

Pyinstaller在构建exe文件时各种报错报错解决办法

问题描述

近期在使用pyinstaller构建exe可执行文件时，经常会报以下错误：

```
C:\Users\朱君鹏\Desktop\Algorithms\GraphAlgorithms\undirected graph clustering algorithms\completed\spectral-clustering.exe
Traceback (most recent call last):
  File "spectral-clustering.py", line 4, in <module>
    from sklearn.cluster import KMeans
  File "c:\python37\lib\site-packages\PyInstaller\loader\pyimod03_importers.py", line 627, in exec_module
    exec(bytecode, module.__dict__)
  File "site-packages\sklearn\cluster\__init__.py", line 6, in <module>
    File "c:\python37\lib\site-packages\PyInstaller\loader\pyimod03_importers.py", line 627, in exec_module
    exec(bytecode, module.__dict__)
  File "site-packages\sklearn\cluster\spectral.py", line 17, in <module>
    File "c:\python37\lib\site-packages\PyInstaller\loader\pyimod03_importers.py", line 627, in exec_module
    exec(bytecode, module.__dict__)
  File "site-packages\sklearn\manifold\__init__.py", line 9, in <module>
    File "c:\python37\lib\site-packages\PyInstaller\loader\pyimod03_importers.py", line 627, in exec_module
    exec(bytecode, module.__dict__)
  File "site-packages\sklearn\manifold\t_sne.py", line 26, in <module>
    File "sklearn\neighbors\quad_tree.pxd", line 55, in init sklearn.manifold._barnes_hut_tsne
ModuleNotFoundError: No module named 'sklearn.neighbors.quad_tree'
[14788] Failed to execute script spectral-clustering
```

```
C:\Users\朱君鹏\Desktop\Algorithms\GraphAlgorithms\undirected graph clustering algorithms\completed\spectral-clustering.exe
Traceback (most recent call last):
  File "spectral-clustering.py", line 4, in <module>
    from sklearn.cluster import KMeans
  File "c:\python37\lib\site-packages\PyInstaller\loader\pyimod03_importers.py", line 627, in exec_module
    exec(bytecode, module.__dict__)
  File "site-packages\sklearn\cluster\__init__.py", line 6, in <module>
  File "c:\python37\lib\site-packages\PyInstaller\loader\pyimod03_importers.py", line 627, in exec_module
    exec(bytecode, module.__dict__)
  File "site-packages\sklearn\cluster\spectral.py", line 15, in <module>
  File "c:\python37\lib\site-packages\PyInstaller\loader\pyimod03_importers.py", line 627, in exec_module
    exec(bytecode, module.__dict__)
  File "site-packages\sklearn\metrics\__init__.py", line 36, in <module>
  File "c:\python37\lib\site-packages\PyInstaller\loader\pyimod03_importers.py", line 627, in exec_module
    exec(bytecode, module.__dict__)
  File "site-packages\sklearn\metrics\cluster\__init__.py", line 20, in <module>
  File "c:\python37\lib\site-packages\PyInstaller\loader\pyimod03_importers.py", line 627, in exec_module
    exec(bytecode, module.__dict__)
  File "site-packages\sklearn\metrics\cluster\unsupervised.py", line 16, in <module>
  File "c:\python37\lib\site-packages\PyInstaller\loader\pyimod03_importers.py", line 627, in exec_module
    exec(bytecode, module.__dict__)
  File "site-packages\sklearn\metrics\pairwise.py", line 32, in <module>
  File "sklearn\metrics\pairwise_fast.pyx", line 1, in init sklearn.metrics.pairwise_fast
ModuleNotFoundError: No module named 'sklearn.utils._cython_blas'
[9432] Failed to execute script spectral-clustering
```

这种问题比较奇怪，首先在Pycharm下执行.py文件发现源码没有任何错误，但是在构建时报错缺少很多模块，本文将给出这种问题的解决办法。

解决方案

在使用Pyinstaller构建exe可执行文件时，使用如下命令：

```
1 pyinstaller -F *.py      # -F的F必须为大写
```

在这个过程中，会生成一个*.spec文件，打开该文件，内容如下：

```
1 # -*- mode: python ; coding: utf-8 -*-
2 block_cipher = None
3 a = Analysis(['spectral-clustering.py'],
4             pathex=['C:\\Users\\朱君鹏\\Desktop\\Algorithms\\GraphAlgorithms\\
5             binaries=[],
6             datas=[],
7             hiddenimports = [],
8             hookspath=[],
9             runtime_hooks=[],
10            excludes=[],
11            win_no_prefer_redirects=False,
12            win_private_assemblies=False,
13            cipher=block_cipher,
14            noarchive=False)
15 pyz = PYZ(a.pure, a.zipped_data,
16          cipher=block_cipher)
17 exe = EXE(pyz,
18          a.scripts,
19          a.binaries,
20          a.zipfiles,
21          a.datas,
22          [],
23          name='spectral-clustering',
24          debug=False,
25          bootloader_ignore_signals=False,
26          strip=False,
27          upx=True,
28          upx_exclude=[],
29          runtime_tmpdir=None,
30          console=True )
```

在上述文件中找到hiddenimports = []，解决方案只需要修改该文件中的hiddenimports参数即可，将您缺少的模块文件写入到该文件中，如 `hiddenimports =`

['pandas._libs.tslibs.timedeltas', 'sklearn.neighbors.quad_tree', 'sklearn.tree', 'sklearn.tree._utils', 'sklearn.neighbors.typedefs', 'sklearn.utils._cython_blas'], , 修改后的完整文件如下:

```
1 # -*- mode: python ; coding: utf-8 -*-
2
3 block_cipher = None
4
5
6 a = Analysis(['spectral-clustering.py'],
7             pathex=['C:\\Users\\朱君鹏\\Desktop\\Algorithms\\GraphAlgorithms\\
8             binaries=[],
9             datas=[],
10            hiddenimports = ['pandas._libs.tslibs.timedeltas', 'sklearn.neigh
11            hookspath=[],
12            runtime_hooks=[],
13            excludes=[],
14            win_no_prefer_redirects=False,
15            win_private_assemblies=False,
16            cipher=block_cipher,
17            noarchive=False)
18 pyz = PYZ(a.pure, a.zipped_data,
19          cipher=block_cipher)
20 exe = EXE(pyz,
21          a.scripts,
22          a.binaries,
23          a.zipfiles,
24          a.datas,
25          [],
26          name='spectral-clustering',
27          debug=False,
28          bootloader_ignore_signals=False,
29          strip=False,
30          upx=True,
31          upx_exclude=[],
32          runtime_tmpdir=None,
33          console=True )
```

修改完文件后，使用如下命令重新构建exe可执行文件，直到整个过程不报错为止：

```
1 pyinstaller *.spec    #等待执行结束即可
```