Experimental Report for dt_lgth:4350

Test on:

epochs: [128]

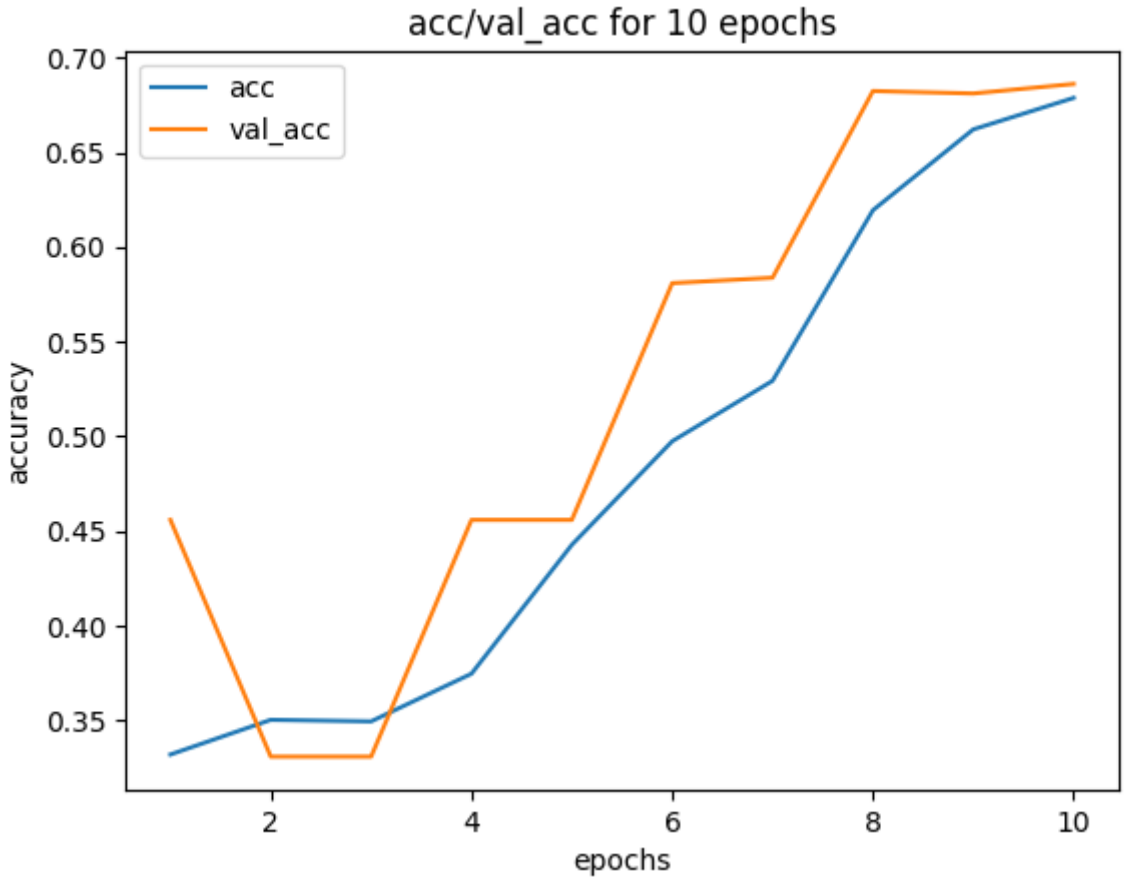
gru_neurons: [2, 5, 10]

Parameters

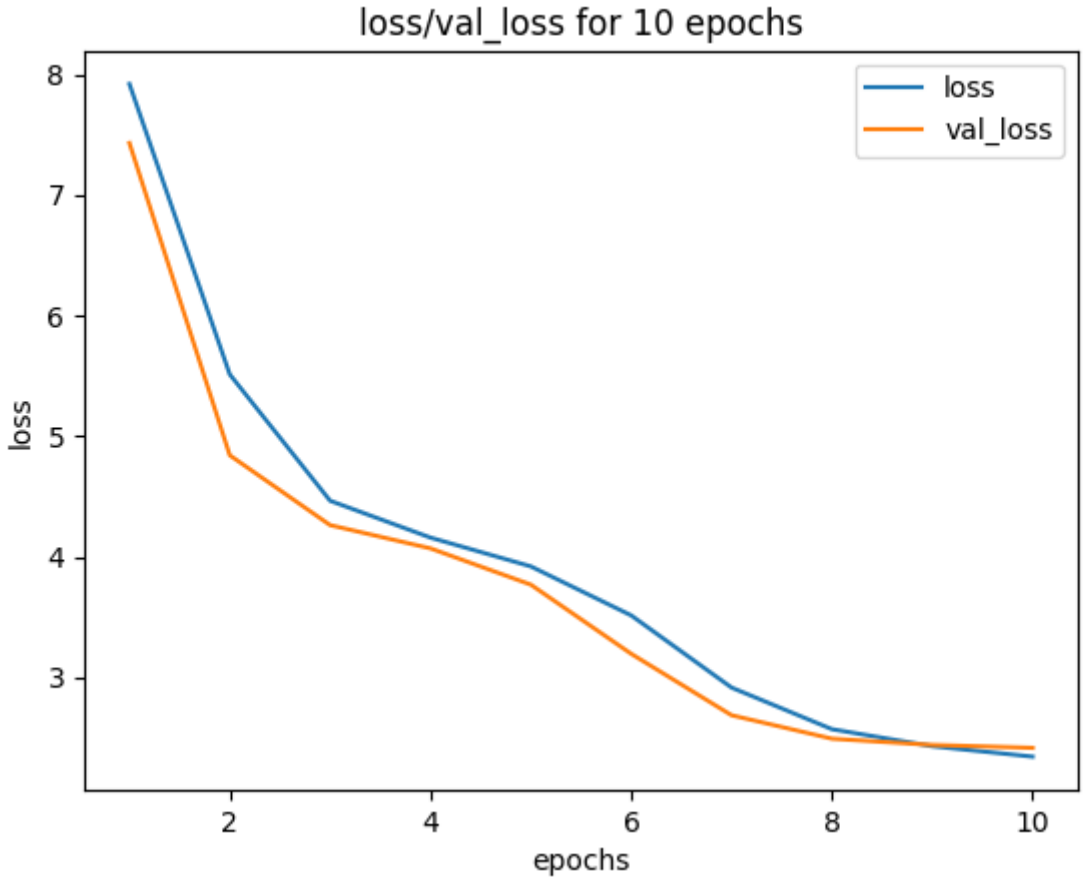
- batch_size : 300
- validation_split : 0.2
- dataset_path : ./datasets/
- learning_rate : 0.001
- dropout_value : 0.5
- dense_neurons : 128
- loss_function : sparse_categorical_crossentropy
- dataset_length : 4350
- percentage True Negatives : 21.4
- percentage names only : None
- percentage other tags : None

GRU: 128 - Epochs: 2

Learning curves



	Training data	Validation data
minimum	0.27	0.26
maximum	0.69	0.71
mean	0.51	0.5



	Training data	Validation data
minimum	0.27	0.26
maximum	0.68	0.71
mean	0.51	0.5

Fitting observations

	Undefitting	Good fitting	Overfitting
Status	Yes	Partially	No

Predictions

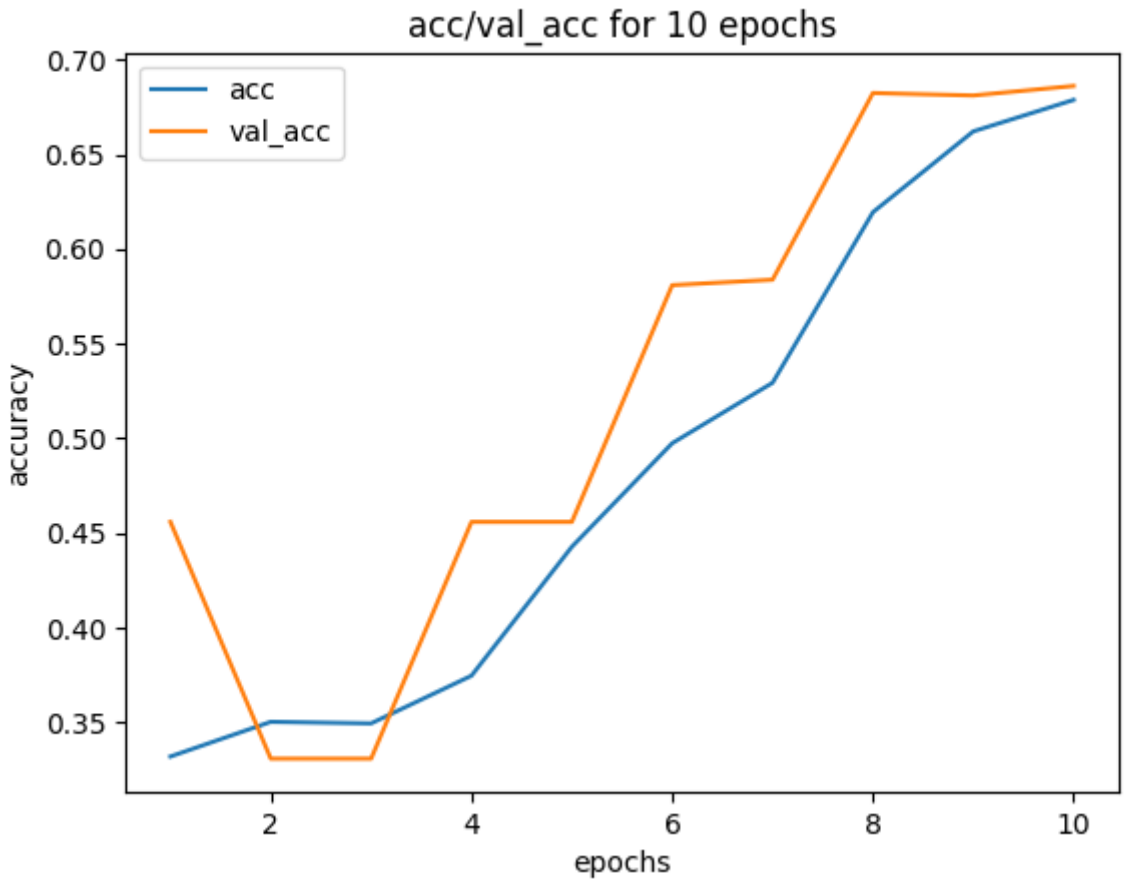
	Seq. to predict	Expected seq.	Predicted seq.
Seq.	<authors author:'John Da'/>	author: 'John Da'	author: 'Mr. Luc Da'

Bilan

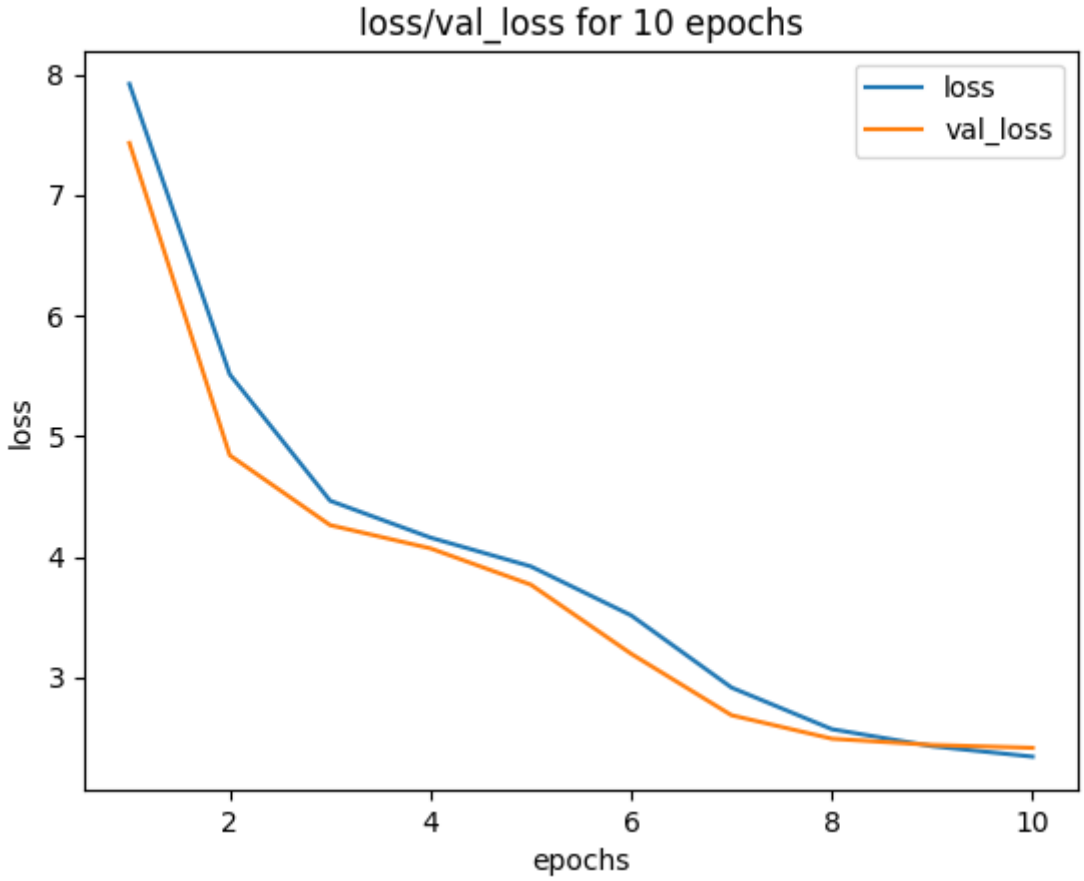
For 128 neurons in GRU and 2 epochs, the training accuracy is gapped at 0.69, the training loss at 0.68. The model is underfitted and the prediction is correct at 56%.

GRU: 128 - Epochs: 5

Learning curves



	Training data	Validation data
minimum	0.27	0.26
maximum	0.69	0.71
mean	0.51	0.5



	Training data	Validation data
minimum	0.27	0.26
maximum	0.68	0.71
mean	0.51	0.5

Fitting observations

	Undefitting	Good fitting	Overfitting
Status	Yes	Partially	No

Predictions

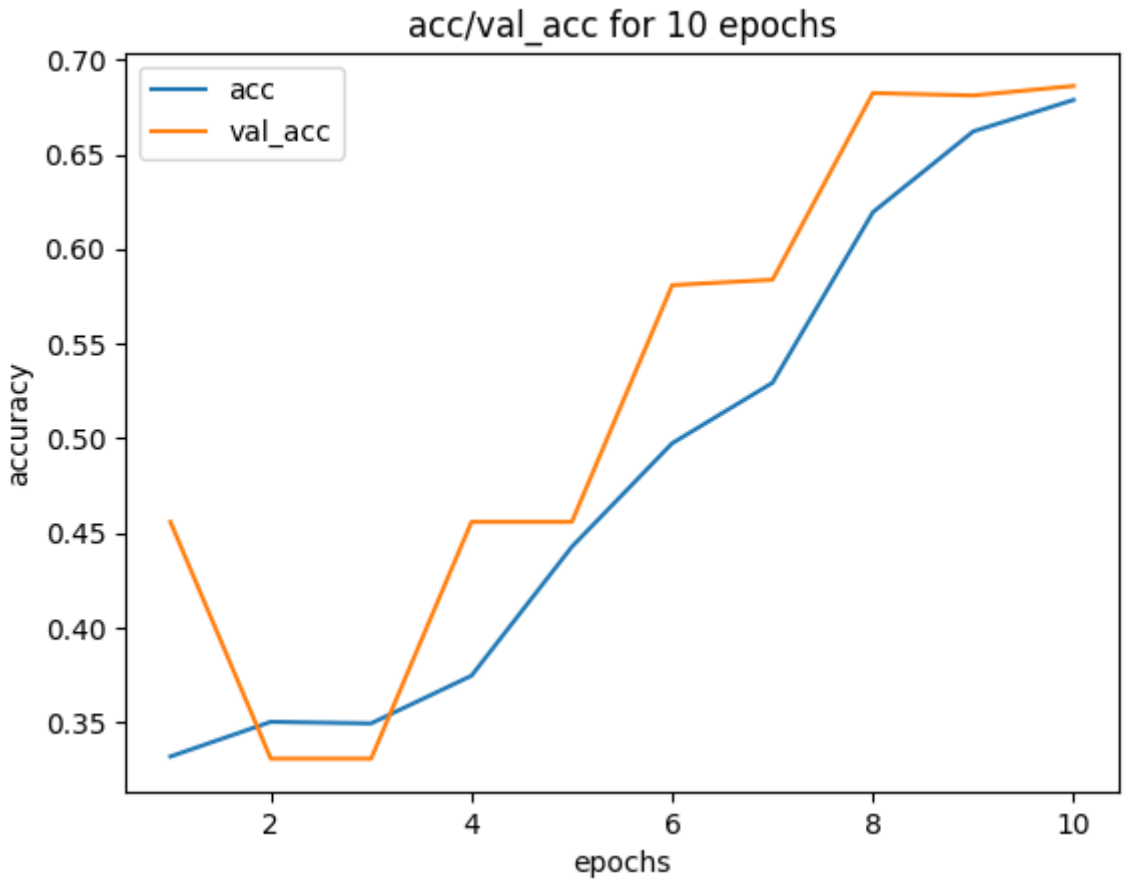
	Seq. to predict	Expected seq.	Predicted seq.
Seq.	<authors author:'John Da'/>	author: 'John Da'	author: 'Mr. Luc Da'

Bilan

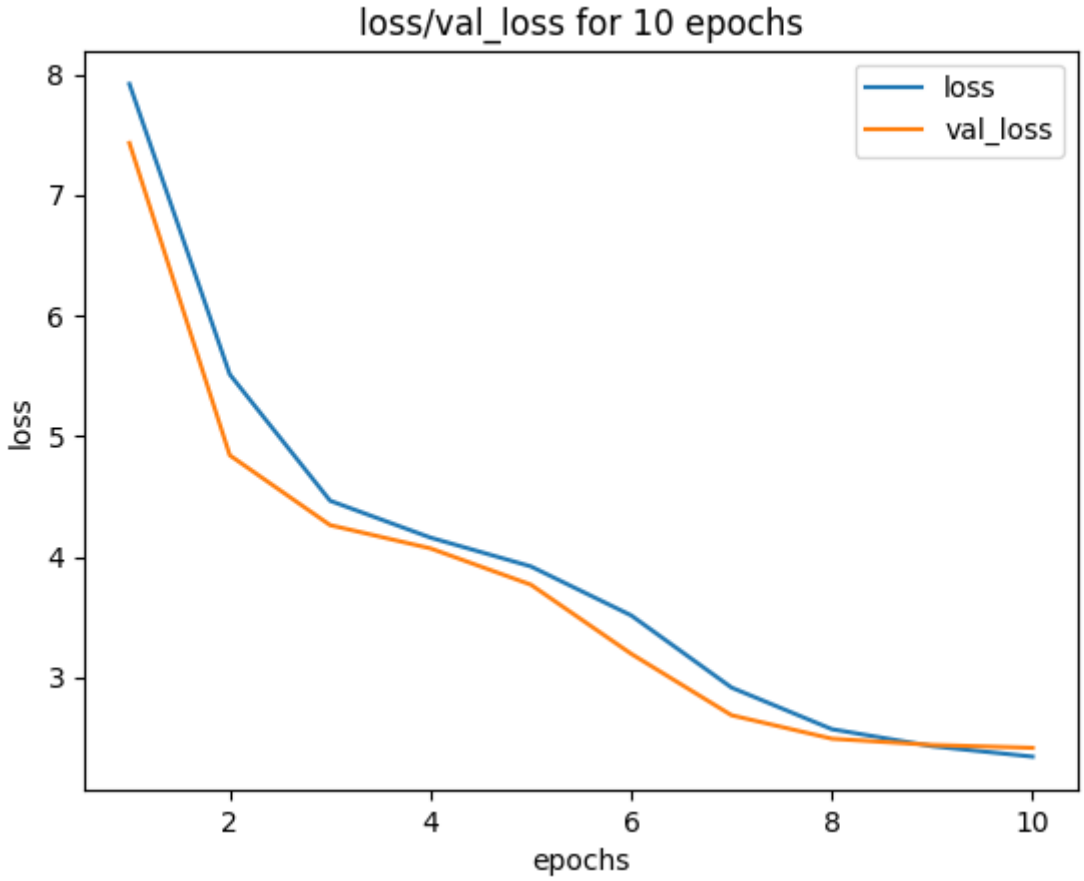
For 128 neurons in GRU and 5 epochs, the training accuracy is gapped at 0.69, the training loss at 0.68. The model is underfitted and the prediction is correct at 56%.

GRU: 128 - Epochs: 10

Learning curves



	Training data	Validation data
minimum	0.27	0.26
maximum	0.69	0.71
mean	0.51	0.5



	Training data	Validation data
minimum	0.27	0.26
maximum	0.68	0.71
mean	0.51	0.5

Fitting observations

	Undefitting	Good fitting	Overfitting
Status	Yes	Partially	No

Predictions

	Seq. to predict	Expected seq.	Predicted seq.
Seq.	<authors author:'John Da'/>	author: 'John Da'	author: 'Mr. Luc Da'

Bilan

For 128 neurons in GRU and 10 epochs, the training accuracy is gapped at 0.69, the training loss at 0.68. The model is underfitted and the prediction is correct at 56%.

Model Summary

Model: "sequential_2"

Layer (type) Output Shape Param #
embedding_2 (Embedding) (None, 8, 100) 309000

gru_4 (GRU) (None, 8, 128) 88320

dropout_6 (Dropout) (None, 8, 128) 0

gru_5 (GRU) (None, 8, 128) 99072

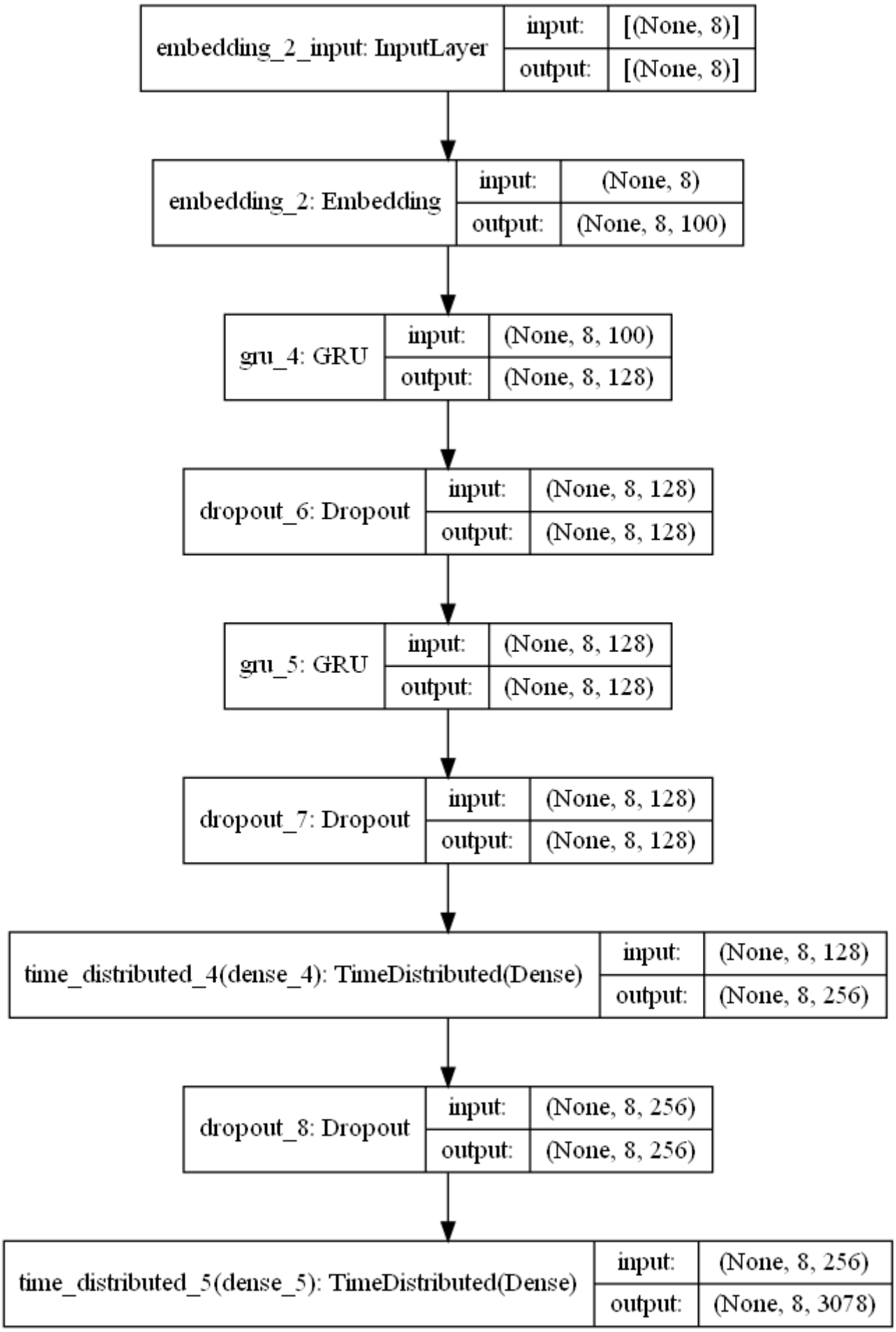
dropout_7 (Dropout) (None, 8, 128) 0

time_distributed_4 (TimeDist (None, 8, 256) 33024

dropout_8 (Dropout) (None, 8, 256) 0

time_distributed_5 (TimeDist (None, 8, 3078) 791046
Total params: 1,320,462 Trainable params: 1,320,462 Non-trainable params: 0

Plotted Model


embedding_2_input: InputLayer
input: [(None, 8)]
output: [(None, 8)]
embedding_2: Embedding
input: (None, 8)
output: (None, 8, 100)
gru_4: GRU
input: (None, 8, 100)
output: (None, 8, 128)
dropout_6: Dropout
input: (None, 8, 128)
output: (None, 8, 128)
gru_5: GRU
input: (None, 8, 128)
output: (None, 8, 128)
dropout_7: Dropout
input: (None, 8, 128)
output: (None, 8, 128)
time_distributed_4(dense_4): TimeDistributed(Dense)
input: (None, 8, 128)
output: (None, 8, 256)
dropout_8: Dropout
input: (None, 8, 256)
output: (None, 8, 256)
time_distributed_5(dense_5): TimeDistributed(Dense)
input: (None, 8, 256)
output: (None, 8, 3078)