

tensorflow开发环境安装

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Tensorflow&python安装

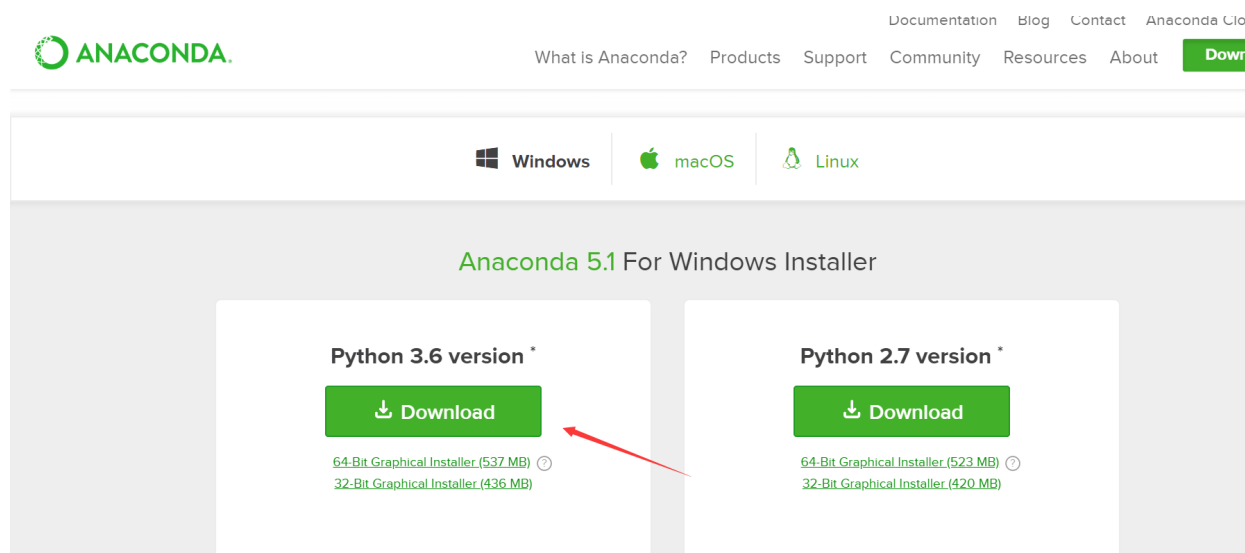
Anaconda 是什么?

Anaconda 是一个可用于科学计算的 Python 发行版, 支持 Linux、Mac、Windows系统, 内置了常用的科学计算包。它解决了官方 Python 的两大痛点。

第一: 提供了包管理功能, Windows 平台安装第三方包经常失败的场景得以解决,
第二: 提供环境管理的功能, 功能类似 Virtualenv, 解决了多版本Python并存、切换的问题。

下载 Anaconda

直接在网<https://www.anaconda.com/download/>下载安装包, 选择 Python3.6 的安装包进行下载, 下载完成后直接安装, 安装过程选择默认配置即可, 大约需要1.8G的磁盘空间。



如果下载速度慢, 可以在清华镜像网站下载<https://mirrors.tuna.tsinghua.edu.cn/anaconda/archive/>

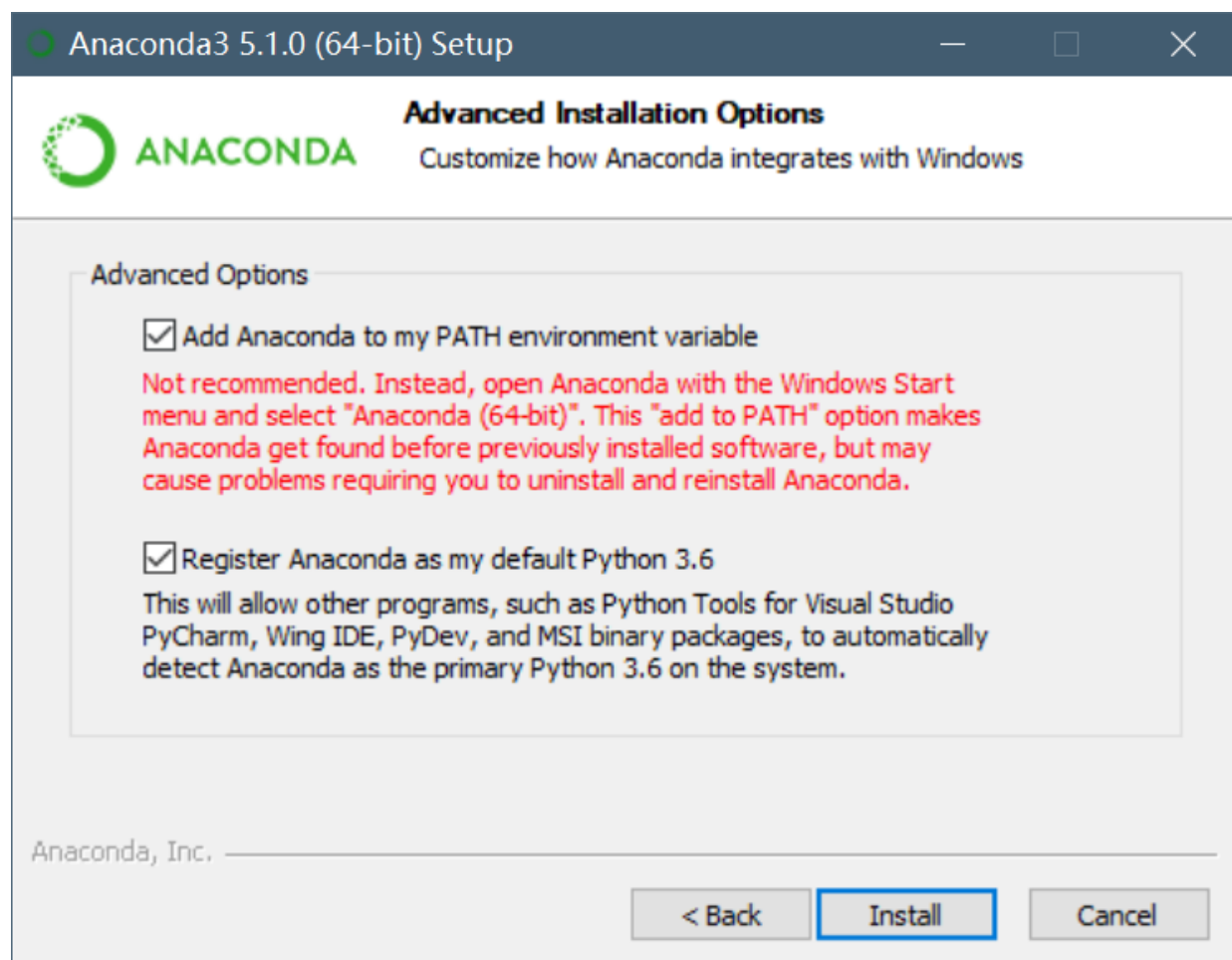
Index of /anaconda/archive/

Last Update: 2018-04-29 17:55

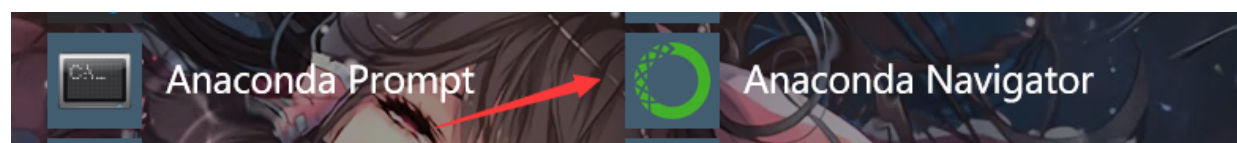
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Parent directory/	-	-
Anaconda3-5.1.0-Windows-x86_64.exe	537.1 MiB	2018-02-15 23:27
Anaconda3-5.1.0-Windows-x86.exe	435.5 MiB	2018-02-15 23:26
Anaconda3-5.1.0-MacOSX-x86_64.sh	511.3 MiB	2018-02-15 23:24
Anaconda3-5.1.0-MacOSX-x86_64.pkg	594.7 MiB	2018-02-15 23:24

安装Anaconda&创建tensorflow环境

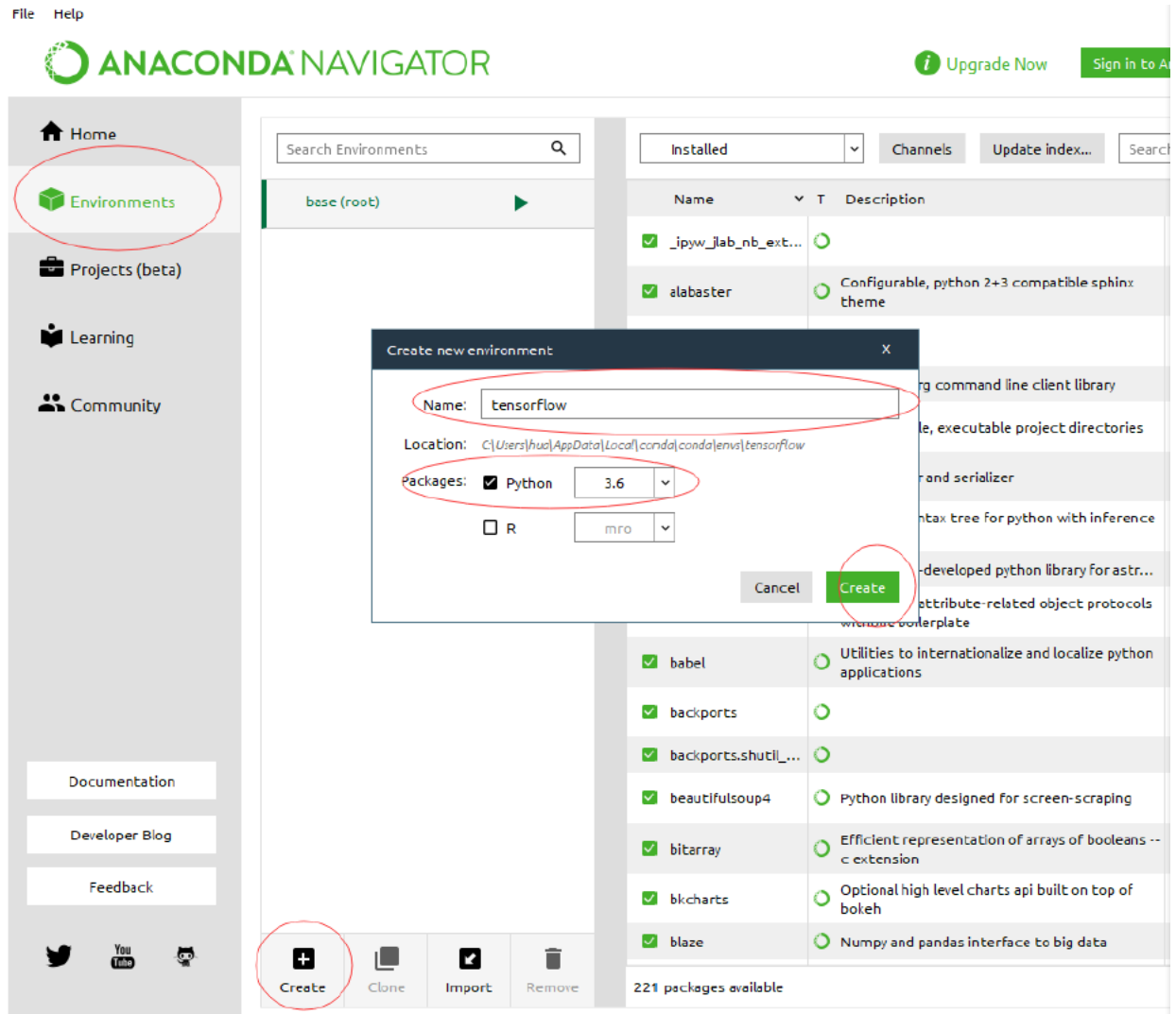
这两个打勾



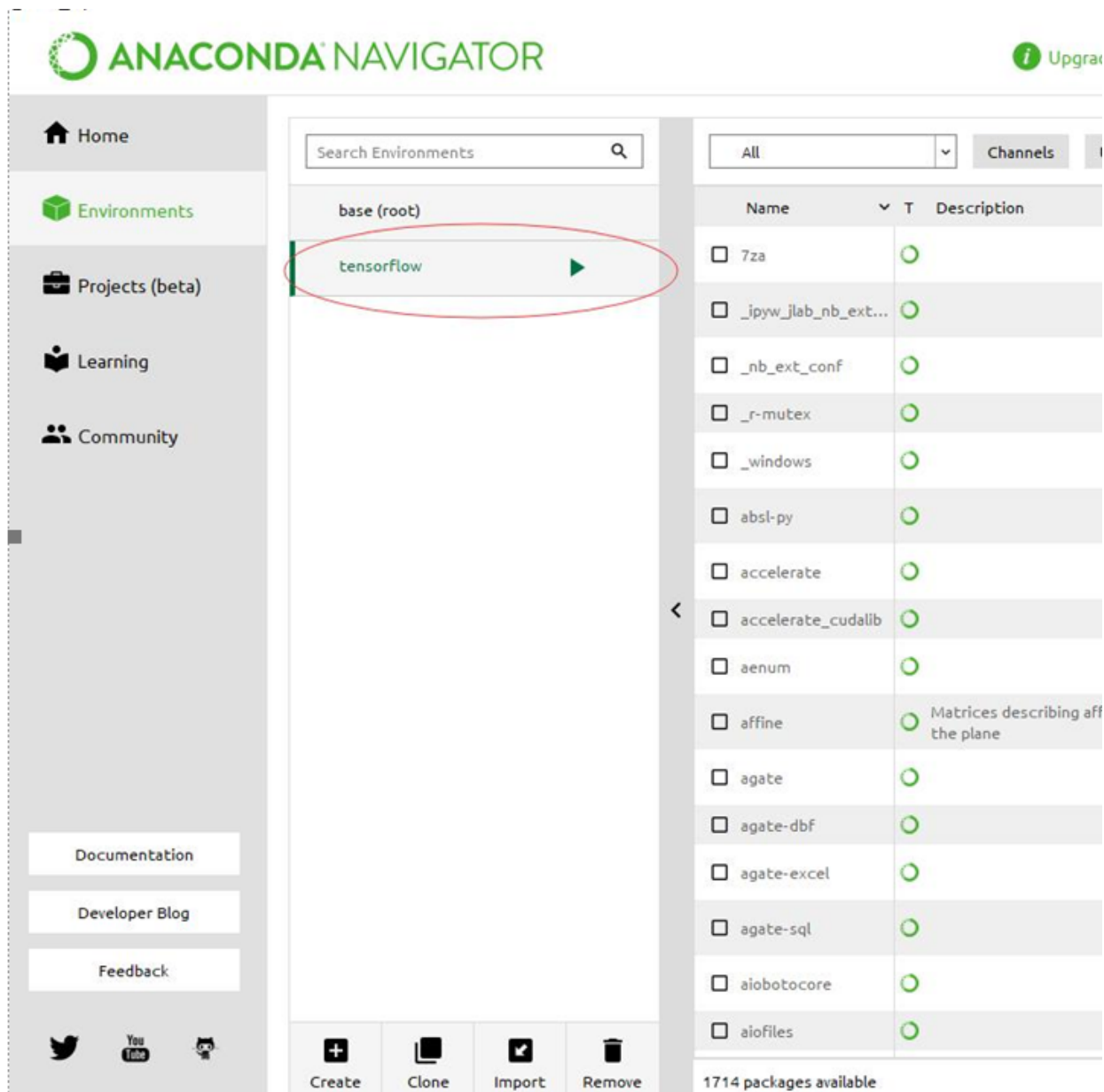
安装完可以在开始菜单找到这两个软件 打开第二个



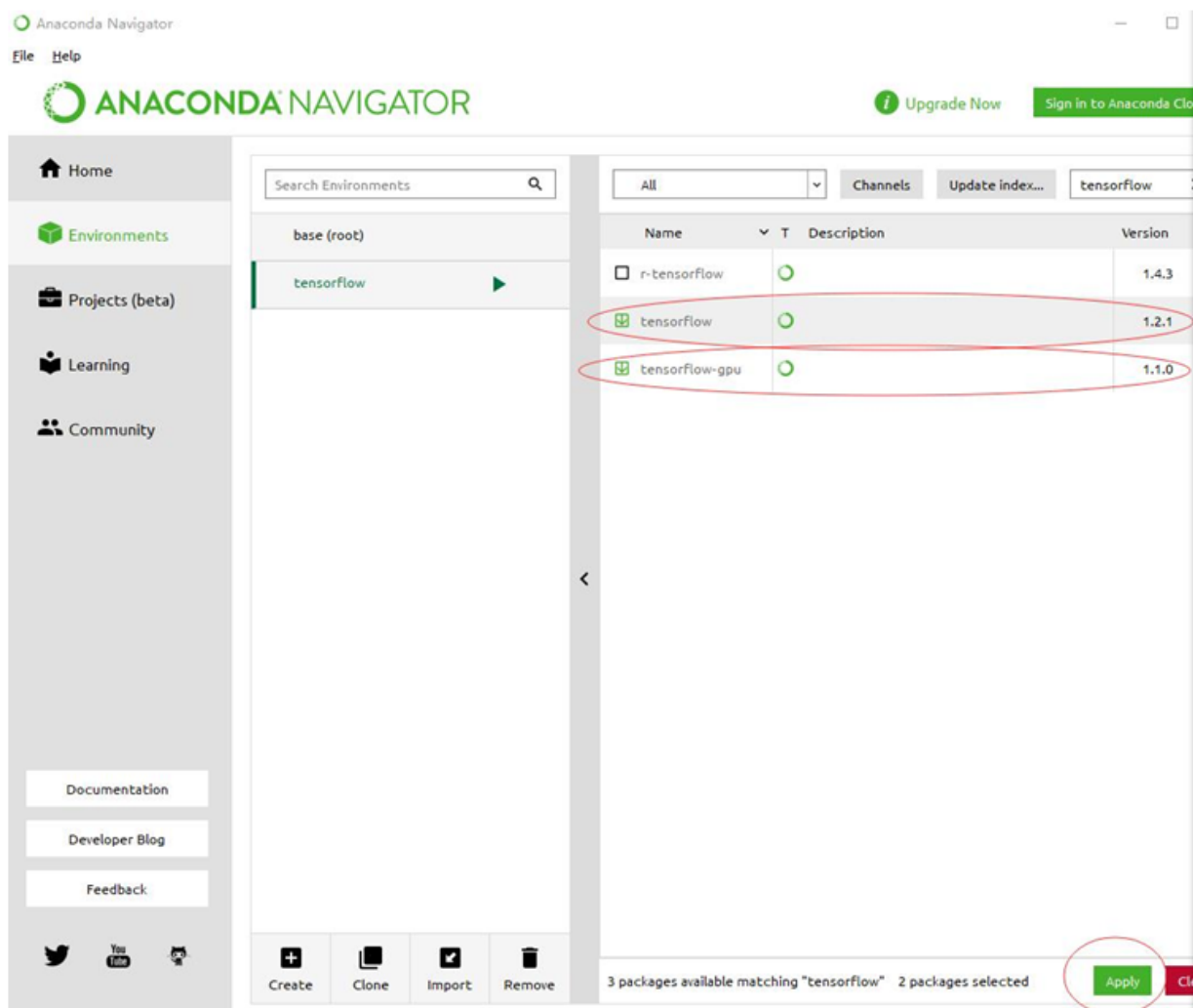
选择左边的Environments点击左下角的create按钮，name中输入tensorflow，package选择3.6



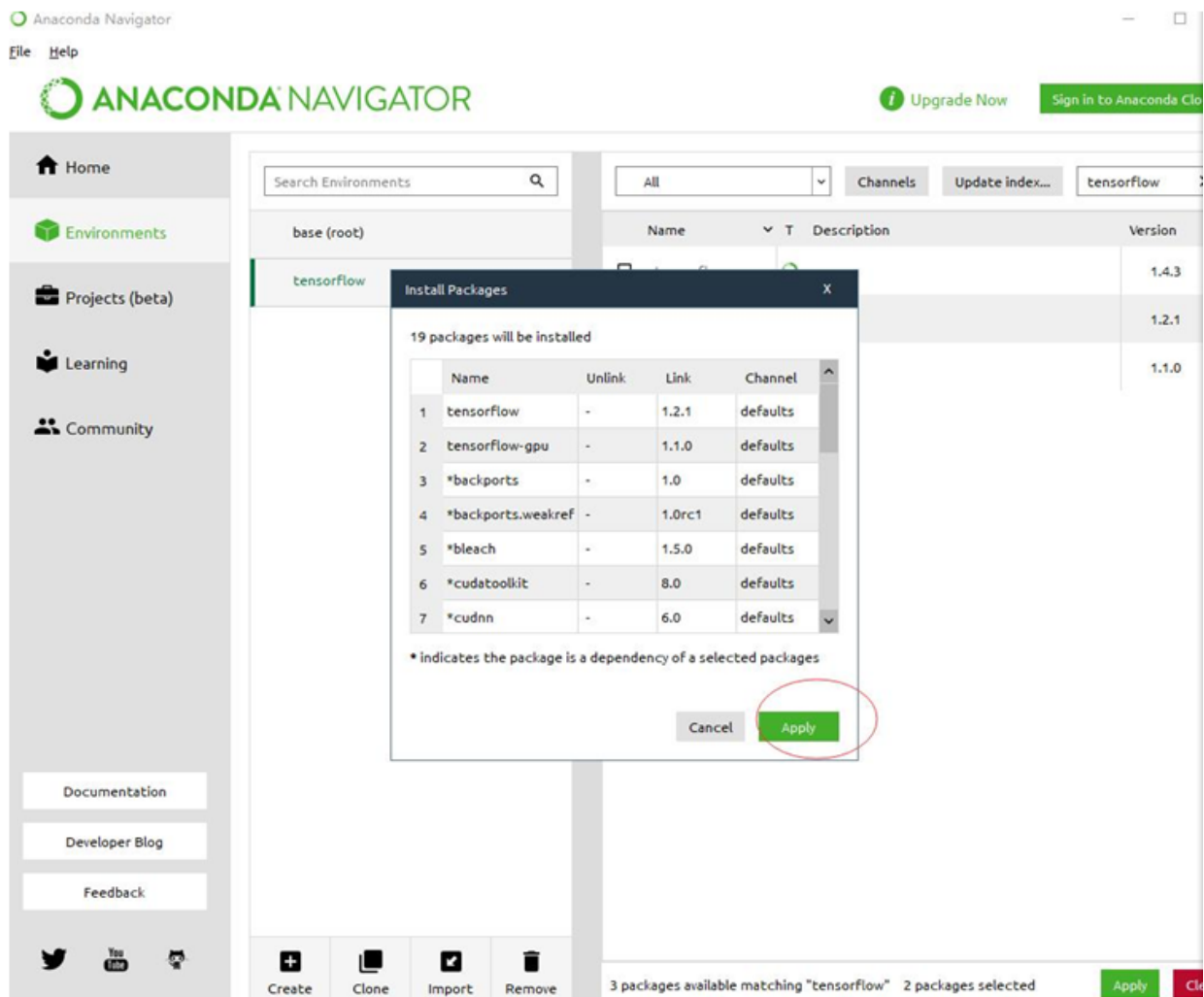
等待一会后，环境创建好，如下图所示。



选中 tensorflow 环境后，在右上的搜索框中输入 tensorflow，然后搜索，会出现几个 tensorflow 相关的包，选择 tensorflow 包，如果你电脑支持 gpu，同时选择 tensorflow-gpu（没有英伟达GPU可以不选这个），然后点击右下角的 apply 按钮，如下图所示。



在弹出的对话框中点击 apply 按钮。



安装完成 tensorflow 之后，继续在右上角的搜索框中输入：jupyter，然后在搜索列表中选择 jupyter，然后点 apply 按钮。稍等一会，jupyter 安装完毕。到此为止，tensorflow 环境基本搭建完成，如下图所示。

File Help

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Search Environments

base (root)

tensorflow

Search

All Channels Update index... jupyter X

Name	T	Description	Version
hdijupyterutils			0.12.5
ipywidgets		Widgets for the jupyter notebook	6.0.0
jupyter		Web-based notebook environment for interactive computing.	1.0.0
jupyter_client		Jupyter protocol implementation and client libraries	5.1.0
jupyter_console		Jupyter terminal console	5.2.0
jupyter_core		Core jupyter functionality	4.3.0
jupyter_dashboar...			0.9.1
jupyterlab			0.31.12
jupyterlab_launcher			0.10.5
nb_conda		Launch jupyter kernels for any installed conda environment	2.2.0
nb_conda_kernels		Launch jupyter kernels for any installed conda...	2.1.0
nbformat		Reference implementation of the jupyter notebook format	4.4.0
nbpresent		Next generation slides for jupyter notebooks	3.0.2
pivottablejs		Pivottable.js integration for jupyter/ipython notebook	2.7.0
qtconsole		Jupyter qt console	4.3.1

16 packages available matching "jupyter" 1 package selected

Apply Clear

测试tensorflow是否安装成功

下面开始进入测试阶段，点击 tensorflow 右面的三角，在弹出的菜单中，选择 open with jupyter notebook，如下图所示。

Search Environments

base (root)

tensorflow

Search

All Channels Update index... jupyter X

Name	T	Description	Version
hdijupyterutils			0.12.5
ipywidgets		Widgets for the jupyter notebook	7.2.1
jupyter		Web-based notebook environment for interactive computing.	1.0.0
jupyter_client		Jupyter protocol implementation and client li...	5.2.3
jupyter_console		Jupyter terminal console	5.2.0
jupyter_core		Core jupyter functionality	4.4.0
jupyter_dashboar...			0.9.1
jupyterlab			0.31.12
jupyterlab_launcher			0.10.5
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qtconsole		Jupyter qt console	4.3.1
widgetsnbextensi...		ipython html widgets for jupyter	3.2.1

16 packages available matching "jupyter"

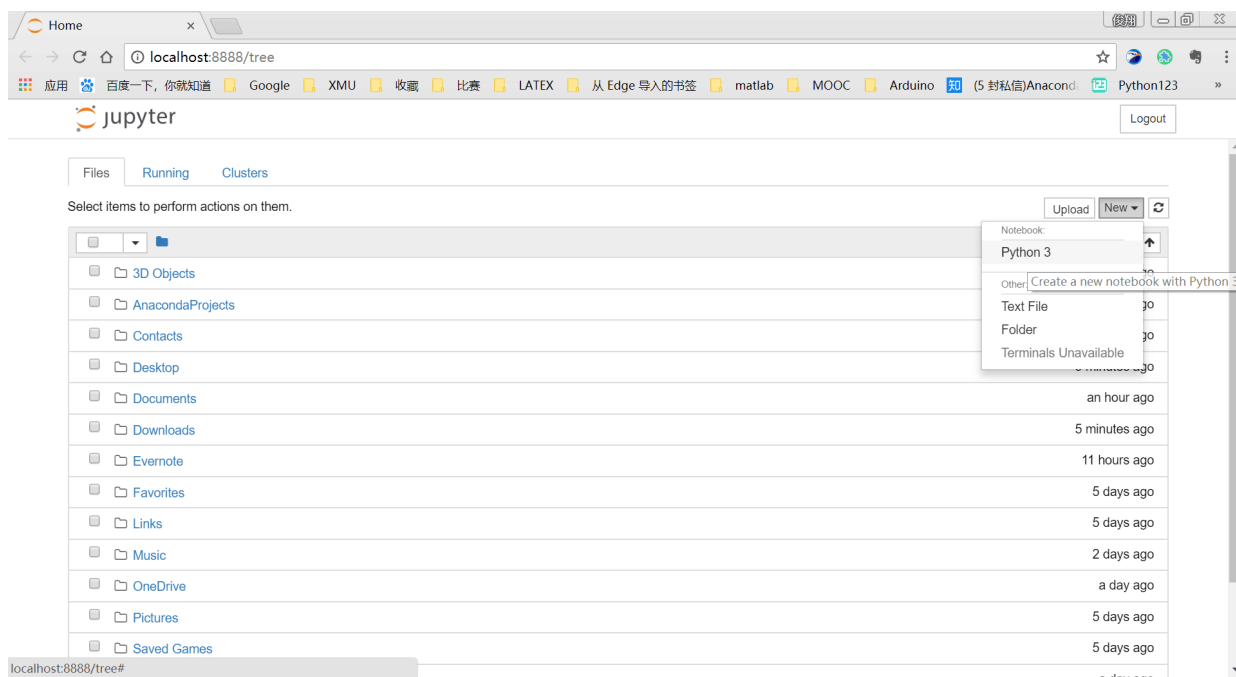
Open Terminal

Open with Python

Open with Jupyter Notebook

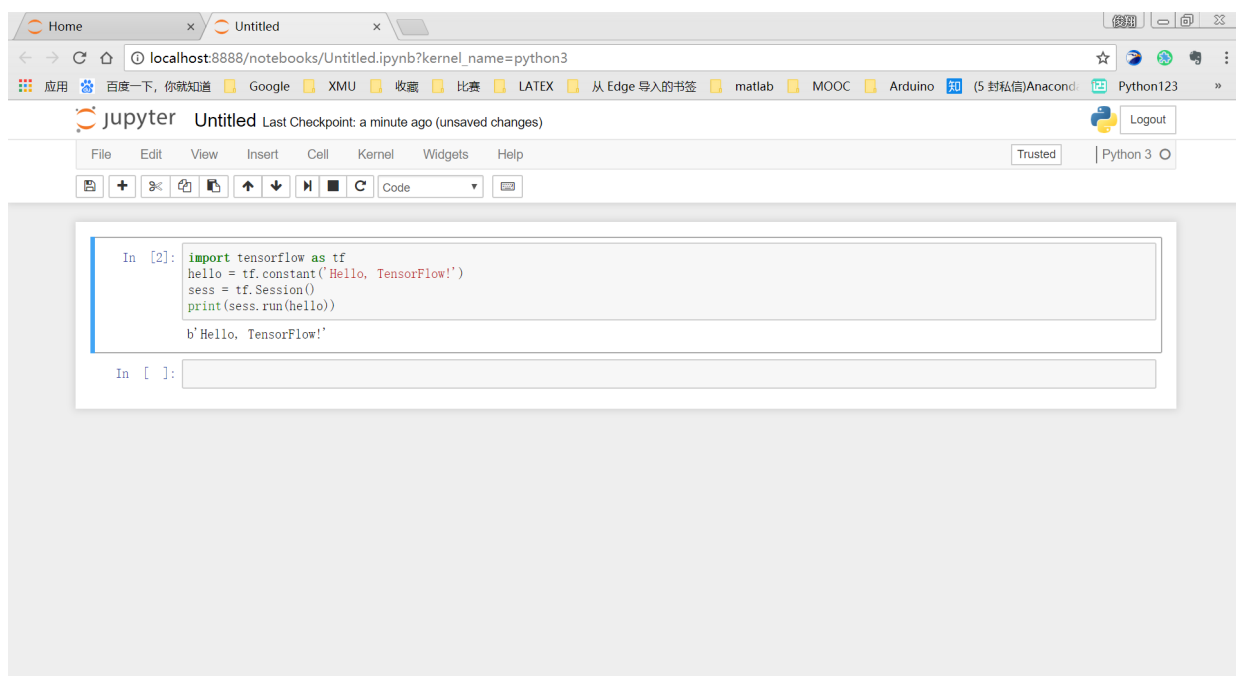
Open with Jupyter Notebook

右上角新建python文件



如图输入以下几行简短的程序代码：

```
>>> import tensorflow as tf
>>> hello = tf.constant('Hello, TensorFlow!')
>>> sess = tf.Session()
>>> print(sess.run(hello))
```



点击像播放键的run

如果系统输出以下内容，就说明您可以开始编写 TensorFlow 程序了：

```
Hello, TensorFlow!
```