

您好，以下是我將 latest.pth 轉成 latest.onnx 時遇到的問題，工作環境是 Google colab，除了把預設資料集改成我們自己的資料集的 Dropbox 連結以外，其餘執行指令上都沒有更改，預設安裝指令有 mmcv 跟 mmcv-full，我們安裝的是 mmcv。

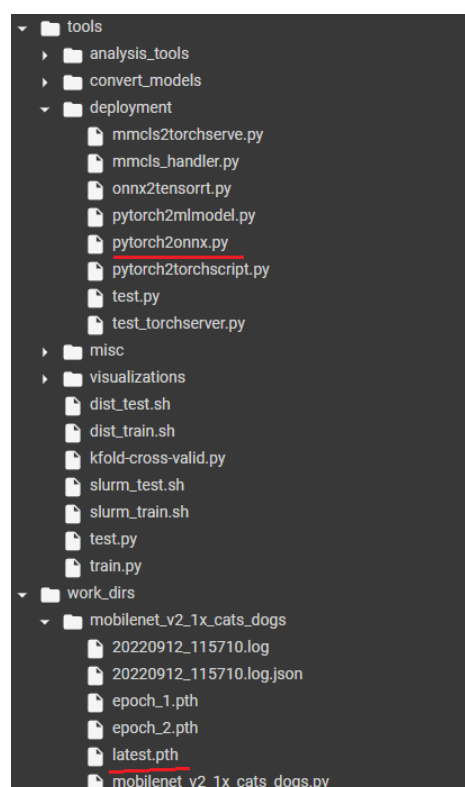
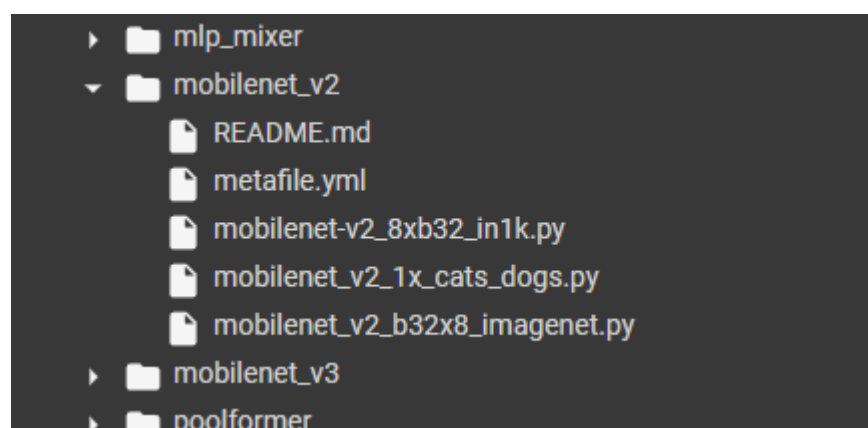
執行以下指令時，出現了 `python3: can't open file 'tools/deployment/pytorch2onnx.py': [Errno 2] No such file or directory` 這個錯誤，有依照路徑一一檢查過了，py 檔案都存在。

https://colab.research.google.com/github/open-mmlab/mmlclassification/blob/master/docs/en/tutorials/MMClassification_tools.ipynb (colab 連結)

以下圖片是錯誤訊息以及路徑檢查。請問該如何解決？

```
!python tools/deployment/pytorch2onnx.py \
  configs/mobilenet_v2/mobilenet_v2_1x_cats_dogs.py \
  --checkpoint work_dirs/mobilenet_v2_1x_cats_dogs/latest.pth \
  --output-file work_dirs/mobilenet_v2_1x_cats_dogs/latest.onnx \

python3: can't open file 'tools/deployment/pytorch2onnx.py': [Errno 2] No such file or directory
```



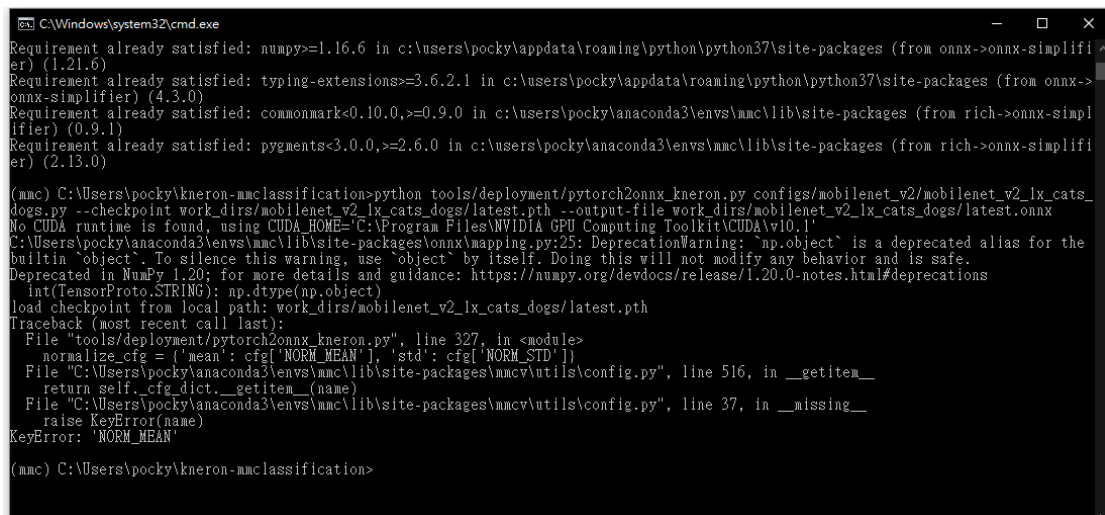
因為在 colab 上轉檔失敗，所以我們將 colab 上所產生的所有檔案移到 anaconda 的 mmclassification 的路徑下，也確認過路徑正確(與 colab 相同)，其中包括：
configs/mobilenet/mobilenet_v2_1x_cats_dogs.py、我們的自己 Dataset、整個 work_dirs 資料夾、work_dirs 底下的 latest.pth。

參考官方提供的教學步驟去驗證模型，驗證模型結果與 colab 上一模一樣，

但在下一個步驟，指令執行將 pth 檔轉成 onnx 檔，遇到問題。

https://github.com/kneron/kneron-mmclassification/blob/main/docs/kneron/regnet_step_by_step.md (步驟參考連結)

Step3 Export ONNX and Verify Pytorch 模型 latest.pth 轉 ONNX 時遇到的問題如下



```
C:\Windows\system32\cmd.exe
Requirement already satisfied: numpy>=1.16.6 in c:\users\pocky\appdata\roaming\python\python37\site-packages (from onnx->onnx-simplifier) (1.21.6)
Requirement already satisfied: typing-extensions>=3.6.2.1 in c:\users\pocky\appdata\roaming\python\python37\site-packages (from onnx->onnx-simplifier) (4.3.0)
Requirement already satisfied: commonmark<0.10.0,>=0.9.0 in c:\users\pocky\anaconda3\envs\mmc\lib\site-packages (from rich->onnx-simplifier) (0.9.1)
Requirement already satisfied: pygments<3.0.0,>=2.6.0 in c:\users\pocky\anaconda3\envs\mmc\lib\site-packages (from rich->onnx-simplifier) (2.13.0)

(mmc) C:\Users\pocky\kneron-mmclassification>python tools/deployment/pytorch2onnx_kneron.py configs/mobilenet_v2/mobilenet_v2_1x_cats_dogs.py --checkpoint work_dirs/mobilenet_v2_1x_cats_dogs/latest.pth --output-file work_dirs/mobilenet_v2_1x_cats_dogs/latest.onnx
No CUDA runtime is found, using CUDA_HOME='C:\Program Files\NVIDIA GPU Computing Toolkit\CUDA\v10.1'
C:\Users\pocky\anaconda3\envs\mmc\lib\site-packages\onnx\mapping.py:25: DeprecationWarning: 'np.object' is a deprecated alias for the builtin 'object'. To silence this warning, use 'object' by itself. Doing this will not modify any behavior and is safe.
Deprecated in NumPy 1.20; for more details and guidance: https://numpy.org/devdocs/release/1.20.0-notes.html#deprecations
  int(TensorProto.STRING): np.dtype(np.object)
load checkpoint from local path: work_dirs/mobilenet_v2_1x_cats_dogs/latest.pth
Traceback (most recent call last):
  File "tools/deployment/pytorch2onnx_kneron.py", line 327, in <module>
    normalize_cfg = {'mean': cfg['NORM_MEAN'], 'std': cfg['NORM_STD']}
  File "C:\Users\pocky\anaconda3\envs\mmc\lib\site-packages\mmc\utils\config.py", line 516, in __getitem__
    return self._cfg_dict.__getitem__(name)
  File "C:\Users\pocky\anaconda3\envs\mmc\lib\site-packages\mmc\utils\config.py", line 37, in __missing__
    raise KeyError(name)
KeyError: 'NORM_MEAN'

(mmc) C:\Users\pocky\kneron-mmclassification>
```

KeyError : 'NORM_MEAN' 有嘗試過修改 mean 參數，但結果相同。請問該如何解決?

後來去嘗試網路上的 `pth` 轉 `onnx` 方法，轉成功了，但在下一個階段，`ONNX` 檔轉 `NEF` 檔時遇到以下問題

```
1 [-----]
2 [           ONNX Flow Output           ]
3 [-----]
4
5 Cmd exec error: exit status 1,
6 /workspace/miniconda/lib/python3.7/site-packages/numpy/_init_.py:156: UserWarning: mkl-service
  package failed to import, therefore Intel(R) MKL initialization ensuring its correct out-of-the
  box operation under condition when Gnu OpenMP had already been loaded by Python process is not
  assured. Please install mkl-service package, see http://github.com/IntelPython/mkl-service
7   from . import _distributor_init
8 Using TensorFlow backend.
9 Traceback (most recent call last):
10   File "scripts/onnxFlow.py", line 58, in <module>
11     m = ktc.onnx_optimizer.onnx2onnx_flow(m, eliminate_tail=True, opt_matmul=True)
12   File "/workspace/libs/ONNX_Convertor/optimizer_scripts/onnx2onnx.py", line 45, in
  onnx2onnx_flow
13     m = combo.preprocess(m, disable_fuse_bn, duplicate_shared_weights)
14   File "/workspace/libs/ONNX_Convertor/optimizer_scripts/tools/combo.py", line 58, in preprocess
15     helper.setup_current_opset_version(model_proto)
16   File "/workspace/libs/ONNX_Convertor/optimizer_scripts/tools/helper.py", line 17, in
  setup_current_opset_version
17     raise RuntimeError('Only support opset 11 and 12, but got ' + str(__ONNX_VERSION__))
18 RuntimeError: Only support opset 11 and 12, but got 13
19
20
```

請問該如何解決?