**The notes of the self\_written files**

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**[Note]:** This is for the first update (11/20/2022). The main purpose for this update is to be familiar with the authors’ code and paper. So what I need to do is to understand the structure of these codes and run them smoothly. I have done some simple experiments by using one data set (Mujoco) with 500 n\_iters to successfully run the three target algorithms.

1. To save time, I have only used the processed Mujoco data to do both the train and test experiments with CSDI, SSSDS4 and SSSDSA these three algorithms. Later, we can use other data like Electricity, ETTm1…
2. To save time to converge, I have set the "train\_config": "n\_iters": 500 in the config json file for all 4 algorithms. The original version from the authors are set as "n\_iters": 200000 (CSDI), or "n\_iters": 150000 (SSSDS4),or "n\_iters": 200000 (SSSDSA).
3. There are some setting mistakes in the original version files. Most of these mistakes are in the json setting information parts (e.g, "trainset\_config": "data\_path" should be "train\_data\_path", "use\_model" in config\_SSSDSA should be 1 rather than 2, "in\_channels": 12 and "out\_channels": 12 should be both 14, the file name of “entensions” should be “extensions” then the S4Model can be run) then the “tran.py” can be run.
4. There are only three available imputers: (1) CSDI (2)SSSDS4 (3) SSSDSA can be directly used with the “train.py”. Because in the setting of “train.py”, there are only three options: use\_model (int): 0:DiffWave. 1:SSSDSA. 2:SSSDS4. If we would like to test other imputers like CSDIS4 or S4Model (provided by the authors) then we need to announce them in the “train.py”: use\_model.
5. The output of the testing results will be saved in my “train folder” such as “/content/drive/MyDrive/JPMorgan/自写代码/Pytorch\_codes/Results\_SSSDS4/Mujoco/train\_90”. The output files are: “mask1.npy” and “original1.npy”.
6. Due to the limitation of Github, I cannot upload very large files. So the generated model iteration checkpoints (e.g., 100.pkl) save in “/content/drive/MyDrive/JPMorgan/自写代码/Pytorch\_codes/Results\_SSSDS4/Mujoco/train\_90” cannot be shown. If you would like to see them, please contact me. Many thanks.