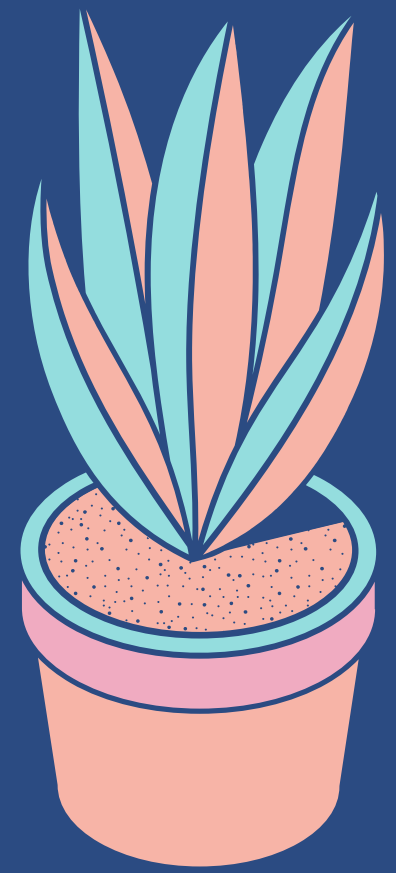
Xenial only: autogen, curl, gcc-7 (7.5.0), glib2.0 (2.56.4), gobject-introspection (1.56.1), json-glib (1.4.2), lame (3.100), libidn2, libpsl, lm-sensors (3.6.0), mesa (18.0.5 rebuild for newer Wayland), nhttp2

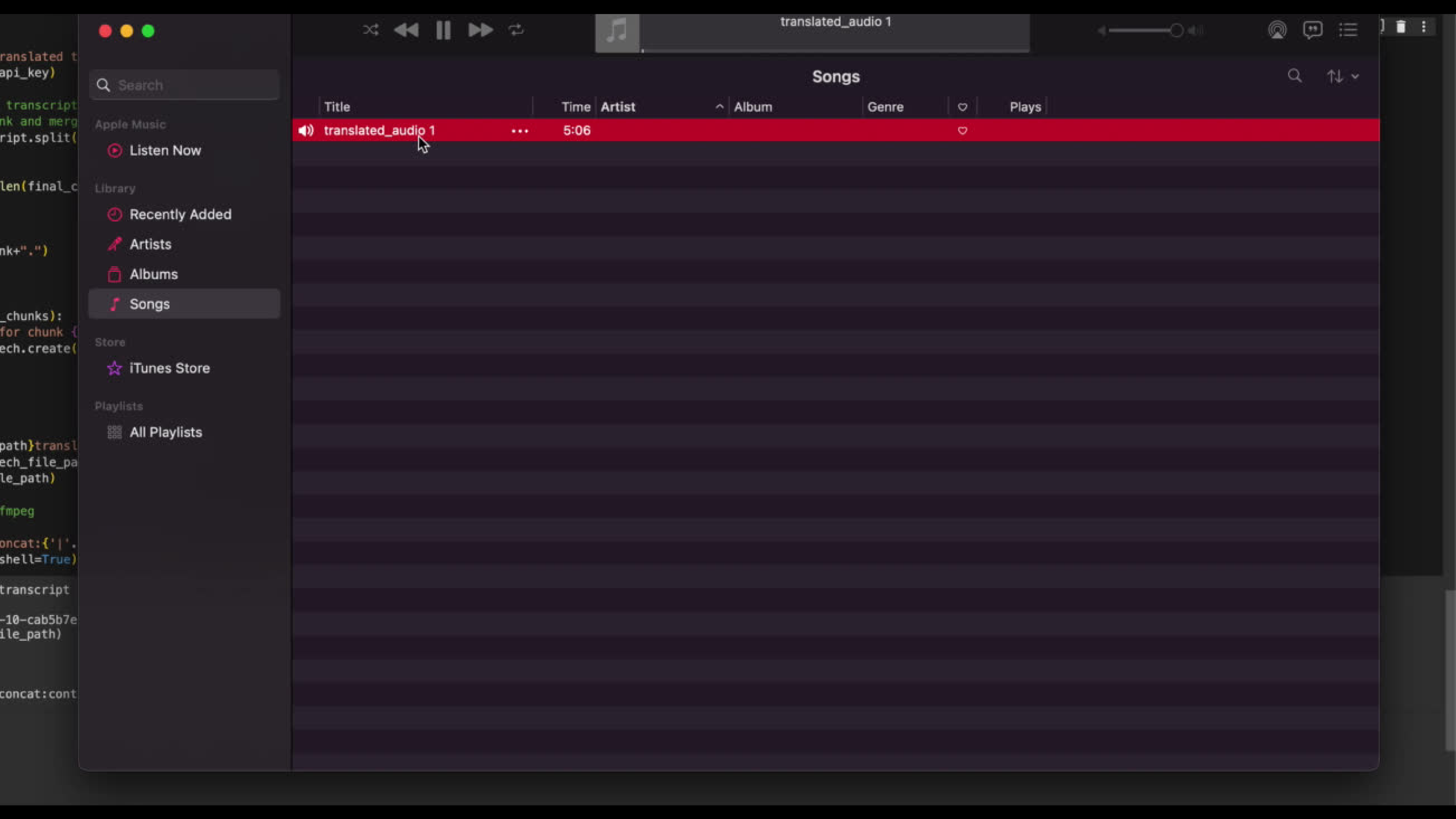
▼ Download Video

```
1 # @title Download Video
2 import requests
3
4
5 # replace with your video url
6 video_url = "https://ai-texttract-bucket.s3.ap-south-1.amazonaws.com/temp_rehan/Grade3EnglishComprehensionHowToListenBetter%2B(Logo)_compressed.mp4"
7
8 base_path = "content/"
9 video_path = f"{base_path}source_video.mp4"
```



PROJECT DEMO





translated_audio 1



Search

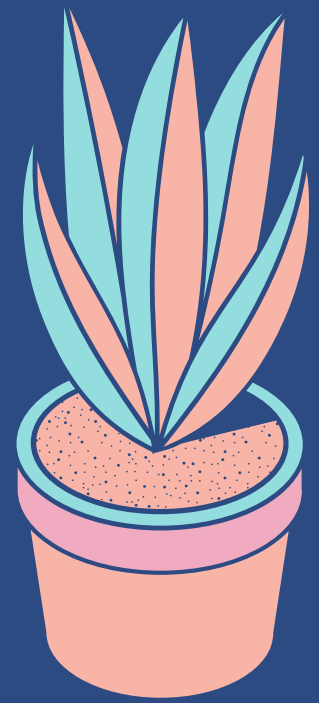
- Apple Music
- Listen Now
- Library
 - Recently Added
 - Artists
 - Albums
 - Songs
- Store
 - iTunes Store
- Playlists
 - All Playlists

Title	Time	Artist	Album	Genre	Plays
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translated_audio 1	5:06				
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PROJECT CONTINUATION





THANK YOU

