



### 深度学习应用开发 基于TensorFlow的实践

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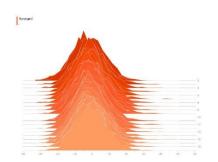
Dept. of Computer Science Zhejiang University City College

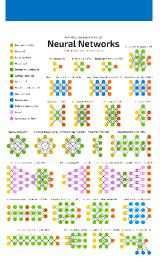














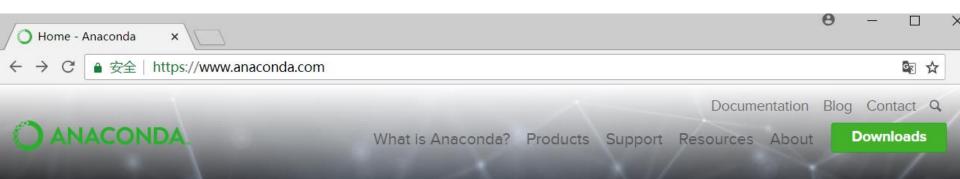
## Anaconda下载和安装





Anaconda是Python的一个科学计算发行版,内置了上千个Python经常会用到的库,包括 Scikit-learn、NumPy、SciPy、Pandas等

官网网址: <a href="https://www.anaconda.com/">https://www.anaconda.com/</a>







官网下载网址: <a href="https://www.anaconda.com/download/">https://www.anaconda.com/download/</a>







Anaconda 5.3版本后缺省的是 Python3.7版本

# Anaconda 2018.12 For Windows Installer Python 3.7 version \* Download 64-Bit Graphical Installer (614.3 MB) ⑦ 32-Bit Graphical Installer (509.7 MB.)





### Anaconda镜像下载



建议下载版本为5.2(集成Python版本3.6) TensorFlow目前Windows支持Python3.6较好

### 下载地址(清华映像站):

https://mirrors.tuna.tsinghua.edu.cn/anaconda/archive/

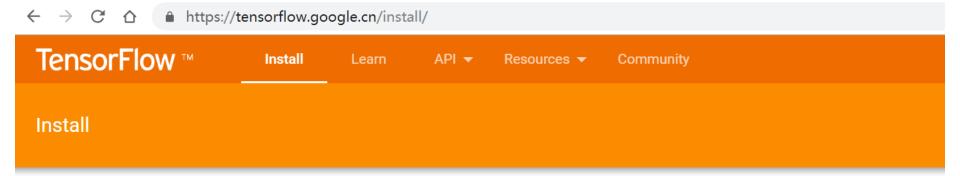
Anaconda3-5. 2. 0-Linux-x86_64. sh	特别注意: TensorFlow不支持	
Anaconda3-5. 2. 0-MacOSX-x86_64. pkg	Windows平台32位系统,	只支持64位
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Anaconda3-5. 3. 0-Linux-x86. sh	527.2 MiB	2018-09-28 06:42
Anaconda3-5. 3. 0-Linux-x86_64. sh	636.9 MiB	2018-09-28 06:43

Anaconda3-5.2.0-Windows-x86.exe文件名含义 3-是Python版本3.x; Windows-x86是32位系统,Windows-x86\_64是64位系统……



### TensorFlow安装系统需求





# Packages pip Docker Additional setup

### Install TensorFlow

TensorFlow is tested and supported on the following 64-bit systems:

- Ubuntu 16.04 or later
- macOS 10.12.6 (Sierra) or later (no GPU support)

• Windows 7 or later

• Raspbian 9.0 or later



## 安装Anaconda



### 安装Anaconda



如果以前装过不同版本,可以先卸载,再安装

如果以前修改过Anaconda配置文件的镜像源的化,用户目录下找到 .condarc 文件





# 在Anaconda中安装 TensorFlow



### 安装TesnorFlow



安装普通版TensorFlow命令为: conda install tensorflow=1.10

当前最新TensorFlow版本 1.12

安装TensorFlow版本1.10

```
Anaconda Prompt
(base) C:\Users\mingh>conda install tensorflow=1.10
Solving environment: done
## Package Plan ##
 environment location: C:\Users\mingh\Anaconda3
 added / updated specs:
   - tensorflow=1.10
The following packages will be downloaded:
   package
                                             build.
    tflow 1100 select-0.0.2
                                                              3 KB
                                             eigen
   \overline{\text{tensorboard}}-1. 10. 0
                                    pv36he025d50 0
                                                            3.3 MB
   tensorflow-1.10.0
                                 eigen py36h849fbd8 0
                                                                 4 KB
    tensorflow-base-1.10.0
                                 eigen py36h45df0d8 0
                                                              38.5 MB
                                            Total:
                                                           41.8 MB
The following NEW packages will be INSTALLED:
   tflow 1100 select: 0.0.2-eigen
```



### 安装TesnorFlow



TensorFlow安装依赖于MSVCP140.DLL,如果安装过程中报相关错误信息,请确定是否已经有安装过Visual C++ 2015 redistributable(x64 verion),并且在 %PATH% 里

Visual C++ 2015 redistributable下载网址:

https://www.microsoft.com/en-us/download/details.aspx?id=53587



### 测试TesnorFlow是否安装成功

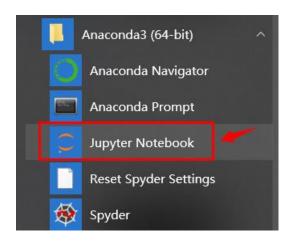


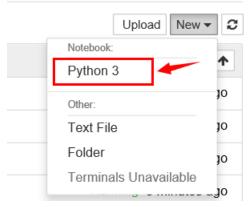
打开Jupyter,新建Python3文件

输入:

import tensorflow as tf tf. version

按 "Ctrl+Enter" 执行 输出版本号就说明安装成功!





In [1]: # 测试安装是否成功
import tensorflow as tf
tf.\_\_version\_\_

C:\Users\mingh\Anaconda3\lib\si
on of the second argument of is
future, it will be treated as
from . conv import register of

Out[1]: '1.10.0'