

# Real Voice clone alternative method.

Please me sure that you have installed python 3.6 or 3.7 in your windows before following this step.

First clone repo from git hub in your local disk.

**git clone <https://github.com/CorentinJ/Real-Time-Voice-Cloning.git>**

```
Hem@DESKTOP-VOSIC9A MINGW64 /f/REPO
$ git clone https://github.com/CorentinJ/Real-Time-Voice-Cloning.git
Cloning into 'Real-Time-Voice-Cloning'...
remote: Enumerating objects: 2597, done.
remote: Counting objects: 100% (15/15), done.
remote: Compressing objects: 100% (15/15), done.
remote: Total 2597 (delta 2), reused 5 (delta 0), pack-reused 2582
Receiving objects: 100% (2597/2597), 360.94 MiB | 4.14 MiB/s, done.
Resolving deltas: 100% (1427/1427), done.

Hem@DESKTOP-VOSIC9A MINGW64 /f/REPO
$
```

Create virtual environment in your repo in one of the disk as given.

**conda create -n sun python=3.7**

```

Microsoft Windows [Version 10.0.19043.1348]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Hem>f:

F:\>cmd F:\REPO\Real-Time-Voice-Cloning
Microsoft Windows [Version 10.0.19043.1348]
(c) Microsoft Corporation. All rights reserved.

F:\>cd F:\REPO\Real-Time-Voice-Cloning

F:\REPO\Real-Time-Voice-Cloning>conda create -n sun python=3.7
Collecting package metadata (current_repodata.json): done
Solving environment: done

## Package Plan ##

  environment location: C:\Users\Hem\conda\envs\sun
  added / updated specs:
    - python=3.7

The following NEW packages will be INSTALLED:

ca-certificates      pkgs/main/win-64::ca-certificates-2021.10.26-haa95532_2
certifi              pkgs/main/win-64::certifi-2021.10.8-py37haa95532_0
openssl              pkgs/main/win-64::openssl-1.1.1l-h2bbff1b_0
pip                  pkgs/main/win-64::pip-21.2.4-py37haa95532_0
python               pkgs/main/win-64::python-3.7.11-h6244533_0
setuptools           pkgs/main/win-64::setuptools-58.0.4-py37haa95532_0
sqlite               pkgs/main/win-64::sqlite-3.36.0-h2bbff1b_0
vc                   pkgs/main/win-64::vc-14.2-h21ff451_1
vs2015_runtime       pkgs/main/win-64::vs2015_runtime-14.27.29016-h5e58377_2
wheel                pkgs/main/noarch::wheel-0.37.0-pyhd3eb1b0_1
wincertstore         pkgs/main/win-64::wincertstore-0.2-py37haa95532_2

Proceed ([y]/n)? y

Preparing transaction: done
Verifying transaction: done
Executing transaction: done
#

```

Activate conda environment.

## conda activate sun

```

  added / updated specs:
    - python=3.7

The following NEW packages will be INSTALLED:

ca-certificates      pkgs/main/win-64::ca-certificates-2021.10.26-haa95532_2
certifi              pkgs/main/win-64::certifi-2021.10.8-py37haa95532_0
openssl              pkgs/main/win-64::openssl-1.1.1l-h2bbff1b_0
pip                  pkgs/main/win-64::pip-21.2.4-py37haa95532_0
python               pkgs/main/win-64::python-3.7.11-h6244533_0
setuptools           pkgs/main/win-64::setuptools-58.0.4-py37haa95532_0
sqlite               pkgs/main/win-64::sqlite-3.36.0-h2bbff1b_0
vc                   pkgs/main/win-64::vc-14.2-h21ff451_1
vs2015_runtime       pkgs/main/win-64::vs2015_runtime-14.27.29016-h5e58377_2
wheel                pkgs/main/noarch::wheel-0.37.0-pyhd3eb1b0_1
wincertstore         pkgs/main/win-64::wincertstore-0.2-py37haa95532_2

Proceed ([y]/n)? y

Preparing transaction: done
Verifying transaction: done
Executing transaction: done
#
# To activate this environment, use
#
#     $ conda activate sun
#
# To deactivate an active environment, use
#
#     $ conda deactivate
#

F:\REPO\Real-Time-Voice-Cloning>conda activate sun

(sun) F:\REPO\Real-Time-Voice-Cloning>conda install pytorch==1.1.0 torchvision==0.3.0 cudatoolkit=10.0 -c pytorch
Collecting package metadata (current_repodata.json): done
Solving environment: done

## Package Plan ##

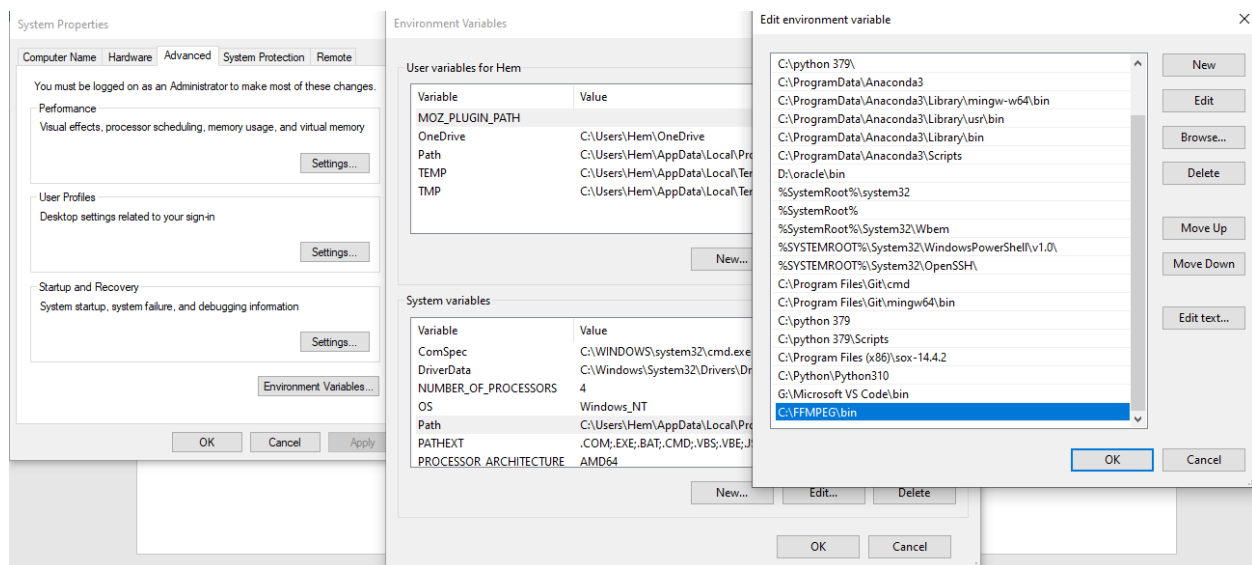
  environment location: C:\Users\Hem\conda\envs\sun

```

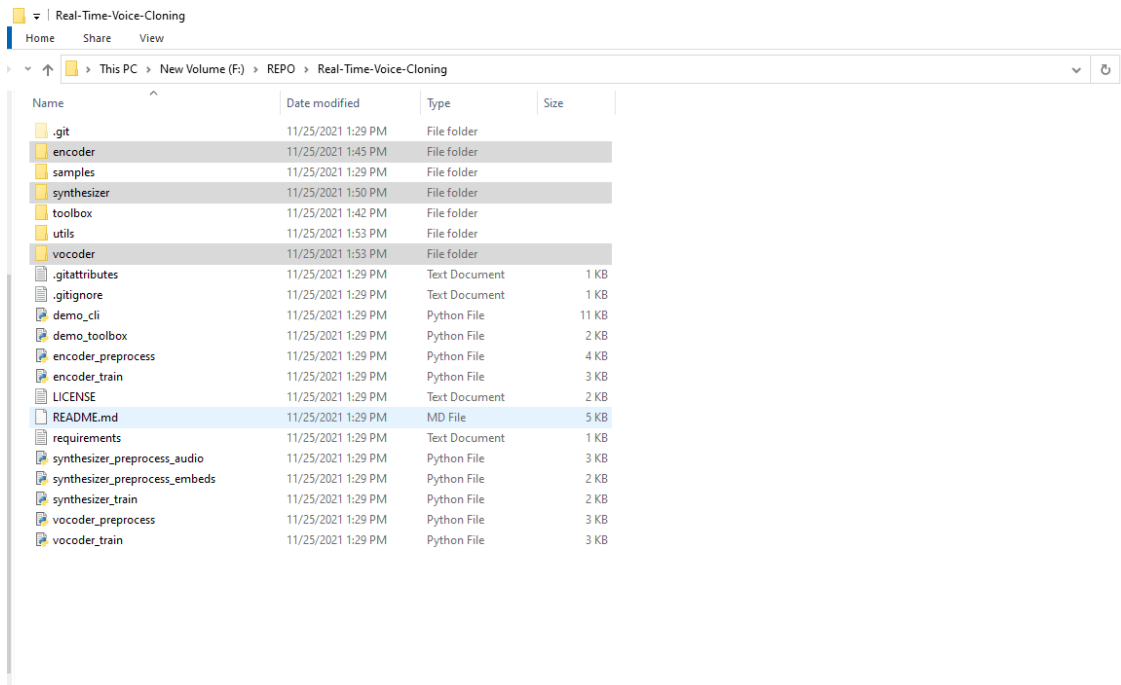
Download and unzip FFMEG file in local disk c. Then copy and paste its **bin folder** path  
**C:\FFMPEG\bin.**

This PC > SSD1 (C:) > FFmpeg > bin				
Name	Date modified	Type	Size	
ffmpeg	11/18/2021 5:41 PM	Application	115,395 KB	
ffplay	11/18/2021 5:41 PM	Application	115,266 KB	
ffprobe	11/18/2021 5:41 PM	Application	115,300 KB	

Then paste the bin path in system environment variable named as **System variables** in your pc and click ok respectively. Please check once you have bin path in environment system variable as shown in figure.



Download, copy and Paste pretrained model in your repo file as shown below.



## Run python demo\_toolbox.py

```
(sun) F:\REPO\Real-Time-Voice-Cloning>python demo_toolbox.py
Traceback (most recent call last):
  File "demo_toolbox.py", line 2, in <module>
    from toolbox import Toolbox
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\__init__.py", line 1, in <module>
    from toolbox.ui import UI
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\ui.py", line 1, in <module>
    import matplotlib.pyplot as plt
ModuleNotFoundError: No module named 'matplotlib'
```

## Pip install matplotlib

```
(sun) F:\REPO\Real-Time-Voice-Cloning>pip install matplotlib
Collecting matplotlib
  Using cached matplotlib-3.5.0-cp37-cp37m-win_amd64.whl (7.2 MB)
Collecting setuptools-scm>=4
  Using cached setuptools-scm-6.3.2-py3-none-any.whl (33 kB)
Collecting packaging>=20.0
  Using cached packaging-21.3-py3-none-any.whl (40 kB)
Collecting kiwisolver>=1.0.1
  Using cached kiwisolver-1.3.2-cp37m-win_amd64.whl (51 kB)
Collecting python-dateutil>=2.7
  Using cached python-dateutil-2.8.2-py2.py3-none-any.whl (247 kB)
Collecting fonttools>=4.22.0
  Using cached fonttools-4.28.2-py3-none-any.whl (880 kB)
Collecting cycler>=0.10
  Using cached cycler-0.11.0-py3-none-any.whl (6.4 kB)
Requirement already satisfied: pillow>=6.2.0 in c:\users\hem\conda\envs\sun\lib\site-packages (from matplotlib) (8.4.0)
Requirement already satisfied: numpy>=1.17 in c:\users\hem\conda\envs\sun\lib\site-packages (from matplotlib) (1.21.2)
Collecting pyparsing>=2.2.1
  Using cached pyparsing-3.0.6-py3-none-any.whl (97 kB)
Requirement already satisfied: six>=1.5 in c:\users\hem\conda\envs\sun\lib\site-packages (from python-dateutil>=2.7->matplotlib) (1.16.0)
Collecting tomli>=1.0.0
  Using cached tomli-1.2.2-py3-none-any.whl (12 kB)
Requirement already satisfied: setuptools in c:\users\hem\conda\envs\sun\lib\site-packages (from setuptools-scm>=4->matplotlib) (58.0.4)
Installing collected packages: pyparsing, tomli, packaging, setuptools-scm, python-dateutil, kiwisolver, fonttools, cycler, matplotlib
Successfully installed cycler-0.11.0 fonttools-4.28.2 kiwisolver-1.3.2 matplotlib-3.5.0 packaging-21.3 pyparsing-3.0.6 python-dateutil-2.8.2 setuptools-scm-6.3.2 tomli-1.2.2
```

## Run python demo\_toolbox.py

```
(sun) F:\REPO\Real-Time-Voice-Cloning>python demo_toolbox.py
Traceback (most recent call last):
  File "demo_toolbox.py", line 2, in <module>
    from toolbox import Toolbox
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\__init__.py", line 1, in <module>
    from toolbox.ui import UI
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\ui.py", line 2, in <module>
    from matplotlib.backends.backend_qt5agg import FigureCanvasQTagg as FigureCanvas
  File "C:\Users\Hem\conda\envs\sun\lib\site-packages\matplotlib\backends\backend_qt5agg.py", line 5, in <module>
    from .backend_qtagg import (
  File "C:\Users\Hem\conda\envs\sun\lib\site-packages\matplotlib\backends\backend_qtagg.py", line 9, in <module>
    from .qt_compat import QT_API, _enum, _setDevicePixelRatio
  File "C:\Users\Hem\conda\envs\sun\lib\site-packages\matplotlib\backends\qt_compat.py", line 128, in <module>
    raise ImportError("Failed to import any qt binding")
ImportError: Failed to import any qt binding
```

## pip install PyQt5

```
(sun) F:\REPO\Real-Time-Voice-Cloning>pip install PyQt5
Collecting PyQt5
  Using cached PyQt5-5.15.6-cp36-abi3-win_amd64.whl (6.7 MB)
Collecting PyQt5-sip<13,>=12.8
  Using cached PyQt5_sip-12.9.0-cp37-cp37m-win_amd64.whl (62 kB)
Collecting PyQt5-Qt5>=5.15.2
  Using cached PyQt5_Qt5-5.15.2-py3-none-win_amd64.whl (50.1 MB)
Installing collected packages: PyQt5-sip, PyQt5-Qt5, PyQt5
Successfully installed PyQt5-5.15.6 PyQt5-Qt5-5.15.2 PyQt5-sip-12.9.0
```

## Run python demo\_toolbox.py

```
(sun) F:\REPO\Real-Time-Voice-Cloning>python demo_toolbox.py
Traceback (most recent call last):
  File "demo_toolbox.py", line 2, in <module>
    from toolbox import Toolbox
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\__init__.py", line 1, in <module>
    from toolbox.ui import UI
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\ui.py", line 6, in <module>
    from encoder.inference import plot_embedding_as_heatmap
  File "F:\REPO\Real-Time-Voice-Cloning\encoder\inference.py", line 2, in <module>
    from encoder.model import SpeakerEncoder
  File "F:\REPO\Real-Time-Voice-Cloning\encoder\model.py", line 3, in <module>
    from scipy.interpolate import interp1d
ModuleNotFoundError: No module named 'scipy'
```

## pip install scipy

```
(sun) F:\REPO\Real-Time-Voice-Cloning>pip install scipy
Collecting scipy
  Downloading scipy-1.7.3-cp37-cp37m-win_amd64.whl (34.1 MB)
    | 34.1 MB 3.3 MB/s
Requirement already satisfied: numpy<1.23.0,>=1.16.5 in c:\users\hem\conda\envs\sun\lib\site-packages (from scipy) (1.21.2)
Installing collected packages: scipy
Successfully installed scipy-1.7.3
```

## Run python demo\_toolbox.py

```
(sun) F:\REPO\Real-Time-Voice-Cloning>python demo_toolbox.py
Traceback (most recent call last):
  File "demo_toolbox.py", line 2, in <module>
    from toolbox import Toolbox
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\__init__.py", line 1, in <module>
    from toolbox.ui import UI
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\ui.py", line 6, in <module>
    from encoder.inference import plot_embedding_as_heatmap
  File "F:\REPO\Real-Time-Voice-Cloning\encoder\inference.py", line 2, in <module>
    from encoder.model import SpeakerEncoder
  File "F:\REPO\Real-Time-Voice-Cloning\encoder\model.py", line 4, in <module>
    from sklearn.metrics import roc_curve
ModuleNotFoundError: No module named 'sklearn'
```

Run pip install sklearn

```
(sun) F:\REPO\Real-Time-Voice-Cloning>pip install sklearn
Collecting sklearn
  Using cached sklearn-0.0-py2.py3-none-any.whl
Collecting scikit-learn
  Using cached scikit_learn-1.0.1-cp37-cp37m-win_amd64.whl (7.2 MB)
Collecting joblib>=0.11
  Using cached joblib-1.1.0-py2.py3-none-any.whl (306 kB)
Requirement already satisfied: numpy>=1.14.6 in c:\users\hem\.conda\envs\sun\lib\site-packages (from scikit-learn->sklearn) (1.21.2)
Requirement already satisfied: scipy>=1.1.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from scikit-learn->sklearn) (1.7.3)
Collecting threadpoolctl>=2.0.0
  Using cached threadpoolctl-3.0.0-py3-none-any.whl (14 kB)
Installing collected packages: threadpoolctl, joblib, scikit-learn, sklearn
Successfully installed joblib-1.1.0 scikit-learn-1.0.1 sklearn-0.0 threadpoolctl-3.0.0
```

Run python demo\_toolbox.py

```
(sun) F:\REPO\Real-Time-Voice-Cloning>python demo_toolbox.py
Traceback (most recent call last):
  File "demo_toolbox.py", line 2, in <module>
    from toolbox import Toolbox
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\__init__.py", line 1, in <module>
    from toolbox.ui import UI
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\ui.py", line 6, in <module>
    from encoder.inference import plot_embedding_as_heatmap
  File "F:\REPO\Real-Time-Voice-Cloning\encoder\inference.py", line 3, in <module>
    from encoder.audio import preprocess_wav # We want to expose this function from here
  File "F:\REPO\Real-Time-Voice-Cloning\encoder\audio.py", line 7, in <module>
    import librosa
ModuleNotFoundError: No module named 'librosa'
```

pip install librosa

```
(sun) F:\REPO\Real-Time-Voice-Cloning>pip install librosa
Collecting librosa
  Using cached librosa-0.8.1-py3-none-any.whl (203 kB)
Requirement already satisfied: packaging>=20.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from librosa) (21.3)
Collecting numba>=0.43.0
  Using cached numba-0.54.1-cp37-cp37m-win_amd64.whl (2.3 MB)
Requirement already satisfied: scipy>=1.0.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from librosa) (1.7.3)
Collecting pooch>=1.0
  Using cached pooch-1.5.2-py3-none-any.whl (57 kB)
Requirement already satisfied: numpy>=1.15.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from librosa) (1.21.2)
Requirement already satisfied: joblib>=0.14 in c:\users\hem\.conda\envs\sun\lib\site-packages (from librosa) (1.1.0)
Collecting decorator>=3.0.0
  Using cached decorator-5.1.0-py3-none-any.whl (9.1 kB)
Collecting resampy>=0.2.2
  Using cached resampy-0.2.2-py3-none-any.whl
Collecting audioread>=2.0.0
  Using cached audioread-2.1.9-py3-none-any.whl
Requirement already satisfied: scikit-learn!=0.19.0,>=0.14.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from librosa) (1.0.1)
Collecting soundfile>=0.10.2
  Using cached SoundFile-0.10.3.post1-py2.py3.cp26.cp27.cp32.cp33.cp34.cp35.cp36.pp27.pp32.pp33-none-win_amd64.whl (689 kB)
Collecting numpy>=1.15.0
  Using cached numpy-1.20.3-cp37-cp37m-win_amd64.whl (13.6 MB)
Collecting llvmlite<0.38,>=0.37.0rc1
  Using cached llvmlite-0.37.0-cp37-cp37m-win_amd64.whl (17.0 MB)
Requirement already satisfied: setuptools in c:\users\hem\.conda\envs\sun\lib\site-packages (from numba>=0.43.0->librosa) (58.0.4)
Requirement already satisfied: pyparsing!=3.0.5,>=2.0.2 in c:\users\hem\.conda\envs\sun\lib\site-packages (from packaging>=20.0->librosa) (3.0.6)
Collecting requests
  Using cached requests-2.26.0-py2.py3-none-any.whl (62 kB)
Collecting appdirs
  Using cached appdirs-1.4.4-py2.py3-none-any.whl (9.6 kB)
Requirement already satisfied: six>=1.3 in c:\users\hem\.conda\envs\sun\lib\site-packages (from resampy>=0.2.2->librosa) (1.16.0)
Requirement already satisfied: threadpoolctl>=2.0.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from scikit-learn!=0.19.0,>=0.14.0->librosa) (3.0.0)
Requirement already satisfied: cffi>=1.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from soundfile>=0.10.2->librosa) (1.15.0)
Requirement already satisfied: pycparser in c:\users\hem\.conda\envs\sun\lib\site-packages (from cffi>=1.0->soundfile>=0.10.2->librosa) (2.21)
Collecting idna>=2.5
  Using cached idna-3.3-py3-none-any.whl (61 kB)
Collecting charset-normalizer<=2.0.0
  Using cached charset-normalizer-2.0.8-py3-none-any.whl (39 kB)
Collecting urllib3<1.27,>=1.21.1
  Using cached urllib3-1.26.7-py2.py3-none-any.whl (138 kB)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\hem\.conda\envs\sun\lib\site-packages (from requests->pooch>=1.0->librosa) (2021.10.8)
Installing collected packages: urllib3, numpy, llvmlite, idna, charset-normalizer, requests, numba, appdirs, soundfile, resampy, pooch, decorator, audioread, librosa
Attempting uninstall: numpy
```

```
Successfully uninstalled numpy-1.21.2
Successfully installed appdirs-1.4.4 audioread-2.1.9 charset-normalizer-2.0.8 decorator-5.1.0 idna-3.3 librosa-0.8.1 llvmlite-0.37.0 numba-0.54.1 numpy-1.20.3 pooch-1.5.2 requests-2.26.0 resampy-0.2.2 soundfile-0.10.3.post1 urllib3-1.26.7
```

## Run demo\_toolbox.py

```
(sun) F:\REPO\Real-Time-Voice-Cloning>python demo_toolbox.py
F:\REPO\Real-Time-Voice-Cloning\encoder\audio.py:13: UserWarning: Unable to import 'webrtcvad'. This package enables noise removal and is recommended.
  warn("Unable to import 'webrtcvad'. This package enables noise removal and is recommended.")
Traceback (most recent call last):
  File "demo_toolbox.py", line 2, in <module>
    from toolbox import Toolbox
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\_init_.py", line 1, in <module>
    from toolbox.ui import UI
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\ui.py", line 10, in <module>
    import sounddevice as sd
ModuleNotFoundError: No module named 'sounddevice'
```

## pip install sounddevice

```
(sun) F:\REPO\Real-Time-Voice-Cloning>pip install sounddevice
Collecting sounddevice
  Using cached sounddevice-0.4.3-py3-none-win_amd64.whl (195 kB)
Requirement already satisfied: CFFI>=1.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from sounddevice) (1.15.0)
Requirement already satisfied: pycparser in c:\users\hem\.conda\envs\sun\lib\site-packages (from CFFI>=1.0->sounddevice) (2.21)
Installing collected packages: sounddevice
Successfully installed sounddevice-0.4.3
```

## Run demo\_toolbox.py

```
(sun) F:\REPO\Real-Time-Voice-Cloning>python demo_toolbox.py
F:\REPO\Real-Time-Voice-Cloning\encoder\audio.py:13: UserWarning: Unable to import 'webrtcvad'. This package enables noise removal and is recommended.
  warn("Unable to import 'webrtcvad'. This package enables noise removal and is recommended.")
Traceback (most recent call last):
  File "demo_toolbox.py", line 2, in <module>
    from toolbox import Toolbox
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\_init_.py", line 1, in <module>
    from toolbox.ui import UI
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\ui.py", line 15, in <module>
    import umap
ModuleNotFoundError: No module named 'umap'
```

## pip install umap



```
(sun) F:\REPO\Real-Time-Voice-Cloning>pip install umap
Collecting umap
  Downloading umap-0.1.1.tar.gz (3.2 kB)
Building wheels for collected packages: umap
  Building wheel for umap (setup.py) ... done
  Created wheel for umap: filename=umap-0.1.1-py3-none-any.whl size=3564 sha256=dda14c189325677c081edab03e358da567d11e90b62dc0cb4352de728d2f8a5e
  Stored in directory: c:\users\hem\appdata\local\pip\cache\wheels\65\55\85\945cfb3d67373767e4dc3e9629300a926edde52633df4f0efe
Successfully built umap
Installing collected packages: umap
Successfully installed umap-0.1.1
```

## Run demo\_toolbox.py

```
(sun) F:\REPO\Real-Time-Voice-Cloning>python demo_toolbox.py
F:\REPO\Real-Time-Voice-Cloning\encoder\audio.py:13: UserWarning: Unable to import 'webrtcvad'. This package enables noise removal and is recommended.
  warn("Unable to import 'webrtcvad'. This package enables noise removal and is recommended.")
Traceback (most recent call last):
  File "demo_toolbox.py", line 2, in <module>
    from toolbox import Toolbox
  File "F:\REPO\Real-Time-Voice-Cloning\toolbox\_init_.py", line 3, in <module>
    from synthesizer.inference import Synthesizer
  File "F:\REPO\Real-Time-Voice-Cloning\synthesizer\inference.py", line 6, in <module>
    from synthesizer.utils.text import text_to_sequence
  File "F:\REPO\Real-Time-Voice-Cloning\synthesizer\utils\text.py", line 2, in <module>
    from . import cleaners
  File "F:\REPO\Real-Time-Voice-Cloning\synthesizer\utils\cleaners.py", line 14, in <module>
    from unidecode import unidecode
ModuleNotFoundError: No module named 'unidecode'
```

## pip install unidecode

```
(sun) F:\REPO\Real-Time-Voice-Cloning>pip install unidecode
Collecting unidecode
  Using cached Unidecode-1.3.2-py3-none-any.whl (235 kB)
Installing collected packages: unidecode
Successfully installed unidecode-1.3.2
```

## pip install -r requirements.txt

```
(sun) F:\REPO\Real-Time-Voice-Cloning>pip install -r requirements.txt
Ignoring numpy: markers 'platform_system != "Windows"' don't match your environment
Ignoring webrtcvad: markers 'platform_system != "Windows"' don't match your environment
Collecting umap-learn
  Using cached umap-learn-0.5.2.tar.gz (86 kB)
Collecting visdom
  Using cached visdom-0.1.8.9-py3-none-any.whl
Requirement already satisfied: librosa>=0.8.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from -r requirements.txt (line 3)) (0.8.1)
Requirement already satisfied: matplotlib>=3.3.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from -r requirements.txt (line 4)) (3.5.0)
Collecting numpy<=1.19.3
  Using cached numpy-1.19.3-cp37-cp37m-win_amd64.whl (13.2 MB)
Requirement already satisfied: scipy>=1.0.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from -r requirements.txt (line 7)) (1.7.3)
Collecting tqdm
  Using cached tqdm-4.62.3-py2.py3-none-any.whl (76 kB)
Requirement already satisfied: sounddevice in c:\users\hem\.conda\envs\sun\lib\site-packages (from -r requirements.txt (line 9)) (0.4.3)
Requirement already satisfied: SoundFile in c:\users\hem\.conda\envs\sun\lib\site-packages (from -r requirements.txt (line 10)) (0.10.3.post1)
Requirement already satisfied: Unidecode in c:\users\hem\.conda\envs\sun\lib\site-packages (from -r requirements.txt (line 11)) (1.3.2)
Collecting inflect
  Using cached inflect-5.3.0-py3-none-any.whl (32 kB)
Requirement already satisfied: PyQt5 in c:\users\hem\.conda\envs\sun\lib\site-packages (from -r requirements.txt (line 13)) (5.15.6)
Collecting multiprocessing
  Using cached multiprocessing-0.70.12.2-py37-none-any.whl (112 kB)
Requirement already satisfied: numba in c:\users\hem\.conda\envs\sun\lib\site-packages (from -r requirements.txt (line 15)) (0.54.1)
Requirement already satisfied: scikit-learn>=0.22 in c:\users\hem\.conda\envs\sun\lib\site-packages (from umap-learn->-r requirements.txt (line 1)) (1.0.1)
Collecting pyndescent>=0.5
  Using cached pyndescent-0.5.5-py3-none-any.whl
Collecting jsonpatch
  Using cached jsonpatch-1.32-py2.py3-none-any.whl (12 kB)
Collecting pyzmq
  Using cached pyzmq-22.3.0-cp37-cp37m-win_amd64.whl (1.1 MB)
Collecting websocket-client
  Using cached websocket_client-1.2.1-py2.py3-none-any.whl (52 kB)
Collecting tornado
  Using cached tornado-6.1-cp37-cp37m-win_amd64.whl (422 kB)
Requirement already satisfied: six in c:\users\hem\.conda\envs\sun\lib\site-packages (from visdom->-r requirements.txt (line 2)) (1.16.0)
Collecting torchfile
  Using cached torchfile-0.1.0-py3-none-any.whl
Requirement already satisfied: pillow in c:\users\hem\.conda\envs\sun\lib\site-packages (from visdom->-r requirements.txt (line 2)) (8.4.0)
Requirement already satisfied: requests in c:\users\hem\.conda\envs\sun\lib\site-packages (from visdom->-r requirements.txt (line 2)) (2.26.0)
Requirement already satisfied: pooch>=1.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from librosa>=0.8.0->-r requirements.txt (line 3)) (1.5.2)
Requirement already satisfied: audioread>=2.0.0 in c:\users\hem\.conda\envs\sun\lib\site-packages (from librosa>=0.8.0->-r requirements.txt (line 3)) (2.1.9)
Requirement already satisfied: resampy>=0.2.2 in c:\users\hem\.conda\envs\sun\lib\site-packages (from librosa>=0.8.0->-r requirements.txt (line 3)) (0.2.2)
Requirement already satisfied: joblib>=0.14 in c:\users\hem\.conda\envs\sun\lib\site-packages (from librosa>=0.8.0->-r requirements.txt (line 3)) (1.1.0)
```



```

Requirement already satisfied: resampy==0.2.2 in c:\users\hem\conda\envs\sun\lib\site-packages (from librosa>=0.8.0->r requirements.txt (line 3)) (0.2.2)
Requirement already satisfied: joblib>=0.14 in c:\users\hem\conda\envs\sun\lib\site-packages (from librosa>=0.8.0->r requirements.txt (line 3)) (1.1.0)
Requirement already satisfied: packaging>=20.0 in c:\users\hem\conda\envs\sun\lib\site-packages (from librosa>=0.8.0->r requirements.txt (line 3)) (21.3)
Requirement already satisfied: decorator>=3.0.0 in c:\users\hem\conda\envs\sun\lib\site-packages (from librosa>=0.8.0->r requirements.txt (line 3)) (5.1.0)
Requirement already satisfied: fonttools>=4.22.0 in c:\users\hem\conda\envs\sun\lib\site-packages (from matplotlib>=3.3.0->r requirements.txt (line 4)) (4.28.2)
Requirement already satisfied: kiwisolver>=1.0.1 in c:\users\hem\conda\envs\sun\lib\site-packages (from matplotlib>=3.3.0->r requirements.txt (line 4)) (1.3.2)
Requirement already satisfied: pyparsing>=2.2.1 in c:\users\hem\conda\envs\sun\lib\site-packages (from matplotlib>=3.3.0->r requirements.txt (line 4)) (3.0.6)
Requirement already satisfied: cycler>=0.10 in c:\users\hem\conda\envs\sun\lib\site-packages (from matplotlib>=3.3.0->r requirements.txt (line 4)) (0.11.0)
Requirement already satisfied: python-dateutil>=2.7 in c:\users\hem\conda\envs\sun\lib\site-packages (from matplotlib>=3.3.0->r requirements.txt (line 4)) (2.8.2)
Requirement already satisfied: setuptools-scm>=4 in c:\users\hem\conda\envs\sun\lib\site-packages (from matplotlib>=3.3.0->r requirements.txt (line 4)) (6.3.2)
Collecting colorama
  Using cached colorama-0.4.4-py2.py3-none-any.whl (16 kB)
Requirement already satisfied: CFFI>=1.0 in c:\users\hem\conda\envs\sun\lib\site-packages (from sounddevice->r requirements.txt (line 9)) (1.15.0)
Requirement already satisfied: PyQt5-sip<13,>=12.8 in c:\users\hem\conda\envs\sun\lib\site-packages (from PyQt5->r requirements.txt (line 13)) (12.9.0)
Requirement already satisfied: PyQt5-Qt5>=5.15.2 in c:\users\hem\conda\envs\sun\lib\site-packages (from PyQt5->r requirements.txt (line 13)) (5.15.2)
Collecting dill>=0.3.4
  Using cached dill-0.3.4-py2.py3-none-any.whl (86 kB)
Requirement already satisfied: llvmlite<0.38,>=0.37.0rc1 in c:\users\hem\conda\envs\sun\lib\site-packages (from numba->r requirements.txt (line 15)) (0.37.0)
Requirement already satisfied: setuptools in c:\users\hem\conda\envs\sun\lib\site-packages (from numba->r requirements.txt (line 15)) (58.0.4)
Requirement already satisfied: pycparser in c:\users\hem\conda\envs\sun\lib\site-packages (from CFFI>=1.0->sounddevice->r requirements.txt (line 9)) (2.21)
Requirement already satisfied: appdirs in c:\users\hem\conda\envs\sun\lib\site-packages (from pooch>=1.0->librosa>=0.8.0->r requirements.txt (line 3)) (1.4.4)
Requirement already satisfied: threadpoolctl>=2.0.0 in c:\users\hem\conda\envs\sun\lib\site-packages (from scikit-learn>=0.22->umap-learn->r requirements.txt (line 1)
) (3.0.0)
Requirement already satisfied: tomli>=1.0.0 in c:\users\hem\conda\envs\sun\lib\site-packages (from setuptools-scm>=4->matplotlib>=3.3.0->r requirements.txt (line 4))
(1.2.2)
Collecting jsonpointer>=1.9
  Using cached jsonpointer-2.2-py2.py3-none-any.whl (7.5 kB)
Requirement already satisfied: idna<4,>=2.5 in c:\users\hem\conda\envs\sun\lib\site-packages (from requests->visdom->r requirements.txt (line 2)) (3.3)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\hem\conda\envs\sun\lib\site-packages (from requests->visdom->r requirements.txt (line 2)) (2021.10.8)
Requirement already satisfied: charset-normalizer<=2.0.0 in c:\users\hem\conda\envs\sun\lib\site-packages (from requests->visdom->r requirements.txt (line 2)) (2.0.8)

Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\hem\conda\envs\sun\lib\site-packages (from requests->visdom->r requirements.txt (line 2)) (1.26.7)
Building wheels for collected packages: umap-learn
  Building wheel for umap-learn (setup.py) ... done
  Created wheel for umap-learn: filename=umap_learn-0.5.2-py3-none-any.whl size=82709 sha256=ea23a9d1ad7b46b5be5ebf129e2fdafb043e75a6c8496d88aad54baaaf4e1eb5
  Stored in directory: c:\users\hem\appdata\local\pip\cache\wheels\84\1b\c6\aa6f8a748122632967ce4dffe68224eb16798b6793257d82
Successfully built umap-learn
Installing collected packages: numpy, jsonpointer, colorama, websocket-client, tqdm, tornado, torchfile, pyzmq, pyndescent, jsonpatch, dill, visdom, umap-learn, multip
rocess, inflect
  Attempting uninstall: numpy
    Found existing installation: numpy 1.20.3
    Uninstalling numpy-1.20.3:
      Successfully uninstalled numpy-1.20.3
Successfully installed colorama-0.4.4 dill-0.3.4 inflect-5.3.0 jsonpatch-1.32 jsonpointer-2.2 multiprocessing-0.70.12.2 numpy-1.19.3 pyndescent-0.5.5 pyzmq-22.3.0 torchfi

```

Finally, run

## python demo\_toolbox.py

```

(sun) F:\REPO\Real-Time-Voice-Cloning>python demo_toolbox.py
F:\REPO\Real-Time-Voice-Cloning\encoder\audio.py:13: UserWarning: Unable to import 'webrtcvad'. This package enables noise removal and is recommended.
  warn("Unable to import 'webrtcvad'. This package enables noise removal and is recommended.")
Arguments:
  datasets_root:      None
  enc_models_dir:     encoder\saved_models
  syn_models_dir:     synthesizer\saved_models
  voc_models_dir:     vocoder\saved_models
  cpu:                False
  seed:               None
  no_mp3_support:     False

Warning: you did not pass a root directory for datasets as argument.
The recognized datasets are:
  LibriSpeech/dev-clean
  LibriSpeech/dev-other
  LibriSpeech/test-clean
  LibriSpeech/test-other
  LibriSpeech/train-clean-100
  LibriSpeech/train-clean-360
  LibriSpeech/train-other-500
  LibriTTS/dev-clean
  LibriTTS/dev-other
  LibriTTS/test-clean
  LibriTTS/test-other
  LibriTTS/train-clean-100
  LibriTTS/train-clean-360
  LibriTTS/train-other-500
  LJSpeech-1.1
  VoxCeleb1/wav
  VoxCeleb1/test_wav
  VoxCeleb2/dev/aac
  VoxCeleb2/test/aac
  VCTK-Corpus/wav48

Feel free to add your own. You can still use the toolbox by recording samples yourself.
Loaded encoder "pretrained.pt" trained to step 1564501
Synthesizer using device: cpu
Trainable Parameters: 30.870M
Loaded synthesizer "pretrained.pt" trained to step 295000
+-----+
| Tacotron | r |
+-----+
| 295k    | 2 |

```

```

Feel free to add your own. You can still use the toolbox by recording samples yourself.
Loaded encoder "pretrained.pt" trained to step 1564501
Synthesizer using device: cpu
Trainable Parameters: 30.870M
Loaded synthesizer "pretrained.pt" trained to step 295000
+-----+
| Tacotron | r |
+-----+
| 295k    | 2 |
+-----+

| Generating 1/1

Done.

Building Wave-RNN
Trainable Parameters: 4.481M
Loading model weights at vocoder\saved_models\pretrained\pretrained.pt

```

Finally, you can record or upload your wav file and synthesis text in right side of toolbox.  
Finally, you will get synthesis voice.

The screenshot displays the Tacotron2 toolbox interface, which is organized into several functional sections:

- Dataset Management:** Includes dropdown menus for Dataset, Speaker, and Utterance, along with a 'Load' button. Below these are 'Random' buttons for each category and an 'Auto select next' checkbox.
- Embedding and Playback:** A 'Use embedding from:' dropdown is set to 'user01\_rec\_30474'. Below it are 'Browse', 'Record', 'Play' (highlighted in blue), and 'Stop' buttons.
- Model Selection:** Dropdown menus for Encoder, Synthesizer, and Vocoder are all set to 'pretrained'. The Audio Output is set to 'Microsoft Sound Mapper'.
- Toolbox Output:** A dropdown is set to '1', with 'Replay' and 'Export' buttons.
- Synthesis Controls:** A text input field contains 'hello how are you'. Below it are 'Synthesize and vocode', 'Synthesize only', and 'Vocode only' buttons. A 'Random seed' input is set to '0', and an 'Enhance vocoder output' checkbox is present.
- Progress and Status:** A green progress bar indicates 100% completion. Log messages show the successful loading of the synthesizer and vocoder models, waveform generation (57000/57600), and audio recording (5 seconds).
- Visualizations:** Two spectrograms are displayed. The top one is labeled 'user01\_rec\_30474 spectrogram' and the bottom one is 'Desktop\_gen\_19269 spectrogram'. To the left of each spectrogram is an 'embedding' visualization, which is a heatmap with a color scale from 0.0 to 0.1.
- Input Area:** A large text box on the left contains the instruction 'Add 1 more points to generate the projections' and a 'Clear' button at the bottom.