**The completed TensorFlow SSSDS4 Model Training**

* This is the fixed file of the last “The\_completed\_TF\_SSSD4”. The issue is that in the last file, I only trained a new Sequential() model but don’t train the target “SSSD4” model. So there was the issue that gradients are not generated in the last file. In this Update, I have fixed this issue and trained the “SSSD4” model. All gradients are generated and well trained.
* The converting work of SSSDS4 model (training) from Pytorch framework to TensorFlow framework has been done. The dataset used is “Mujoco/train\_mujoco.npy" provided by the authors.
* Under the “n\_iters” is set as 300, I do the simple experiment to train the target model “SSSD4” model’s weights. This small iteration number is set to save more time for the further research. We can increase the iteration number later. I have successfully save the model weights at the time point of each 100 iteration. When we need the model, we can easily read the model itself and then these weights (like here, we read the weights from the 300 iteration checkpoint).

文本

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* All the checkpoints (save weights) are saved in my OneDrive and here we use 300 iterations as an instance. The reason that I don’t use the “.h5” format in TensorFlow to save both the “SSSD4” model’s configuration and weights is that “.h5” format does not support the subclassed custom model configuration. So we can only save the weights then run the model’s configuration when we need to use the model.

图形用户界面, 应用程序

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* In the next step, I will continue to convert the “testing” part of the model from pytorch framework to TensorFlow framework. After this work is done, the imputed data will be generated. Then the predicted data points from the TensorFlow SSSDS4 model will be provided. When the “S4Model.py” file has been converted to TensorFlow framework, the whole converting work of SSSDS4 model is done.