

Changes made to Deep PMSM code and output

Reference websites

1. [GitHub - upb-lea/deep-pmsm: Estimate intrinsic Permanent Magnet Synchronous Motor temperatures with deep recurrent and convolutional neural networks.](#)

Following version of PY libraries are being used:

	Library name	Version used
1	Tensor flow	2.15.0
2	Transformers	4.32.1
3	Numpy	1.24.3

Following changes were made to following files:

1. While trying to run hot_cnn.py
 - a. Hot_cnn.py:
 - i. The line “*from tensorflow import set_random_seed*” was replaced with “*from tensorflow.random import set_seed*” due to changes in tensorflow.
 - ii. The function ‘*set_random_seed*’ was replaced with ‘*set_seed*’.
 - b. File_utils.py:
 - i. The line “*from tensorflow import set_random_seed*” was replaced with “*from tensorflow.random import set_seed*” due to changes in tensorflow.
 - ii. The function ‘*set_random_seed*’ was replaced with ‘*set_seed*’.
 - iii. This change is same as in file hot_cnn.py
 - c. Custom_layers.py:
 - i. The line “*from keras.engine import InputSpec*” was replaced with “*import tensorflow.python.keras.engine as KE*”
 - ii. Furthermore, the *InputSpec* function was used as *KE.InputSpec*
 - d. Cnn_model_utils.py:
 - i. The line ‘*from keras.engine import InputSpec*’ was replaced with ‘*import tensorflow.python.keras.engine as KE*’.
 - ii. Furthermore, the *InputSpec* function was used as *KE.InputSpec*
 - iii. This change is the same as performed in custom_layers.py
 - iv. The line ‘*from keras.wrappers.scikit_learn import KerasRegressor*’ is replaced with ‘*from scikeras.wrappers import KerasRegressor*’
2. Input file downloaded from kaggle website: file name : measures_v2.csv renamed to measures.csv as expected by the program.

