0、先安装好anaconda，建议直接去官网下(windows)

1、安装虚拟环境 `conda create -n test python=3.7`

> 需要关闭VPN

```
(base) G:\mine\may_useful_softwares\SRTP\xfields-main>conda create -n thy_test_4 python=3.7
Collecting package metadata (current_repodata.json): done
Solving environment: done

==> WARNING: A newer version of conda exists. <==
  current version: 4.10.3
  latest version: 4.11.0

Please update conda by running

    $ conda update -n base -c defaults conda


## Package Plan ##

  environment location: G:\mine\may_useful_softwares\anaconda3\envs\thy_test_4

  added / updated specs:
    - python=3.7


The following packages will be downloaded:

    package                    |            build
    ---------------------------|-----------------
    certifi-2021.10.8          |   py37haa95532_2         152 KB
    openssl-1.1.1m             |       h2bbff1b_0         4.8 MB
    pip-21.2.4                 |   py37haa95532_0         1.8 MB
    python-3.7.11              |       h6244533_0        14.5 MB
    setuptools-58.0.4          |   py37haa95532_0         776 KB
    sqlite-3.37.0              |       h2bbff1b_0         785 KB
    wheel-0.37.1               |     pyhd3eb1b0_0          33 KB
    wincertstore-0.2           |   py37haa95532_2          15 KB
    ---------------------------|-----------------
                                         Total:        22.9 MB

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_2
  openssl            pkgs/main/win-64::openssl-1.1.1m-h2bbff1b_0
```

2、激活环境 `conda activate test`

```
done
#
# To activate this environment, use
#
#     $ conda activate thy_test_4
#
# To deactivate an active environment, use
#
#     $ conda deactivate


(base) G:\mine\may_useful_softwares\SRTP\xfields-main>conda activate thy_test_4

(thy_test_4) G:\mine\may_useful_softwares\SRTP\xfields-main>
```

3、安装指定版本的TensorFlow, `conda install tensorflow-gpu==1.14.0`

```
# To deactivate an active environment, use
#
#     $ conda deactivate


(base) G:\mine\may_useful_softwares\SRTP\xfields-main>conda activate thy_test_4

(thy_test_4) G:\mine\may_useful_softwares\SRTP\xfields-main>conda install tensorflow-gpu
Collecting package metadata (current_repodata.json): done
Solving environment: failed with initial frozen solve. Retrying with flexible solve.
Solving environment: failed with repodata from current_repodata.json, will retry with next repodata source.
Collecting package metadata (repodata.json): done
Solving environment: done


==> WARNING: A newer version of conda exists. <==
  current version: 4.10.3
  latest version: 4.11.0

Please update conda by running

    $ conda update -n base -c defaults conda



## Package Plan ##

  environment location: G:\mine\may_useful_softwares\anaconda3\envs\thy_test_4

  added / updated specs:
    - tensorflow-gpu


The following packages will be downloaded:

    package                    |            build
    ---------------------------|-----------------
    _tflow_select-2.3.0        |              gpu           4 KB
    aiohttp-3.8.1              |   py37h2bbff1b_0         483 KB
    aiosignal-1.2.0            |     pyhd3eb1b0_0          12 KB
    astunparse-1.6.3           |             py_0          17 KB
    async-timeout-4.0.1        |     pyhd3eb1b0_0          10 KB
    asynctest-0.13.0           |             py_0          26 KB
    attrs-21.4.0               |     pyhd3eb1b0_0          51 KB
    blinker-1.4                |   py37haa95532_0          23 KB
```

4、安装tensorlayer `pip3 install tensorlayer==1.11.1`

```
(thy_test_4) G:\mine\may_useful_softwares\SRTP\xfields-main>pip3 install tensorlayer==1.11.1
Collecting tensorlayer==1.11.1
  Using cached tensorlayer-1.11.1-py3-none-any.whl (316 kB)
Collecting progressbar2<3.39,>=3.38
  Using cached progressbar2-3.38.0-py2.py3-none-any.whl (19 kB)
Collecting wrapt<1.11,>=1.10
  Using cached wrapt-1.10.11-cp37-cp37m-win_amd64.whl
Collecting scipy<1.2,>=1.1
  Using cached scipy-1.1.0-cp37-none-win_amd64.whl (30.9 MB)
Collecting matplotlib<3.1,>=2.2
  Using cached matplotlib-3.0.3-cp37-cp37m-win_amd64.whl (9.1 MB)
Collecting requests<2.21,>=2.19
  Using cached requests-2.20.1-py2.py3-none-any.whl (57 kB)
Collecting scikit-image<0.15,>=0.14
  Using cached scikit_image-0.14.5-cp37-none-win_amd64.whl (24.7 MB)
Collecting scikit-learn<0.21,>=0.19
  Using cached scikit_learn-0.20.4-cp37-cp37m-win_amd64.whl (4.8 MB)
Collecting lxml<4.3,>=4.2
  Using cached lxml-4.2.6-cp37-cp37m-win_amd64.whl (3.5 MB)
Collecting numpy<1.16,>=1.14
  Using cached numpy-1.15.4-cp37-none-win_amd64.whl (13.5 MB)
Collecting imageio<2.5,>=2.3
  Using cached imageio-2.4.1-py3-none-any.whl
Collecting tqdm<4.29,>=4.23
  Using cached tqdm-4.28.1-py2.py3-none-any.whl (45 kB)
Collecting pillow
  Using cached Pillow-9.0.0-cp37-cp37m-win_amd64.whl (3.2 MB)
Collecting kiwisolver>=1.0.1
  Using cached kiwisolver-1.3.2-cp37-cp37m-win_amd64.whl (51 kB)
Collecting cycler>=0.10
  Using cached cycler-0.11.0-py3-none-any.whl (6.4 kB)
Collecting pyparsing!=2.0.4,!=2.1.2,!=2.1.6,>=2.0.1
  Using cached pyparsing-3.0.7-py3-none-any.whl (98 kB)
Collecting python-dateutil>=2.1
  Using cached python_dateutil-2.8.2-py2.py3-none-any.whl (247 kB)
Collecting python-utils>=2.3.0
  Using cached python_utils-3.1.0-py2.py3-none-any.whl (19 kB)
Requirement already satisfied: six in g:\mine\may_useful_softwares\anaconda3\envs\thy_test_4\lib\site-packages (from progressbar2<3.39,>=3.38->tensorlayer=
```

5、安装opencv `pip install opencv-python`

6、运行


一些可能的错误以及解决方法：

- 报这个错 `ModuleNotFoundError: No module named 'numpy.core._multiarray_umath'` 的时候升级numpy，`pip install --user --upgrade numpy`
- 命令行用**cmd**而不是**powershell**