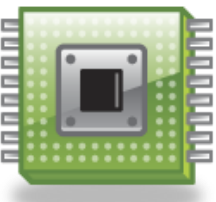


ANACONDA ENVIRONMENT

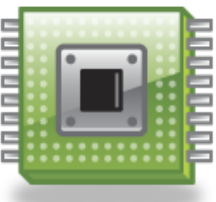
Speaker : Ching-Yeh Tsai

Advisor : Prof. Tong-Yu Hsieh



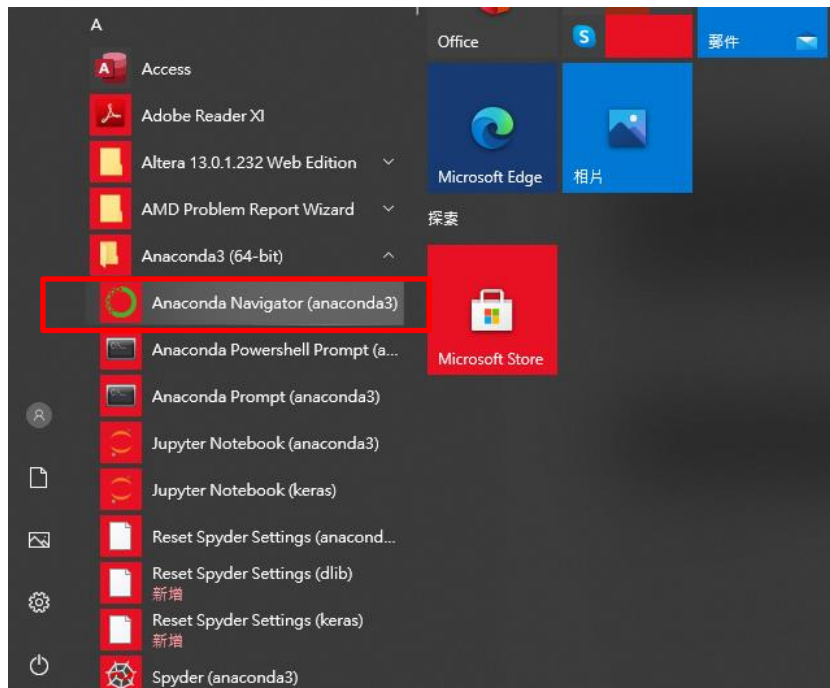
Environment(1/3)

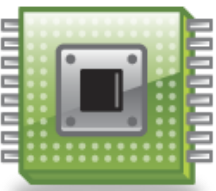
- 1.Download the Anaconda
 - <https://www.anaconda.com/products/individual>
 - **Install Anaconda**



Environment(2/3)

- **Activate anaconda**
 - **Click Anaconda Navigator**












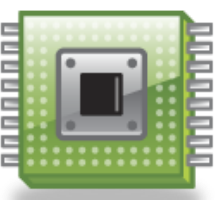


Environment(3/3)

■ Install spyder (or jupyter notebook)

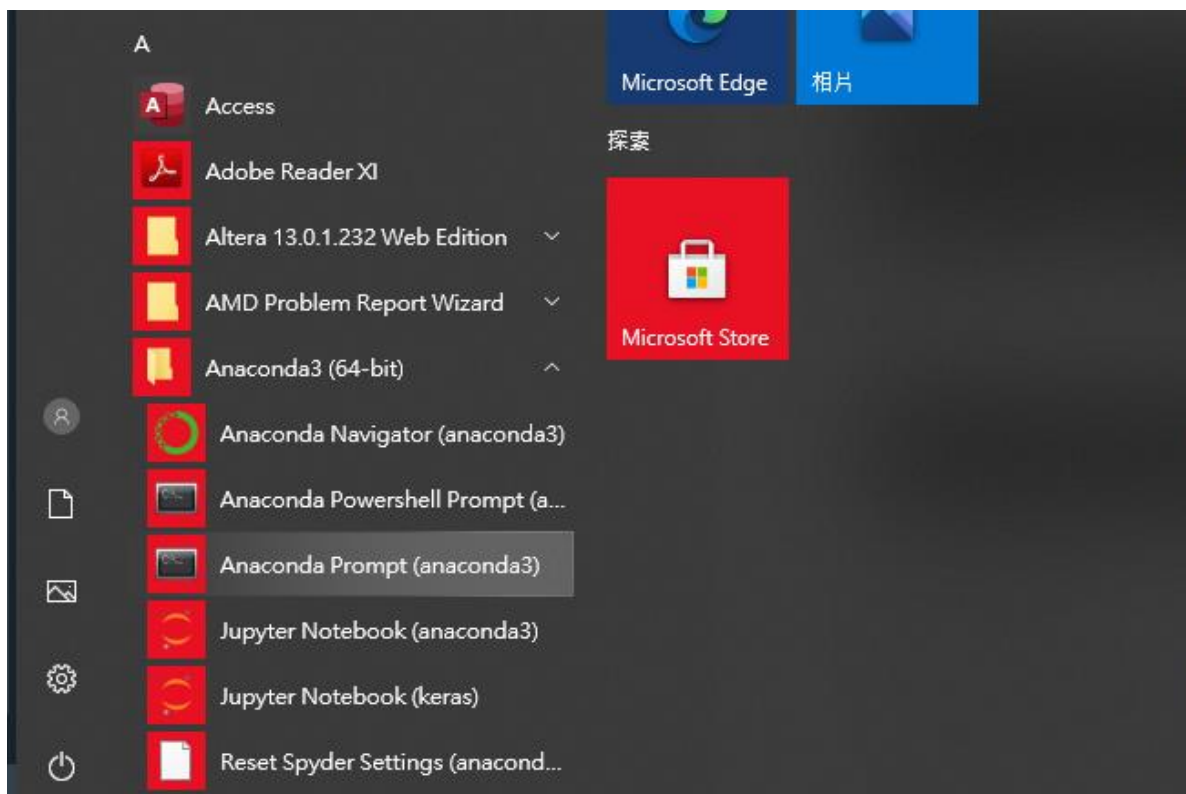
Applications on Channels

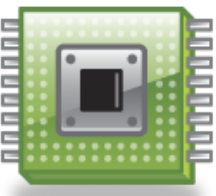
 CMD.exe Prompt 0.1.1 Run a cmd.exe terminal with your current environment from Navigator activated Launch	 JupyterLab 1.2.6 An extensible environment for interactive and reproducible computing, based on the Jupyter Notebook and Architecture. Launch	 Notebook 6.0.3 Web-based, interactive computing notebook environment. Edit and run human-readable docs while describing the data analysis. Launch	 Powershell Prompt 0.0.1 Run a Powershell terminal with your current environment from Navigator activated Launch	 Qt Console 4.6.0 PyQt GUI that supports inline figures, proper multiline editing with syntax highlighting, graphical calltips, and more. Launch	 Spyder 4.0.1 Scientific Python Development Environment. Powerful Python IDE with advanced editing, interactive testing, debugging and introspection features Launch
 Glueviz 0.15.2 Multidimensional data visualization across files. Explore relationships within and among related datasets. Install	 Orange 3 3.26.0 Component based data mining framework. Data visualization and data analysis for novice and expert. Interactive workflows with a large toolbox. Install	 RStudio 1.1.456 A set of integrated tools designed to help you be more productive with R. Includes R essentials and notebooks. Install			



Virtual Environment(1/6)

■ Click Anaconda Prompt

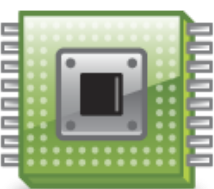




Virtual Environment(2/6)

- **Conda create -n envName python=3.7**
 - envName is a virtual environment name which you named.
 - Python=3.7 is the package which you want to install in you virtual environment.

```
Anaconda Prompt (anaconda3)
(base) C:\Users\user>conda create -n test1 python=3.7
```



Virtual Environment(3/6)

```
Anaconda Prompt (anaconda3) - conda create -n test1 python=3.7

(base) C:\Users\user>conda create -n test1 python=3.7
Collecting package metadata (current_repodata.json): done
Solving environment: done

## Package Plan ##

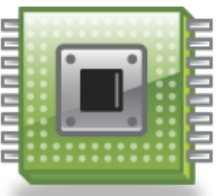
  environment location: C:\Users\user\anaconda3\envs\test1

  added / updated specs:
    - python=3.7

The following NEW packages will be INSTALLED:

  ca-certificates pkgs/main/win-64::ca-certificates-2020.7.22-0
  certifi         pkgs/main/win-64::certifi-2020.6.20-py37_0
  openssl        pkgs/main/win-64::openssl-1.1.1g-he774522_1
  pip            pkgs/main/win-64::pip-20.2.2-py37_0
  python         pkgs/main/win-64::python-3.7.9-h60c2a47_0
  setuptools     pkgs/main/win-64::setuptools-49.6.0-py37_0
  sqlite         pkgs/main/win-64::sqlite-3.33.0-h2a8f88b_0
  vc             pkgs/main/win-64::vc-14.1-h0510ff6_4
  vs2015_runtime pkgs/main/win-64::vs2015_runtime-14.16.27012-hf0eaf9b_3
  wheel          pkgs/main/noarch::wheel-0.35.1-py_0
  wincertstore   pkgs/main/win-64::wincertstore-0.2-py37_0
  zlib           pkgs/main/win-64::zlib-1.2.11-h62dcd97_4

Proceed ([y]/n)? y
```



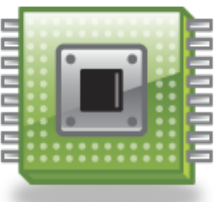
Virtual Environment(4/6)

- activate **envName**
 - activate your virtual environment
 - EX:activate test1

```
(base) C:\Users\user>activate test1
```

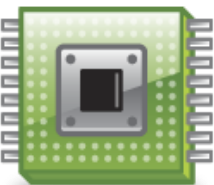
```
(base) C:\Users\user>activate test1
```

```
(test1) C:\Users\user>
```

Virtual Environment(5/6)

- **Install other package**
 - **conda install tensorflow=1.13.1**
 - **conda install keras**
 - **conda install opencv**
 - **conda install pillow**
 - **conda install matplotlib**



Virtual Environment(6/6)

The following NEW packages will be INSTALLED:

```
freetype      pkgs/main/win-64::freetype-2.10.2-hd328e21_0
jpeg          pkgs/main/win-64::jpeg-9b-hb83a4c4_2
libpng        pkgs/main/win-64::libpng-1.6.37-h2a8f88b_0
libtiff       pkgs/main/win-64::libtiff-4.1.0-h56a325e_1
lz4-c         pkgs/main/win-64::lz4-c-1.9.2-h62dcd97_1
olefile       pkgs/main/win-64::olefile-0.46-py37_0
pillow        pkgs/main/win-64::pillow-7.2.0-py37hcc1f983_0
tk            pkgs/main/win-64::tk-8.6.10-he774522_0
xz            pkgs/main/win-64::xz-5.2.5-h62dcd97_0
zstd          pkgs/main/win-64::zstd-1.4.5-h04227a9_0
```

Proceed ([y]/n)? y

Downloading and Extracting Packages

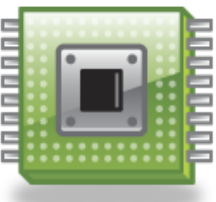
```
freetype-2.10.2 | 470 KB | ##### | 100%
tk-8.6.10       | 2.7 MB | ##### | 100%
pillow-7.2.0    | 661 KB | ##### | 100%
```

Preparing transaction: done

Verifying transaction: done

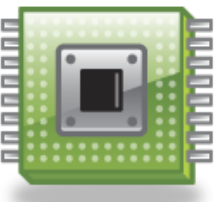
Executing transaction: done

(test1) C:\Users\user>



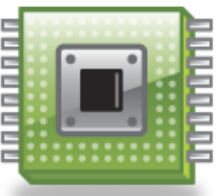
Other instructions

- **conda remove -n envName**
 - Remove the virtual environment
- **Deactivate**
 - Leave the virtual environment
- **conda list**
 - List the environment



Python

- **String**
- **List**
- **Numpy**
 - Arrange
 - Random
 - Index
 - Reshape
- **Dictionary**



Reference

- <https://ithelp.ithome.com.tw/articles/10203624>