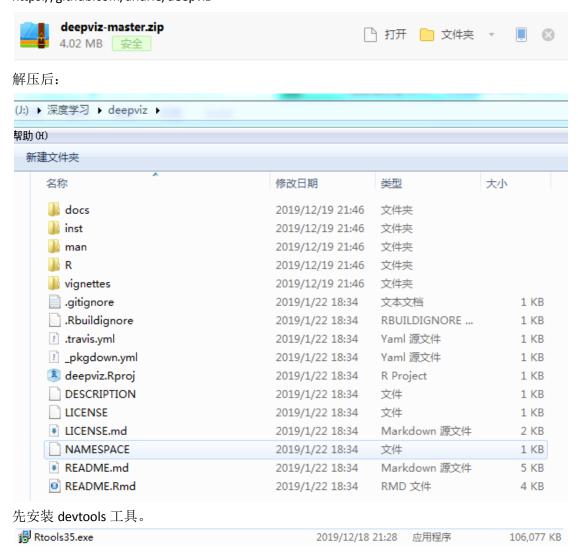
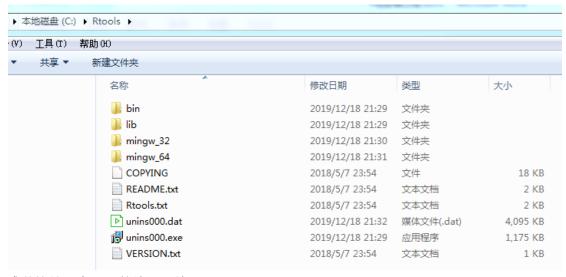
神经网络可视化包下载安装过程:

从 github 上下载 R 包: https://github.com/andrie/deepviz





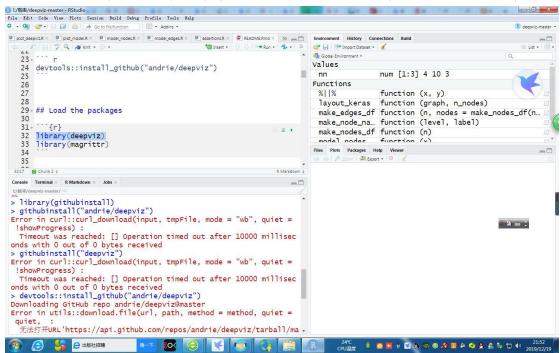
感觉就是一个 gnu 的编译环境。

> devtools::install_github("andrie/deepviz")

Downloading GitHub repo andrie/deepviz@master

Error in utils::download.file(url, path, method = method, quiet = quiet, :

无法打开 URL' 😵 https://api.github.com/repos/andrie/deepviz/tarball/master'



```
* installing *source* package 'deepviz' ...
ERROR: cannot remove earlier installation, is it in use?
* removing 'C:/Program Files/R/R-3.6.2/library/deepviz'
* restoring previous 'C:/Program Files/R/R-3.6.2/library/deepviz'
Warning in install.packages :
  installation of package 'C:/Program Files/R/R-36~1.2/library/dee
pviz' had non-zero exit status
> library(deepviz)
Error in library(deepviz): 'deepviz'不是有效的已经安装了的程序包
 > devtools::install_github("andrie/deepviz")
Downloading GitHub repo andrie/deepviz@master
Error in utils::download.file(url, path, method = method, quiet =
 quiet,
   无法打开URL'https://api.github.com/repos/andrie/deepviz/tarball/ma
ster'
按网上的方法,试了好多种都不可以。甚至论坛上网友说跟蓝灯有关,把蓝灯关了,还是不
行。
于是先将 URL 地址文件下载到本地,由于下载下来的是.zip 的压缩包,因此现将压缩包解压
到 C:\Program Files\R\R-3.6.2\library\deepviz-master 路径下。
然后执行下面命令进行安装
devtools::install_github("C:\Program Files\R\R-3.6.2\library\deepviz-master")
仍然有错误。
晚上也试了,用最笨的方法,把包中所有的源代码都运行一遍,一一加载
source("I:\\概率\\deepviz-master\\R\\plot_deepviz.r")
但总是提示有些函数找不到: 这个包的依赖太多, 依次安装
> library(tidyverse)
— Attaching packages —
                                                   ----- tidyverse 1.3.0 ---
<U+2713> ggplot2 3.2.1
                    <U+2713> dplyr 0.8.3
<U+2713> tibble 2.1.3
                    <U+2713> stringr 1.4.0
<U+2713> tidyr 1.0.0
                    <U+2713> forcats 0.4.0
<U+2713> readr 1.3.1
--- Conflicts ---
                                                  tidyverse_conflicts() —
x tidyr::extract() masks magrittr::extract()
x dplyr::filter() masks stats::filter()
x dplyr::lag()
             masks stats::lag()
x purrr::set_names() masks magrittr::set_names()
> plot deepviz(nn)
Error in ggraph(., layout = "manual", node.position = layout_keras(., :
 没有"ggraph"这个函数
解决了三个函数的包依赖,实在没有精力再折腾。
```

第二天一早关了蓝灯再试:

> devtools::install_github("andrie/deepviz")

Downloading GitHub repo andrie/deepviz@master

Error in utils::download.file(url, path, method = method, quiet = quiet, :

无法打开 URL'https://api.github.com/repos/andrie/deepviz/tarball/master'

 $> install.packages("C:\Pr"ogram Files\R\R-3.6.2\library\deepviz",repos=NULL,type="source")$

错误:由""C:\P"开头的字符串中存在'\P',但没有这种逸出号

- > install.packages("C:\\Program Files\\R\\R-3.6.2\\library\\deepviz",repos=NULL,type="source")
- * installing *source* package 'deepviz' ...

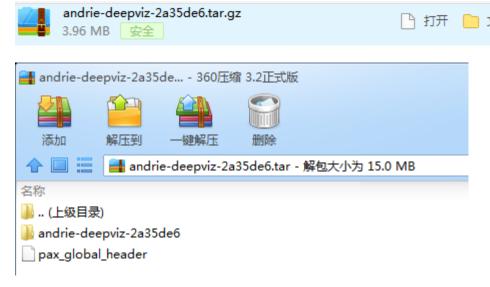
ERROR: cannot remove earlier installation, is it in use?

- * removing 'C:/Program Files/R/R-3.6.2/library/deepviz'
- * restoring previous 'C:/Program Files/R/R-3.6.2/library/deepviz'

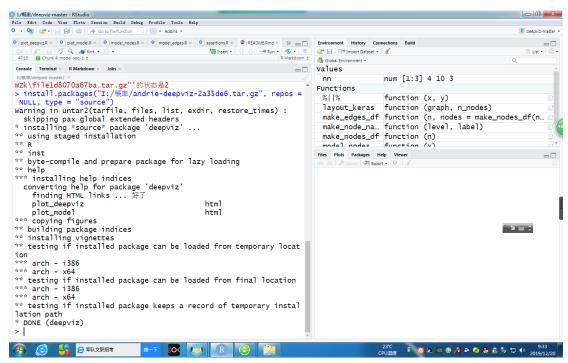
Warning in install.packages:

installation of package 'C:/Program Files/R/R-36 \sim 1.2/library/deepviz' had non-zero exit status

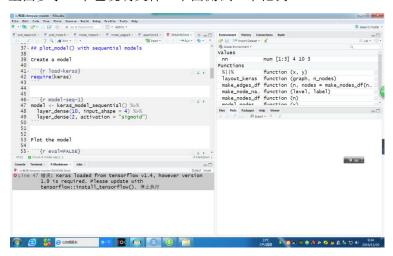
重新从 github 上用浏览器下载源码,感觉跟昨天下载的文件有点区别,区别在哪,应该很明显,多了一个文件



直接用这个源码安装:



居然可以了,我想问题出在我下载的包压缩文件上,比较前后两个文件,大小不一样,后者 里面多了一个包说明文件。下面测试一下范例

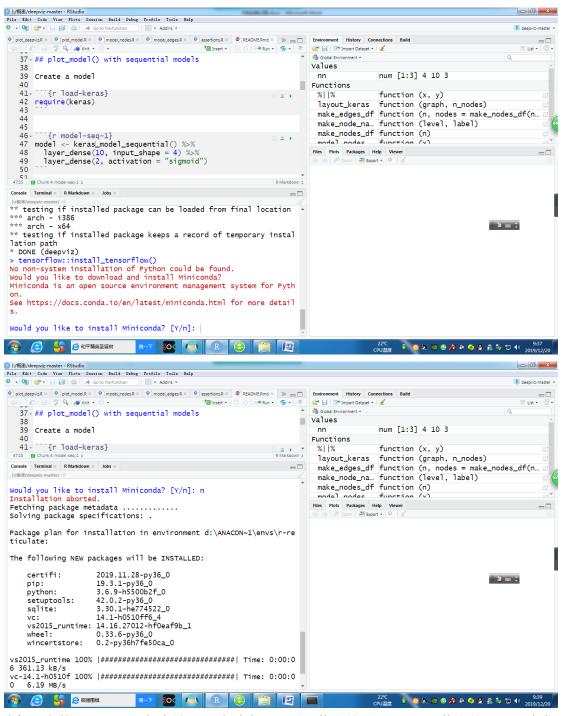


提示下面的问题:

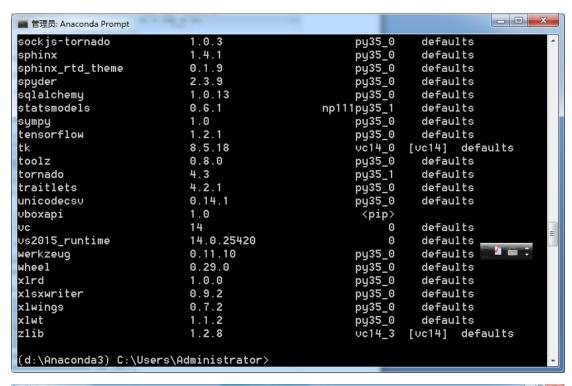
tensorflow::install_tensorflow()

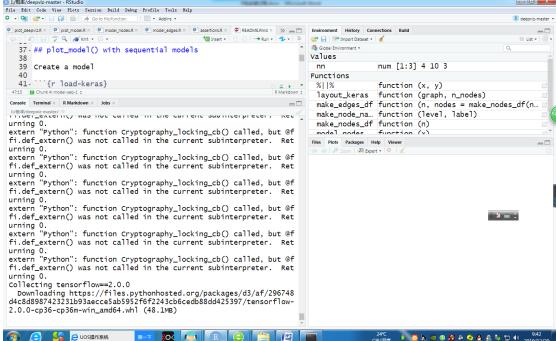
No non-system installation of Python could be found. Would you like to download and install Miniconda? Miniconda is an open source environment management system for Python. See https://docs.conda.io/en/latest/miniconda.html for more details.

Would you like to install Miniconda? [Y/n]: #这里我选 no, 因为我机器装了 anaconda



我机器上的 TensorFlow 版本是 1.2,版本低了。至于什么是 TensorFlow,什么是 keras,各位自己百度去。





> tensorflow::install_tensorflow()

extern "Python": function Cryptography_locking_cb () called, but @ffi.def_extern() was not called in the current subinterpreter. Returning 0. Collecting tensorflow==2.0.0

Downloading https://files.pythonhosted.org/packages/d3/af/296748d4c8d8987423231b93aecce5ab5952f6

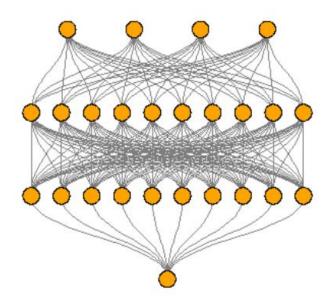
f2243cb6cedb88dd425397/tensorflow-2.0.0-cp36-cp36 m-win_amd64.whl (48.1MB)

就等待升级 TensorFlow, 网络太慢。

如果运行成功,最后的效果图是这样的:

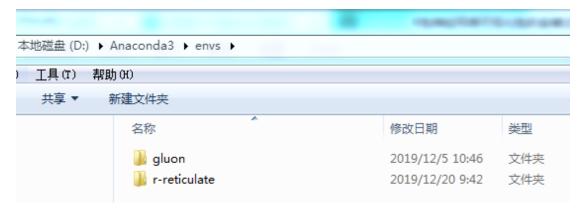
A multi-layer perceptron (two hidden layers):

```
c(4, 10, 10, 1) %>%
plot_deepviz()
```

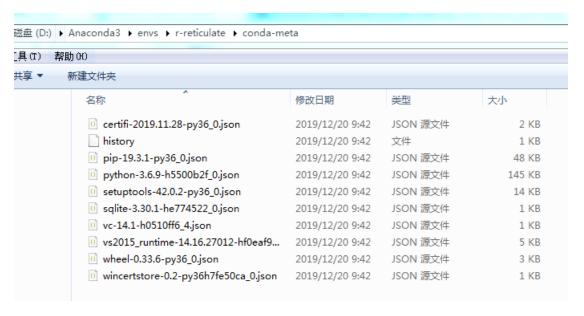


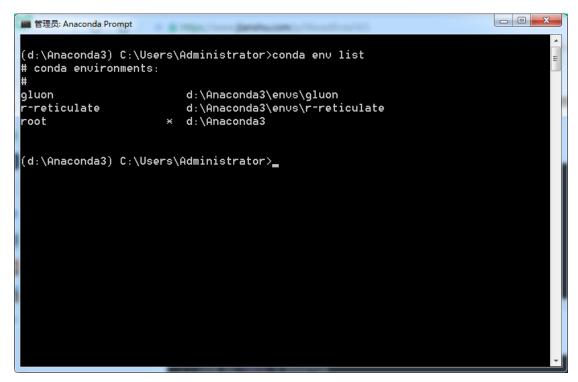
只能再来:

packages in environment at d:\ANACON~1\envs\r-ret iculate:



好像自动建立了 conda 虚拟环境。





删除虚拟环境

conda env remove -n env_name conda remove - name env_name - all 分享虚拟环境 conda env create -f env.yaml 直接下载这个轮子文件:



浏览器下载居然要1个多小时。



```
# conda environments:
#
gluon d:\Anaconda3\envs\gluon
r-reticulate d:\Anaconda3\envs\r-reticulate
root * d:\Anaconda3

(d:\Anaconda3) C:\Users\Administrator>conda activate r-reticulate

CommandNotFoundError: 'activate'

(d:\Anaconda3) C:\Users\Administrator>activate r-reticulate

(r-reticulate) C:\Users\Administrator>
```

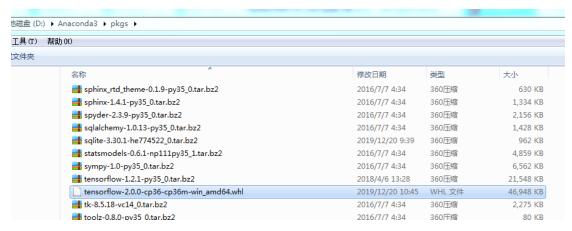
激活虚拟环境

activate env_name

安装:

```
_ 0 X
■ 管理员: Anaconda Prompt
(d:\Anaconda3) C:\Users\Administrator>activate r-reticulate
(r-reticulate) C:\Users\Administrator>conda install "I:/tensorflow-2.0.0-cp36-cp
36m-win_amd64.whl"
Fetching package metadata ......
PackageNotFoundError: Packages missing in current channels:
  - i:/tensorflow-2.0.0-cp36-cp36m-win_amd64.whl
We have searched for the packages in the following channels:
  - https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkgs/free/win-64
  - https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkgs/free/noarch
- https://repo.continuum.io/pkgs/main/win-64
  - https://repo.continuum.io/pkgs/main/noarch
  - https://repo.continuum.io/pkgs/free/win-64
  - https://repo.continuum.io/pkgs/free/noarch
  https://repo.continuum.io/pkgs/r/win-64https://repo.continuum.io/pkgs/r/noarch
  - https://repo.continuum.io/pkgs/pro/win-64
   https://repo.continuum.io/pkgs/pro/noarch
    https://repo.continuum.io/pkgs/msys2/win-64
    https://repo.continuum.io/pkgs/msys2/noarch
```

进入 D:\Anaconda3\pkgs

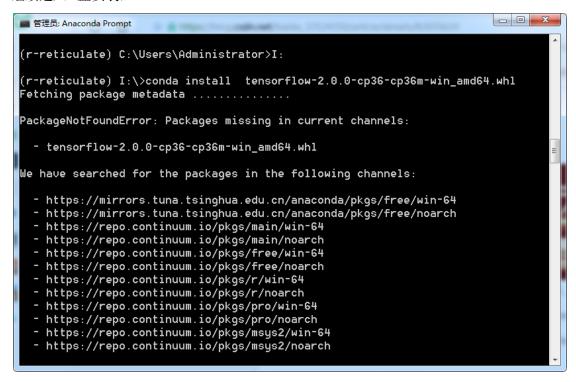


执行以下命令可进行本地安装

conda install --use-local tensorflow-2.0.0-cp36-cp36m-win_amd64.whl

错误一样。

继续进入i盘安装,



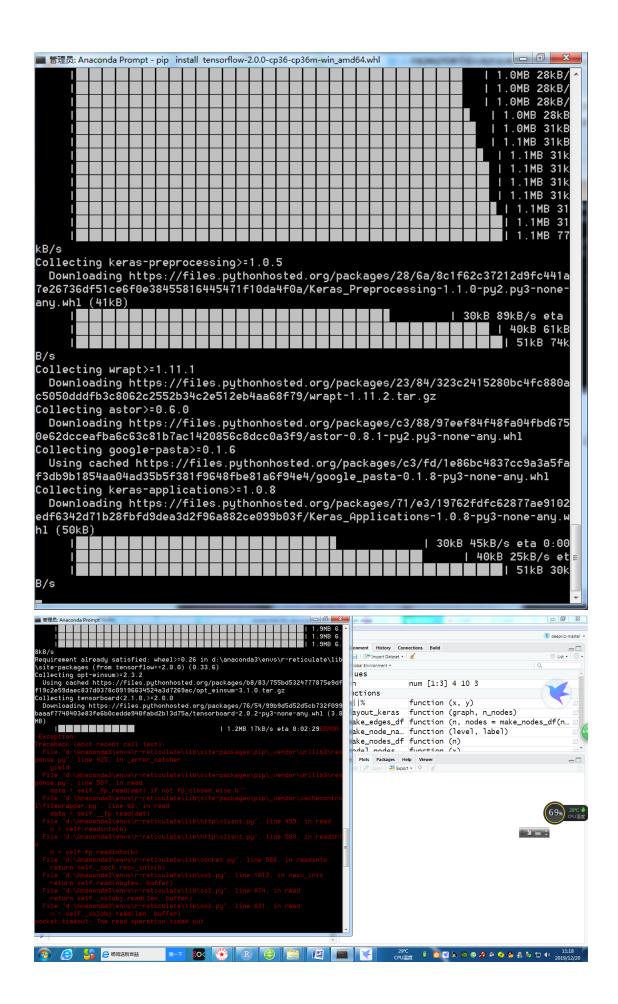
换 pip install 试试:

提示缺 numpy

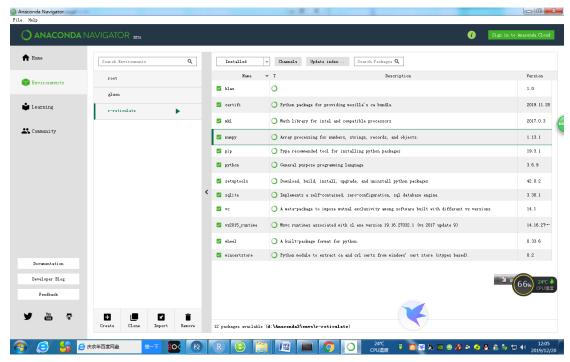


■ 管理员: Anaconda Prompt extern "Python": function Cryptography_locking_cb() called, but @ffi.def_extern() was not called in the current subinterpreter. Returning 0. extern "Python": function Cryptography_locking_cb() called, but @ffi.def_extern() was not called in the current subinterpreter. Returning 0. extern "Python": function Cryptography_locking_cb() called, but @ffi.def_extern() was not called in the current subinterpreter. Returning 0. extern "Python": function Cryptography_locking_cb() called, but @ffi.def_extern() was not called in the current subinterpreter. Returning 0. extern "Python": function Cryptography_locking_cb() called, but @ffi.def_extern() was not called in the current subinterpreter. Returning 0. extern "Python": function Cryptography_locking_cb() called, but @ffi.def_extern() was not called in the current subinterpreter. Returning 0. extern "Python": function Cryptography_locking_cb() called, but @ffi.def_extern() was not called in the current subinterpreter. Returning 0. extern "Python": function Cryptography_locking_cb() called, but @ffi.def_extern() was not called in the current subinterpreter. Returning 0. extern "Python": function Cryptography_locking_cb() called, but @ffi.def_extern() was not called in the current subinterpreter. Returning 0. (r-reticulate) I:\>conda install numpy==1.7 Fetching package metadata Solving package specifications: . UnsatisfiableError: The following specifications were found to be in conflict: - numpy ==1.7 -> python 2.6* python 3.6× Use "conda info <package>" to see the dependencies for each package. (r-reticulate) I:\>conda install numpq==1.9 Fetching package metadata Solving package specifications: . UnsatisfiableError: The following specifications were found to be in conflict: - numpy ==1.9 -> python 2.7* - python 3.6× Use "conda info <package>" to see the dependencies for each package. (r-reticulate) I:\>_

```
■ 管理员: Anaconda Prompt - pip install tensorflow-2.0.0-cp36-cp36m-win_amd64.whl
                                                                               ) was not called in the current subinterpreter. Returning 0.
extern "Python": function Cryptography_locking_cb() called, but @ffi.def_extern(
) was not called in the current subinterpreter. Returning 0.
(r-reticulate) I:\>conda install numpy==1.7
Fetching package metadata .....
Solving package specifications: .
UnsatisfiableError: The following specifications were found to be in conflict:
 - numpy ==1.7 -> python 2.6×
 - python 3.6×
Use "conda info <package>" to see the dependencies for each package.
(r\text{-reticulate}) I: \> conda install numpy==1.9
Fetching package metadata .....
Solving package specifications: .
UnsatisfiableError: The following specifications were found to be in conflict:
  - numpy ==1.9 -> python 2.7×
    python 3.6×
Use "conda info <package>" to see the dependencies for each package.
(r-reticulate) I:\>pip install tensorflow-2.0.0-cp36-cp36m-win_amd64.whl
Processing i:\tensorflow-2.0.0-cp36-cp36m-win_amd64.whl
Collecting protobuf>=3.6.1
 Downloading https://files.pythonhosted.org/packages/78/c5/5f64362524497c0ab5f5
32f58d605c9a6f75a7313974893f6c3168903dfe/protobuf-3.11.1-cp36-cp36m-win_amd64.wh
1 (1.1MB)
                                                             | 542kB 54kB/s eta 0:00:11
                                                             | 552kB 54kB/s eta 0:00:11
                                                             | 563kB 54kB/s eta 0:00:11
                                                             | 573kB 32kB/s eta 0:00:1
| 583kB 32kB/s eta 0:00:1
| 593kB 32kB/s eta 0:00:1
                                                              | 604kB 19kB/s eta 0:00:2
                                                               | 614kB 15kB/s eta 0:00:
                                                               | 624kB 15kB/s eta 0:00:
```



```
■ 管理员: Anaconda Prompt - pip install tensorflow-2.0.0-cp36-cp36m-win_amd64.whl
(r-reticulate) I:\>pip install tensorflow-2.0.0-cp36-cp36m-win_amd64.whl
Processing i:\tensorflow-2.0.0-cp36-cp36m-win_amd64.whl
Collecting astor>=0.6.0
 Using cached https://files.pythonhosted.org/packages/c3/88/97eef84f48fa04fbd67
50e62dcceafba6c63c81b7ac1420856c8dcc0a3f9/astor-0.8.1-py2.py3-none-any.whl
Requirement already satisfied: wheel>=0.26 in d:\anaconda3\en∪s\r-reticulate\lib
\site-packages (from tensorflow==2.0.0) (0.33.6)
Collecting keras-applications>=1.0.8
Using cached https://files.pythonhosted.org/packages/71/e3/19762fdfc62877ae910
2edf6342d71b28fbfd9dea3d2f96a882ce099b03f/Keras_Applications-1.0.8-py3-none-any.
wh1
Collecting numpy<2.0,>=1.16.0
  Downloading https://files.pythonhosted.org/packages/b0/ee/5ff445dd43b9820e5494
d21240e689d3b7cb52bc93f4f164eba84206cd0d/numpy-1.17.4-cp36-cp36m-win_amd64.whl (
12.7MB)
      | 563kB 14kB/s eta 0:14:01
```

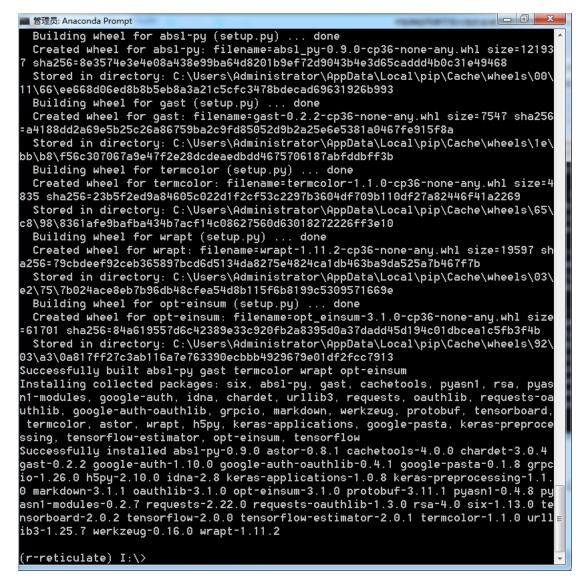


https://www.lfd.uci.edu/~gohlke/pythonlibs/

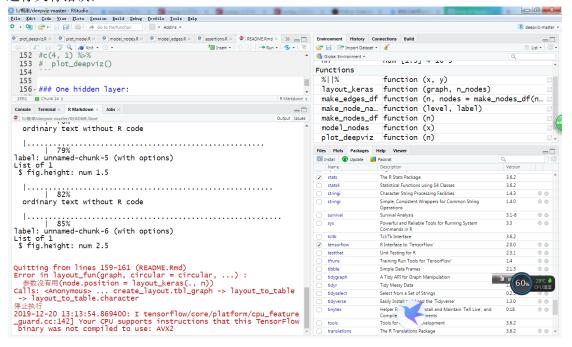
请教山东工商学院董老师:

pip install numpy==1.17 -i http://mirrors.aliyun.com/pypi/simple --trusted-host mirrors.aliyun.com

很快安装完了。



运行又有错误:



Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX2 ?

欢迎网友们交流!

山东理工大学 数学学院 周世祥