File - att

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"C:\Program Files\Anaconda3\python.exe" "D:/Program Files/JetBrains/localanacondapy3/attention/att.py"
Using TensorFlow backend.
X_train shape: (60000, 28, 28)
X_test shape: (10000, 28, 28)
_________________________________________________________________________________________________
Layer (type)                 Output Shape              Param #     Connected to
=================================================================================================
input_input (InputLayer)     (None, 28, 28)            0

input_drop (Dropout)         (None, 28, 28)            0           input_input[0][0]

bilstm (Bidirectional)       (None, 28, 128)           47616       input_drop[0][0]

att_input (Permute)          (None, 128, 28)           0           bilstm[0][0]

att_dense (Dense)            (None, 128, 28)           812         att_input[0][0]

att_vec (Permute)            (None, 28, 128)           0           att_dense[0][0]

att_mul (Multiply)           (None, 28, 128)           0           bilstm[0][0]
                                                                   att_vec[0][0]

att_flat (Flatten)           (None, 3584)              0           att_mul[0][0]

out_drop (Dropout)           (None, 3584)              0           att_flat[0][0]

out_dense (Dense)            (None, 10)                35850       out_drop[0][0]
=================================================================================================
Total params: 84,278
Trainable params: 84,278
Non-trainable params: 0
_________________________________________________________________________________________________
None
Training------------
Epoch 1/100
2019-10-12 08:49:00.542900: I tensorflow/core/platform/cpu_feature_guard.cc:141] Your CPU supports
instructions that this TensorFlow binary was not compiled to use: AVX AVX2
2019-10-12 08:49:00.544900: I tensorflow/core/common_runtime/process_util.cc:69] Creating new thread pool
with default inter op setting: 8. Tune using inter_op_parallelism_threads for best performance.
 - 121s - loss: 0.3482 - acc: 0.8943
Epoch 2/100
 - 144s - loss: 0.1403 - acc: 0.9564
Epoch 3/100
 - 124s - loss: 0.1074 - acc: 0.9667
Epoch 4/100
 - 142s - loss: 0.0872 - acc: 0.9722
Epoch 5/100
 - 118s - loss: 0.0745 - acc: 0.9760
Epoch 6/100
 - 121s - loss: 0.0665 - acc: 0.9785
Epoch 7/100
 - 118s - loss: 0.0608 - acc: 0.9804
Epoch 8/100
 - 119s - loss: 0.0551 - acc: 0.9827
Epoch 9/100
 - 118s - loss: 0.0521 - acc: 0.9831
Epoch 10/100
 - 130s - loss: 0.0483 - acc: 0.9837
Epoch 11/100
 - 121s - loss: 0.0455 - acc: 0.9858
Epoch 12/100
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 - 118s - loss: 0.0453 - acc: 0.9852
Epoch 13/100
 - 119s - loss: 0.0405 - acc: 0.9871
Epoch 14/100
 - 120s - loss: 0.0420 - acc: 0.9865
Epoch 15/100
 - 142s - loss: 0.0372 - acc: 0.9872
Epoch 16/100
 - 117s - loss: 0.0366 - acc: 0.9880
Epoch 17/100
 - 115s - loss: 0.0361 - acc: 0.9878
Epoch 18/100
 - 115s - loss: 0.0346 - acc: 0.9888
Epoch 19/100
 - 115s - loss: 0.0329 - acc: 0.9891
Epoch 20/100
 - 116s - loss: 0.0301 - acc: 0.9901
Epoch 21/100
 - 117s - loss: 0.0305 - acc: 0.9899
Epoch 22/100
 - 115s - loss: 0.0286 - acc: 0.9908
Epoch 23/100
 - 118s - loss: 0.0289 - acc: 0.9904
Epoch 24/100
 - 132s - loss: 0.0269 - acc: 0.9914
Epoch 25/100
 - 121s - loss: 0.0246 - acc: 0.9918
Epoch 26/100
 - 138s - loss: 0.0272 - acc: 0.9908
Epoch 27/100
 - 148s - loss: 0.0270 - acc: 0.9912
Epoch 28/100
 - 143s - loss: 0.0254 - acc: 0.9912
Epoch 29/100
 - 159s - loss: 0.0254 - acc: 0.9915
Epoch 30/100
 - 132s - loss: 0.0248 - acc: 0.9919
Epoch 31/100
 - 127s - loss: 0.0248 - acc: 0.9916
Epoch 32/100
 - 120s - loss: 0.0237 - acc: 0.9921
Epoch 33/100
 - 140s - loss: 0.0218 - acc: 0.9924
Epoch 34/100
 - 193s - loss: 0.0229 - acc: 0.9926
Epoch 35/100
 - 122s - loss: 0.0228 - acc: 0.9923
Epoch 36/100
 - 138s - loss: 0.0206 - acc: 0.9928
Epoch 37/100
 - 127s - loss: 0.0222 - acc: 0.9926
Epoch 38/100
 - 151s - loss: 0.0200 - acc: 0.9928
Epoch 39/100
 - 136s - loss: 0.0223 - acc: 0.9931
Epoch 40/100
 - 132s - loss: 0.0217 - acc: 0.9927
Epoch 41/100
 - 127s - loss: 0.0185 - acc: 0.9938
Epoch 42/100
 - 137s - loss: 0.0212 - acc: 0.9927
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Epoch 43/100
 - 131s - loss: 0.0199 - acc: 0.9934
Epoch 44/100
 - 126s - loss: 0.0197 - acc: 0.9932
Epoch 45/100
 - 126s - loss: 0.0190 - acc: 0.9937
Epoch 46/100
 - 120s - loss: 0.0197 - acc: 0.9933
Epoch 47/100
 - 120s - loss: 0.0180 - acc: 0.9936
Epoch 48/100
 - 121s - loss: 0.0193 - acc: 0.9935
Epoch 49/100
 - 120s - loss: 0.0195 - acc: 0.9935
Epoch 50/100
 - 120s - loss: 0.0181 - acc: 0.9941
Epoch 51/100
 - 119s - loss: 0.0186 - acc: 0.9933
Epoch 52/100
 - 125s - loss: 0.0167 - acc: 0.9941
Epoch 53/100
 - 125s - loss: 0.0181 - acc: 0.9939
Epoch 54/100
 - 122s - loss: 0.0186 - acc: 0.9940
Epoch 55/100
 - 119s - loss: 0.0173 - acc: 0.9938
Epoch 56/100
 - 120s - loss: 0.0173 - acc: 0.9942
Epoch 57/100
 - 123s - loss: 0.0167 - acc: 0.9941
Epoch 58/100
 - 119s - loss: 0.0166 - acc: 0.9945
Epoch 59/100
 - 118s - loss: 0.0173 - acc: 0.9944
Epoch 60/100
 - 119s - loss: 0.0159 - acc: 0.9942
Epoch 61/100
 - 119s - loss: 0.0176 - acc: 0.9943
Epoch 62/100
 - 134s - loss: 0.0158 - acc: 0.9948
Epoch 63/100
 - 134s - loss: 0.0156 - acc: 0.9945
Epoch 64/100
 - 126s - loss: 0.0157 - acc: 0.9946
Epoch 65/100
 - 147s - loss: 0.0170 - acc: 0.9944
Epoch 66/100
 - 152s - loss: 0.0165 - acc: 0.9945
Epoch 67/100
 - 141s - loss: 0.0162 - acc: 0.9945
Epoch 68/100
 - 146s - loss: 0.0153 - acc: 0.9949
Epoch 69/100
 - 136s - loss: 0.0145 - acc: 0.9947
Epoch 70/100
 - 136s - loss: 0.0155 - acc: 0.9947
Epoch 71/100
 - 144s - loss: 0.0148 - acc: 0.9952
Epoch 72/100
 - 142s - loss: 0.0154 - acc: 0.9950
Epoch 73/100
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 - 148s - loss: 0.0166 - acc: 0.9944
Epoch 74/100
 - 210s - loss: 0.0150 - acc: 0.9948
Epoch 75/100
 - 139s - loss: 0.0153 - acc: 0.9949
Epoch 76/100
 - 137s - loss: 0.0161 - acc: 0.9948
Epoch 77/100
 - 136s - loss: 0.0149 - acc: 0.9949
Epoch 78/100
 - 142s - loss: 0.0146 - acc: 0.9949
Epoch 79/100
 - 128s - loss: 0.0143 - acc: 0.9951
Epoch 80/100
 - 145s - loss: 0.0159 - acc: 0.9950
Epoch 81/100
 - 136s - loss: 0.0135 - acc: 0.9955
Epoch 82/100
 - 139s - loss: 0.0136 - acc: 0.9957
Epoch 83/100
 - 129s - loss: 0.0156 - acc: 0.9946
Epoch 84/100
 - 123s - loss: 0.0146 - acc: 0.9952
Epoch 85/100
 - 123s - loss: 0.0150 - acc: 0.9950
Epoch 86/100
 - 123s - loss: 0.0143 - acc: 0.9950
Epoch 87/100
 - 122s - loss: 0.0129 - acc: 0.9955
Epoch 88/100
 - 123s - loss: 0.0146 - acc: 0.9949
Epoch 89/100
 - 122s - loss: 0.0139 - acc: 0.9954
Epoch 90/100
 - 122s - loss: 0.0143 - acc: 0.9950
Epoch 91/100
 - 122s - loss: 0.0142 - acc: 0.9950
Epoch 92/100
 - 122s - loss: 0.0145 - acc: 0.9953
Epoch 93/100
 - 124s - loss: 0.0141 - acc: 0.9953
Epoch 94/100
 - 122s - loss: 0.0139 - acc: 0.9956
Epoch 95/100
 - 123s - loss: 0.0136 - acc: 0.9956
Epoch 96/100
 - 121s - loss: 0.0132 - acc: 0.9957
Epoch 97/100
 - 122s - loss: 0.0129 - acc: 0.9955
Epoch 98/100
 - 122s - loss: 0.0132 - acc: 0.9957
Epoch 99/100
 - 122s - loss: 0.0135 - acc: 0.9953
Epoch 100/100
 - 122s - loss: 0.0142 - acc: 0.9953
Testing--------------

  32/10000 [..............................] - ETA: 1:10
 224/10000 [..............................] - ETA: 12s
 416/10000 [>.............................] - ETA: 7s
 608/10000 [>.............................] - ETA: 5s
```

File - att

```
  800/10000 [=>............................] - ETA: 5s
  992/10000 [=>............................] - ETA: 4s
 1184/10000 [==>...........................] - ETA: 4s
 1376/10000 [===>..........................] - ETA: 3s
 1568/10000 [===>..........................] - ETA: 3s
 1760/10000 [====>.........................] - ETA: 3s
 1952/10000 [====>.........................] - ETA: 3s
 2144/10000 [=====>........................] - ETA: 3s
 2336/10000 [======>.......................] - ETA: 2s
 2528/10000 [======>.......................] - ETA: 2s
 2720/10000 [=======>......................] - ETA: 2s
 2880/10000 [=======>......................] - ETA: 2s
 3104/10000 [========>.....................] - ETA: 2s
 3296/10000 [========>.....................] - ETA: 2s
 3488/10000 [=========>....................] - ETA: 2s
 3680/10000 [==========>...................] - ETA: 2s
 3872/10000 [==========>...................] - ETA: 2s
 4064/10000 [===========>..................] - ETA: 2s
 4256/10000 [===========>..................] - ETA: 1s
 4448/10000 [============>.................] - ETA: 1s
 4576/10000 [============>.................] - ETA: 1s
 4768/10000 [=============>................] - ETA: 1s
 4960/10000 [=============>................] - ETA: 1s
 5152/10000 [==============>...............] - ETA: 1s
 5344/10000 [===============>..............] - ETA: 1s
 5568/10000 [===============>..............] - ETA: 1s
 5760/10000 [================>.............] - ETA: 1s
 5952/10000 [================>.............] - ETA: 1s
 6112/10000 [=================>............] - ETA: 1s
 6272/10000 [=================>............] - ETA: 1s
 6496/10000 [==================>...........] - ETA: 1s
 6688/10000 [==================>...........] - ETA: 1s
 6880/10000 [==================>...........] - ETA: 1s
 7072/10000 [===================>..........] - ETA: 0s
 7264/10000 [===================>..........] - ETA: 0s
 7456/10000 [====================>.........] - ETA: 0s
 7648/10000 [====================>.........] - ETA: 0s
 7840/10000 [=====================>........] - ETA: 0s
 8000/10000 [=====================>........] - ETA: 0s
 8192/10000 [======================>.......] - ETA: 0s
 8384/10000 [======================>.......] - ETA: 0s
 8544/10000 [======================>.......] - ETA: 0s
 8736/10000 [=======================>......] - ETA: 0s
 8928/10000 [=======================>......] - ETA: 0s
 9120/10000 [========================>.....] - ETA: 0s
 9312/10000 [========================>.....] - ETA: 0s
 9504/10000 [=========================>....] - ETA: 0s
 9696/10000 [=========================>....] - ETA: 0s
 9888/10000 [==========================>...] - ETA: 0s
10000/10000 [==============================] - 3s 312us/step
test loss: 0.03949641597061464
test accuracy: 0.9908

Process finished with exit code 0
```