

1. All required packages and libraries

Python 3.6
Keras 2.2.4
opencv-python 4.5.1.48
pandas 1.1.5
scikit-learn 0.24.1
tensorflow 1.14.0
h5py 2.10.0
PyTorch 1.4.0
Torch 1.5.1
PyDicom 1.4.2 (Installation) : pip install pydicom
SimpleITK (Installation) : pip install SimpleITK
lungmask (Installation) : pip install git+https://github.com/JoHof/lungmask
OS
Numpy 1.16.0
Matplotlib 3.3.4

2. direction on how to run the code

I used pycharm to run this code.

The code's file name : "TeamSSU_codes.py"

Open the file "TeamSSU_codes.py"

First, line of code to modify the test folder directroy is line 37



```
35  
36 # Set the path based on your data directory  
37 data_path = "./ICASSP_SPGC2021_TestData/SPGC-Test1"  
38 # "./ICASSP_SPGC2021_TestData/SPGC-Test2"  
39 # "./ICASSP_SPGC2021_TestData/SPGC-Test3"  
40  
41 K.set_image_data_format('channels_last')  
42  
43
```

in this picture, the code : data_path = "./ICASSP_SPCG2021_TestData/SPGC-Test1")
is first test data sets's path(line 37).

The second and third test data sets's paths are annotated below.

that line 38, 39

if you want to run for second test data set, you change the code like this

data_path = "./ICASSP_SPCG2021_TestData/SPGC-Test2" (38th line)

and for third test data set.

`data_path = "./ICASSP_SPCG2021_TestData/SPGC-Test3"` (39th line)

Finally, Run the code

3. Get the result for test cases.

the above code saves CSV files for test data sets tha named `"result.csv"`

The path where the `"result.csv"` file is stored is the same as the directory where the file `"TeamSSU_codes.py"` is located.