



國立雲林科技大學
電子工程系
Department of Electronic Engineering

教育部補助AI應用領域系列課程-
人工智慧計算晶片設計和應用人才培育

1

LAB2

國立雲林科技大學

王斯弘 助理教授 / 前瞻學位學士學程

2021/11/25



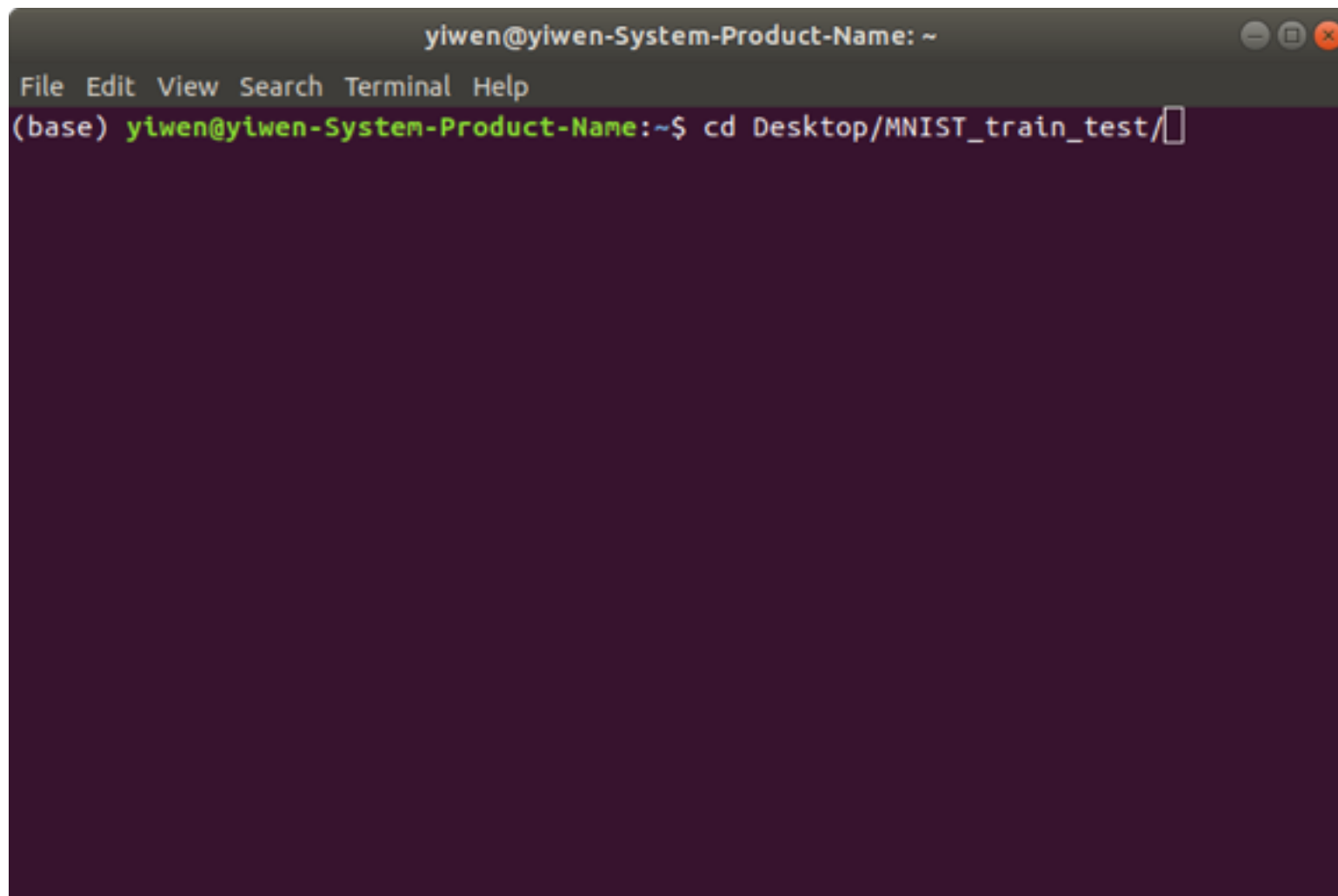
Xavier NX

MNIST手寫測試



到資料夾路徑

```
$ cd Desktop/MNIST_train_test/
```



```
yiwen@yiwen-System-Product-Name: ~  
File Edit View Search Terminal Help  
(base) yiwen@yiwen-System-Product-Name:~$ cd Desktop/MNIST_train_test/
```



\$ python3 painter.py

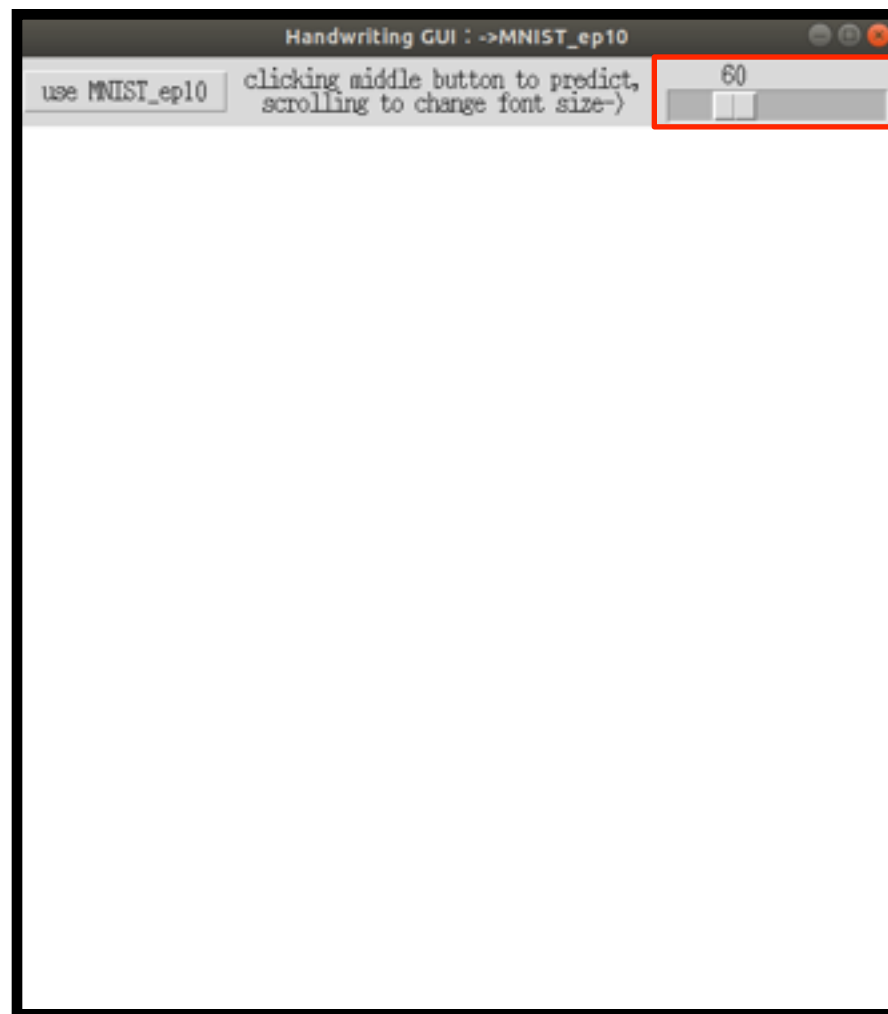
開啟測試檔

```
yiwen@yiwen-System-Product-Name: ~/Desktop/MNIST_train_test
File Edit View Search Terminal Help
(agc2) yiwen@yiwen-System-Product-Name: ~/Desktop/MNIST_train_test$ python3 painter.py
```

確定有進入指定資料夾路徑



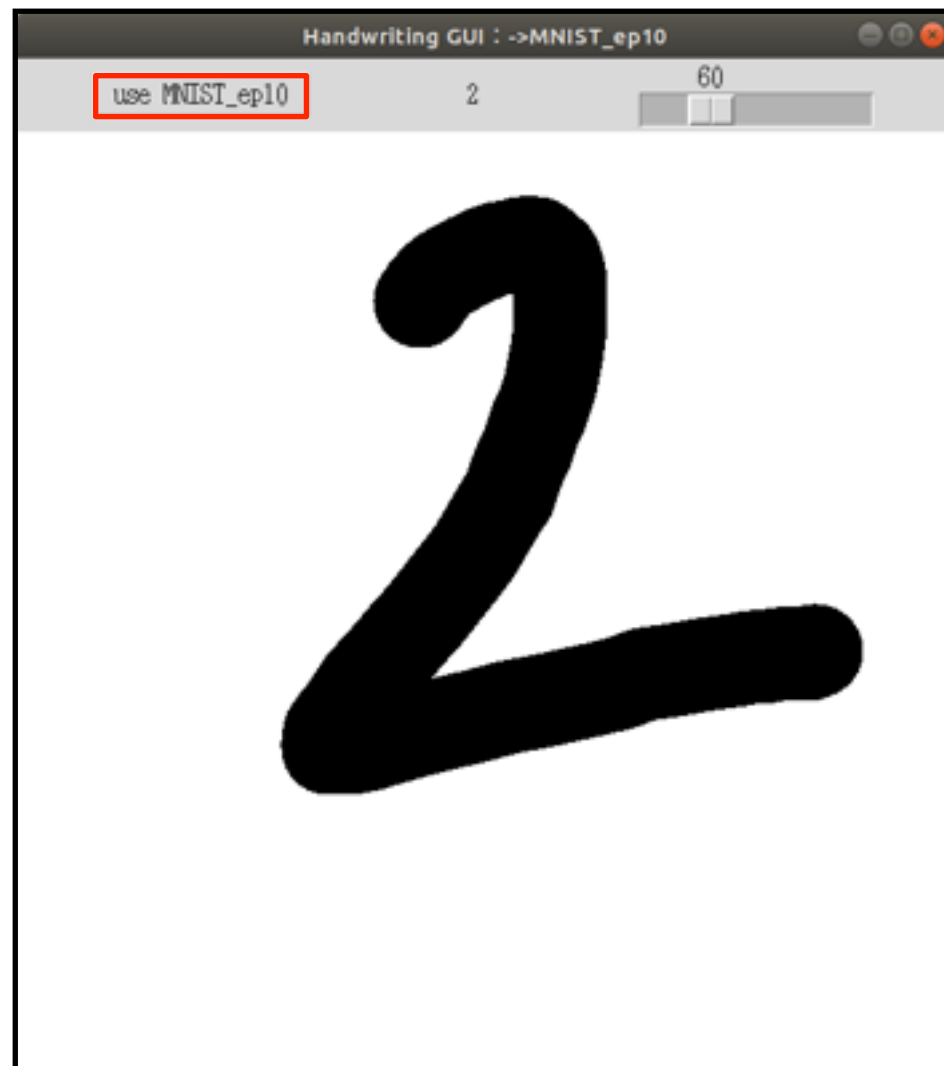
測試檔開啟成功



可調整筆的粗細

手寫測試

手寫完按紅色框框





結果

```
yiwen@yiwen-System-Product-Name: ~/Desktop/MNIST_train_test
File Edit View Search Terminal Help
cc:981] successful NUMA node read from SysFS had negative value (-1), but there
must be at least one NUMA node, so returning NUMA node zero
2021-11-24 19:54:21.409725: I tensorflow/stream_executor/cuda/cuda_gpu_executor.
cc:981] successful NUMA node read from SysFS had negative value (-1), but there
must be at least one NUMA node, so returning NUMA node zero
2021-11-24 19:54:21.410504: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1
247] Created TensorFlow device (/job:localhost/replica:0/task:0/device:GPU:0 wit
h 6878 MB memory) -> physical GPU (device: 0, name: GeForce RTX 2060 SUPER, pci
bus id: 0000:01:00.0, compute capability: 7.5)
2021-11-24 19:54:23.866436: I tensorflow/stream_executor/platform/default/dso_lo
ader.cc:44] Successfully opened dynamic library libcublas.so.10
2021-11-24 19:54:24.272135: I tensorflow/stream_executor/platform/default/dso_lo
ader.cc:44] Successfully opened dynamic library libcudnn.so.7
2021-11-24 19:54:25.901612: W tensorflow/stream_executor/gpu/asm_compiler.cc:81]
Running ptxas --version returned 256
2021-11-24 19:54:25.929812: W tensorflow/stream_executor/gpu/redzone_allocator.c
c:314] Internal: ptxas exited with non-zero error code 256, output:
Relying on driver to perform ptx compilation.
Modify $PATH to customize ptxas location.
This message will be only logged once.
Using {'en': 'MNIST_ep10', 'zh': 'lenet'}
Using {'en': 'MNIST_ep10', 'zh': 'lenet'}
[0. 0. 1. 0. 0. 0. 0. 0. 0.]
```

對應數字 0. 1. 2. 3. 4. 5. 6. 7. 8. 9.