

YOLOv7 環境的建置

1. 套件安裝

- i. Continue
- ii. 取得 nvidia 版本
cmd -> nvidia-smi

```
(baiV7) D:\PC_space\baiV7>nvidia-smi
Mon Jul 17 01:39:53 2023
```

NVIDIA-SMI 512.78			Driver Version: 512.78			CUDA Version: 11.6		
GPU	Name	TCC/WDDM	Bus-Id	Disp.A	Volatile	Uncorr.	ECC	
Fan	Temp	Perf	Pwr:Usage/Cap	Memory-Usage	GPU-Util	Compute	M.	
							MIG	
0	NVIDIA RTX A4000	WDDM	00000000:01:00.0	On			Off	
41%	42C	P8	10W / 140W	362MiB / 16376MiB	9%	Default	N/A	
1	NVIDIA RTX A4000	WDDM	00000000:02:00.0	Off			Off	
41%	42C	P8	8W / 140W	362MiB / 16376MiB	1%	Default	N/A	

Processes:							
GPU	GI	CI	PID	Type	Process name	GPU Memory	
ID	ID	ID				Usage	
0	N/A	N/A	1020	C+G	...bbwe\Microsoft.Photos.exe	N/A	
0	N/A	N/A	2080	C+G	...lPanel\SystemSettings.exe	N/A	
0	N/A	N/A	2372	C+G	...wekyb3d8bbwe\Video.UI.exe	N/A	
0	N/A	N/A	8488	C+G	C:\Windows\explorer.exe	N/A	
0	N/A	N/A	9468	C+G	...artMenuExperienceHost.exe	N/A	
0	N/A	N/A	9720	C+G	...2txyewy\TextInputHost.exe	N/A	
0	N/A	N/A	10060	C+G	...5nlh2txyewy\SearchApp.exe	N/A	
0	N/A	N/A	11400	C+G	...oft\OneDrive\OneDrive.exe	N/A	
0	N/A	N/A	11804	C+G	...e\PhoneExperienceHost.exe	N/A	
0	N/A	N/A	12356	C+G	...8wekyb3d8bbwe\Cortana.exe	N/A	
0	N/A	N/A	12636	C+G	...me\Application\chrome.exe	N/A	
1	N/A	N/A	1020	C+G	...bbwe\Microsoft.Photos.exe	N/A	
1	N/A	N/A	2080	C+G	...lPanel\SystemSettings.exe	N/A	
1	N/A	N/A	2372	C+G	...wekyb3d8bbwe\Video.UI.exe	N/A	
1	N/A	N/A	8488	C+G	C:\Windows\explorer.exe	N/A	
1	N/A	N/A	9468	C+G	...artMenuExperienceHost.exe	N/A	
1	N/A	N/A	9720	C+G	...2txyewy\TextInputHost.exe	N/A	
1	N/A	N/A	10060	C+G	...5nlh2txyewy\SearchApp.exe	N/A	
1	N/A	N/A	11400	C+G	...oft\OneDrive\OneDrive.exe	N/A	
1	N/A	N/A	11804	C+G	...e\PhoneExperienceHost.exe	N/A	
1	N/A	N/A	12356	C+G	...8wekyb3d8bbwe\Cortana.exe	N/A	
1	N/A	N/A	12636	C+G	...me\Application\chrome.exe	N/A	

- iii. Torch 與 cuXXX: 進入此網站，找到對應的版本 ->

<https://pytorch.org/get-started/previous-versions/>

v1.12.0

Conda

OSX

```
# conda
conda install pytorch==1.12.0 torchvision==0.13.0 torchaudio==0.12.0 -c pytorch
```

Linux and Windows

```
# CUDA 10.2
conda install pytorch==1.12.0 torchvision==0.13.0 torchaudio==0.12.0 cudatoolkit=10.2 -c pytorch
# CUDA 11.3
conda install pytorch==1.12.0 torchvision==0.13.0 torchaudio==0.12.0 cudatoolkit=11.3 -c pytorch
# CUDA 11.6
conda install pytorch==1.12.0 torchvision==0.13.0 torchaudio==0.12.0 cudatoolkit=11.6 -c pytorch -c conda-forge
# CPU Only
conda install pytorch==1.12.0 torchvision==0.13.0 torchaudio==0.12.0 cpuonly -c pytorch
```

Wheel

OSX

```
pip install torch==1.12.0 torchvision==0.13.0 torchaudio==0.12.0
```

Linux and Windows

```
# ROCm 5.1.1 (Linux only)
pip install torch==1.12.0+rocm5.1.1 torchvision==0.13.0+rocm5.1.1 torchaudio==0.12.0 --extra-index-url https://download.pytorch.org/whl/rocm5.1.1
# CUDA 11.6
pip install torch==1.12.0+cu116 torchvision==0.13.0+cu116 torchaudio==0.12.0 --extra-index-url https://download.pytorch.org/whl/cu116
# CUDA 11.3
pip install torch==1.12.0+cu113 torchvision==0.13.0+cu113 torchaudio==0.12.0 --extra-index-url https://download.pytorch.org/whl/cu113
# CUDA 10.2
pip install torch==1.12.0+cu102 torchvision==0.13.0+cu102 torchaudio==0.12.0 --extra-index-url https://download.pytorch.org/whl/cu102
# CPU only
pip install torch==1.12.0+cpu torchvision==0.13.0+cpu torchaudio==0.12.0 --extra-index-url https://download.pytorch.org/whl/cpu
```

iv. `pip install torch==1.12.0+cu116 torchvision==0.13.0+cu116 torchaudio==0.12.0 --extra-index-url https://download.pytorch.org/whl/cu116`

v. continue

2. continue