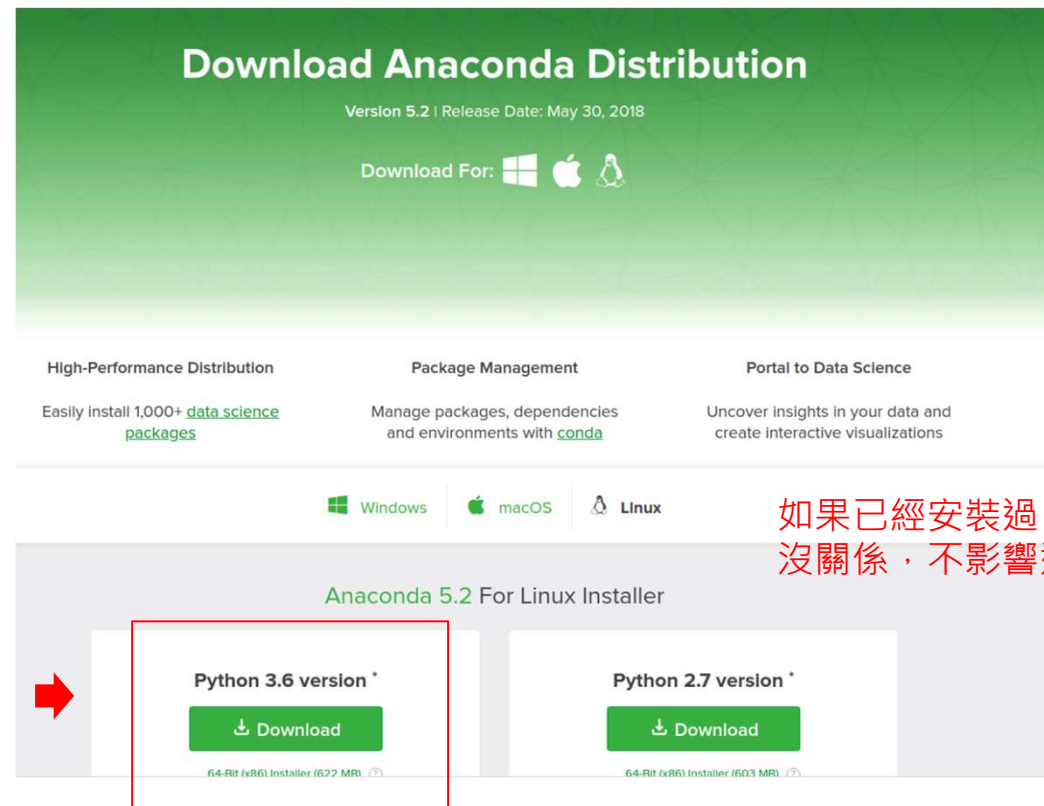


# YOLO事前準備事項

<http://gg.gg/bcc2e>

# 下載 Anaconda

<https://www.anaconda.com/download/#linux>



選擇 3.6 version



如果已經安裝過 2.7 版本也沒  
沒關係，不影響這次教學體驗

```
$ sudo apt-get update && sudo apt-get upgrade
$ sudo apt-get install virtualenv
$ virtualenv venv2 --python=2.7
$ source venv2/bin/activate
(venv2) pi@raspberrypi:
(venv2) $ pip install numpy matplotlib
(venv2) $ pip install -U tensorflow keras scikit-image
six tqdm pydot
```

## 下載模型權重與資料集

常見深度網路相關模型與資料集， 一共 1.1GB 請大家事前下載完成

<https://storage.googleapis.com/jiawei-keras-model-dataset/keras-model-weight.zip>

## Terminal 執行

```
conda create -n py27 python=2.7
```

```
source activate py27
```

```
conda install jupyter
```

```
pip install -U tensorflow keras opencv-python scikit-image six  
tqdm pydot
```

## Terminal 執行 (windows)

```
conda create -n py36 python=3.6
```

```
source activate py36
```

```
conda install jupyter
```

```
pip install -U tensorflow keras opencv-python scikit-image six  
tqdm pydot
```

## Terminal 執行

```
unzip keras-model-weight.zip
```

```
cd keras-model-weight
```

```
cp -R datasets models keras.json ~/.keras
```

```
jupyter notebook
```

Terminal 執行 (windows)

`unzip keras-model-weight.zip`

進入目錄 `keras-model-weight`

複製資料 `keras-model-weight` 到 `C:\Users\<你的用戶名>`

把原本的 `.keras` 整個資料夾刪除

把 `keras-model-weight` 改名叫 `.keras`

jupyter notebook



更改 keras.json

把 channels\_last 改成 channels\_first

```
{  
    "floatx": "float32",  
    "epsilon": 1e-07,  
    "backend": "tensorflow",  
    "image_data_format": "channels_first"  
}
```



## 下載模型權重與資料集

Yolo v2 相關模型與資料集， 一共 1.4GB 請大家事前下載完成

<https://storage.googleapis.com/jiawei-yolo2-dataset/yolo-dataset.zip>

**Terminal 執行 (前四行上午執行過了不用管它)**

```
conda create -n py27 python=2.7
```

```
source activate py27
```

```
conda install jupyter
```

```
pip install tensorflow keras opencv-python scikit-image six  
tqdm pydot
```

```
pip install git+https://github.com/aleju/imgaug
```

windows

下載 <https://github.com/aleju/imgaug>

解壓縮，進入 imgaug 資料夾

注意 要在 py36 環境

`python setup.py install`

Terminal 執行

```
unzip yolo-dataset.zip
```

```
cd yolo-dataset/keras-yolo2
```

```
jupyter notebook
```