Ungraded Lab: Build a Multi-output Model

In this lab, we'll show how you can build models with more than one output. The dataset we will be working on is available from the <u>UCI Machine Learning Repository</u>. It is an Energy Efficiency dataset which uses the bulding features (e.g. wall area, roof area) as inputs and has two outputs: Cooling Load and Heating Load. Let's see how we can build a model to train on this data.

Imports

```
In [1]:
```

```
try:
    # %tensorflow_version only exists in Colab.
    %tensorflow_version 2.x
except Exception:
    pass

import tensorflow as tf
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
from tensorflow.keras.models import Model
from tensorflow.keras.layers import Dense, Input
from sklearn.model_selection import train_test_split
```

Utilities

We define a few utilities for data conversion and visualization to make our code more neat.

```
In [2]:
```

```
def format_output(data):
   y1 = data.pop('Y1')
   y1 = np.array(y1)
   y2 = data.pop('Y2')
   y2 = np.array(y2)
   return y1, y2
def norm(x):
   return (x - train stats['mean']) / train stats['std']
def plot_diff(y_true, y_pred, title=''):
   plt.scatter(y true, y pred)
   plt.title(title)
   plt.xlabel('True Values')
   plt.ylabel('Predictions')
   plt.axis('equal')
   plt.axis('square')
   plt.xlim(plt.xlim())
   plt.ylim(plt.ylim())
   plt.plot([-100, 100], [-100, 100])
   plt.show()
def plot_metrics(metric_name, title, ylim=5):
   plt.title(title)
   plt.ylim(0, ylim)
   plt.plot(history.history[metric_name], color='blue', label=metric_name)
   plt.plot(history.history['val ' + metric name], color='green', label='val ' + metric name)
   plt.show()
```

Prepare the Data

We download the dataset and format it for training.

```
In [3]:
```

```
# Get the data from UCI dataset
URL = 'https://archive.ics.uci.edu/ml/machine-learning-databases/00242/ENB2012 data.xlsx'
# Use pandas excel reader
df = pd.read excel(URL)
df = df.sample(frac=1).reset_index(drop=True)
# Split the data into train and test with 80 train / 20 test
train, test = train_test_split(df, test_size=0.2)
train stats = train.describe()
# Get Y1 and Y2 as the 2 outputs and format them as np arrays
train stats.pop('Y1')
train_stats.pop('Y2')
train stats = train stats.transpose()
train Y = format output(train)
test_Y = format_output(test)
# Normalize the training and test data
norm_train_X = norm(train)
norm_test_X = norm(test)
```

Build the Model

Here is how we'll build the model using the functional syntax. Notice that we can specify a list of outputs (i.e. [y1_output, y2 output]) when we instantiate the Model() class.

In [4]:

```
# Define model layers.
input_layer = Input(shape=(len(train .columns),))
first_dense = Dense(units='128', activation='relu')(input_layer)
second_dense = Dense(units='128', activation='relu')(first_dense)

# Y1 output will be fed directly from the second dense
y1_output = Dense(units='1', name='y1_output')(second_dense)
third_dense = Dense(units='64', activation='relu')(second_dense)

# Y2 output will come via the third dense
y2_output = Dense(units='1', name='y2_output')(third_dense)

# Define the model with the input layer and a list of output layers
model = Model(inputs=input_layer, outputs=[y1_output, y2_output])
print(model.summary())
```

Model: "model"

Layer (type)	Output Shape	Param #	Connected to
input_1 (InputLayer)	[(None, 8)]	0	
dense (Dense)	(None, 128)	1152	input_1[0][0]
dense_1 (Dense)	(None, 128)	16512	dense[0][0]
dense_2 (Dense)	(None, 64)	8256	dense_1[0][0]
y1_output (Dense)	(None, 1)	129	dense_1[0][0]
y2_output (Dense)	(None, 1)	65	dense_2[0][0]

Total params: 26,114 Trainable params: 26,114 Non-trainable params: 0

None

Configure parameters

We specify the optimizer as well as the loss and metrics for each output.

```
In [5]:
```

```
# Specify the optimizer, and compile the model with loss functions for both outputs
optimizer = tf.keras.optimizers.SGD(lr=0.001)
model.compile(optimizer=optimizer,
             loss={'y1 output': 'mse', 'y2 output': 'mse'},
              metrics={'y1_output': tf.keras.metrics.RootMeanSquaredError(),
                       'y2 output': tf.keras.metrics.RootMeanSquaredError()})
```

Train the Model

```
In [6]:
```

```
# Train the model for 500 epochs
history = model.fit(norm train X, train Y,
                epochs=500, batch size=10, validation data=(norm test X, test Y))
Train on 614 samples, validate on 154 samples
Epoch 1/500
7365 - y2 output loss: 127.1739 - y1 output root mean squared error: 10.9368 -
y2 output root mean squared error: 11.3275 - val loss: 38.4251 - val y1 output loss: 15.6682 - val
_y2_output_loss: 22.0817 - val_y1_output_root_mean_squared_error: 4.0121 -
val_y2_output_root_mean_squared_error: 4.7253
Epoch 2/500
614/614 [=========================== ] - Os 159us/sample - loss: 30.8300 - y1 output loss:
12.3234 - y2_output_loss: 18.5277 - y1_output_root_mean_squared_error: 3.5104 -
y2 output root mean squared error: 4.3020 - val loss: 26.6643 - val y1 output loss: 10.0182 - val
y2 output loss: 16.3304 - val y1 output root mean squared error: 3.1965 -
val y2 output root mean squared error: 4.0554
Epoch 3/500
10.4460 - y2 output loss: 18.7444 - y1 output root mean squared error: 3.2329
y2 output root mean squared error: 4.3170 - val loss: 51.4348 - val y1 output loss: 11.4237 - val
y2 output loss: 39.1541 - val y1 output root mean squared error: 3.4221 -
val y2 output root mean squared error: 6.3027
Epoch 4/500
9.9835 - y2 output loss: 15.8942 - y1 output root mean squared error: 3.1406 -
y2_output_root_mean_squared_error: 3.9592 - val_loss: 21.6456 - val_y1_output_loss: 9.4548 - val_y
2_output_loss: 11.8621 - val_y1_output_root_mean_squared_error: 3.1081 -
val y2 output root mean squared error: 3.4620
Epoch 5/500
9.4738 - y2_output_loss: 14.3432 - y1_output_root_mean_squared_error: 3.0531 -
y2_output_root_mean_squared_error: 3.7846 - val_loss: 22.8415 - val_y1_output_loss: 8.9227 - val_y
2 output loss: 13.6619 - val y1 output root mean squared error: 3.0155 -
val y2 output root mean squared error: 3.7079
Epoch 6/500
9.4358 - y2 output loss: 17.1326 - y1 output root mean squared error: 3.0813 -
y2 output root mean squared error: 4.1367 - val loss: 21.7274 - val y1 output loss: 7.7796 - val y
2_output_loss: 13.6118 - val_y1_output_root_mean_squared_error: 2.8221 -
val_y2_output_root_mean_squared_error: 3.7098
Epoch 7/500
8.7266 - y2_output_loss: 14.1845 - y1_output_root_mean_squared_error: 2.9524 -
y2 output root mean squared error: 3.7790 - val loss: 21.2093 - val y1 output loss: 7.6733 - val y
2_output_loss: 13.1568 - val_y1_output_root_mean_squared_error: 2.8033 -
val_y2_output_root_mean_squared_error: 3.6539
Epoch 8/500
8.5709 - y2_output_loss: 13.1844 - y1_output_root_mean_squared_error: 2.9329 -
y2 output root mean squared error: 3.6391 - val loss: 28.3478 - val y1 output loss: 9.6392 - val y
2 output loss: 18.1337 - val y1 output root mean squared error: 3.1449 -
val_y2_output_root_mean_squared_error: 4.2962
Epoch 9/500
8.3718 - y2_output_loss: 12.7884 - y1_output_root_mean_squared_error: 2.9055 - y2_output_root_mean_squared_error: 3.5871 - yal_loss: 18_2539 - yal_y1_output_loss: 7.3683 - yal_y2
```

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yz_oucput_root_mean_squared_error. J.Joir
                                 vai 1033. 10.2337
                                                 var yr ouchuc ross. 1.5000 var y
2_output_loss: 10.6529 - val_y1_output_root_mean_squared_error: 2.7408 -
val y2 output root mean squared error: 3.2774
Epoch 10/500
8.5193 - y2_output_loss: 13.9165 - y1_output_root_mean_squared_error: 2.9074 - y2_output_root_mean_squared_error: 3.7455 - val_loss: 22.5405 - val_y1_output_loss: 7.7163 - val_y
2_output_loss: 14.5731 - val_y1_output_root_mean_squared_error: 2.8052 -
val y2 output root mean squared error: 3.8303
Epoch 11/500
8.1734 - y2 output loss: 12.9898 - y1 output root mean squared error: 2.8441 -
y2 output root mean squared error: 3.6001 - val loss: 48.3846 - val y1 output loss: 12.1440 - val
y2 output loss: 35.5627 - val y1 output root mean squared error: 3.5155 -
val y2 output root mean squared error: 6.0021
Epoch 12/500
8.4527 - y2_output_loss: 13.8262 - y1_output_root_mean_squared_error: 2.9125 -
y2 output root mean squared error: 3.7191 - val loss: 17.3004 - val y1 output loss: 6.7075 - val y
2 output loss: 10.2270 - val y1 output root mean squared error: 2.6265 -
val_y2_output_root_mean_squared_error: 3.2252
Epoch 13/500
7.0578 - y2_output_loss: 10.5665 - y1_output_root_mean_squared_error: 2.6617 -
y2 output root mean squared error: 3.2565 - val loss: 15.7135 - val y1 output loss: 6.2905 - val y
2 output loss: 9.1220 - val y1 output root mean squared error: 2.5423 -
val_y2_output_root_mean_squared_error: 3.0414
Epoch 14/500
7.6700 - y2_output_loss: 11.7760 - y1_output_root_mean_squared_error: 2.7812 -
y2 output root mean squared error: 3.4409 - val loss: 25.4744 - val y1 output loss: 8.7484 - val y
2_output_loss: 16.2729 - val_y1_output_root_mean_squared_error: 2.9906 -
val_y2_output_root_mean_squared_error: 4.0658
Epoch 15/500
6.9685 - y2 output loss: 10.3848 - y1 output root mean squared error: 2.6397 -
y2 output root mean squared error: 3.2291 - val loss: 21.6125 - val y1 output loss: 8.2515 - val y
2_output_loss: 12.8514 - val_y1_output_root_mean_squared_error: 2.9141 -
val y2 output root mean squared error: 3.6222
Epoch 16/500
6.9258 - y2 output loss: 11.1492 - y1 output root mean squared error: 2.6365 -
y2 output root mean squared error: 3.3538 - val loss: 13.9619 - val y1 output loss: 5.2956 - val y
2_output_loss: 8.4605 - val_y1_output_root_mean_squared_error: 2.3250 -
val y2 output root mean squared error: 2.9251
Epoch 17/500
6.7789 - y2_output_loss: 10.8061 - y1_output_root_mean_squared_error: 2.6083 -
y2_output_root_mean_squared_error: 3.2733 - val_loss: 15.7473 - val_y1_output_loss: 6.4953 - val_y
2_output_loss: 9.1545 - val_y1_output_root_mean_squared_error: 2.5579 -
val_y2_output_root_mean_squared_error: 3.0339
Epoch 18/500
7.1080 - y2_output_loss: 11.8460 - y1_output_root_mean_squared_error: 2.6507 -
y2_output_root_mean_squared_error: 3.3957 - val_loss: 15.4356 - val_y1_output_loss: 5.9346 - val_y
2 output loss: 9.1128 - val y1 output root mean squared error: 2.4772 -
val y2 output root mean squared error: 3.0494
Epoch 19/500
6.3442 - y2 output loss: 10.3698 - y1 output root mean squared error: 2.5138 -
y2_output_root_mean_squared_error: 3.2247 - val_loss: 14.7562 - val_y1_output_loss: 6.3410 - val_y
2_output_loss: 8.1238 - val_y1_output_root_mean_squared_error: 2.5450 -
val_y2_output_root_mean_squared_error: 2.8774
Epoch 20/500
5.8779 - y2_output_loss: 10.0463 - y1_output_root_mean_squared_error: 2.4219 -
y2 output root mean squared error: 3.1675 - val loss: 16.7805 - val y1 output loss: 4.3943 - val y
2_output_loss: 12.0894 - val_y1_output_root_mean_squared_error: 2.1258 -
val y2 output root mean squared error: 3.5016
Epoch 21/500
5.7721 - y2_output_loss: 9.6873 - y1_output_root_mean_squared_error: 2.3947 -
y2 output root mean squared error: 3.1250 - val loss: 15.6976 - val y1 output loss: 5.6343 - val y
2_output_loss: 9.6667 - val_y1_output_root_mean_squared_error: 2.4081 -
val_y2_output_root_mean_squared_error: 3.1462
Epoch 22/500
5 20/11 - 1/2 output lose. 8 1137 - 1/1 output root mean equared error. 2 2007 -
```

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J.2011 - YE_Output_1088. 0.1137 - YI_Output_1000_Mean_Squared_effor. 2.2307 -
y2 output root mean squared error: 2.8578 - val loss: 11.5498 - val y1 output loss: 4.0862 - val y
2_output_loss: 7.1637 - val_y1_output_root_mean_squared_error: 2.0469 -
val_y2_output_root_mean_squared_error: 2.7129
Epoch 23/500
5.3512 - y2 output loss: 9.0993 - y1 output root mean squared error: 2.3096 -
y2 output root mean squared error: 3.0249 - val loss: 13.6912 - val y1 output loss: 4.3980 - val y
2_output_loss: 8.8683 - val_y1_output_root_mean_squared_error: 2.1330
val y2 output root mean squared error: 3.0235
Epoch 24/500
5.3295 - y2 output loss: 8.5374 - y1 output root mean squared error: 2.3125 -
y2 output root mean squared error: 2.9308 - val loss: 10.0296 - val y1 output loss: 3.6677 - val y
2 output loss: 6.0638 - val y1 output root mean squared error: 1.9462 -
val y2 output root mean squared error: 2.4984
Epoch 25/500
4.6003 - y2_output_loss: 7.8104 - y1_output_root_mean_squared_error: 2.1540 -
y2 output root mean squared_error: 2.8080 - val_loss: 16.0817 - val_y1_output_loss: 5.2501 - val_y
2 output loss: 10.5309 - val y1 output root mean squared error: 2.3133 -
val_y2_output_root_mean_squared_error: 3.2757
Epoch 26/500
4.6360 - y2_output_loss: 8.0489 - y1_output_root_mean_squared_error: 2.1536 -
y2 output root mean squared error: 2.8416 - val loss: 10.7288 - val y1 output loss: 3.8380 - val y
2_output_loss: 6.6506 - val_y1_output_root_mean_squared_error: 1.9784 -
val_y2_output_root_mean_squared_error: 2.6105
Epoch 27/500
4.4246 - y2 output loss: 7.3841 - y1_output_root_mean_squared_error: 2.0949 -
y2_output_root_mean_squared_error: 2.7093 - val_loss: 44.7215 - val_y1_output_loss: 15.9417 - val_
y2_output_loss: 30.5794 - val_y1_output_root_mean_squared_error: 3.8837 -
val y2 output root mean squared error: 5.4441
Epoch 28/500
4.6564 - y2 output loss: 7.5167 - y1 output root mean squared error: 2.1522 -
y2_output_root_mean_squared_error: 2.7378 - val_loss: 19.0104 - val_y1_output_loss: 4.6638 - val_y
2_output_loss: 13.8042 - val_y1_output_root_mean_squared_error: 2.1992 -
val y2 output root mean squared error: 3.7648
Epoch 29/500
4.0870 - y2 output loss: 7.1800 - y1 output root mean squared error: 2.0283 -
y2 output root mean squared error: 2.6789 - val loss: 18.5799 - val y1 output loss: 3.2024 - val y
2 output loss: 14.9899 - val y1 output root mean squared error: 1.8183 -
val y2 output root mean squared error: 3.9082
Epoch 30/500
614/614 [============] - Os 131us/sample - loss: 11.0693 - y1 output loss:
3.8007 - y2_output_loss: 7.2764 - y1_output_root_mean_squared_error: 1.9443 -
y2_output_root_mean_squared_error: 2.6998 - val_loss: 12.1660 - val_y1_output_loss: 4.8740 - val_y
2 output loss: 6.8966 - val y1 output root mean squared error: 2.2445 -
val_y2_output_root_mean_squared_error: 2.6699
Epoch 31/500
614/614 [=========================== ] - Os 150us/sample - loss: 11.8873 - y1 output loss:
3.9659 - y2_output_loss: 7.9361 - y1_output_root_mean_squared_error: 1.9869 -
y2_output_root_mean_squared_error: 2.8177 - val_loss: 17.9038 - val_y1_output_loss: 6.9765 - val_y
2 output loss: 10.3059 - val y1 output root mean squared error: 2.6895 -
val_y2_output_root_mean_squared_error: 3.2666
Epoch 32/500
614/614 [=============] - 0s 142us/sample - loss: 10.5780 - y1 output loss:
3.8544 - y2_output_loss: 6.8413 - y1_output_root_mean_squared_error: 1.9474 -
y2_output_root_mean_squared_error: 2.6049 - val_loss: 24.8967 - val_y1_output_loss: 8.7204 - val_y 2_output_loss: 15.9196 - val_y1_output_root_mean_squared_error: 2.9624 -
val_y2_output_root_mean_squared_error: 4.0151
Epoch 33/500
3.8793 - y2_output_loss: 8.1502 - y1_output_root_mean_squared_error: 1.9547 -
y2 output root mean squared_error: 2.8523 - val_loss: 15.6535 - val_y1_output_loss: 6.0525 - val_y
2_output_loss: 9.4076 - val_y1_output_root_mean_squared_error: 2.4658 -
val y2 output root mean squared error: 3.0941
Epoch 34/500
- y2 output loss: 6.3616 - y1 output root mean squared error: 1.8438 -
y2 output root mean squared error: 2.5256 - val loss: 17.7725 - val y1 output loss: 6.3436 - val y
2 output loss: 11.1370 - val y1 output root mean_squared_error: 2.5350 -
val y2 output root mean squared error: 3.3684
Epoch 35/500
```

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```
- y2 output loss: 5.3547 - y1 output root mean squared error: 1.7673 -
y2_output_root_mean_squared_error: 2.3098 - val_loss: 12.6290 - val_y1_output_loss: 2.5642 - val_y
2_output_loss: 9.8789 - val_y1_output_root_mean_squared_error: 1.6252 -
val y2 output root mean squared error: 3.1604
Epoch 36/500
- y2 output loss: 6.0141 - y1 output root mean squared error: 1.8177 -
y2_output_root_mean_squared_error: 2.4411 - val_loss: 15.5491 - val_y1_output_loss: 4.8246 - val_y
2 output loss: 10.3436 - val y1 output root mean squared error: 2.2191 -
val_y2_output_root_mean_squared_error: 3.2595
Epoch 37/500
- y2 output loss: 5.3588 - y1 output root mean squared error: 1.6957 -
y2 output root mean squared error: 2.3188 - val loss: 10.2195 - val y1 output loss: 2.0524 - val y
2 output loss: 7.8937 - val y1 output root mean squared error: 1.4580 -
val y2 output root mean squared error: 2.8449
Epoch 38/500
- y2_output_loss: 5.3019 - y1_output_root_mean_squared_error: 1.6126 -
y2 output root mean squared error: 2.3036 - val loss: 8.7026 - val y1 output loss: 2.0967 - val y2
_output_loss: 6.3686 - val_y1_output_root_mean_squared_error: 1.4589 -
val_y2_output_root_mean_squared_error: 2.5640
Epoch 39/500
- y2 output loss: 5.4874 - y1_output_root_mean_squared_error: 1.6263 -
y2 output root mean squared error: 2.3523 - val loss: 8.4467 - val y1 output loss: 2.8093 - val y2
output loss: 5.3628 - val y1 output root mean squared error: 1.7028 -
val y2 output root mean squared error: 2.3552
Epoch 40/500
- y2 output loss: 5.1364 - y1 output root mean squared error: 1.6207 -
y2_output_root_mean_squared_error: 2.2454 - val_loss: 28.3183 - val_y1_output_loss: 8.3055 - val_y
2_output_loss: 19.5557 - val_y1_output_root_mean_squared_error: 2.8999 -
val y2 output root mean squared error: 4.4619
Epoch 41/500
4.1697 - y2 output loss: 8.3799 - y1 output root mean squared error: 2.0456 -
y2_output_root_mean_squared_error: 2.9034 - val_loss: 6.4438 - val_y1_output_loss: 1.6943 - val_y2
output loss: 4.5572 - val y1 output root mean squared error: 1.3233 -
val y2 output root mean squared error: 2.1662
Epoch 42/500
- y2_output_loss: 6.2749 - y1_output_root_mean_squared_error: 1.6268 -
y2 output root_mean_squared_error: 2.5038 - val_loss: 19.8996 - val_y1_output_loss: 5.8477 - val_y
2 output loss: 14.4797 - val y1 output root mean squared error: 2.3666 -
val y2 output root mean squared error: 3.7814
Epoch 43/500
- y2_output_loss: 6.3065 - y1_output_root_mean_squared_error: 1.6153 -
y2_output_root_mean_squared_error: 2.5119 - val_loss: 7.2160 - val_y1_output_loss: 1.8464 - val_y2
_output_loss: 5.1786 - val_y1_output_root_mean_squared_error: 1.3643
val_y2_output_root_mean_squared_error: 2.3140
Epoch 44/500
614/614 [=============] - Os 143us/sample - loss: 7.7722 - y1 output loss: 2.5143
- y2_output_loss: 5.1883 - y1_output_root_mean_squared_error: 1.5933 -
y2_output_root_mean_squared_error: 2.2877 - val_loss: 9.1136 - val_y1_output_loss: 2.9320 - val_y2_output_loss: 6.0656 - val_y1_output_root_mean_squared_error: 1.7094 -
val_y2_output_root_mean_squared_error: 2.4883
Epoch 45/500
- y2_output_loss: 4.0581 - y1_output_root_mean_squared_error: 1.4457 -
y2 output root mean squared error: 2.0186 - val loss: 10.3577 - val y1 output loss: 3.0846 - val y
2_output_loss: 7.0510 - val_y1_output_root_mean_squared_error: 1.7674 -
val_y2_output_root_mean_squared_error: 2.6896
Epoch 46/500
- y2 output loss: 4.4790 - y1 output root mean squared error: 1.5352 -
y2 output root mean squared error: 2.1032 - val loss: 35.3190 - val y1 output loss: 7.9123 - val y
2 output loss: 27.4674 - val y1_output_root_mean_squared_error: 2.7905 -
val y2 output root mean squared error: 5.2471
Epoch 47/500
614/614 [============] - Os 142us/sample - loss: 9.3370 - y1 output loss: 2.7992
- y2 output loss: 6.5274 - y1 output root mean squared error: 1.6799 -
y2 output root mean squared error: 2.5524 - val loss: 12.1691 - val y1 output loss: 2.1414 - val y
2 output loss: 9.8239 - val y1 output root mean squared error: 1.4855 -
val_y2_output_root_mean_squared_error: 3.1563
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Epocn 48/500
4.1723 - y2 output loss: 9.6942 - y1 output root mean squared error: 2.0447 -
y2_output_root_mean_squared_error: 3.1272 - val_loss: 7.5205 - val_y1_output_loss: 2.1681 - val_y2
output loss: 5.2447 - val yl output root mean squared error: 1.4703 -
val_y2_output_root_mean_squared_error: 2.3149
Epoch 49/500
- y2 output loss: 5.0481 - y1 output root mean squared error: 1.4280 -
y2_output_root_mean_squared_error: 2.2366 - val_loss: 13.7410 - val_y1_output_loss: 4.0845 - val_y
2 output loss: 9.6986 - val y1 output root mean squared error: 1.9982 -
val_y2_output_root_mean_squared_error: 3.1222
Epoch 50/500
- y2_output_loss: 5.3043 - y1_output_root_mean_squared_error: 1.6062 -
y2 output root mean squared error: 2.2978 - val loss: 21.1231 - val y1 output loss: 3.2821 - val y
2_output_loss: 17.2538 - val_y1_output_root_mean_squared_error: 1.8443 -
val_y2_output_root_mean_squared_error: 4.2097
Epoch 51/500
- y2 output_loss: 4.2477 - y1_output_root_mean_squared_error: 1.3540 -
y2 output root mean squared error: 2.0583 - val loss: 12.2838 - val y1 output loss: 3.1818 - val y
2_output_loss: 9.5539 - val_y1_output_root_mean_squared_error: 1.7156 -
val_y2_output_root_mean_squared_error: 3.0562
Epoch 52/500
- y2 output loss: 5.8009 - y1 output root mean squared error: 1.5145 -
y2 output root mean squared error: 2.4053 - val loss: 6.4703 - val y1 output loss: 1.6567 - val y2
_output_loss: 4.6047 - val_y1_output_root_mean_squared_error: 1.3087 -
val_y2_output_root_mean_squared_error: 2.1812
Epoch 53/500
- y2 output loss: 4.7646 - y1 output root mean squared error: 1.4180 -
y2_output_root_mean_squared_error: 2.1887 - val_loss: 11.0888 - val_y1_output_loss: 3.0685 - val_y
2_output_loss: 7.7444 - val_y1_output_root_mean_squared_error: 1.7682 -
val_y2_output_root_mean_squared_error: 2.8218
Epoch 54/500
- y2_output_loss: 5.1869 - y1_output_root_mean_squared_error: 1.4610 -
y2_output_root_mean_squared_error: 2.2720 - val_loss: 5.4187 - val_y1_output_loss: 1.2729 - val_y2
output loss: 3.9735 - val y1 output root mean squared error: 1.1442
val y2 output root mean squared error: 2.0272
Epoch 55/500
- y2_output_loss: 5.8240 - y1_output_root_mean_squared_error: 1.5753 -
y2_output_root_mean_squared_error: 2.3994 - val_loss: 15.0652 - val_y1_output_loss: 5.2106 - val y
2 output loss: 9.4539 - val y1 output root mean squared error: 2.3098 -
val y2 output root mean squared error: 3.1193
Epoch 56/500
- y2_output_loss: 4.6940 - y1_output_root_mean_squared_error: 1.4173 -
y2 output_root_mean_squared_error: 2.1639 - val_loss: 9.7094 - val_y1_output_loss: 2.9499 - val_y2
output loss: 6.5622 - val y1 output root mean squared error: 1.7262 -
val_y2_output_root_mean_squared_error: 2.5942
Epoch 57/500
- y2_output_loss: 3.6289 - y1_output_root_mean_squared_error: 1.2175 -
y2 output root mean squared error: 1.9114 - val loss: 7.8926 - val y1 output loss: 2.4073 - val y2
_output_loss: 5.3667 - val_y1_output_root_mean_squared_error: 1.5507 -
val y2 output root mean squared error: 2.3427
Epoch 58/500
- y2 output loss: 4.2586 - y1 output root mean squared error: 1.3973 -
y2_output_root_mean_squared_error: 2.0616 - val_loss: 15.0947 - val_y1_output_loss: 3.3684 - val_y
2_output_loss: 11.7047 - val_y1_output_root_mean_squared_error: 1.8205 -
val y2 output root mean squared error: 3.4323
Epoch 59/500
- y2_output_loss: 4.2474 - y1_output_root_mean_squared_error: 1.3003 -
y2_output_root_mean_squared_error: 2.0521 - val_loss: 6.6377 - val_y1_output_loss: 2.5633 - val_y2
output loss: 3.9621 - val y1 output root mean squared error: 1.5953 -
val_y2_output_root_mean_squared_error: 2.0230
Epoch 60/500
- y2 output loss: 4.3515 - y1 output root mean squared error: 1.3823 -
y2 output root mean squared error: 2.0951 - val loss: 5.2152 - val y1 output loss: 1.2125 - val y2
_output_loss: 3.8259 - val_y1_output_root_mean_squared_error: 1.1177 -
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val y2 output root mean squared error: 1.9915
Epoch 61/500
- y2 output loss: 3.7736 - y1_output_root_mean_squared_error: 1.2842 -
y2 output root mean squared error: 1.9451 - val loss: 8.5726 - val y1 output loss: 1.5953 - val y2
output loss: 6.9171 - val y1 output root mean squared error: 1.2518 -
val y2 output root mean squared error: 2.6468
Epoch 62/500
- y2_output_loss: 5.9060 - y1_output_root_mean_squared_error: 1.4575 -
y2 output root mean squared error: 2.4150 - val loss: 19.6321 - val y1 output loss: 5.1111 - val y
2 output loss: 14.0103 - val y1 output root mean squared error: 2.2940 -
val_y2_output_root_mean_squared_error: 3.7907
Epoch 63/500
- y2 output loss: 4.3119 - y1 output root mean squared error: 1.3620 -
y2 output root mean squared error: 2.0782 - val loss: 6.2109 - val y1 output loss: 1.2026 - val y2
output loss: 4.8028 - val y1 output root mean squared error: 1.1081 -
val y2 output root mean squared error: 2.2323
Epoch 64/500
- y2 output loss: 4.9097 - y1 output root mean squared error: 1.3898 -
y2_output_root_mean_squared_error: 2.2262 - val_loss: 4.8761 - val_y1_output_loss: 1.0565 - val_y2
_output_loss: 3.6576 - val_y1_output_root_mean_squared_error: 1.0421 -
val y2 output root mean squared error: 1.9468
Epoch 65/500
- y2 output loss: 3.5622 - y1 output root mean squared error: 1.1985 -
y2 output root mean squared error: 1.8879 - val loss: 7.1968 - val y1 output loss: 2.1774 - val y2
_output_loss: 5.0500 - val_y1_output_root_mean_squared error: 1.4528
val y2 output root mean squared error: 2.2553
Epoch 66/500
- y2 output loss: 4.3313 - y1 output root mean squared error: 1.2907 -
y2_output_root_mean_squared_error: 2.0836 - val_loss: 9.0282 - val_y1_output_loss: 1.7729 - val_y2
_output_loss: 7.0961 - val_y1_output_root_mean_squared_error: 1.3452 -
val_y2_output_root_mean_squared_error: 2.6868
Epoch 67/500
- y2_output_loss: 6.9011 - y1_output_root_mean_squared_error: 1.6171 -
y2_output_root_mean_squared_error: 2.6184 - val_loss: 4.9777 - val_y1_output_loss: 1.0598 - val_y2
output loss: 3.7630 - val y1 output root mean squared error: 1.0439
val_y2_output_root_mean_squared_error: 1.9718
Epoch 68/500
- y2 output_loss: 4.6331 - y1_output_root_mean_squared_error: 1.3102 -
y2_output_root_mean_squared_error: 2.1606 - val_loss: 4.7261 - val_y1_output_loss: 1.1438 - val_y2
output loss: 3.5089 - val y1 output root mean squared error: 1.0625 -
val_y2_output_root_mean_squared_error: 1.8966
Epoch 69/500
- y2_output_loss: 3.1960 - y1_output_root_mean_squared_error: 1.0678 -
y2_output_root_mean_squared_error: 1.7820 - val_loss: 6.4361 - val_y1_output_loss: 1.4662 - val_y2
_output_loss: 5.0543 - val_y1_output_root_mean_squared_error: 1.1714 -
val_y2_output_root_mean_squared_error: 2.2503
Epoch 70/500
614/614 [============] - Os 149us/sample - loss: 4.4711 - y1_output_loss: 1.1032
- y2_output_loss: 3.3454 - y1_output_root_mean_squared_error: 1.0511 -
y2 output root mean squared error: 1.8348 - val loss: 4.4348 - val y1 output loss: 0.8953 - val y2
output loss: 3.3947 - val y1 output root mean squared error: 0.9573 -
val y2 output root mean squared error: 1.8757
Epoch 71/500
- y2 output loss: 3.7967 - y1_output_root_mean_squared_error: 1.0536 -
y2_output_root_mean_squared_error: 1.8962 - val_loss: 51.2574 - val_y1_output_loss: 17.1235 - val_
y2 output loss: 37.5944 - val y1 output root mean squared error: 3.9265 -
val_y2_output_root_mean_squared_error: 5.9866
Epoch 72/500
4.3584 - y2_output_loss: 8.8393 - y1_output_root_mean_squared_error: 2.0976 -
y2 output root mean squared error: 2.9868 - val loss: 4.2730 - val y1 output loss: 0.7898 - val y2
output loss: 3.4680 - val y1 output root mean squared error: 0.8693 -
val y2 output root mean squared error: 1.8754
Epoch 73/500
- y2_output_loss: 4.6688 - y1_output_root_mean_squared_error: 1.2929 -
y2 output root mean squared error: 2.1704 - val loss: 4.2671 - val y1 output loss: 0.7208 - val y2
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output loss: 3.3997 - val yl output root mean squared error: 0.8604 -
val y2 output root mean squared error: 1.8780
Epoch 74/500
- y2 output_loss: 2.6157 - y1_output_root_mean_squared_error: 0.9536 -
y2 output root mean squared error: 1.6245 - val loss: 3.5152 - val y1 output loss: 0.5400 - val y2
_output_loss: 2.8807 - val_y1_output_root_mean_squared_error: 0.7364 -
val_y2_output_root_mean_squared_error: 1.7242
Epoch 75/500
- y2_output_loss: 3.4025 - y1_output_root_mean_squared_error: 1.1281 -
y2 output root mean squared error: 1.8402 - val loss: 7.5956 - val y1 output loss: 1.0778 - val y2
output loss: 6.2809 - val y1 output root mean squared error: 1.0530 -
val y2 output root mean squared error: 2.5469
Epoch 76/500
- y2 output loss: 2.9982 - y1 output root mean squared error: 0.8691 -
y2 output root mean squared error: 1.7121 - val loss: 7.0928 - val y1 output loss: 0.9925 - val y2
output loss: 6.1414 - val y1 output root mean squared error: 0.9757 -
val y2 output root mean squared error: 2.4781
Epoch 77/500
- y2 output loss: 2.7488 - y1 output root mean squared error: 0.9631 -
y2_output_root_mean_squared_error: 1.6539 - val_loss: 3.8999 - val_y1_output_loss: 0.6492 - val_y2
_output_loss: 3.1510 - val_y1_output_root_mean_squared_error: 0.8128 -
val y2 output root mean squared error: 1.7998
Epoch 78/500
- y2 output loss: 2.8853 - y1 output root mean squared error: 0.9322 -
y2_output_root_mean_squared_error: 1.7021 - val_loss: 3.9739 - val_y1_output_loss: 0.6451 - val_y2
output loss: 3.2475 - val_y1_output_root_mean_squared_error: 0.7839
val y2 output root mean squared error: 1.8329
Epoch 79/500
614/614 [=============] - 0s 142us/sample - loss: 3.1202 - y1 output loss: 0.7565
- y2_output_loss: 2.3980 - y1_output_root_mean_squared_error: 0.8631 -
y2_output_root_mean_squared_error: 1.5412 - val_loss: 13.2937 - val_y1_output_loss: 2.4888 - val_y
2 output loss: 10.6184 - val y1 output root mean squared error: 1.5824 -
val_y2_output_root_mean_squared_error: 3.2848
Epoch 80/500
- y2_output_loss: 4.2418 - y1_output_root_mean_squared_error: 1.2816 -
y2_output_root_mean_squared_error: 2.0595 - val_loss: 6.4409 - val_y1_output_loss: 0.9333 - val_y2
output loss: 5.3488 - val_y1_output_root_mean_squared_error: 0.9722
val_y2_output_root_mean_squared_error: 2.3443
Epoch 81/500
- y2_output_loss: 2.9358 - y1_output_root_mean_squared_error: 0.8910 -
y2 output root mean squared error: 1.7156 - val loss: 5.7725 - val y1 output loss: 0.8386 - val y2
output_loss: 4.7537 - val_y1_output_root_mean_squared_error: 0.9218 -
val_y2_output_root_mean_squared_error: 2.2188
Epoch 82/500
- y2 output loss: 4.2088 - y1 output root mean squared error: 1.1613
y2 output root mean squared error: 2.0572 - val loss: 4.6205 - val y1 output loss: 1.1207 - val y2
_output_loss: 3.4428 - val_y1_output_root_mean_squared_error: 1.0485 -
val_y2_output_root_mean_squared_error: 1.8765
Epoch 83/500
- y2 output loss: 2.4910 - y1 output root mean squared error: 0.8755 -
y2 output root mean squared error: 1.5815 - val loss: 5.9240 - val y1 output loss: 0.9975 - val y2
output loss: 4.9169 - val yl output root mean squared error: 0.9778 -
val y2 output root mean squared error: 2.2289
Epoch 84/500
- y2 output loss: 2.6251 - y1 output root mean squared error: 0.8522 -
y2_output_root_mean_squared_error: 1.6233 - val_loss: 4.6134 - val_y1_output_loss: 1.0092 - val_y2
output loss: 3.5352 - val y1 output root mean squared error: 1.0072 -
val_y2_output_root_mean_squared_error: 1.8971
Epoch 85/500
- y2_output_loss: 3.2958 - y1_output_root_mean_squared_error: 0.9955 -
y2 output root mean squared error: 1.8070 - val loss: 14.9427 - val y1 output loss: 1.2414 - val y
2_output_loss: 13.2718 - val_y1_output_root_mean_squared_error: 1.1338 -
val_y2_output_root_mean_squared_error: 3.6956
Epoch 86/500
614/614 [============= ] - Os 145us/sample - loss: 3.7359 - y1 output loss: 0.8078
- y2_output_loss: 2.9561 - y1_output_root_mean_squared_error: 0.8974 -
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y2 output root mean squared error: 1.7119 - val loss: 7.9589 - val y1 output loss: 1.9214 - val y2
output loss: 5.9644 - val y1 output root mean squared error: 1.3833 -
val y2 output root mean squared error: 2.4587
Epoch 87/500
- y2 output loss: 2.4178 - y1 output root mean squared error: 0.7401 -
y2 output root mean squared error: 1.5612 - val loss: 3.0120 - val y1 output loss: 0.5597 - val y2
_output_loss: 2.3473 - val_y1_output_root_mean_squared_error: 0.7590 -
val_y2_output_root_mean_squared_error: 1.5607
Epoch 88/500
- y2 output loss: 3.3222 - y1 output root mean squared error: 1.0534 -
y2 output root mean squared error: 1.8276 - val loss: 3.1734 - val y1 output loss: 0.6374 - val y2
_output_loss: 2.4480 - val_y1_output_root_mean_squared_error: 0.8030 -
val_y2_output_root_mean_squared error: 1.5902
Epoch 89/500
- y2 output loss: 2.3267 - y1 output root mean squared error: 0.8744 -
y2_output_root_mean_squared_error: 1.5120 - val_loss: 8.9211 - val_y1_output_loss: 1.6919 - val_y2
_output_loss: 6.9204 - val_y1_output_root_mean_squared_error: 1.3202 -
val y2 output root mean squared error: 2.6792
Epoch 90/500
- y2_output_loss: 2.4413 - y1_output_root_mean_squared_error: 0.8155 -
y2_output_root_mean_squared_error: 1.5677 - val_loss: 2.8556 - val_y1_output_loss: 0.5278 - val_y2
_output_loss: 2.3190 - val_y1_output_root_mean_squared_error: 0.6970 -
val_y2_output_root_mean_squared_error: 1.5394
Epoch 91/500
- y2_output_loss: 4.3702 - y1_output_root_mean_squared_error: 1.1950 -
y2_output_root_mean_squared_error: 2.0873 - val_loss: 8.7896 - val_y1_output_loss: 3.5111 - val_y2
output loss: 5.6944 - val y1 output root mean squared error: 1.8061
val y2 output root mean squared error: 2.3511
Epoch 92/500
- y2_output_loss: 2.7944 - y1_output_root_mean_squared_error: 0.9411 -
y2_output_root_mean_squared_error: 1.6763 - val_loss: 3.9345 - val_y1_output_loss: 0.8074 - val_y2
_output_loss: 3.0006 - val_y1_output_root_mean_squared_error: 0.9122 -
val_y2_output_root_mean_squared_error: 1.7614
Epoch 93/500
- y2 output_loss: 2.1042 - y1_output_root_mean_squared_error: 0.7450 -
y2 output root mean squared error: 1.4544 - val loss: 3.1524 - val y1 output loss: 0.6718 - val y2
output loss: 2.5375 - val y1 output root mean squared error: 0.7762
val_y2_output_root_mean_squared_error: 1.5968
Epoch 94/500
614/614 [============] - Os 140us/sample - loss: 4.2182 - y1_output_loss: 0.9397
- y2 output loss: 3.2534 - y1 output root mean squared error: 0.9734 -
y2 output root mean squared error: 1.8085 - val_loss: 2.6358 - val_y1_output_loss: 0.4887 - val_y2
output loss: 2.1032 - val y1 output root mean squared error: 0.6800 -
val y2 output root mean squared error: 1.4743
Epoch 95/500
- y2 output loss: 1.8945 - y1 output root mean squared error: 0.7505 -
y2_output_root_mean_squared_error: 1.3816 - val_loss: 2.5046 - val_y1_output_loss: 0.3316 - val_y2
_output_loss: 2.1061 - val_y1_output_root_mean_squared_error: 0.5736 -
val y2 output root mean squared error: 1.4750
Epoch 96/500
- y2 output loss: 1.9372 - y1 output root mean squared error: 0.7055 -
y2 output root mean squared error: 1.3954 - val loss: 3.2921 - val y1 output loss: 0.5398 - val y2
output loss: 2.7011 - val y1 output root mean squared error: 0.7043 -
val y2 output root mean squared error: 1.6721
Epoch 97/500
614/614 [=============] - Os 140us/sample - loss: 3.7022 - y1_output_loss: 0.8700
- y2_output_loss: 2.8285 - y1_output_root_mean_squared_error: 0.9354 -
y2_output_root_mean_squared_error: 1.6814 - val_loss: 4.6312 - val_y1_output_loss: 0.6405 - val_y2
_output_loss: 3.8446 - val_y1_output_root_mean_squared_error: 0.8031 -
val_y2_output_root_mean_squared_error: 1.9966
Epoch 98/500
- y2_output_loss: 4.1431 - y1_output_root_mean_squared_error: 1.1518 -
y2 output root mean squared error: 2.0335 - val loss: 3.8600 - val y1 output loss: 0.6248 - val y2
_output_loss: 3.1069 - val_y1_output_root_mean_squared_error: 0.8028 -
val y2 output root mean squared error: 1.7932
Epoch 99/500
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- y2_output_loss: 2.0122 - y1_output_root_mean_squared_error: 0.7219 -
y2 output root mean squared error: 1.4207 - val loss: 2.3829 - val y1 output loss: 0.3188 - val y2
output loss: 2.0011 - val y1 output root mean squared error: 0.5611 -
val_y2_output_root_mean_squared_error: 1.4381
Epoch 100/500
- y2 output loss: 2.9302 - y1 output root mean squared error: 0.8879 -
y2 output root mean squared error: 1.7026 - val loss: 8.7580 - val y1 output loss: 1.4193 - val y2
_output_loss: 7.2199 - val_y1_output_root_mean_squared_error: 1.1999 -
val_y2_output_root_mean_squared_error: 2.7053
Epoch 101/500
- y2 output loss: 2.8343 - y1_output_root_mean_squared_error: 0.9128 -
y2_output_root_mean_squared_error: 1.6913 - val_loss: 3.0739 - val_y1_output_loss: 0.5060 - val_y2
_output_loss: 2.5264 - val_y1_output_root_mean_squared_error: 0.6961 -
val y2 output root mean squared error: 1.6091
Epoch 102/500
614/614 [=============] - 0s 151us/sample - loss: 3.2212 - y1 output loss: 0.8083
- y2 output loss: 2.4222 - y1 output root mean squared error: 0.8954 -
y2 output root mean squared error: 1.5555 - val loss: 4.0198 - val y1 output loss: 0.5225 - val y2
output loss: 3.4599 - val y1 output root mean squared error: 0.7221
val_y2_output_root_mean_squared_error: 1.8704
Epoch 103/500
- y2_output_loss: 2.1635 - y1_output_root_mean_squared_error: 0.7198 -
\label{eq:continuous_squared_error} y2\_output\_root\_mean\_squared\_error: 1.4555 - val\_loss: 5.7207 - val\_y1\_output\_loss: 0.6712 - val\_y2\_output\_root\_mean\_squared\_error: 1.4555 - val\_loss: 5.7207 - val\_y1\_output\_loss: 0.6712 - val\_y2\_output\_root\_mean\_squared\_error: 1.4555 - val\_loss: 5.7207 - val\_y1\_output\_loss: 0.6712 - val\_y2\_output\_root\_mean\_squared\_error: 1.4555 - val\_loss: 5.7207 - val\_y1\_output\_loss: 0.6712 - val\_y2\_output\_root\_mean\_squared\_error: 1.4555 - val\_loss: 5.7207 - val\_y1\_output\_loss: 0.6712 - val\_y2\_output\_root\_mean\_squared\_error: 1.4555 - val\_loss: 5.7207 - val\_y1\_output\_loss: 0.6712 - val\_y2\_output\_root\_mean\_squared\_error: 1.4555 - val\_loss: 5.7207 - val\_y1\_output\_loss: 0.6712 - val\_y2\_output\_root\_mean\_squared\_error: 1.4555 - val\_loss: 0.6712 - val\_y2\_output\_root\_mean\_squared\_error: 1.4555 - val\_loss: 0.6712 - val\_loss:
_output_loss: 4.8755 - val_y1_output_root_mean_squared error: 0.8254 -
val y2 output root mean squared error: 2.2449
Epoch 104/500
- y2_output_loss: 2.7817 - y1_output_root_mean_squared_error: 0.8878 -
y2_output_root_mean_squared_error: 1.6749 - val_loss: 2.7005 - val_y1_output_loss: 0.4752 - val_y2
 output loss: 2.1408 - val y1 output root mean squared error: 0.6980 -
val_y2_output_root_mean_squared_error: 1.4877
Epoch 105/500
- y2_output_loss: 2.5330 - y1_output_root_mean_squared_error: 0.8525 -
y2 output root mean squared error: 1.5967 - val loss: 2.8435 - val y1 output loss: 0.3794 - val y2
_output_loss: 2.3780 - val_y1_output_root_mean_squared_error: 0.6179 -
val y2 output root mean squared error: 1.5690
Epoch 106/500
- y2_output_loss: 2.3718 - y1_output_root_mean_squared_error: 0.9028 -
y2_output_root_mean_squared_error: 1.5438 - val_loss: 2.7166 - val_y1_output_loss: 0.5101 - val_y2
 _output_loss: 2.1155 - val_y1_output_root_mean_squared_error: 0.7251 -
val y2 output root mean squared error: 1.4801
Epoch 107/500
- y2 output loss: 2.0701 - y1 output root mean squared error: 0.7535 -
y2 output root mean squared error: 1.4378 - val loss: 5.4895 - val y1 output loss: 2.1414 - val y2
output loss: 3.5705 - val y1 output root mean squared error: 1.4136 -
val_y2_output_root_mean_squared_error: 1.8685
Epoch 108/500
- y2_output_loss: 1.7305 - y1_output_root_mean_squared_error: 0.7068 -
y2_output_root_mean_squared_error: 1.3183 - val_loss: 2.9546 - val_y1_output_loss: 0.4363 - val_y2
output loss: 2.4334 - val y1 output root mean squared error: 0.6668 -
val_y2_output_root_mean_squared_error: 1.5843
Epoch 109/500
- y2 output loss: 2.9307 - y1 output root mean squared error: 1.0114 -
y2 output root mean squared error: 1.7065 - val loss: 8.5723 - val y1 output loss: 1.7158 - val y2
output loss: 6.7593 - val y1 output root mean squared error: 1.3108 -
val y2 output root mean squared error: 2.6180
Epoch 110/500
- y2_output_loss: 2.6722 - y1_output_root_mean_squared_error: 0.9311 -
y2 output root mean squared error: 1.6407 - val loss: 3.0078 - val y1 output loss: 0.5730 - val y2
_output_loss: 2.4976 - val_y1_output_root_mean_squared_error: 0.7202 -
val_y2_output_root_mean_squared_error: 1.5777
Epoch 111/500
- y2 output loss: 2.5942 - y1 output root mean squared error: 0.9827 -
y2 output root mean squared error: 1.6048 - val loss: 5.4494 - val y1 output loss: 1.9177 - val y2
_output_loss: 3.6600 - val_y1_output_root_mean_squared_error: 1.3500 -
val y2 output root mean squared error: 1.9045
Epoch 112/500
```

```
- y2 output loss: 1.9274 - y1 output root mean squared error: 0.7510 -
y2 output root mean squared error: 1.3794 - val loss: 3.1828 - val y1 output loss: 0.6759 - val y2
output loss: 2.5613 - val y1 output root mean squared error: 0.7884 -
val y2 output root mean squared error: 1.6004
Epoch 113/500
- y2 output loss: 1.7179 - y1 output root mean squared error: 0.7012 -
y2_output_root_mean_squared_error: 1.3161 - val_loss: 2.6010 - val_y1_output_loss: 0.5997 - val_y2
_output_loss: 1.9751 - val_y1_output_root_mean_squared_error: 0.7563 -
val y2 output root mean squared error: 1.4244
Epoch 114/500
- y2 output loss: 1.8879 - y1 output root mean squared error: 0.6416 -
y2_output_root_mean_squared_error: 1.3786 - val_loss: 2.6852 - val_y1_output_loss: 0.4416 - val_y2
_output_loss: 2.1607 - val_y1_output_root_mean_squared_error: 0.6727 -
val y2 output root mean squared error: 1.4942
Epoch 115/500
- y2 output loss: 2.0890 - y1 output root mean squared error: 0.7446 -
y2_output_root_mean_squared_error: 1.4434 - val_loss: 4.4936 - val_y1_output_loss: 0.3098 - val_y2
output loss: 4.0626 - val y1 output root mean squared error: 0.5580 -
val_y2_output_root_mean_squared_error: 2.0450
Epoch 116/500
- y2_output_loss: 2.8324 - y1_output_root_mean_squared_error: 0.9990 -
y2_output_root_mean_squared_error: 1.6907 - val_loss: 2.2690 - val_y1_output_loss: 0.3387 - val_y2
_output_loss: 1.8785 - val_y1_output_root_mean_squared_error: 0.5767 -
val_y2_output_root_mean_squared_error: 1.3915
Epoch 117/500
- y2_output_loss: 1.7778 - y1_output_root_mean_squared_error: 0.6291 -
y2_output_root_mean_squared_error: 1.3250 - val_loss: 3.0378 - val_y1_output_loss: 0.6244 - val_y2
_output_loss: 2.3510 - val_y1_output_root_mean_squared_error: 0.8008
val y2 output root mean squared error: 1.5481
Epoch 118/500
- y2_output_loss: 2.0060 - y1_output_root_mean_squared_error: 0.7327 -
y2_output_root_mean_squared_error: 1.4150 - val_loss: 5.4593 - val_y1_output_loss: 0.9628 - val_y2
_output_loss: 4.3231 - val_y1_output_root_mean_squared_error: 0.9902 -
val_y2_output_root_mean_squared_error: 2.1163
Epoch 119/500
- y2 output loss: 2.1268 - y1 output root mean squared error: 0.8037
y2 output root mean squared error: 1.4537 - val loss: 2.7944 - val y1 output loss: 0.5713 - val y2
output loss: 2.1904 - val y1 output root mean squared error: 0.7409 -
val y2 output root mean squared error: 1.4985
Epoch 120/500
- y2_output_loss: 1.7473 - y1_output_root_mean_squared_error: 0.7582 -
y2 output root mean squared error: 1.3233 - val loss: 3.6345 - val y1 output loss: 1.1879 - val y2
output loss: 2.3757 - val y1 output root mean squared error: 1.0941 -
val_y2_output_root_mean_squared_error: 1.5612
Epoch 121/500
- y2_output_loss: 2.5091 - y1_output_root_mean_squared_error: 0.8987 -
y2_output_root_mean_squared_error: 1.5890 - val_loss: 7.2851 - val_y1_output loss: 3.2555 - val_y2
output loss: 4.4470 - val y1 output root mean squared error: 1.7291 -
val_y2_output_root_mean_squared_error: 2.0725
Epoch 122/500
- y2_output_loss: 2.4680 - y1_output_root_mean_squared_error: 0.8615 -
y2 output root mean squared error: 1.5753 - val loss: 3.5763 - val y1 output loss: 0.3773 - val y2
output loss: 3.0888 - val y1 output root mean squared error: 0.6157 -
val y2 output root mean squared error: 1.7881
Epoch 123/500
- y2 output loss: 2.1395 - y1 output root mean squared error: 0.7083 -
y2_output_root_mean_squared_error: 1.4529 - val_loss: 2.1461 - val_y1_output_loss: 0.3065 - val_y2
_output_loss: 1.7691 - val_y1_output_root_mean_squared_error: 0.5580 -
val_y2_output_root_mean_squared_error: 1.3545
Epoch 124/500
- y2 output loss: 4.5623 - y1 output root mean squared error: 1.1930 -
y2_output_root_mean_squared_error: 2.1431 - val_loss: 5.4427 - val_y1_output_loss: 1.4187 - val_y2
_output_loss: 4.1799 - val_y1_output_root_mean_squared_error: 1.1397 -
```

val y2 output root mean squared error: 2.0356

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Epoch 125/500
- y2 output loss: 2.2538 - y1 output root mean squared error: 0.7020 -
y2 output root mean squared error: 1.5078 - val loss: 2.1811 - val y1 output loss: 0.3632 - val y2
_output_loss: 1.7586 - val_y1_output_root_mean_squared_error: 0.6033 -
val y2 output root mean squared error: 1.3480
Epoch 126/500
- y2 output loss: 1.7725 - y1 output root mean squared error: 0.7156 -
y2_output_root_mean_squared_error: 1.3344 - val_loss: 2.4454 - val_y1_output_loss: 0.5204 - val_y2
_output_loss: 1.8630 - val_y1_output_root_mean_squared_error: 0.7253 -
val y2 output root mean squared error: 1.3854
Epoch 127/500
- y2 output_loss: 1.5023 - y1_output_root_mean_squared_error: 0.6183 -
y2_output_root_mean_squared_error: 1.2223 - val_loss: 6.5358 - val_y1_output_loss: 0.8478 - val_y2
_output_loss: 5.6019 - val_y1_output_root_mean_squared error: 0.9252 -
val y2 output root mean squared error: 2.3832
Epoch 128/500
- y2 output_loss: 1.9527 - y1_output_root_mean_squared_error: 0.7556 -
y2_output_root_mean_squared_error: 1.3910 - val_loss: 4.1921 - val_y1_output_loss: 0.8918 - val_y2
_output_loss: 3.3412 - val_y1_output_root_mean_squared_error: 0.9351 -
val_y2_output_root_mean_squared_error: 1.8214
Epoch 129/500
- y2_output_loss: 1.6694 - y1_output_root_mean_squared_error: 0.6987 -
y2 output root mean squared error: 1.2964 - val loss: 2.2678 - val y1 output loss: 0.5049 - val y2
output loss: 1.7194 - val y1 output root mean squared error: 0.7094 -
val y2 output root mean squared error: 1.3284
Epoch 130/500
- y2 output_loss: 1.4849 - y1_output_root_mean_squared_error: 0.7090 -
y2 output root mean squared error: 1.2183 - val loss: 2.1497 - val y1 output loss: 0.4077 - val y2
output loss: 1.6741 - val y1 output root mean squared error: 0.6452 -
val y2 output root mean squared error: 1.3166
Epoch 131/500
- y2 output loss: 1.8036 - y1 output root mean squared error: 0.6605 -
y2 output root mean squared error: 1.3322 - val loss: 5.1175 - val y1 output loss: 1.0429 - val y2
_output_loss: 3.9775 - val_y1_output_root_mean_squared_error: 1.0149 -
val y2 output root mean squared error: 2.0218
Epoch 132/500
- y2 output loss: 1.7586 - y1 output root mean squared error: 0.7047 -
y2_output_root_mean_squared_error: 1.3313 - val_loss: 2.1395 - val_y1_output_loss: 0.4969 - val_y2
output loss: 1.5856 - val_y1_output_root_mean_squared_error: 0.7022 -
val_y2_output_root_mean_squared_error: 1.2831
Epoch 133/500
- y2 output loss: 2.1572 - y1 output root mean squared error: 0.8355 -
y2 output root mean squared error: 1.4665 - val loss: 2.6560 - val y1 output loss: 0.2876 - val y2
_output_loss: 2.2940 - val_y1_output_root_mean_squared_error: 0.5432 -
val_y2_output_root_mean_squared_error: 1.5365
Epoch 134/500
- y2_output_loss: 2.6170 - y1_output_root_mean_squared_error: 0.9006 -
y2 output root mean squared error: 1.6187 - val loss: 16.2580 - val y1 output loss: 3.5575 - val y
2_output_loss: 12.2888 - val_y1_output_root_mean_squared_error: 1.8913 -
val_y2_output_root_mean_squared_error: 3.5610
Epoch 135/500
- y2_output_loss: 2.4731 - y1_output_root_mean_squared_error: 0.8969 -
y2 output root mean squared error: 1.5791 - val loss: 2.3616 - val y1 output loss: 0.3565 - val y2
output loss: 1.9508 - val y1 output root mean squared error: 0.5857 -
val y2 output root mean squared error: 1.4208
Epoch 136/500
- y2 output loss: 1.6711 - y1 output root mean squared error: 0.5730 -
y2_output_root_mean_squared_error: 1.2698 - val_loss: 6.0726 - val_y1_output_loss: 2.3998 - val_y2
_output_loss: 4.1124 - val_y1_output_root_mean_squared_error: 1.4482 -
val y2 output root mean squared error: 1.9938
Epoch 137/500
- y2 output loss: 1.6551 - y1 output root mean squared error: 0.7188 -
y2_output_root_mean_squared_error: 1.2913 - val_loss: 1.8764 - val_y1_output_loss: 0.3645 - val_y2
_output_loss: 1.4914 - val_y1_output_root_mean_squared_error: 0.5871 -
```

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val y2 output root mean squared error: 1.2376
Epoch 138/500
- y2 output loss: 1.7955 - y1 output root mean squared error: 0.7144 -
y2 output root mean squared error: 1.3307 - val loss: 10.3765 - val y1 output loss: 0.9832 - val y
2_output_loss: 9.1513 - val_y1_output_root_mean_squared_error: 1.0085 -
val y2 output root mean squared error: 3.0593
Epoch 139/500
- y2_output_loss: 1.5055 - y1_output_root_mean_squared_error: 0.5923 -
y2_output_root_mean_squared_error: 1.2309 - val_loss: 2.5782 - val_y1_output_loss: 0.4349 - val_y2
output loss: 2.0772 - val y1 output root mean squared error: 0.6510
val_y2_output_root_mean_squared_error: 1.4678
Epoch 140/500
- y2_output_loss: 1.5027 - y1_output_root_mean_squared_error: 0.6176 -
y2_output_root_mean_squared_error: 1.2280 - val_loss: 2.7971 - val_y1_output_loss: 0.9091 - val_y2
output loss: 2.0697 - val y1 output root mean squared error: 0.8866 -
val y2 output root mean squared error: 1.4181
Epoch 141/500
- y2 output_loss: 1.6247 - y1_output_root_mean_squared_error: 0.6409 -
y2 output root mean squared error: 1.2719 - val loss: 3.6008 - val y1 output loss: 0.3927 - val y2
_output_loss: 3.0987 - val_y1_output_root_mean_squared_error: 0.6373 -
val_y2_output_root_mean_squared_error: 1.7874
Epoch 142/500
- y2_output_loss: 1.6199 - y1_output_root_mean_squared_error: 0.7081 -
y2 output root mean squared error: 1.2771 - val loss: 1.9943 - val y1 output loss: 0.3851 - val y2
_output_loss: 1.5411 - val_y1_output_root_mean_squared_error: 0.6301 -
val y2 output root mean squared error: 1.2638
Epoch 143/500
- y2 output loss: 1.3917 - y1 output root mean squared error: 0.5866
y2 output root mean squared error: 1.1808 - val loss: 2.0734 - val y1 output loss: 0.4005 - val y2
output loss: 1.6604 - val y1 output root mean squared error: 0.6161 -
val_y2_output_root_mean_squared_error: 1.3015
Epoch 144/500
- y2 output_loss: 1.5411 - y1_output_root_mean_squared_error: 0.6374 -
y2_output_root_mean_squared_error: 1.2447 - val_loss: 3.2051 - val_y1_output_loss: 0.9329 - val_y2
output loss: 2.3495 - val y1 output root mean squared error: 0.9375 -
val_y2_output_root_mean_squared_error: 1.5252
Epoch 145/500
- y2_output_loss: 1.2920 - y1_output_root_mean_squared_error: 0.5562 -
y2 output root mean squared error: 1.1228 - val loss: 6.5545 - val y1 output loss: 1.3344 - val y2
output loss: 5.1171 - val y1 output root mean squared error: 1.1600 -
val_y2_output_root_mean_squared_error: 2.2823
Epoch 146/500
- y2_output_loss: 4.1203 - y1_output_root_mean_squared_error: 1.1285 -
y2 output root mean squared error: 2.0378 - val loss: 2.2614 - val y1 output loss: 0.4637 - val y2
output loss: 1.8084 - val y1 output root mean squared error: 0.6467 -
val_y2_output_root_mean_squared_error: 1.3577
Epoch 147/500
- y2_output_loss: 1.2330 - y1_output_root_mean_squared_error: 0.5718 -
y2 output root mean squared error: 1.1121 - val loss: 2.4170 - val y1 output loss: 0.4092 - val y2
_output_loss: 1.9463 - val_y1_output_root_mean_squared_error: 0.6439 -
val_y2_output_root_mean_squared_error: 1.4151
Epoch 148/500
- y2 output loss: 1.7648 - y1 output root mean squared error: 0.6452 -
y2 output root mean squared error: 1.3330 - val loss: 2.5699 - val y1 output loss: 0.3428 - val y2
_output_loss: 2.1420 - val_y1_output_root_mean_squared_error: 0.5890 -
val y2 output root mean squared error: 1.4909
Epoch 149/500
- y2 output loss: 1.4093 - y1 output root mean squared error: 0.5479 -
y2_output_root_mean_squared_error: 1.1929 - val_loss: 2.2103 - val_y1_output_loss: 0.2735 - val_y2
_output_loss: 1.8681 - val_y1_output_root_mean_squared_error: 0.5213 -
val_y2_output_root_mean_squared_error: 1.3923
Epoch 150/500
- y2 output_loss: 1.7859 - y1_output_root_mean_squared_error: 0.6188 -
y2_output_root_mean_squared_error: 1.3248 - val_loss: 9.3341 - val_y1_output_loss: 1.6134 - val_y2
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output loss: 7.4312 - val y1 output root mean squared error: 1.2910 -
val y2 output root mean squared error: 2.7690
Epoch 151/500
- y2 output loss: 1.5053 - y1 output root mean squared error: 0.6990 -
y2_output_root_mean_squared_error: 1.2323 - val_loss: 1.7342 - val_y1_output loss: 0.2859 - val_y2
_output_loss: 1.3888 - val y1 output root mean squared error: 0.5434 -
val y2 output root mean squared error: 1.1995
Epoch 152/500
- y2_output_loss: 1.1497 - y1_output_root_mean_squared_error: 0.5419 -
y2_output_root_mean_squared_error: 1.0731 - val_loss: 2.6482 - val_y1_output_loss: 0.4853 - val_y2
output loss: 2.1242 - val y1 output root mean squared error: 0.6919
val_y2_output_root_mean_squared_error: 1.4729
Epoch 153/500
- y2_output_loss: 1.4152 - y1_output_root_mean_squared_error: 0.6195 -
y2 output root mean squared error: 1.1899 - val loss: 1.7355 - val y1 output loss: 0.2952 - val y2
output loss: 1.3977 - val_y1_output_root_mean_squared_error: 0.5453 -
val_y2_output_root_mean_squared_error: 1.1993
Epoch 154/500
614/614 [=============] - Os 146us/sample - loss: 1.8344 - y1 output loss: 0.3779
- y2_output_loss: 1.4948 - y1_output_root_mean_squared_error: 0.6108 -
y2 output root_mean_squared_error: 1.2088 - val_loss: 9.9241 - val_y1_output_loss: 2.0214 - val_y2
output_loss: 7.6223 - val_y1_output_root_mean_squared_error: 1.4465 -
val_y2_output_root_mean_squared_error: 2.7985
Epoch 155/500
- y2_output_loss: 2.0320 - y1_output_root_mean_squared_error: 0.8069 -
y2_output_root_mean_squared_error: 1.4248 - val_loss: 3.0972 - val_y1_output_loss: 0.6031 - val_y2
output_loss: 2.5971 - val_y1_output_root_mean_squared_error: 0.7460 -
val y2 output root mean squared error: 1.5940
Epoch 156/500
- y2 output loss: 1.5227 - y1 output root mean squared error: 0.6040 -
y2 output root mean squared error: 1.2374 - val loss: 1.7767 - val y1 output loss: 0.2984 - val y2
output loss: 1.4516 - val y1 output root mean squared error: 0.5426 -
val y2 output root mean squared error: 1.2175
Epoch 157/500
- y2 output loss: 2.8307 - y1 output root mean squared error: 0.9805 -
y2 output root mean squared error: 1.6793 - val loss: 4.0738 - val y1 output loss: 0.6941 - val y2
output loss: 3.2684 - val y1 output root mean squared error: 0.8446 -
val_y2_output_root_mean_squared_error: 1.8331
Epoch 158/500
- y2_output_loss: 1.4317 - y1_output_root_mean_squared_error: 0.6201 -
y2_output_root_mean_squared_error: 1.2017 - val_loss: 1.9562 - val_y1_output loss: 0.2592 - val_y2
output loss: 1.6375 - val y1 output root mean squared error: 0.5152 -
val_y2_output_root_mean_squared_error: 1.3003
Epoch 159/500
- y2 output loss: 2.4521 - y1 output root mean squared error: 0.9021 -
y2 output root mean squared error: 1.5681 - val loss: 3.2140 - val y1 output loss: 0.2424 - val y2
_output_loss: 2.8729 - val_y1_output_root_mean_squared_error: 0.4894 -
val_y2_output_root_mean_squared_error: 1.7247
Epoch 160/500
- y2 output loss: 1.4586 - y1 output root mean squared error: 0.5899 -
y2_output_root_mean_squared_error: 1.2065 - val_loss: 1.9117 - val_y1_output_loss: 0.3535 - val_y2
_output_loss: 1.5006 - val_y1_output_root_mean_squared_error: 0.6017 -
val y2 output root mean squared error: 1.2448
Epoch 161/500
- y2 output loss: 1.2077 - y1 output root mean squared error: 0.5613 -
y2 output root mean squared error: 1.1036 - val loss: 1.6140 - val y1 output loss: 0.2522 - val y2
_output_loss: 1.3113 - val_y1_output_root_mean_squared_error: 0.5093 -
val y2 output root mean squared error: 1.1639
Epoch 162/500
- y2_output_loss: 1.6073 - y1_output_root_mean_squared_error: 0.5875 -
y2_output_root_mean_squared_error: 1.2640 - val_loss: 3.4786 - val_y1_output_loss: 0.9991 - val_y2
_output_loss: 2.5692 - val_y1_output_root_mean_squared_error: 0.9706 -
val_y2_output_root_mean_squared_error: 1.5926
Epoch 163/500
- y2 output loss: 1.3509 - y1 output root mean squared error: 0.5903 -
```

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y2_output_root_mean_squared_error: 1.1567 - val_loss: 3.9645 - val_y1_output_loss: 0.3904 - val_y2
_output_loss: 3.6336 - val_y1_output_root_mean_squared_error: 0.5997 -
val_y2_output_root_mean_squared_error: 1.8986
Epoch 164/500
- y2_output_loss: 1.3944 - y1_output_root_mean_squared_error: 0.6270 -
y2 output root mean squared error: 1.1830 - val loss: 2.5995 - val y1 output loss: 0.5581 - val y2
_output_loss: 2.0751 - val_y1_output_root_mean squared error: 0.7216 -
val y2 output root mean squared error: 1.4418
Epoch 165/500
- y2_output_loss: 1.3507 - y1_output_root_mean_squared_error: 0.5914 -
y2\_output\_root\_mean\_squared\_error: 1.1643 - val\_loss: 2.1108 - val\_y1\_output\_loss: 0.4918 - val\_y2
_output_loss: 1.6039 - val_y1_output_root_mean_squared_error: 0.6995
val_y2_output_root_mean_squared_error: 1.2734
Epoch 166/500
- y2_output_loss: 1.6624 - y1_output_root_mean_squared_error: 0.6273 -
y2 output root mean squared error: 1.2942 - val loss: 2.0937 - val y1 output loss: 0.3070 - val y2
output loss: 1.7276 - val y1 output root mean squared error: 0.5565 -
val y2 output root mean squared error: 1.3357
Epoch 167/500
- y2 output loss: 1.1053 - y1 output root mean squared error: 0.4767
y2 output root mean squared error: 1.0509 - val loss: 2.6393 - val y1 output loss: 0.3368 - val y2
output_loss: 2.2691 - val_y1_output_root_mean_squared_error: 0.5767 -
val_y2_output_root_mean_squared_error: 1.5188
Epoch 168/500
614/614 [============] - 0s 143us/sample - loss: 2.3538 - y1_output_loss: 0.4574
- y2 output loss: 1.8808 - y1 output root mean squared error: 0.6769 -
y2 output root mean squared error: 1.3768 - val loss: 2.2887 - val y1 output loss: 0.2893 - val y2
_output_loss: 1.9405 - val_y1_output_root_mean_squared_error: 0.5428 -
val y2 output root mean squared error: 1.4121
Epoch 169/500
- y2 output loss: 1.1063 - y1 output root mean squared error: 0.5428 -
y2 output root mean squared error: 1.0556 - val loss: 1.6813 - val y1 output loss: 0.2694 - val y2
output loss: 1.3574 - val y1 output root mean squared error: 0.5281 -
val_y2_output_root_mean_squared_error: 1.1843
Epoch 170/500
- y2_output_loss: 1.1192 - y1_output_root_mean_squared_error: 0.5136 -
y2 output root mean squared error: 1.0628 - val loss: 1.5231 - val y1 output loss: 0.2710 - val y2
_output_loss: 1.2028 - val_y1_output_root_mean_squared_error: 0.5262 -
val_y2_output_root_mean_squared_error: 1.1164
Epoch 171/500
- y2 output loss: 1.2206 - y1 output root mean squared error: 0.5222 -
y2 output root mean squared error: 1.1044 - val loss: 3.1442 - val y1 output loss: 0.6984 - val y2
_output_loss: 2.3993 - val_y1_output_root_mean_squared_error: 0.8326 -
val y2 output root mean squared error: 1.5655
Epoch 172/500
- y2 output loss: 0.9765 - y1 output root mean squared error: 0.5004 -
y2 output root mean squared error: 0.9903 - val loss: 2.0445 - val y1 output loss: 0.4151 - val y2
_output_loss: 1.6008 - val_y1_output_root_mean_squared_error: 0.6305 -
val_y2_output_root_mean_squared_error: 1.2834
Epoch 173/500
- y2 output loss: 1.3511 - y1 output root mean squared error: 0.6078 -
y2_output_root_mean_squared_error: 1.1466 - val_loss: 1.6479 - val_y1_output_loss: 0.3970 - val_y2
_output_loss: 1.1962 - val_y1_output_root_mean_squared_error: 0.6375 -
val y2 output root mean squared error: 1.1142
Epoch 174/500
- y2 output loss: 1.5644 - y1 output root mean squared error: 0.6419 -
y2_output_root_mean_squared_error: 1.2395 - val_loss: 9.5027 - val_y1_output_loss: 1.4185 - val_y2
output loss: 7.9175 - val_y1_output_root_mean_squared_error: 1.2002
val y2 output root mean squared error: 2.8394
Epoch 175/500
- y2_output_loss: 1.2081 - y1_output_root_mean_squared_error: 0.4967 -
y2_output_root_mean_squared_error: 1.1041 - val_loss: 1.5770 - val_y1_output_loss: 0.2622 - val_y2
output loss: 1.2662 - val y1 output root mean squared error: 0.5187 -
val_y2_output_root_mean_squared_error: 1.1437
Epoch 176/500
```

```
- y2_output_loss: 1.4563 - y1_output_root_mean_squared_error: 0.5874 -
y2_output_root_mean_squared_error: 1.1954 - val_loss: 6.1224 - val_y1_output_loss: 0.3785 - val_y2
output loss: 5.5778 - val y1 output root mean squared error: 0.6264
val y2 output root mean squared error: 2.3937
Epoch 177/500
- y2_output_loss: 1.3252 - y1_output_root_mean_squared_error: 0.5415 -
y2_output_root_mean_squared_error: 1.1554 - val_loss: 2.5199 - val_y1_output_loss: 0.3251 - val_y2
_output_loss: 2.1400 - val_y1_output_root_mean_squared_error: 0.5741 -
val y2 output root mean squared error: 1.4800
Epoch 178/500
- y2_output_loss: 1.3498 - y1_output_root_mean_squared_error: 0.5716 -
y2_output_root_mean_squared_error: 1.1336 - val_loss: 6.7873 - val_y1_output_loss: 0.3352 - val_y2
_output_loss: 6.3323 - val_y1_output_root_mean_squared_error: 0.5860 -
val_y2_output_root_mean_squared_error: 2.5385
Epoch 179/500
- y2_output_loss: 1.7189 - y1_output_root_mean_squared_error: 0.6920 -
y2 output root mean squared error: 1.3072 - val loss: 1.9198 - val y1 output loss: 0.2355 - val y2
output_loss: 1.6454 - val_y1_output_root_mean_squared_error: 0.4890 -
val y2 output root mean squared error: 1.2964
Epoch 180/500
- y2 output loss: 1.4928 - y1 output root mean squared error: 0.5996 -
y2 output root mean squared error: 1.2202 - val loss: 3.3821 - val y1 output loss: 0.2229 - val y2
output_loss: 3.0701 - val_y1_output_root_mean_squared_error: 0.4781 -
val_y2_output_root_mean_squared_error: 1.7758
Epoch 181/500
- y2_output_loss: 1.8923 - y1_output_root_mean_squared_error: 0.6837 -
y2_output_root_mean_squared_error: 1.3812 - val_loss: 2.0575 - val_y1_output_loss: 0.5345 - val_y2
output loss: 1.5788 - val y1 output root mean squared error: 0.6979 -
val_y2_output_root_mean_squared_error: 1.2532
Epoch 182/500
- y2 output loss: 1.7188 - y1 output root mean squared error: 0.7525 -
y2 output root mean squared error: 1.3154 - val loss: 2.1046 - val y1 output loss: 0.2693 - val y2
output loss: 1.7776 - val y1 output root mean squared error: 0.5249 -
val y2 output root mean squared error: 1.3524
Epoch 183/500
- y2_output_loss: 1.3336 - y1_output_root_mean_squared_error: 0.5532 -
y2 output root mean squared error: 1.1594 - val loss: 1.6091 - val y1 output loss: 0.3867 - val y2
_output_loss: 1.1924 - val_y1_output_root_mean_squared_error: 0.6176 -
val_y2_output_root_mean_squared_error: 1.1080
Epoch 184/500
- y2 output loss: 1.7864 - y1 output root mean squared error: 0.7089 -
y2 output root mean squared error: 1.3407 - val loss: 2.8023 - val y1 output loss: 0.2324 - val y2
_output_loss: 2.4837 - val_y1_output_root_mean_squared_error: 0.4865 -
val y2 output root mean squared error: 1.6017
Epoch 185/500
- y2 output loss: 1.4955 - y1 output root mean squared error: 0.5554 -
y2_output_root_mean_squared_error: 1.2181 - val_loss: 3.1598 - val_y1_output_loss: 0.9900 - val y2
_output_loss: 2.3671 - val_y1_output_root_mean_squared_error: 0.9528 -
val y2 output root mean squared error: 1.5007
Epoch 186/500
- y2 output loss: 1.1579 - y1 output root mean squared error: 0.5730 -
y2_output_root_mean_squared_error: 1.0692 - val_loss: 2.8575 - val_y1_output_loss: 0.3630 - val_y2
_output_loss: 2.4307 - val_y1_output_root_mean_squared_error: 0.6080 -
val_y2_output_root_mean_squared_error: 1.5773
Epoch 187/500
- y2 output_loss: 1.1907 - y1_output_root_mean_squared_error: 0.5237 -
y2_output_root_mean_squared_error: 1.0953 - val_loss: 1.8197 - val_y1_output_loss: 0.4062 - val_y2
output loss: 1.3552 - val y1 output root mean squared error: 0.6439
val y2 output root mean squared error: 1.1854
Epoch 188/500
- y2_output_loss: 1.1180 - y1_output_root_mean_squared_error: 0.4904 -
y2_output_root_mean_squared_error: 1.0345 - val_loss: 3.7550 - val_y1_output_loss: 0.4179 - val_y2
_output_loss: 3.2395 - val_y1_output_root_mean_squared_error: 0.6318 -
val_y2_output_root_mean_squared_error: 1.8319
```

Epoch 189/500

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- y2_output_loss: 1.1009 - y1_output_root_mean_squared_error: 0.5024 -
y2_output_root_mean_squared_error: 1.0525 - val_loss: 1.8458 - val y1 output loss: 0.3306 - val y2
output loss: 1.4877 - val y1 output root mean squared error: 0.5551
val_y2_output_root_mean_squared_error: 1.2400
Epoch 190/500
- y2_output_loss: 0.9974 - y1_output_root_mean_squared_error: 0.5239 -
y2 output root mean squared error: 0.9996 - val loss: 1.6539 - val y1 output loss: 0.2665 - val y2
output loss: 1.3399 - val y1 output root mean squared error: 0.5159 -
val y2 output root mean squared error: 1.1781
Epoch 191/500
- y2_output_loss: 1.2488 - y1_output_root_mean_squared_error: 0.5686 -
y2_output_root_mean_squared_error: 1.0843 - val_loss: 16.9997 - val_y1_output_loss: 3.2000 - val_y 2_output_loss: 13.8565 - val_y1_output_root_mean_squared_error: 1.7566 -
val_y2_output_root_mean_squared_error: 3.7302
Epoch 192/500
- y2 output loss: 1.6488 - y1 output root mean squared error: 0.7008 -
y2 output root mean squared_error: 1.2837 - val_loss: 2.4695 - val_y1_output_loss: 0.2201 - val_y2
output loss: 2.1776 - val y1 output root mean squared error: 0.4657 -
val y2 output root mean squared error: 1.5009
Epoch 193/500
- y2 output loss: 1.7547 - y1_output_root_mean_squared_error: 0.6526 -
y2 output root mean squared error: 1.3270 - val loss: 2.8259 - val y1 output loss: 0.2044 - val y2
output loss: 2.5355 - val yl output root mean squared error: 0.4536 -
val_y2_output_root_mean_squared_error: 1.6187
Epoch 194/500
- y2 output loss: 1.1456 - y1 output root mean squared error: 0.5042 -
y2 output root mean squared error: 1.0698 - val loss: 2.1840 - val y1 output loss: 0.4693 - val y2
output loss: 1.6847 - val y1 output root mean squared error: 0.6817 -
val y2 output root mean squared error: 1.3112
Epoch 195/500
- y2_output_loss: 1.1175 - y1_output_root_mean_squared_error: 0.5504 -
y2 output root mean squared error: 1.0589 - val loss: 2.4082 - val y1 output loss: 0.4480 - val y2
_output_loss: 1.9093 - val_y1_output_root_mean_squared_error: 0.6674 -
val y2 output root mean squared error: 1.4010
Epoch 196/500
- y2_output_loss: 1.0350 - y1_output_root_mean_squared_error: 0.5201 -
y2 output root mean squared error: 1.0164 - val loss: 1.6141 - val y1 output loss: 0.2288 - val y2
_output_loss: 1.3449 - val_y1_output_root_mean_squared_error: 0.4835 -
val_y2_output_root_mean_squared_error: 1.1749
Epoch 197/500
- y2 output loss: 0.8421 - y1 output root mean squared error: 0.4649 -
y2 output root mean squared_error: 0.9172 - val_loss: 1.5302 - val_y1_output_loss: 0.2751 - val_y2
_output_loss: 1.2213 - val_y1_output_root_mean_squared_error: 0.5254 -
val y2 output root mean squared error: 1.1199
Epoch 198/500
- y2 output loss: 1.3752 - y1 output root mean squared error: 0.6598 -
y2 output root mean squared error: 1.1602 - val loss: 2.3254 - val y1 output loss: 0.6397 - val y2
_output_loss: 1.7382 - val_y1_output_root_mean_squared_error: 0.7724 -
val_y2_output_root_mean_squared_error: 1.3148
Epoch 199/500
614/614 [=============] - 0s 142us/sample - loss: 1.5337 - y1 output loss: 0.2808
- y2_output_loss: 1.2531 - y1_output_root_mean_squared_error: 0.5298 -
y2_output_root_mean_squared_error: 1.1194 - val_loss: 2.0692 - val_y1_output_loss: 0.3125 - val_y2
_output_loss: 1.6912 - val_y1_output_root_mean_squared_error: 0.5666 -
val y2 output root mean squared error: 1.3222
Epoch 200/500
- y2_output_loss: 1.7737 - y1_output_root_mean_squared_error: 0.7113 -
y2_output_root_mean_squared_error: 1.3357 - val_loss: 1.7968 - val_y1_output_loss: 0.3415 - val_y2
output loss: 1.4516 - val y1 output root mean squared error: 0.5782 -
val_y2_output_root_mean_squared_error: 1.2093
Epoch 201/500
- y2_output_loss: 1.1678 - y1_output_root_mean_squared_error: 0.4861 -
y2_output_root_mean_squared_error: 1.0737 - val_loss: 7.1686 - val_y1_output_loss: 1.2616 - val_y2_output_loss: 5.7259 - val_y1_output_root_mean_squared_error: 1.1359 -
```

val v2 output root mean squared error: 2.4245

```
Epoch 202/500
- y2_output_loss: 1.0546 - y1_output_root_mean_squared_error: 0.5348 -
y2_output_root_mean_squared_error: 1.0305 - val_loss: 1.6436 - val_y1_output_loss: 0.3911 - val_y2
output loss: 1.2108 - val_y1_output_root_mean_squared_error: 0.6331
val_y2_output_root_mean_squared_error: 1.1148
Epoch 203/500
- y2_output_loss: 1.3290 - y1_output_root_mean_squared_error: 0.5944 -
y2 output root mean squared error: 1.1570 - val loss: 1.4715 - val y1 output loss: 0.2822 - val y2
output loss: 1.1500 - val y1 output root mean squared error: 0.5360 -
val y2 output root mean squared error: 1.0882
Epoch 204/500
- y2 output loss: 1.0105 - y1_output_root_mean_squared_error: 0.5016
y2 output root mean squared error: 1.0082 - val loss: 1.8296 - val y1 output loss: 0.3894 - val y2
_output_loss: 1.4177 - val_y1_output_root_mean_squared_error: 0.6157 -
val_y2_output_root_mean_squared_error: 1.2044
Epoch 205/500
- y2 output loss: 1.1998 - y1 output root mean squared error: 0.6118 -
y2_output_root_mean_squared_error: 1.0977 - val_loss: 1.2977 - val_y1_output_loss: 0.2221 - val_y2
output loss: 1.0292 - val_y1_output_root_mean_squared_error: 0.4793 -
val y2 output root mean squared error: 1.0334
Epoch 206/500
- y2 output loss: 1.3758 - y1 output root mean squared error: 0.5492 -
y2 output root mean squared error: 1.1748 - val loss: 2.9098 - val y1 output loss: 0.5918 - val y2
output loss: 2.2323 - val y1 output root mean squared error: 0.7811 -
val_y2_output_root_mean_squared_error: 1.5165
Epoch 207/500
- y2 output_loss: 1.0907 - y1_output_root_mean_squared_error: 0.5065 -
y2 output root mean squared error: 1.0424 - val loss: 2.5909 - val y1 output loss: 0.5020 - val y2
output loss: 2.0082 - val y1 output root mean squared error: 0.7186 -
val_y2_output_root_mean_squared_error: 1.4403
Epoch 208/500
- y2 output loss: 1.6978 - y1 output root mean squared error: 0.5838 -
y2 output root mean squared error: 1.3092 - val loss: 1.8236 - val y1 output loss: 0.4544 - val y2
output loss: 1.3349 - val y1 output root mean squared error: 0.6646 -
val y2 output root mean squared error: 1.1756
Epoch 209/500
- y2 output loss: 1.5476 - y1 output root mean squared error: 0.6922 -
y2_output_root_mean_squared_error: 1.2481 - val_loss: 1.9393 - val_y1_output_loss: 0.4311 - val_y2
_output_loss: 1.4430 - val_y1_output_root_mean_squared_error: 0.6671 -
val y2 output root mean squared error: 1.2224
Epoch 210/500
- y2 output loss: 1.0440 - y1 output root mean squared error: 0.5242 -
y2 output root mean squared error: 1.0232 - val loss: 1.8805 - val y1 output loss: 0.2044 - val y2
_output_loss: 1.6138 - val_y1_output_root_mean_squared error: 0.4586 -
val y2 output root mean squared error: 1.2924
Epoch 211/500
- y2_output_loss: 1.1209 - y1_output_root_mean_squared_error: 0.4844 -
y2_output_root_mean_squared_error: 1.0637 - val_loss: 1.4999 - val_y1_output_loss: 0.2142 - val_y2
output loss: 1.2433 - val y1 output root mean squared error: 0.4651
val_y2_output_root_mean_squared_error: 1.1330
Epoch 212/500
- y2_output_loss: 1.0540 - y1_output_root_mean_squared_error: 0.4725 -
y2_output_root_mean_squared_error: 1.0311 - val_loss: 1.3144 - val_y1_output_loss: 0.2650 - val_y2
output loss: 1.0371 - val y1 output root mean squared error: 0.5054 -
val_y2_output_root_mean_squared_error: 1.0291
Epoch 213/500
614/614 [============] - Os 132us/sample - loss: 1.1928 - y1 output loss: 0.2320
- y2_output_loss: 0.9521 - y1_output_root_mean_squared_error: 0.4831 -
y2 output root mean squared error: 0.9795 - val loss: 1.8329 - val y1 output loss: 0.4519 - val y2
_output_loss: 1.3568 - val_y1_output_root_mean_squared_error: 0.6666
val y2 output root mean squared error: 1.1784
Epoch 214/500
614/614 [=============] - Os 147us/sample - loss: 1.4407 - y1_output_loss: 0.2725
- y2_output_loss: 1.1582 - y1_output_root_mean_squared_error: 0.5234 -
y2_output_root_mean_squared_error: 1.0801 - val_loss: 1.9254 - val_y1_output_loss: 0.3271 - val_y2
output loss: 1.5508 - val v1 output root mean squared error: 0.5767 -
```

```
val_y2_output_root_mean_squared_error: 1.2621
Epoch 215/500
- y2_output_loss: 1.0280 - y1_output_root_mean_squared_error: 0.4540 -
y2 output root mean squared error: 1.0182 - val loss: 1.5515 - val y1 output loss: 0.2184 - val y2
output loss: 1.2920 - val y1 output root mean squared error: 0.4618
val_y2_output_root_mean_squared_error: 1.1568
Epoch 216/500
- y2 output loss: 0.9153 - y1 output root mean squared error: 0.4447 -
y2 output root mean squared error: 0.9600 - val_loss: 1.5482 - val_y1_output_loss: 0.2583 - val_y2
 output loss: 1.2365 - val y1 output root mean squared error: 0.5153 -
val y2 output root mean squared error: 1.1325
Epoch 217/500
- y2 output loss: 1.3476 - y1 output root mean squared error: 0.5809 -
y2_output_root_mean_squared_error: 1.1653 - val_loss: 1.4508 - val_y1_output_loss: 0.3116 - val_y2
output loss: 1.1118 - val_y1_output_root_mean_squared_error: 0.5545 -
val_y2_output_root_mean_squared_error: 1.0693
Epoch 218/500
- y2 output loss: 0.9762 - y1 output root mean squared error: 0.4703 -
y2 output root mean squared error: 0.9923 - val_loss: 1.5013 - val_y1_output_loss: 0.2122 - val_y2
output loss: 1.2438 - val y1 output root mean squared error: 0.4687 -
val_y2_output_root_mean_squared_error: 1.1321
Epoch 219/500
- y2 output loss: 1.1846 - y1 output root mean squared error: 0.4884 -
y2 output root mean squared error: 1.0870 - val loss: 1.3635 - val y1 output loss: 0.2154 - val y2
_output_loss: 1.1084 - val_y1_output_root_mean_squared_error: 0.4706 -
val_y2_output_root_mean_squared_error: 1.0687
Epoch 220/500
- y2 output loss: 1.0539 - y1 output root mean squared error: 0.5480 -
y2 output root mean squared error: 1.0310 - val loss: 1.4376 - val y1 output loss: 0.2820 - val y2
_output_loss: 1.1116 - val_y1_output_root_mean_squared_error: 0.5384 -
val_y2_output_root mean squared error: 1.0713
Epoch 221/500
- y2 output loss: 1.0386 - y1 output root mean squared error: 0.5302 -
y2 output root mean squared error: 1.0237 - val loss: 1.6115 - val y1 output loss: 0.2494 - val y2
_output_loss: 1.3236 - val_y1_output_root_mean_squared_error: 0.4991 -
val y2 output root mean squared error: 1.1672
Epoch 222/500
- y2 output loss: 0.7814 - y1 output root mean squared error: 0.4486 -
\label{eq:continuous_solution} y2\_output\_root\_mean\_squared\_error: 0.8867 - val\_loss: 1.8712 - val\_y1\_output\_loss: 0.2295 - val\_y2\_output\_loss: 0.2295 - val\_y2\_output\_loss: 0.2295 - val\_y3\_output\_loss: 0.2295 - val\_y3\_
_output_loss: 1.6126 - val_y1_output_root_mean_squared_error: 0.4771 -
val y2 output root mean squared error: 1.2820
Epoch 223/500
- y2_output_loss: 1.0861 - y1_output_root_mean_squared_error: 0.5217 -
y2_output_root_mean_squared_error: 1.0464 - val_loss: 1.2282 - val_y1_output_loss: 0.1959 - val_y2
_output_loss: 0.9899 - val_y1_output_root_mean_squared_error: 0.4489 -
val y2 output root mean squared error: 1.0133
Epoch 224/500
- y2_output_loss: 0.8558 - y1_output_root_mean_squared_error: 0.4417 -
y2_output_root_mean_squared_error: 0.9282 - val_loss: 1.4299 - val_y1_output_loss: 0.2983 - val_y2
_output_loss: 1.0905 - val_y1_output_root_mean_squared_error: 0.5518
val_y2_output_root_mean_squared_error: 1.0608
Epoch 225/500
- y2_output_loss: 1.2272 - y1_output_root_mean_squared_error: 0.5406 -
y2 output root mean squared error: 1.1119 - val loss: 1.6081 - val y1 output loss: 0.4958 - val y2
_output_loss: 1.1207 - val_y1_output_root_mean_squared_error: 0.6862 -
val_y2_output_root_mean_squared_error: 1.0664
Epoch 226/500
- y2 output loss: 0.8396 - y1 output root mean squared error: 0.4490 -
y2 output root mean squared error: 0.9203 - val loss: 1.1949 - val y1 output loss: 0.1936 - val y2
 output loss: 0.9603 - val y1 output root mean squared error: 0.4473 -
val y2 output root mean squared error: 0.9974
Epoch 227/500
614/614 [============] - 0s 148us/sample - loss: 1.3027 - y1_output_loss: 0.2509
- y2 output loss: 1.0466 - y1_output_root_mean_squared_error: 0.5017 -
v2 output root mean equared error. 1 0252 - val loss. 1 6845 - val v1 output loss. 0 2250 - val v2
```

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yz_oucpuc_rooc_mean_squared_error. r.vzuz
                                Val 1033. 1.0073
                                               _output_loss: 1.4140 - val_y1_output_root_mean_squared_error: 0.4750 -
val y2 output root mean squared error: 1.2078
Epoch 228/500
- y2_output_loss: 1.6667 - y1_output_root_mean_squared_error: 0.6255 -
y2 output root mean squared error: 1.2966 - val loss: 1.8947 - val y1 output loss: 0.2125 - val y2
output_loss: 1.6294 - val_y1_output_root_mean_squared_error: 0.4667 -
val_y2_output_root_mean_squared error: 1.2949
Epoch 229/500
- y2 output loss: 1.0810 - y1 output root mean squared error: 0.5071 -
y2 output root mean squared error: 1.0444 - val loss: 1.4584 - val y1 output loss: 0.2413 - val y2
output loss: 1.1700 - val y1 output root mean squared error: 0.4971 -
val y2 output root mean squared error: 1.1006
Epoch 230/500
- y2_output_loss: 1.0136 - y1_output_root_mean_squared_error: 0.5061 -
y2_output_root_mean_squared_error: 1.0086 - val_loss: 2.4039 - val_y1_output_loss: 0.3742 - val_y2
output loss: 1.9512 - val y1 output root mean squared error: 0.6213 -
val_y2_output_root_mean_squared_error: 1.4205
Epoch 231/500
- y2 output loss: 1.1636 - y1 output root mean squared error: 0.5649 -
y2 output root mean squared error: 1.0778 - val loss: 1.9257 - val y1 output loss: 0.3277 - val y2
output loss: 1.5833 - val y1 output root mean squared error: 0.5693 -
val_y2_output_root_mean_squared_error: 1.2655
Epoch 232/500
614/614 [=============] - Os 152us/sample - loss: 1.0530 - y1_output_loss: 0.1843
- y2 output loss: 0.8741 - y1 output root mean squared error: 0.4292 -
y2 output root mean squared error: 0.9321 - val loss: 3.0498 - val y1 output loss: 0.9767 - val y2
_output_loss: 2.1387 - val_y1_output_root_mean_squared_error: 0.9629 -
val_y2_output_root_mean_squared_error: 1.4569
Epoch 233/500
- y2 output loss: 1.1592 - y1 output root mean squared error: 0.4688 -
y2 output root mean squared error: 1.0704 - val loss: 1.7033 - val y1 output loss: 0.2657 - val y2
_output_loss: 1.3919 - val_y1_output_root_mean_squared_error: 0.5080 -
val y2 output root mean squared error: 1.2021
Epoch 234/500
- y2 output loss: 1.2114 - y1 output root mean squared error: 0.5680 -
y2 output root mean squared error: 1.1025 - val loss: 2.0231 - val y1 output loss: 0.4236 - val y2
output loss: 1.5427 - val y1 output root mean squared error: 0.6591 -
val y2 output root mean squared error: 1.2605
Epoch 235/500
- y2_output_loss: 1.0183 - y1_output_root_mean_squared_error: 0.4970 -
y2_output_root_mean_squared_error: 1.0005 - val_loss: 1.3038 - val_y1_output_loss: 0.2230 - val_y2
_output_loss: 1.0606 - val_y1_output_root_mean_squared_error: 0.4717
val_y2_output_root_mean_squared_error: 1.0399
Epoch 236/500
- y2_output_loss: 0.8599 - y1_output_root_mean_squared_error: 0.4188 -
y2_output_root_mean_squared_error: 0.9214 - val_loss: 3.1143 - val_y1_output_loss: 0.2710 - val_y2
output loss: 2.7548 - val y1 output root mean squared error: 0.5118 -
val y2 output root mean squared error: 1.6889
Epoch 237/500
- y2_output_loss: 1.5776 - y1_output_root_mean_squared_error: 0.6460 -
y2_output_root_mean_squared_error: 1.2615 - val_loss: 1.8770 - val_y1_output_loss: 0.2246 - val_y2
_output_loss: 1.6033 - val_y1_output_root_mean_squared_error: 0.4774 -
val_y2_output_root_mean_squared_error: 1.2842
Epoch 238/500
- y2_output_loss: 1.0326 - y1_output_root_mean_squared_error: 0.5124 -
y2 output root mean squared error: 1.0187 - val loss: 1.1934 - val y1 output loss: 0.2096 - val y2
_output_loss: 0.9440 - val_y1_output_root_mean_squared_error: 0.4622 -
val y2 output root mean squared error: 0.9898
Epoch 239/500
- y2 output loss: 0.9297 - y1 output root mean squared error: 0.4822
y2 output root mean squared error: 0.9662 - val loss: 1.4209 - val y1 output loss: 0.2239 - val y2
output_loss: 1.1487 - val_y1_output_root_mean_squared_error: 0.4810 -
val y2 output root mean squared error: 1.0906
Epoch 240/500
- v2 output lose. 1 4001 - v1 output root mash equared error. 0 6418 -
```

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- yz_ouchuc_ross. r.403r - yr_ouchuc_rooc_mean_squarec_error. v.04ro -
y2 output root mean squared_error: 1.1888 - val_loss: 2.8799 - val_y1_output_loss: 0.2660 - val_y2
output_loss: 2.5179 - val_y1_output_root_mean_squared_error: 0.5235 -
val y2 output root mean squared error: 1.6142
Epoch 241/500
- y2 output loss: 0.9008 - y1 output root mean squared error: 0.4877
y2 output root mean squared error: 0.9478 - val loss: 2.0549 - val y1 output loss: 0.3493 - val y2
output loss: 1.6528 - val y1 output root mean squared error: 0.5942 -
val y2 output root mean squared error: 1.3045
Epoch 242/500
- y2_output_loss: 0.9717 - y1_output_root_mean_squared_error: 0.4496 -
y2 output root mean squared error: 0.9795 - val loss: 1.4041 - val y1 output loss: 0.2605 - val y2
output loss: 1.1451 - val y1 output root mean squared error: 0.4965 -
val y2 output root mean squared error: 1.0759
Epoch 243/500
- y2_output_loss: 0.8084 - y1_output_root_mean_squared_error: 0.4547 -
y2_output_root_mean_squared_error: 0.9018 - val_loss: 1.7216 - val_y1_output_loss: 0.3695 - val_y2
output loss: 1.3630 - val y1 output root mean squared error: 0.6025 -
val_y2_output_root_mean_squared_error: 1.1656
Epoch 244/500
- y2 output_loss: 1.0117 - y1_output_root_mean_squared_error: 0.4926 -
y2 output root mean squared error: 1.0101 - val_loss: 1.6600 - val_y1_output_loss: 0.1732 - val_y2
output loss: 1.4308 - val y1 output root mean squared error: 0.4231 -
val y2 output root mean squared error: 1.2169
Epoch 245/500
- y2 output loss: 1.0569 - y1 output root mean squared error: 0.4988 -
y2_output_root_mean_squared_error: 1.0302 - val_loss: 1.6234 - val_y1_output_loss: 0.2451 - val_y2
_output_loss: 1.3242 - val_y1_output_root_mean_squared_error: 0.5024 -
val_y2_output_root_mean_squared_error: 1.1709
Epoch 246/500
- y2 output loss: 0.8267 - y1 output root mean squared error: 0.4619 -
y2_output_root_mean_squared_error: 0.9125 - val_loss: 1.3481 - val_y1_output_loss: 0.2617 - val_y2
_output_loss: 1.0628 - val_y1_output_root_mean_squared_error: 0.5009 -
val y2 output root mean squared error: 1.0475
Epoch 247/500
614/614 [============] - 0s 137us/sample - loss: 1.0694 - y1_output_loss: 0.1774
- y2 output loss: 0.8881 - y1 output root mean squared error: 0.4223 -
y2 output root mean squared error: 0.9440 - val loss: 2.7444 - val y1 output loss: 0.2289 - val y2
_output_loss: 2.4300 - val_y1_output_root_mean_squared error: 0.4789 -
val y2 output root mean squared error: 1.5859
Epoch 248/500
- y2_output_loss: 0.9685 - y1_output_root_mean_squared_error: 0.4764 -
\label{eq:continuous_squared_error} y2\_output\_root\_mean\_squared\_error: 0.9885 - val\_loss: 1.3805 - val\_y1\_output\_loss: 0.2754 - val\_y2\_output\_root\_mean\_squared\_error: 0.9885 - val\_loss: 1.3805 - val\_y1\_output\_loss: 0.2754 - val\_y2\_output\_root\_mean\_squared\_error: 0.9885 - val\_loss: 1.3805 - val\_y1\_output\_loss: 0.2754 - val\_y2\_output\_root\_mean\_squared\_error: 0.9885 - val\_loss: 1.3805 - val\_y1\_output\_loss: 0.2754 - val\_y2\_output\_root\_mean\_squared\_error: 0.9885 - val\_loss: 0.9885 - val\_y1\_output\_loss: 0.98
output loss: 1.0743 - val y1 output root mean squared error: 0.5261
val_y2_output_root_mean_squared_error: 1.0506
Epoch 249/500
- y2_output_loss: 0.6455 - y1_output_root_mean_squared_error: 0.4059 -
y2 output root mean squared error: 0.8055 - val loss: 3.1020 - val y1 output loss: 0.1985 - val y2
output loss: 2.8100 - val y1 output root mean squared error: 0.4528 -
val y2 output root mean squared error: 1.7020
Epoch 250/500
- y2_output_loss: 1.2869 - y1_output_root_mean_squared_error: 0.6150 -
y2_output_root_mean_squared_error: 1.1397 - val_loss: 1.2364 - val_y1_output_loss: 0.2301 - val_y2
 output_loss: 0.9617 - val_y1_output_root_mean_squared_error: 0.4875
val_y2_output_root_mean_squared_error: 0.9994
Epoch 251/500
614/614 [============] - 0s 150us/sample - loss: 1.4768 - y1_output_loss: 0.3003
- y2_output_loss: 1.1698 - y1_output_root_mean_squared_error: 0.5475 -
y2 output root mean squared_error: 1.0849 - val_loss: 1.3538 - val_y1_output_loss: 0.3699 - val_y2
_output_loss: 0.9709 - val_y1_output_root_mean_squared_error: 0.5982 -
val y2 output root mean squared error: 0.9980
Epoch 252/500
- y2 output loss: 1.0128 - y1 output root mean squared error: 0.4343 -
y2 output root mean squared error: 0.9784 - val loss: 7.1956 - val y1 output loss: 1.9637 - val y2
output loss: 5.1981 - val y1 output root mean squared error: 1.3957 -
val y2 output root mean squared error: 2.2908
Epoch 253/500
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στ4/στ4 [======= - υς τ4τας/sample - τοςς: 1.3343 - γτ_oucpuc_toss: 0.343σ
- y2 output loss: 1.4463 - y1 output root mean squared error: 0.7421 -
y2_output_root_mean_squared_error: 1.2016 - val_loss: 2.0700 - val_y1_output_loss: 0.2270 - val_y2
_output_loss: 1.7850 - val_y1_output_root_mean_squared_error: 0.4740 -
val y2 output root mean squared error: 1.3584
Epoch 254/500
- y2 output loss: 0.7374 - y1 output root mean squared error: 0.4334
y2_output_root_mean_squared_error: 0.8626 - val_loss: 1.3514 - val_y1_output_loss: 0.2320 - val_y2
output loss: 1.1025 - val y1 output root mean squared error: 0.4777 -
val_y2_output_root_mean_squared_error: 1.0598
Epoch 255/500
- y2 output loss: 1.3241 - y1 output root mean squared error: 0.5184 -
y2 output root mean squared error: 1.1541 - val loss: 1.3431 - val y1 output loss: 0.2727 - val y2
output loss: 1.0342 - val y1 output root mean squared error: 0.5258 -
val y2 output root mean squared error: 1.0327
Epoch 256/500
- y2_output_loss: 0.8679 - y1_output_root_mean_squared_error: 0.4877 -
y2 output root mean squared error: 0.9316 - val loss: 1.3905 - val y1 output loss: 0.2320 - val y2
_output_loss: 1.1146 - val_y1_output_root_mean_squared_error: 0.4871 -
val_y2_output_root_mean_squared_error: 1.0739
Epoch 257/500
- y2 output loss: 0.8261 - y1_output_root_mean_squared_error: 0.4139 -
y2 output root mean squared error: 0.9129 - val loss: 1.1552 - val y1 output loss: 0.2184 - val y2
output loss: 0.9149 - val y1 output root mean squared error: 0.4587 -
val y2 output root mean squared error: 0.9720
Epoch 258/500
- y2 output loss: 1.0808 - y1 output root mean squared error: 0.5178 -
y2_output_root_mean_squared_error: 1.0350 - val_loss: 1.7400 - val_y1_output_loss: 0.2828 - val_y2
_output_loss: 1.3966 - val_y1_output_root_mean_squared_error: 0.5416 -
val y2 output root mean squared error: 1.2028
Epoch 259/500
614/614 [=============] - 0s 133us/sample - loss: 1.0532 - y1 output loss: 0.1947
- y2 output loss: 0.8521 - y1 output root mean squared error: 0.4424 -
y2_output_root_mean_squared_error: 0.9260 - val_loss: 1.4708 - val_y1_output_loss: 0.1930 - val_y2
_output_loss: 1.2340 - val_y1_output_root_mean_squared_error: 0.4378 -
val y2 output root mean squared error: 1.1310
Epoch 260/500
- y2 output_loss: 0.8253 - y1_output_root_mean_squared_error: 0.4508 -
y2 output root_mean_squared_error: 0.9053 - val_loss: 1.4829 - val_y1_output_loss: 0.1821 - val_y2
output loss: 1.2595 - val y1 output root mean squared error: 0.4320 -
val y2 output root mean squared error: 1.1386
Epoch 261/500
- y2_output_loss: 0.8127 - y1_output_root_mean_squared_error: 0.4162 -
y2_output_root_mean_squared_error: 0.8973 - val_loss: 1.6028 - val_y1_output_loss: 0.2042 - val_y2
_output_loss: 1.3462 - val_y1_output_root_mean_squared_error: 0.4587
val_y2_output_root_mean_squared_error: 1.1800
Epoch 262/500
- y2_output_loss: 0.8878 - y1_output_root_mean_squared_error: 0.4930 -
y2 output root mean squared error: 0.9256 - val loss: 1.7143 - val y1 output loss: 0.3644 - val y2
output loss: 1.3470 - val y1 output root mean squared error: 0.5944 -
val y2 output root mean squared error: 1.1666
Epoch 263/500
- y2 output loss: 0.8367 - y1_output_root_mean_squared_error: 0.4394 -
y2_output_root_mean_squared_error: 0.9105 - val_loss: 2.8608 - val_y1_output_loss: 0.6563 - val_y2
_output_loss: 2.1030 - val_y1_output_root_mean_squared_error: 0.8243 -
val_y2_output_root_mean_squared_error: 1.4770
Epoch 264/500
614/614 [=============] - Os 138us/sample - loss: 1.2706 - y1_output_loss: 0.2186
- y2 output loss: 1.0475 - y1 output root mean squared error: 0.4651 -
y2 output root mean squared error: 1.0268 - val loss: 1.1609 - val y1 output loss: 0.2112 - val y2
output loss: 0.9308 - val y1 output root mean squared error: 0.4582 -
val y2 output root mean squared error: 0.9752
Epoch 265/500
614/614 [============] - Os 140us/sample - loss: 1.0730 - y1 output loss: 0.2036
- y2 output loss: 0.8906 - y1 output root mean squared error: 0.4496 -
y2 output root mean squared error: 0.9332 - val loss: 2.6628 - val y1 output loss: 0.7855 - val y2
output loss: 1.8083 - val y1 output root mean squared error: 0.8980 -
val_y2_output_root_mean_squared_error: 1.3625
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Epocn 266/500
- y2 output loss: 2.2046 - y1 output root mean squared error: 0.9416 -
y2_output_root_mean_squared_error: 1.4865 - val_loss: 2.8778 - val_y1_output_loss: 0.3003 - val_y2
output loss: 2.5125 - val yl output root mean squared error: 0.5560 -
val_y2_output_root_mean_squared_error: 1.6027
Epoch 267/500
- y2_output_loss: 0.8459 - y1_output_root_mean_squared_error: 0.4953 -
y2_output_root_mean_squared_error: 0.9199 - val_loss: 1.9485 - val_y1_output_loss: 0.2059 - val_y2
output loss: 1.6799 - val y1 output root mean squared error: 0.4589 -
val y2 output root mean squared error: 1.3183
Epoch 268/500
- y2_output_loss: 0.7976 - y1_output_root_mean_squared_error: 0.4205 -
y2 output root mean squared error: 0.8956 - val loss: 1.4884 - val y1 output loss: 0.4374 - val y2
output loss: 1.0441 - val y1 output root mean squared error: 0.6531 -
val_y2_output_root_mean_squared_error: 1.0304
Epoch 269/500
- y2_output_loss: 0.8494 - y1_output_root_mean_squared_error: 0.4404 -
y2 output root mean squared error: 0.9198 - val loss: 2.1927 - val y1 output loss: 0.4371 - val y2
_output_loss: 1.6984 - val_y1_output_root_mean_squared_error: 0.6687 -
val_y2_output_root_mean_squared_error: 1.3212
Epoch 270/500
- y2 output loss: 0.7213 - y1 output root mean squared error: 0.4315 -
y2 output root mean squared error: 0.8517 - val loss: 1.2362 - val y1 output loss: 0.3056 - val y2
_output_loss: 0.9331 - val_y1_output_root_mean_squared_error: 0.5368 -
val_y2_output_root_mean_squared_error: 0.9737
Epoch 271/500
- y2 output loss: 0.8248 - y1 output root mean squared error: 0.4137 -
y2_output_root_mean_squared_error: 0.9093 - val_loss: 1.3601 - val_y1_output_loss: 0.3327 - val_y2
_output_loss: 1.0550 - val_y1_output_root_mean_squared_error: 0.5546 -
val_y2_output_root_mean_squared_error: 1.0259
Epoch 272/500
- y2_output_loss: 0.7408 - y1_output_root_mean_squared_error: 0.3977 -
y2_output_root_mean_squared_error: 0.8633 - val_loss: 1.6903 - val_y1_output_loss: 0.4560 - val_y2
output loss: 1.1939 - val y1 output root mean squared error: 0.6792
val y2 output root mean squared error: 1.1086
Epoch 273/500
- y2_output_loss: 0.6925 - y1_output_root_mean_squared_error: 0.4033 -
y2_output_root_mean_squared_error: 0.8338 - val_loss: 1.8763 - val_y1_output_loss: 0.5889 - val_y2
output loss: 1.3421 - val y1 output root mean squared error: 0.7418 -
val y2 output root mean squared error: 1.1516
Epoch 274/500
- y2_output_loss: 0.7218 - y1_output_root_mean_squared_error: 0.4071 -
y2_output_root_mean_squared_error: 0.8491 - val_loss: 2.1536 - val_y1_output_loss: 0.4322 - val_y2
output loss: 1.6799 - val y1 output root mean squared error: 0.6623 -
val_y2_output_root_mean_squared_error: 1.3096
Epoch 275/500
- y2_output_loss: 0.7534 - y1_output_root_mean_squared_error: 0.4406 -
y2 output root mean squared error: 0.8451 - val loss: 10.3846 - val y1 output loss: 0.4772 - val y
2_output_loss: 9.7010 - val_y1_output_root_mean_squared_error: 0.7006 -
val y2 output root mean squared error: 3.1454
Epoch 276/500
614/614 [=============] - 0s 147us/sample - loss: 2.7653 - y1 output loss: 0.5379
- y2 output loss: 2.2191 - y1 output root mean squared error: 0.7357
y2_output_root_mean_squared_error: 1.4913 - val_loss: 2.0210 - val_y1_output_loss: 0.2646 - val_y2
output_loss: 1.6919 - val_y1_output_root_mean_squared_error: 0.5207 -
val y2 output root mean squared error: 1.3228
Epoch 277/500
- y2_output_loss: 0.7505 - y1_output_root_mean_squared_error: 0.4185 -
y2_output_root_mean_squared_error: 0.8694 - val_loss: 1.1677 - val_y1_output_loss: 0.2183 - val_y2
output loss: 0.9110 - val_y1_output_root_mean_squared_error: 0.4734 -
val_y2_output_root_mean_squared_error: 0.9714
Epoch 278/500
- y2 output loss: 0.7895 - y1 output root mean squared error: 0.4193 -
y2_output_root_mean_squared_error: 0.8922 - val_loss: 1.1802 - val y1 output loss: 0.2686 - val y2
_output_loss: 0.8775 - val_y1_output_root_mean_squared_error: 0.5229 -
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val y2 output root mean squared error: 0.9522
Epoch 279/500
- y2 output loss: 0.6828 - y1 output root mean squared error: 0.3956 -
y2 output root mean squared error: 0.8248 - val loss: 1.2138 - val y1 output loss: 0.2266 - val y2
output loss: 0.9653 - val y1 output root mean squared error: 0.4733 -
val_y2_output_root_mean_squared_error: 0.9949
Epoch 280/500
- y2_output_loss: 0.8138 - y1_output_root_mean_squared_error: 0.4407 -
y2 output root mean squared error: 0.9012 - val loss: 1.6240 - val y1 output loss: 0.2622 - val y2
output loss: 1.3138 - val y1 output root mean squared error: 0.5142 -
val_y2_output_root_mean_squared_error: 1.1660
Epoch 281/500
- y2 output loss: 0.6067 - y1 output root mean squared error: 0.4011 -
y2 output root mean squared error: 0.7775 - val loss: 1.1410 - val y1 output loss: 0.1644 - val y2
output loss: 0.9479 - val y1 output root mean squared error: 0.4080 -
val y2 output root mean squared error: 0.9872
Epoch 282/500
- y2 output loss: 0.6823 - y1 output root mean squared error: 0.4100 -
y2_output_root_mean_squared_error: 0.8285 - val_loss: 1.3526 - val_y1_output_loss: 0.1901 - val_y2
_output_loss: 1.1177 - val_y1_output_root_mean_squared_error: 0.4417 -
val y2 output root mean squared error: 1.0759
Epoch 283/500
- y2 output loss: 0.6770 - y1 output root mean squared error: 0.3998 -
y2 output root mean squared error: 0.8260 - val loss: 1.2831 - val y1 output loss: 0.2714 - val y2
_output_loss: 0.9738 - val_y1_output_root_mean_squared error: 0.5233
val y2 output root mean squared error: 1.0046
Epoch 284/500
- y2 output loss: 0.7592 - y1 output root mean squared error: 0.4107 -
y2_output_root_mean_squared_error: 0.8534 - val_loss: 6.4915 - val_y1_output_loss: 0.7475 - val_y2
_output_loss: 5.6931 - val_y1_output_root_mean_squared_error: 0.8576 -
val_y2_output_root_mean_squared_error: 2.3992
Epoch 285/500
- y2_output_loss: 1.2931 - y1_output_root_mean_squared_error: 0.5499 -
\label{eq:continuous_squared_error} y2\_output\_root\_mean\_squared\_error: 1.1403 - val\_loss: 1.1242 - val\_y1\_output\_loss: 0.2213 - val\_y2\_output\_root\_mean\_squared\_error: 1.1403 - val\_loss: 1.1242 - val\_y1\_output\_loss: 0.2213 - val\_y2\_output\_root\_mean\_squared\_error: 1.1403 - val\_loss: 1.1242 - val\_y1\_output\_loss: 0.2213 - val\_y2\_output\_root\_mean\_squared\_error: 1.1403 - val\_loss: 1.1242 - val\_y1\_output\_loss: 0.2213 - val\_y2\_output\_root\_mean\_squared\_error: 1.1403 - val\_y1\_output\_loss: 0.2213 - val\_y2\_output\_root\_mean\_squared\_error: 1.1403 - val\_y1\_output\_loss: 1.1403 - val\_y1\_output\_loss: 0.2213 - val\_y2\_output\_root\_mean\_squared\_error: 1.1403 - val\_y1\_output\_loss: 1.1403 - val\_y1\_output\_loss: 0.2213 - val\_y1\_output\_root\_mean\_squared\_error: 1.1403 - val\_y1\_output\_loss: 1.1403 - val\_y1\_output\_loss: 1.1403 - val\_y1\_output\_root\_mean\_squared\_error: 1.1403 - val\_y1\_output\_loss: 1.140
output loss: 0.8787 - val y1 output root mean squared error: 0.4705
val_y2_output_root_mean_squared_error: 0.9502
Epoch 286/500
- y2 output_loss: 0.7368 - y1_output_root_mean_squared_error: 0.4032 -
y2 output root mean squared error: 0.8588 - val loss: 1.1909 - val y1 output loss: 0.3224 - val y2
output loss: 0.8561 - val y1 output root mean squared error: 0.5641 -
val_y2_output_root_mean_squared_error: 0.9342
Epoch 287/500
- y2_output_loss: 1.1764 - y1_output_root_mean_squared_error: 0.5713 -
y2_output_root_mean_squared_error: 1.0897 - val_loss: 1.0857 - val_y1_output_loss: 0.1784 - val_y2
 _output_loss: 0.8777 - val_y1_output_root_mean_squared_error: 0.4265 -
val y2 output root mean squared error: 0.9507
Epoch 288/500
614/614 [===========] - 0s 138us/sample - loss: 1.2248 - y1_output_loss: 0.2063
- y2_output_loss: 1.0339 - y1_output_root_mean_squared_error: 0.4496 -
y2 output root mean squared error: 1.0113 - val loss: 1.9082 - val y1 output loss: 0.3782 - val y2
output loss: 1.4922 - val y1 output root mean squared error: 0.6195 -
val y2 output root mean squared error: 1.2346
Epoch 289/500
- y2_output_loss: 0.8998 - y1_output_root_mean_squared_error: 0.4372 -
y2_output_root_mean_squared_error: 0.9047 - val_loss: 10.7410 - val_y1_output_loss: 1.2072 - val_y
2 output loss: 9.6804 - val y1 output root mean squared error: 1.0708 -
val_y2_output_root_mean_squared_error: 3.0975
Epoch 290/500
- y2 output loss: 1.5749 - y1 output root mean squared error: 0.5289 -
y2 output root mean squared error: 1.2586 - val loss: 1.7001 - val y1 output loss: 0.2240 - val y2
output loss: 1.4259 - val y1 output root mean squared error: 0.4778 -
val_y2_output_root_mean_squared_error: 1.2132
Epoch 291/500
- y2 output loss: 0.9649 - y1 output root mean squared error: 0.4943 -
y2 output root mean squared error: 0.9860 - val loss: 1.8060 - val y1 output loss: 0.2354 - val y2
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output loss: 1.5202 - val yl output root mean squared error: 0.4796 -
val y2 output root mean squared error: 1.2554
Epoch 292/500
- y2_output_loss: 0.9017 - y1_output_root_mean_squared_error: 0.5204 -
y2 output root mean squared error: 0.9506 - val loss: 2.5544 - val y1 output loss: 0.7081 - val y2
_output_loss: 1.9010 - val_y1_output_root_mean_squared_error: 0.8244 -
val_y2_output_root_mean_squared_error: 1.3692
Epoch 293/500
- y2_output_loss: 0.7566 - y1_output_root_mean_squared_error: 0.4346 -
y2 output root mean squared error: 0.8733 - val loss: 1.2711 - val y1 output loss: 0.2600 - val y2
output loss: 0.9828 - val y1 output root mean squared error: 0.5088 -
val y2 output root mean squared error: 1.0061
Epoch 294/500
- y2 output loss: 0.7655 - y1 output root mean squared error: 0.4132 -
y2_output_root_mean_squared_error: 0.8749 - val_loss: 1.4719 - val_y1_output_loss: 0.4241 - val_y2
output loss: 1.0465 - val y1 output root mean squared error: 0.6451 -
val_y2_output_root_mean_squared_error: 1.0275
Epoch 295/500
- y2 output loss: 0.6316 - y1 output root mean squared error: 0.4082 -
y2_output_root_mean_squared_error: 0.7974 - val_loss: 1.2250 - val_y1_output_loss: 0.2460 - val_y2
_output_loss: 0.9474 - val_y1_output_root_mean_squared_error: 0.4964 -
val y2 output root mean squared error: 0.9892
Epoch 296/500
614/614 [=============] - Os 187us/sample - loss: 0.9886 - y1 output loss: 0.1935
- y2 output loss: 0.7877 - y1 output root mean squared error: 0.4404 -
y2_output_root_mean_squared_error: 0.8914 - val_loss: 1.1048 - val_y1_output_loss: 0.1879 - val_y2
output loss: 0.8810 - val y1 output root mean squared error: 0.4409
val y2 output root mean squared error: 0.9542
Epoch 297/500
614/614 [==============] - 0s 141us/sample - loss: 1.0044 - y1 output loss: 0.2023
- y2 output_loss: 0.7955 - y1_output_root_mean_squared_error: 0.4513 -
y2_output_root_mean_squared_error: 0.8948 - val_loss: 1.4422 - val_y1_output_loss: 0.3376 - val_y2
output loss: 1.0937 - val y1 output root mean squared error: 0.5781 -
val_y2_output_root_mean_squared_error: 1.0526
Epoch 298/500
614/614 [=============] - Os 134us/sample - loss: 0.8031 - y1 output loss: 0.1623
- y2_output_loss: 0.6363 - y1_output_root_mean_squared_error: 0.4040 -
y2_output_root_mean_squared_error: 0.7999 - val_loss: 1.1967 - val_y1_output_loss: 0.2294 - val_y2
_output_loss: 0.9331 - val_y1_output_root_mean_squared_error: 0.4845
val_y2_output_root_mean_squared_error: 0.9808
Epoch 299/500
- y2_output_loss: 0.6150 - y1_output_root_mean_squared_error: 0.3714 -
y2 output root mean squared error: 0.7872 - val loss: 1.0310 - val y1 output loss: 0.1646 - val y2
output loss: 0.8424 - val y1 output root mean squared error: 0.4093 -
val_y2_output_root_mean_squared_error: 0.9292
Epoch 300/500
- y2 output loss: 0.5611 - y1 output root mean squared error: 0.3734
y2 output root mean squared error: 0.7450 - val loss: 2.4168 - val y1 output loss: 0.6712 - val y2
_output_loss: 1.8230 - val_y1_output_root_mean_squared_error: 0.7940 -
val_y2_output_root_mean_squared_error: 1.3365
Epoch 301/500
- y2 output loss: 0.6713 - y1 output root mean squared error: 0.4380 -
y2 output root mean squared error: 0.8228 - val loss: 1.2268 - val y1 output loss: 0.1824 - val y2
output loss: 1.0021 - val y1 output root mean squared error: 0.4326 -
val y2 output root mean squared error: 1.0196
Epoch 302/500
614/614 [=============] - Os 152us/sample - loss: 0.8221 - y1 output loss: 0.1573
- y2_output_loss: 0.6603 - y1_output_root_mean squared error: 0.3963 -
y2_output_root_mean_squared_error: 0.8155 - val_loss: 1.3162 - val_y1_output_loss: 0.3685 - val_y2
output loss: 0.9514 - val y1 output root mean squared error: 0.5911 -
val_y2_output_root_mean_squared_error: 0.9832
Epoch 303/500
- y2_output_loss: 0.5549 - y1_output_root_mean_squared_error: 0.3795 -
y2 output root mean squared error: 0.7363 - val loss: 2.6058 - val y1 output loss: 0.5150 - val y2
_output_loss: 2.1386 - val_y1_output_root_mean_squared_error: 0.6987 -
val_y2_output_root_mean_squared_error: 1.4552
Epoch 304/500
- y2 output loss: 0.6397 - y1 output root mean squared error: 0.4009 -
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y2 output root mean squared error: 0.8010 - val loss: 1.2420 - val y1 output loss: 0.1810 - val y2
output loss: 1.0291 - val y1 output root mean squared error: 0.4283 -
val y2 output root mean squared error: 1.0289
Epoch 305/500
- y2 output loss: 1.0524 - y1 output root mean squared error: 0.4834 -
y2 output root mean squared error: 1.0284 - val loss: 1.2718 - val y1 output loss: 0.1761 - val y2
_output_loss: 1.0537 - val_y1_output_root_mean_squared_error: 0.4256 -
val_y2_output_root_mean_squared_error: 1.0443
Epoch 306/500
- y2 output loss: 0.7874 - y1 output root mean squared error: 0.4509 -
y2 output root mean squared error: 0.8905 - val loss: 1.1131 - val y1 output loss: 0.2066 - val y2
_output_loss: 0.8928 - val_y1_output_root_mean_squared_error: 0.4507 -
val_y2_output_root_mean_squared error: 0.9539
Epoch 307/500
- y2 output loss: 0.9148 - y1 output root mean squared error: 0.4949 -
y2_output_root_mean_squared_error: 0.9594 - val_loss: 1.0424 - val_y1_output_loss: 0.1699 - val_y2
_output_loss: 0.8385 - val_y1_output_root_mean_squared_error: 0.4149 -
val y2 output root mean squared error: 0.9329
Epoch 308/500
- y2_output_loss: 0.6492 - y1_output_root_mean_squared_error: 0.4368 -
y2_output_root_mean_squared_error: 0.7949 - val_loss: 2.6194 - val_y1_output_loss: 0.4300 - val_y2
_output_loss: 2.1077 - val_y1_output_root_mean_squared_error: 0.6658 -
val_y2_output_root_mean_squared_error: 1.4752
Epoch 309/500
- y2_output_loss: 0.7499 - y1_output_root_mean_squared_error: 0.4180 -
y2_output_root_mean_squared_error: 0.8684 - val_loss: 1.2214 - val_y1_output_loss: 0.2208 - val_y2
output loss: 1.0040 - val y1 output root mean squared error: 0.4692
val y2 output root mean squared error: 1.0006
Epoch 310/500
- y2_output_loss: 0.5854 - y1_output_root_mean_squared_error: 0.3970 -
y2_output_root_mean_squared_error: 0.7683 - val_loss: 1.1251 - val_y1_output_loss: 0.2005 - val_y2
_output_loss: 0.8910 - val_y1_output_root_mean_squared_error: 0.4518 -
val_y2_output_root_mean_squared_error: 0.9597
Epoch 311/500
- y2_output_loss: 0.6083 - y1_output_root_mean_squared_error: 0.4020 -
y2 output root mean squared error: 0.7834 - val loss: 1.1166 - val y1 output loss: 0.1542 - val y2
output loss: 0.9256 - val y1 output root mean squared error: 0.3989
val_y2_output_root_mean_squared_error: 0.9785
Epoch 312/500
- y2 output loss: 0.4820 - y1 output root mean squared error: 0.3655 -
y2 output root mean squared error: 0.6959 - val loss: 1.0630 - val y1 output loss: 0.2201 - val y2
output loss: 0.8075 - val y1 output root mean squared error: 0.4760 -
val y2 output root mean squared error: 0.9146
Epoch 313/500
- y2 output loss: 0.7423 - y1 output root mean squared error: 0.4471 -
y2_output_root_mean_squared_error: 0.8646 - val_loss: 1.0463 - val_y1_output_loss: 0.1691 - val_y2
_output_loss: 0.8569 - val_y1_output_root_mean_squared_error: 0.4151 -
val y2 output root mean squared error: 0.9349
Epoch 314/500
- y2 output loss: 0.6677 - y1 output root mean squared error: 0.4100 -
y2 output root mean squared error: 0.8200 - val_loss: 1.5713 - val_y1_output_loss: 0.2643 - val_y2
output loss: 1.2844 - val y1 output root mean squared error: 0.5112 -
val_y2_output_root_mean_squared_error: 1.1446
Epoch 315/500
- y2_output_loss: 0.6778 - y1_output_root_mean_squared_error: 0.4444 -
y2 output root mean squared error: 0.8242 - val loss: 0.9805 - val y1 output loss: 0.1758 - val y2
_output_loss: 0.7747 - val_y1_output_root_mean_squared_error: 0.4254 -
val_y2_output_root_mean_squared_error: 0.8942
Epoch 316/500
- y2 output loss: 0.9125 - y1 output root mean squared error: 0.4771 -
y2 output root mean squared error: 0.9544 - val loss: 1.1552 - val y1 output loss: 0.2679 - val y2
output loss: 0.8586 - val y1 output root mean squared error: 0.5185 -
val y2 output root mean squared error: 0.9415
Epoch 317/500
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- y2_output_loss: 0.8443 - y1_output_root_mean_squared_error: 0.4420 -
y2 output root mean squared error: 0.9224 - val loss: 1.0152 - val y1 output loss: 0.1809 - val y2
output loss: 0.8129 - val y1 output root mean squared error: 0.4241 -
val_y2_output_root_mean_squared_error: 0.9140
Epoch 318/500
- y2 output loss: 0.5021 - y1 output root mean squared error: 0.3762 -
y2 output root mean squared error: 0.6978 - val loss: 1.2080 - val y1 output loss: 0.1773 - val y2
_output_loss: 0.9917 - val_y1_output_root_mean_squared_error: 0.4282 -
val_y2_output_root_mean_squared_error: 1.0123
Epoch 319/500
- y2 output loss: 0.6673 - y1 output root mean squared error: 0.3945 -
y2_output_root_mean_squared_error: 0.8166 - val_loss: 3.5363 - val_y1_output_loss: 0.7027 - val_y2
_output_loss: 2.8595 - val_y1_output_root_mean_squared_error: 0.8238 -
val y2 output root mean squared error: 1.6905
Epoch 320/500
- y2 output loss: 0.6825 - y1 output root mean squared error: 0.4695 -
y2_output_root_mean_squared_error: 0.8291 - val_loss: 1.0139 - val_y1_output_loss: 0.1842 - val_y2
output loss: 0.8076 - val y1 output root mean squared error: 0.4304
val_y2_output_root_mean_squared_error: 0.9103
Epoch 321/500
614/614 [=============] - Os 138us/sample - loss: 0.9077 - y1 output loss: 0.1876
- y2_output_loss: 0.7374 - y1_output_root_mean_squared_error: 0.4333 -
y2_output_root_mean_squared_error: 0.8485 - val_loss: 3.2494 - val_y1_output_loss: 0.4181 - val_y2
_output_loss: 2.8523 - val_y1_output_root_mean_squared error: 0.6266 -
val y2 output root mean squared error: 1.6902
Epoch 322/500
- y2_output_loss: 0.7514 - y1_output_root_mean_squared_error: 0.4157 -
y2_output_root_mean_squared_error: 0.8705 - val_loss: 1.0076 - val_y1_output_loss: 0.1878 - val_y2
output loss: 0.7892 - val y1 output root mean squared error: 0.4371
val_y2_output_root_mean_squared_error: 0.9036
Epoch 323/500
- y2 output_loss: 0.9948 - y1_output_root_mean_squared_error: 0.4883 -
y2 output root mean squared error: 1.0016 - val loss: 1.0393 - val y1 output loss: 0.1932 - val y2
_output_loss: 0.8365 - val_y1_output_root_mean_squared_error: 0.4364 -
val y2 output root mean squared error: 0.9214
Epoch 324/500
- y2_output_loss: 1.0723 - y1_output_root_mean_squared_error: 0.5411 -
y2_output_root_mean_squared_error: 1.0403 - val_loss: 1.2116 - val_y1_output_loss: 0.2936 - val_y2
output loss: 0.9001 - val_y1_output_root_mean_squared_error: 0.5365 -
val y2 output root mean squared error: 0.9611
Epoch 325/500
- y2 output loss: 0.5518 - y1 output root mean squared error: 0.4018 -
y2 output root mean squared error: 0.7396 - val loss: 1.5794 - val y1 output loss: 0.3101 - val y2
output loss: 1.2185 - val y1 output root mean squared error: 0.5654 -
val_y2_output_root_mean_squared_error: 1.1224
Epoch 326/500
- y2_output_loss: 0.5798 - y1_output_root_mean_squared_error: 0.3979 -
y2_output_root_mean_squared_error: 0.7584 - val_loss: 1.4134 - val_y1_output_loss: 0.2097 - val_y2
output loss: 1.1639 - val y1 output root mean squared error: 0.4580 -
val_y2_output_root_mean_squared_error: 1.0971
Epoch 327/500
- y2 output loss: 0.5826 - y1 output root mean squared error: 0.4218 -
y2 output root mean squared error: 0.7649 - val loss: 0.9939 - val y1 output loss: 0.1650 - val y2
output loss: 0.8019 - val y1 output root mean squared error: 0.4066 -
val y2 output root mean squared error: 0.9103
Epoch 328/500
- y2 output loss: 0.8067 - y1_output_root_mean_squared_error: 0.3987 -
y2 output root mean squared error: 0.9006 - val loss: 1.4552 - val y1 output loss: 0.1739 - val y2
_output_loss: 1.2381 - val_y1_output_root_mean_squared_error: 0.4184 -
val_y2_output_root_mean_squared_error: 1.1314
Epoch 329/500
- y2 output loss: 0.5933 - y1 output root mean squared error: 0.3976 -
y2 output root mean squared error: 0.7717 - val loss: 1.4242 - val y1 output loss: 0.4320 - val y2
_output_loss: 1.0184 - val_y1_output_root_mean_squared_error: 0.6438 -
val y2 output root mean squared error: 1.0049
Epoch 330/500
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614/614 [=============] - 0s 143us/sample - loss: 0.7380 - y1 output loss: 0.1491
- y2 output loss: 0.5854 - y1 output root mean squared error: 0.3874 -
y2 output root mean squared error: 0.7668 - val loss: 1.6270 - val y1 output loss: 0.2647 - val y2
output loss: 1.3160 - val y1 output root mean squared error: 0.5215 -
val y2 output root mean squared error: 1.1640
Epoch 331/500
- y2 output loss: 0.5033 - y1 output root mean squared error: 0.3586 -
y2_output_root_mean_squared_error: 0.7096 - val_loss: 0.9675 - val_y1_output_loss: 0.1614 - val_y2
_output_loss: 0.7840 - val_y1_output_root_mean_squared_error: 0.4043 -
val y2 output root mean squared error: 0.8966
Epoch 332/500
- y2 output loss: 0.5984 - y1 output root mean squared error: 0.3896 -
y2\_output\_root\_mean\_squared\_error: 0.7761 - val\_loss: 1.0045 - val\_y1\_output\_loss: 0.1414 - val\_y2
_output_loss: 0.8323 - val_y1_output_root_mean_squared_error: 0.3810 -
val y2 output root mean squared error: 0.9270
Epoch 333/500
- y2 output loss: 0.6218 - y1 output root mean squared error: 0.4135 -
y2_output_root_mean_squared_error: 0.7898 - val_loss: 0.9626 - val_y1_output_loss: 0.1721 - val_y2
output loss: 0.7588 - val y1 output root mean squared error: 0.4194
val_y2_output_root_mean_squared_error: 0.8869
Epoch 334/500
- y2_output_loss: 0.8995 - y1_output_root_mean_squared_error: 0.4747 -
y2_output_root_mean_squared_error: 0.9517 - val_loss: 1.4046 - val_y1_output_loss: 0.2327 - val_y2
_output_loss: 1.1496 - val_y1_output_root_mean_squared_error: 0.4723 -
val_y2_output_root_mean_squared_error: 1.0870
Epoch 335/500
- y2_output_loss: 0.7171 - y1_output_root_mean_squared_error: 0.4445 -
y2 output root mean squared error: 0.8500 - val loss: 1.0818 - val y1 output loss: 0.1967 - val y2
_output_loss: 0.8631 - val_y1_output_root_mean_squared_error: 0.4414
val y2 output root mean squared error: 0.9418
Epoch 336/500
- y2_output_loss: 1.1717 - y1_output_root_mean_squared_error: 0.6119 -
y2_output_root_mean_squared_error: 1.0804 - val_loss: 1.8061 - val_y1_output_loss: 0.4293 - val_y2
output_loss: 1.3520 - val_y1_output_root_mean_squared_error: 0.6579 -
val y2 output root mean squared error: 1.1719
Epoch 337/500
- y2 output loss: 0.5191 - y1 output root mean squared error: 0.3896
y2 output root mean squared error: 0.7221 - val loss: 1.1202 - val y1 output loss: 0.1546 - val y2
output loss: 0.9276 - val y1 output root mean squared error: 0.3975
val y2 output root mean squared error: 0.9809
Epoch 338/500
614/614 [=============] - Os 146us/sample - loss: 0.7702 - y1 output loss: 0.1524
- y2 output loss: 0.6447 - y1_output_root_mean_squared_error: 0.3807 -
y2 output root mean squared error: 0.7908 - val loss: 3.6056 - val y1 output loss: 1.4815 - val y2
output loss: 2.2559 - val yl output root mean squared error: 1.1926 -
val_y2_output_root_mean_squared_error: 1.4776
Epoch 339/500
- y2_output_loss: 0.7528 - y1_output_root_mean_squared_error: 0.4887 -
y2_output_root_mean_squared_error: 0.8716 - val_loss: 1.1546 - val_y1_output loss: 0.1909 - val_y2
output loss: 0.9350 - val y1 output root mean squared error: 0.4403 -
val_y2_output_root_mean_squared_error: 0.9802
Epoch 340/500
- y2 output loss: 0.9158 - y1 output root mean squared error: 0.5022 -
y2 output root mean squared error: 0.9581 - val loss: 1.0450 - val y1 output loss: 0.2038 - val y2
output loss: 0.8168 - val y1 output root mean squared error: 0.4572 -
val y2 output root mean squared error: 0.9143
Epoch 341/500
- y2 output loss: 0.5450 - y1 output root mean squared error: 0.3939 -
y2_output_root_mean_squared_error: 0.7413 - val_loss: 1.2866 - val_y1_output_loss: 0.3068 - val_y2
_output_loss: 0.9699 - val_y1_output_root_mean_squared_error: 0.5493 -
val_y2_output_root_mean_squared_error: 0.9924
Epoch 342/500
- y2 output loss: 0.5491 - y1 output root mean squared error: 0.3855 -
y2_output_root_mean_squared_error: 0.7366 - val_loss: 1.7983 - val_y1_output_loss: 0.1696 - val_y2
_output_loss: 1.5721 - val_y1_output_root_mean_squared_error: 0.4160 -
```

val y2 output root mean squared error: 1.2748

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Epoch 343/500
- y2 output loss: 0.7086 - y1 output root mean squared error: 0.4364 -
y2 output root mean squared error: 0.8455 - val loss: 0.9855 - val y1 output loss: 0.1932 - val y2
_output_loss: 0.7623 - val_y1_output_root_mean_squared_error: 0.4429 -
val y2 output root mean squared error: 0.8885
Epoch 344/500
- y2 output loss: 0.9398 - y1 output root mean squared error: 0.4790 -
y2_output_root_mean_squared_error: 0.9739 - val_loss: 1.0109 - val_y1_output_loss: 0.2027 - val_y2
_output_loss: 0.7932 - val_y1_output_root_mean_squared_error: 0.4462 -
val y2 output root mean squared error: 0.9010
Epoch 345/500
- y2 output_loss: 0.5941 - y1_output_root_mean_squared_error: 0.3912 -
y2_output_root_mean_squared_error: 0.7700 - val_loss: 1.6496 - val_y1_output_loss: 0.3783 - val_y2
_output_loss: 1.2506 - val_y1_output_root_mean_squared error: 0.6041 -
val y2 output root mean squared error: 1.1334
Epoch 346/500
- y2_output_loss: 0.5246 - y1_output_root_mean_squared_error: 0.3954 -
y2_output_root_mean_squared_error: 0.7265 - val_loss: 0.9066 - val_y1_output_loss: 0.1495 - val_y2
_output_loss: 0.7265 - val_y1_output_root_mean_squared_error: 0.3933
val_y2_output_root_mean_squared_error: 0.8671
Epoch 347/500
- y2_output_loss: 0.5623 - y1_output_root_mean_squared_error: 0.4239 -
y2 output root mean squared error: 0.7499 - val loss: 0.9710 - val y1 output loss: 0.1868 - val y2
output loss: 0.7614 - val y1 output root mean squared error: 0.4349 -
val y2 output root mean squared error: 0.8842
Epoch 348/500
- y2 output_loss: 0.6805 - y1_output_root_mean_squared_error: 0.4016
y2 output root mean squared error: 0.8284 - val loss: 1.7263 - val y1 output loss: 0.4802 - val y2
output loss: 1.2251 - val y1 output root mean squared error: 0.6934 -
val y2 output root mean squared error: 1.1160
Epoch 349/500
614/614 [============] - 0s 135us/sample - loss: 1.0833 - y1_output_loss: 0.2367
- y2 output loss: 0.8396 - y1 output root mean squared error: 0.4880 -
y2 output root mean squared error: 0.9194 - val loss: 0.9307 - val y1 output loss: 0.1703 - val y2
_output_loss: 0.7280 - val_y1_output_root_mean_squared_error: 0.4183 -
val y2 output root mean squared error: 0.8693
Epoch 350/500
- y2 output loss: 0.5694 - y1 output root mean squared error: 0.3897
y2_output_root_mean_squared_error: 0.7560 - val_loss: 1.3249 - val_y1_output_loss: 0.2399 - val_y2
output loss: 1.0411 - val yl_output_root_mean_squared_error: 0.4953 -
val_y2_output_root_mean_squared_error: 1.0390
Epoch 351/500
614/614 [=============] - 0s 142us/sample - loss: 1.1419 - y1 output loss: 0.2494
- y2 output loss: 0.8919 - y1 output root mean squared error: 0.5012 -
y2 output root mean squared error: 0.9438 - val loss: 1.5893 - val y1 output loss: 0.2680 - val y2
_output_loss: 1.3260 - val_y1_output_root_mean_squared_error: 0.5106 -
val_y2_output_root_mean_squared_error: 1.1526
Epoch 352/500
- y2_output_loss: 0.5859 - y1_output_root_mean_squared_error: 0.3911 -
y2 output root mean squared error: 0.7639 - val loss: 2.0939 - val y1 output loss: 0.6412 - val y2
_output_loss: 1.5048 - val_y1_output_root_mean_squared_error: 0.7806 -
val_y2_output_root_mean_squared_error: 1.2184
Epoch 353/500
- y2_output_loss: 0.6981 - y1_output_root_mean_squared_error: 0.4609 -
y2 output root mean squared error: 0.8348 - val loss: 1.8647 - val y1 output loss: 0.2636 - val y2
output loss: 1.5383 - val y1 output root mean squared error: 0.5198 -
val y2 output root mean squared error: 1.2627
Epoch 354/500
- y2 output loss: 0.5459 - y1 output root mean squared error: 0.4092 -
y2_output_root_mean_squared_error: 0.7335 - val_loss: 4.1347 - val_y1_output_loss: 1.0194 - val_y2
_output_loss: 3.0938 - val_y1_output_root_mean_squared_error: 1.0003 -
val y2 output root mean squared error: 1.7704
Epoch 355/500
- y2 output loss: 0.5182 - y1 output root mean squared error: 0.4088 -
y2_output_root_mean_squared_error: 0.7223 - val_loss: 1.0363 - val_y1_output_loss: 0.1672 - val_y2
_output_loss: 0.8433 - val_y1_output_root_mean_squared_error: 0.4103 -
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val y2 output root mean squared error: 0.9316
Epoch 356/500
- y2 output loss: 0.5140 - y1 output root mean squared error: 0.3812 -
y2 output root mean squared error: 0.7196 - val loss: 1.0359 - val y1 output loss: 0.1504 - val y2
output loss: 0.8483 - val y1 output root mean squared error: 0.3940 -
val y2 output root mean squared error: 0.9384
Epoch 357/500
- y2_output_loss: 0.5429 - y1_output_root_mean_squared_error: 0.3712 -
y2_output_root_mean_squared_error: 0.7100 - val_loss: 6.0725 - val_y1_output_loss: 0.3883 - val_y2
output loss: 5.5511 - val y1 output root mean squared error: 0.6324
val_y2_output_root_mean_squared_error: 2.3817
Epoch 358/500
- y2_output_loss: 0.6585 - y1_output_root_mean_squared_error: 0.4028 -
y2_output_root_mean_squared_error: 0.8137 - val_loss: 0.9370 - val_y1_output_loss: 0.1404 - val_y2
output loss: 0.7661 - val y1 output root mean squared error: 0.3802 -
val y2 output root mean squared error: 0.8902
Epoch 359/500
614/614 [=============] - 0s 135us/sample - loss: 0.9179 - y1 output loss: 0.1795
- y2 output_loss: 0.7339 - y1_output_root_mean_squared_error: 0.4229 -
y2_output_root_mean_squared_error: 0.8597 - val_loss: 1.5788 - val_y1_output_loss: 0.4987 - val_y2
_output_loss: 1.0340 - val_y1_output_root_mean_squared_error: 0.7164 -
val_y2_output_root_mean_squared_error: 1.0323
Epoch 360/500
- y2_output_loss: 0.5506 - y1_output_root_mean_squared_error: 0.3830 -
y2 output root mean squared error: 0.7455 - val loss: 0.8488 - val y1 output loss: 0.1949 - val y2
_output_loss: 0.6350 - val_y1_output_root_mean_squared_error: 0.4415 -
val y2 output root mean squared error: 0.8086
Epoch 361/500
- y2_output_loss: 0.5441 - y1_output_root_mean_squared_error: 0.3916
y2 output root mean squared error: 0.7359 - val loss: 2.9469 - val y1 output loss: 0.4500 - val y2
output loss: 2.3935 - val y1 output root mean squared error: 0.6828 -
val_y2_output_root_mean_squared_error: 1.5750
Epoch 362/500
- y2_output_loss: 0.4979 - y1_output_root_mean_squared_error: 0.3651 -
y2_output_root_mean_squared_error: 0.7024 - val_loss: 1.5638 - val_y1_output_loss: 0.2226 - val_y2
output loss: 1.3215 - val y1 output root mean squared error: 0.4741 -
val_y2_output_root_mean_squared_error: 1.1571
Epoch 363/500
- y2 output loss: 0.5526 - y1_output_root_mean_squared_error: 0.3672 -
y2 output root mean squared error: 0.7438 - val loss: 1.0079 - val y1 output loss: 0.1888 - val y2
output loss: 0.7873 - val y1 output root mean squared error: 0.4380 -
val_y2_output_root_mean_squared_error: 0.9033
Epoch 364/500
- y2 output loss: 0.5975 - y1 output root mean squared error: 0.3795 -
y2 output root mean squared error: 0.7754 - val loss: 1.1890 - val y1 output loss: 0.2228 - val y2
output loss: 0.9278 - val y1 output root mean squared error: 0.4782 -
val_y2_output_root_mean_squared_error: 0.9800
Epoch 365/500
- y2_output_loss: 0.6355 - y1_output_root_mean_squared_error: 0.3915 -
y2 output root mean squared error: 0.7993 - val loss: 0.9483 - val y1 output loss: 0.1929 - val y2
_output_loss: 0.7450 - val_y1_output_root_mean_squared_error: 0.4316 -
val_y2_output_root_mean_squared_error: 0.8729
Epoch 366/500
- y2 output loss: 0.5505 - y1 output root mean squared error: 0.3875 -
y2 output root mean squared error: 0.7438 - val loss: 1.1889 - val y1 output loss: 0.2294 - val y2
_output_loss: 0.9312 - val_y1_output_root_mean_squared_error: 0.4755 -
val y2 output root mean squared error: 0.9812
Epoch 367/500
- y2 output loss: 0.5674 - y1 output root mean squared error: 0.3802 -
y2_output_root_mean_squared_error: 0.7305 - val_loss: 9.4695 - val_y1_output_loss: 0.4851 - val_y2
_output_loss: 8.7241 - val_y1_output_root_mean_squared_error: 0.7089 -
val_y2_output_root_mean_squared_error: 2.9945
Epoch 368/500
- y2 output_loss: 0.9112 - y1_output_root_mean_squared_error: 0.4578 -
y2_output_root_mean_squared_error: 0.9580 - val_loss: 0.9549 - val_y1_output_loss: 0.1825 - val_y2
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output loss: 0.7422 - val y1 output root mean squared error: 0.4331 -
val y2 output root mean squared error: 0.8760
Epoch 369/500
614/614 [=================== ] - Os 142us/sample - loss: 0.8047 - y1 output loss: 0.1797
- y2 output loss: 0.6208 - y1 output root mean squared error: 0.4256 -
y2_output_root_mean_squared_error: 0.7896 - val_loss: 0.8732 - val_y1_output loss: 0.1509 - val_y2
_output_loss: 0.7071 - val_y1 output root mean squared error: 0.3894 -
val y2 output root mean squared error: 0.8494
Epoch 370/500
- y2_output_loss: 0.5581 - y1_output_root_mean_squared_error: 0.3712 -
y2_output_root_mean_squared_error: 0.7486 - val_loss: 1.8355 - val_y1_output_loss: 0.5933 - val_y2
output loss: 1.3232 - val y1 output root mean squared error: 0.7401 -
val_y2_output_root_mean_squared_error: 1.1348
Epoch 371/500
- y2_output_loss: 0.7814 - y1_output_root_mean_squared_error: 0.4420 -
y2 output root mean squared error: 0.8851 - val loss: 1.1044 - val y1 output loss: 0.2657 - val y2
_output_loss: 0.8301 - val_y1_output_root_mean_squared_error: 0.5085 -
val_y2_output_root_mean_squared_error: 0.9197
Epoch 372/500
614/614 [=============] - Os 136us/sample - loss: 0.6784 - y1 output loss: 0.1503
- y2_output_loss: 0.5227 - y1_output_root_mean_squared_error: 0.3893 -
y2 output root mean squared error: 0.7259 - val loss: 0.9268 - val y1 output loss: 0.1597 - val y2
output_loss: 0.7401 - val_y1_output_root_mean_squared_error: 0.4019
val_y2_output_root_mean_squared_error: 0.8748
Epoch 373/500
- y2_output_loss: 0.5226 - y1_output_root_mean_squared_error: 0.3752 -
y2_output_root_mean_squared_error: 0.7214 - val_loss: 1.0907 - val_y1_output_loss: 0.2461 - val_y2
_output_loss: 0.8533 - val_y1_output_root_mean_squared_error: 0.4846 -
val y2 output root mean squared error: 0.9251
Epoch 374/500
- y2 output loss: 0.4502 - y1 output root mean squared error: 0.3739 -
y2 output root mean squared error: 0.6729 - val loss: 0.9400 - val y1 output loss: 0.1576 - val y2
output loss: 0.7657 - val y1 output root mean squared error: 0.4007
val y2 output root mean squared error: 0.8828
Epoch 375/500
- y2 output loss: 0.4743 - y1 output root mean squared error: 0.3942 -
y2 output root mean squared error: 0.6916 - val loss: 1.0436 - val y1 output loss: 0.1469 - val y2
output loss: 0.8622 - val y1 output root mean squared error: 0.3862 -
val_y2_output_root_mean_squared_error: 0.9458
Epoch 376/500
- y2_output_loss: 0.4281 - y1_output_root_mean_squared_error: 0.3425 -
y2_output_root_mean_squared_error: 0.6565 - val_loss: 1.2716 - val_y1_output loss: 0.2842 - val_y2
output loss: 0.9897 - val y1 output root mean squared error: 0.5293 -
val_y2_output_root_mean_squared_error: 0.9958
Epoch 377/500
- y2 output loss: 0.4765 - y1 output root mean squared error: 0.3724 -
y2 output root mean squared error: 0.6852 - val loss: 1.5402 - val y1 output loss: 0.2094 - val y2
_output_loss: 1.3122 - val_y1_output_root_mean_squared_error: 0.4573 -
val_y2_output_root_mean_squared_error: 1.1537
Epoch 378/500
- y2 output loss: 0.4322 - y1 output root mean squared error: 0.3631 -
y2_output_root_mean_squared_error: 0.6569 - val_loss: 1.4644 - val_y1_output_loss: 0.3166 - val_y2
_output_loss: 1.1290 - val_y1_output_root_mean_squared_error: 0.5612 -
val y2 output root mean squared error: 1.0721
Epoch 379/500
- y2 output loss: 0.7434 - y1 output root mean squared error: 0.4268 -
y2 output root mean squared error: 0.8549 - val loss: 5.2710 - val y1 output loss: 0.6536 - val y2
_output_loss: 4.4596 - val_y1_output_root_mean_squared_error: 0.8222 -
val y2 output root mean squared error: 2.1436
Epoch 380/500
614/614 [=============] - Os 144us/sample - loss: 0.7788 - y1 output loss: 0.1776
- y2_output_loss: 0.6077 - y1_output_root_mean_squared_error: 0.4177 -
y2_output_root_mean_squared_error: 0.7774 - val_loss: 1.3457 - val_y1_output_loss: 0.4228 - val_y2
_output_loss: 0.9565 - val_y1_output_root_mean_squared_error: 0.6297 -
val_y2_output_root_mean_squared_error: 0.9743
Epoch 381/500
- y2 output loss: 0.5469 - y1 output root mean squared error: 0.4161 -
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y2_output_root_mean_squared_error: 0.7334 - val_loss: 3.5296 - val_y1_output_loss: 0.9011 - val_y2
_output_loss: 2.6735 - val_y1_output_root_mean_squared_error: 0.9322 -
val_y2_output_root_mean_squared_error: 1.6311
Epoch 382/500
- y2_output_loss: 0.5758 - y1_output_root_mean_squared_error: 0.4120 -
y2_output_root_mean_squared_error: 0.7622 - val_loss: 0.9673 - val_y1_output_loss: 0.1701 - val_y2
_output_loss: 0.7653 - val_y1_output_root_mean squared error: 0.4181 -
val y2 output root mean squared error: 0.8902
Epoch 383/500
- y2_output_loss: 0.5566 - y1_output_root_mean_squared_error: 0.3696 -
y2\_output\_root\_mean\_squared\_error: 0.7475 - val\_loss: 1.1480 - val\_y1\_output\_loss: 0.3417 - val\_y2
_output_loss: 0.8047 - val_y1_output_root_mean_squared_error: 0.5800
val_y2_output_root_mean_squared_error: 0.9009
Epoch 384/500
- y2_output_loss: 0.4217 - y1_output_root_mean_squared_error: 0.3545 -
y2 output root mean squared error: 0.6514 - val loss: 0.7703 - val y1 output loss: 0.1369 - val y2
output loss: 0.6096 - val y1 output root mean squared error: 0.3755 -
val y2 output root mean squared error: 0.7933
Epoch 385/500
- y2 output loss: 0.5085 - y1 output root mean squared error: 0.3563
y2 output root mean squared error: 0.7044 - val loss: 1.2479 - val y1 output loss: 0.1979 - val y2
output_loss: 1.0090 - val_y1_output_root_mean_squared_error: 0.4517 -
val_y2_output_root_mean_squared_error: 1.0217
Epoch 386/500
614/614 [============] - Os 144us/sample - loss: 0.6462 - y1_output_loss: 0.1278
- y2 output loss: 0.5285 - y1 output root mean squared error: 0.3546 -
y2_output_root_mean_squared_error: 0.7214 - val_loss: 3.1882 - val_y1_output_loss: 0.9573 - val_y2
output loss: 2.2737 - val_y1_output_root_mean_squared_error: 0.9654 -
val y2 output root mean squared error: 1.5021
Epoch 387/500
- y2 output loss: 0.6778 - y1 output root mean squared error: 0.4374 -
y2 output root mean squared error: 0.8269 - val loss: 0.8413 - val y1 output loss: 0.1531 - val y2
output loss: 0.6763 - val y1 output root mean squared error: 0.3948 -
val_y2_output_root_mean_squared_error: 0.8279
Epoch 388/500
- y2_output_loss: 0.8454 - y1_output_root_mean_squared_error: 0.4695 -
y2 output root mean squared error: 0.9098 - val loss: 4.3924 - val y1 output loss: 0.6446 - val y2
_output_loss: 3.6338 - val_y1_output_root_mean_squared_error: 0.8132 -
val_y2_output_root_mean_squared_error: 1.9316
Epoch 389/500
- y2_output_loss: 0.6144 - y1_output_root_mean_squared_error: 0.3951 -
y2 output root mean squared error: 0.7813 - val loss: 3.1995 - val y1 output loss: 0.3564 - val y2
output loss: 2.7317 - val_y1_output_root_mean_squared_error: 0.6074 -
val_y2_output_root_mean_squared_error: 1.6825
Epoch 390/500
- y2 output loss: 0.4198 - y1 output root mean squared error: 0.3585 -
y2 output root mean squared error: 0.6469 - val loss: 1.3084 - val y1 output loss: 0.2472 - val y2
_output_loss: 1.0742 - val_y1_output_root_mean_squared_error: 0.4917 -
val_y2_output_root mean squared error: 1.0328
Epoch 391/500
- y2 output loss: 0.5560 - y1 output root mean squared error: 0.3945 -
y2_output_root_mean_squared_error: 0.7464 - val_loss: 0.8307 - val_y1_output_loss: 0.1682 - val_y2
_output_loss: 0.6562 - val_y1_output_root_mean_squared_error: 0.4098 -
val y2 output root mean squared error: 0.8141
Epoch 392/500
- y2 output loss: 0.4110 - y1 output root mean squared error: 0.3688 -
y2_output_root_mean_squared_error: 0.6438 - val_loss: 0.9807 - val_y1_output_loss: 0.2573 - val_y2
output loss: 0.7275 - val y1 output root mean squared error: 0.4973
val y2 output root mean squared error: 0.8564
Epoch 393/500
- y2_output_loss: 0.6661 - y1_output_root_mean_squared_error: 0.4039 -
y2_output_root_mean_squared_error: 0.8168 - val_loss: 1.1938 - val_y1_output_loss: 0.1917 - val_y2
output loss: 0.9630 - val y1 output root mean squared error: 0.4431 -
val_y2_output_root_mean_squared_error: 0.9987
Epoch 394/500
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- y2_output_loss: 0.5210 - y1_output_root_mean_squared_error: 0.3633 -
y2_output_root_mean_squared_error: 0.7249 - val_loss: 0.8319 - val_y1_output_loss: 0.1741 - val_y2
output loss: 0.6356 - val y1 output root mean squared error: 0.4207
val y2 output root mean squared error: 0.8092
Epoch 395/500
- y2_output_loss: 0.4752 - y1_output_root_mean_squared_error: 0.3591 -
y2_output_root_mean_squared_error: 0.6915 - val_loss: 0.9189 - val_y1_output_loss: 0.2016 - val_y2
_output_loss: 0.6909 - val_y1_output_root_mean_squared_error: 0.4523 -
val y2 output root mean squared error: 0.8452
Epoch 396/500
- y2_output_loss: 0.4543 - y1_output_root_mean_squared_error: 0.3702 -
y2_output_root_mean_squared_error: 0.6743 - val_loss: 0.9582 - val_y1_output_loss: 0.2222 - val_y2
_output_loss: 0.7041 - val_y1_output_root_mean_squared_error: 0.4776 -
val_y2_output_root_mean_squared_error: 0.8545
Epoch 397/500
- y2_output_loss: 0.4875 - y1_output_root_mean_squared_error: 0.3989 -
y2 output root mean squared error: 0.6991 - val loss: 0.8370 - val y1 output loss: 0.1698 - val y2
output_loss: 0.6453 - val_y1_output_root_mean_squared_error: 0.4156 -
val y2 output root mean squared error: 0.8150
Epoch 398/500
- y2 output loss: 0.4293 - y1 output root mean squared error: 0.3463
y2 output root mean squared error: 0.6557 - val loss: 0.9898 - val y1 output loss: 0.1766 - val y2
output_loss: 0.7861 - val_y1_output_root_mean_squared_error: 0.4237 -
val_y2_output_root_mean_squared_error: 0.9001
Epoch 399/500
- y2_output_loss: 0.3836 - y1_output_root_mean_squared_error: 0.3605 -
y2_output_root_mean_squared_error: 0.6210 - val_loss: 0.8487 - val_y1_output_loss: 0.1667 - val_y2
output loss: 0.6689 - val y1 output root mean squared error: 0.4062 -
val_y2_output_root_mean_squared_error: 0.8268
Epoch 400/500
- y2 output loss: 0.4126 - y1 output root mean squared error: 0.3473 -
y2 output root mean squared error: 0.6406 - val loss: 1.7059 - val y1 output loss: 0.2473 - val y2
output loss: 1.5098 - val y1 output root mean squared error: 0.4839 -
val y2 output root mean squared error: 1.2132
Epoch 401/500
- y2_output_loss: 0.4635 - y1_output_root_mean_squared_error: 0.3713 -
y2 output root mean squared error: 0.6805 - val loss: 0.8646 - val y1 output loss: 0.1708 - val y2
_output_loss: 0.6661 - val_y1_output_root_mean_squared_error: 0.4183 -
val_y2_output_root_mean_squared_error: 0.8304
Epoch 402/500
- y2 output loss: 0.3594 - y1_output_root_mean_squared_error: 0.3364 -
y2 output root mean squared error: 0.5986 - val loss: 0.9637 - val y1 output loss: 0.1682 - val y2
_output_loss: 0.7657 - val_y1_output_root_mean_squared_error: 0.4139 -
val y2 output root mean squared error: 0.8902
Epoch 403/500
- y2 output loss: 0.4932 - y1 output root mean squared error: 0.3604 -
y2_output_root_mean_squared_error: 0.7027 - val_loss: 0.9457 - val_y1_output_loss: 0.1772 - val_y2
_output_loss: 0.7419 - val_y1_output_root_mean_squared_error: 0.4279 -
val y2 output root mean squared error: 0.8733
Epoch 404/500
- y2 output loss: 0.6867 - y1 output root mean squared error: 0.4737 -
y2_output_root_mean_squared_error: 0.8306 - val_loss: 0.8647 - val_y1_output_loss: 0.1677 - val_y2
_output_loss: 0.6908 - val_y1_output_root_mean_squared_error: 0.4093 -
val_y2_output_root_mean_squared_error: 0.8350
Epoch 405/500
- y2 output_loss: 0.5662 - y1_output_root_mean_squared_error: 0.3931 -
y2_output_root_mean_squared_error: 0.7552 - val_loss: 1.1284 - val_y1_output_loss: 0.2135 - val_y2
output loss: 0.8863 - val y1 output root mean squared error: 0.4613
val y2 output root mean squared error: 0.9569
Epoch 406/500
- y2_output_loss: 0.4222 - y1_output_root_mean_squared_error: 0.3657 -
y2_output_root_mean_squared_error: 0.6519 - val_loss: 0.8419 - val_y1_output_loss: 0.1843 - val_y2
_output_loss: 0.6315 - val_y1_output_root_mean_squared_error: 0.4346 -
val_y2_output_root_mean_squared_error: 0.8081
```

Epoch 407/500

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- y2_output_loss: 0.5164 - y1_output_root_mean_squared_error: 0.4060 -
y2_output_root_mean_squared_error: 0.7205 - val_loss: 1.0246 - val_y1_output_loss: 0.1575 - val_y2
output loss: 0.8342 - val y1 output root mean squared error: 0.4017
val_y2_output_root_mean_squared_error: 0.9291
Epoch 408/500
- y2 output_loss: 0.5175 - y1_output_root_mean_squared_error: 0.3677 -
y2 output root mean squared error: 0.7213 - val loss: 0.8378 - val y1 output loss: 0.1680 - val y2
output loss: 0.6466 - val y1 output root mean squared error: 0.4113 -
val y2 output root mean squared error: 0.8177
Epoch 409/500
- y2_output_loss: 0.4091 - y1_output_root_mean_squared_error: 0.3627 -
y2_output_root_mean_squared_error: 0.6380 - val_loss: 1.1683 - val_y1_output loss: 0.2997 - val_y2
output_loss: 0.8691 - val_y1_output_root_mean_squared_error: 0.5457 -
val_y2_output_root_mean_squared_error: 0.9330
Epoch 410/500
- y2 output loss: 0.4016 - y1 output root mean squared error: 0.3371 -
y2 output root mean squared error: 0.6324 - val loss: 1.0379 - val y1 output loss: 0.2287 - val y2
output loss: 0.7903 - val y1 output root mean squared error: 0.4798 -
val y2 output root mean squared error: 0.8987
Epoch 411/500
- y2 output loss: 0.4299 - y1_output_root_mean_squared_error: 0.3580 -
y2 output root mean squared error: 0.6525 - val loss: 1.7259 - val y1 output loss: 0.1857 - val y2
output loss: 1.4855 - val yl output root mean squared error: 0.4330 -
val_y2_output_root_mean_squared_error: 1.2403
Epoch 412/500
- y2 output loss: 0.5579 - y1 output root mean squared error: 0.4122 -
y2 output root mean squared error: 0.7491 - val loss: 1.1936 - val y1 output loss: 0.1721 - val y2
output loss: 0.9893 - val y1 output root mean squared error: 0.4125 -
val y2 output root mean squared error: 1.0117
Epoch 413/500
- y2 output loss: 0.5294 - y1 output root mean squared error: 0.4367 -
y2 output root mean squared error: 0.7301 - val loss: 0.8146 - val y1 output loss: 0.1498 - val y2
_output_loss: 0.6373 - val_y1_output_root_mean_squared_error: 0.3919 -
val y2 output root mean squared error: 0.8130
Epoch 414/500
- y2_output_loss: 0.6146 - y1_output_root_mean_squared_error: 0.4052 -
y2 output root mean squared error: 0.7869 - val loss: 1.1847 - val y1 output loss: 0.3527 - val y2
_output_loss: 0.8165 - val_y1_output_root_mean_squared_error: 0.5948 -
val_y2_output_root_mean_squared_error: 0.9116
Epoch 415/500
- y2 output loss: 0.3367 - y1 output root mean squared error: 0.3546 -
y2 output root mean squared_error: 0.5828 - val_loss: 1.0415 - val_y1_output_loss: 0.3658 - val_y2
_output_loss: 0.6616 - val_y1_output_root_mean_squared_error: 0.6068 -
val y2 output root mean squared error: 0.8205
Epoch 416/500
- y2 output loss: 0.3845 - y1 output root mean squared error: 0.3489 -
y2 output root mean squared error: 0.6164 - val loss: 1.4756 - val y1 output loss: 0.1360 - val y2
_output_loss: 1.2999 - val_y1_output_root_mean_squared_error: 0.3716 -
val_y2_output_root_mean_squared_error: 1.1565
Epoch 417/500
- y2_output_loss: 0.3685 - y1_output_root_mean_squared_error: 0.3459 -
y2_output_root_mean_squared_error: 0.6072 - val_loss: 1.1619 - val_y1_output_loss: 0.3048 - val_y2
_output_loss: 0.8372 - val_y1_output_root_mean_squared error: 0.5528 -
val y2 output root mean squared error: 0.9254
Epoch 418/500
- y2_output_loss: 0.4233 - y1_output_root_mean_squared_error: 0.3523 -
y2_output_root_mean_squared_error: 0.6511 - val_loss: 0.8420 - val_y1_output_loss: 0.1595 - val_y2
_output_loss: 0.6555 - val_y1_output_root_mean_squared_error: 0.4032 -
val_y2_output_root_mean_squared_error: 0.8243
Epoch 419/500
- y2_output_loss: 0.3220 - y1_output_root_mean_squared_error: 0.3246 -
y2 output root mean squared error: 0.5683 - val loss: 0.8618 - val y1 output loss: 0.1745 - val y2
_output_loss: 0.6623 - val_y1_output_root_mean_squared_error: 0.4223 -
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val v2 output root mean squared error: 0.8267

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Epoch 420/500
- y2_output_loss: 0.4265 - y1_output_root_mean_squared_error: 0.3477 -
y2_output_root_mean_squared_error: 0.6530 - val_loss: 1.7170 - val_y1_output_loss: 0.3639 - val_y2
output loss: 1.3252 - val_y1_output_root_mean_squared_error: 0.6084
val_y2_output_root_mean_squared_error: 1.1605
Epoch 421/500
- y2_output_loss: 0.4682 - y1_output_root_mean_squared_error: 0.3728 -
y2 output root mean squared error: 0.6842 - val loss: 1.4804 - val y1 output loss: 0.3639 - val y2
_output_loss: 1.1134 - val_y1_output_root_mean_squared_error: 0.5972 -
val y2 output root mean squared error: 1.0601
Epoch 422/500
- y2 output loss: 0.4206 - y1_output_root_mean_squared_error: 0.3779
y2 output root mean squared error: 0.6487 - val loss: 1.5035 - val y1 output loss: 0.1496 - val y2
_output_loss: 1.3136 - val_y1_output_root_mean_squared_error: 0.3882 -
val_y2_output_root_mean_squared_error: 1.1631
Epoch 423/500
- y2 output loss: 0.4446 - y1 output root mean squared error: 0.3728 -
y2 output root_mean_squared_error: 0.6653 - val_loss: 0.8851 - val_y1_output_loss: 0.1446 - val_y2
output loss: 0.7194 - val y1 output root mean squared error: 0.3858 -
val y2 output root mean squared error: 0.8581
Epoch 424/500
614/614 [==============] - 0s 141us/sample - loss: 0.6031 - y1 output loss: 0.1421
- y2 output loss: 0.4638 - y1 output root mean squared error: 0.3759 -
y2 output root mean squared error: 0.6795 - val loss: 1.5077 - val y1 output loss: 0.2560 - val y2
output loss: 1.2165 - val y1 output root mean squared error: 0.5133 -
val_y2_output_root_mean_squared_error: 1.1154
Epoch 425/500
- y2_output_loss: 0.4496 - y1_output_root_mean_squared_error: 0.3490 -
y2 output root mean squared error: 0.6433 - val loss: 5.1530 - val y1 output loss: 1.0787 - val y2
output loss: 3.9832 - val y1 output root mean squared error: 1.0471 -
val_y2_output_root_mean_squared_error: 2.0141
Epoch 426/500
- y2 output loss: 0.5604 - y1 output root mean squared error: 0.3737 -
y2 output root mean squared error: 0.7514 - val loss: 0.7750 - val y1 output loss: 0.1693 - val y2
_output_loss: 0.5948 - val_y1_output_root_mean_squared_error: 0.4119 -
val y2 output root mean squared error: 0.7781
Epoch 427/500
- y2 output loss: 0.5142 - y1 output root mean squared error: 0.3803 -
y2_output_root_mean_squared_error: 0.7115 - val_loss: 1.9100 - val_y1_output_loss: 0.2968 - val_y2
_output_loss: 1.5870 - val_y1_output_root_mean_squared_error: 0.5490 -
val y2 output root mean squared error: 1.2683
Epoch 428/500
- y2 output loss: 0.3187 - y1 output root mean squared error: 0.3565 -
y2 output root mean squared error: 0.5650 - val loss: 2.1727 - val y1 output loss: 0.4959 - val y2
_output_loss: 1.6480 - val_y1_output_root_mean_squared error: 0.7039 -
val y2 output root mean squared error: 1.2951
Epoch 429/500
614/614 [=================== ] - Os 136us/sample - loss: 0.7879 - y1 output loss: 0.2240
- y2_output_loss: 0.5584 - y1_output_root_mean_squared_error: 0.4749 -
y2_output_root_mean_squared_error: 0.7499 - val_loss: 1.0740 - val_y1_output_loss: 0.2382 - val_y2
output loss: 0.8085 - val y1 output root mean squared error: 0.4924
val_y2_output_root_mean_squared_error: 0.9119
Epoch 430/500
- y2_output_loss: 0.3746 - y1_output_root_mean_squared_error: 0.3595 -
y2_output_root_mean_squared_error: 0.6133 - val_loss: 0.7528 - val_y1_output_loss: 0.1512 - val_y2
output loss: 0.5803 - val y1 output root mean squared error: 0.3912 -
val_y2_output_root_mean_squared_error: 0.7745
Epoch 431/500
614/614 [=============] - Os 171us/sample - loss: 0.4701 - y1 output loss: 0.1199
- y2_output_loss: 0.3460 - y1_output_root_mean_squared_error: 0.3477 -
y2 output root mean squared error: 0.5909 - val loss: 1.1583 - val y1 output loss: 0.2099 - val y2
_output_loss: 0.9260 - val_y1_output_root_mean_squared_error: 0.4616
val y2 output root mean squared error: 0.9722
Epoch 432/500
- y2_output_loss: 0.4446 - y1_output_root_mean_squared_error: 0.3537 -
y2_output_root_mean_squared_error: 0.6699 - val_loss: 0.8069 - val_y1_output_loss: 0.1421 - val_y2
output loss: 0.6403 - val v1 output root mean squared error: 0.3828 -
```

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val_y2_output_root_mean_squared_error: 0.8126
Epoch 433/500
- y2_output_loss: 0.3891 - y1_output_root_mean_squared_error: 0.3261 -
y2 output root mean squared error: 0.6139 - val loss: 3.2504 - val y1 output loss: 0.4886 - val y2
output loss: 2.7666 - val y1 output root mean squared error: 0.6911 -
val_y2_output_root_mean_squared_error: 1.6652
Epoch 434/500
614/614 [=============] - Os 144us/sample - loss: 0.8448 - y1_output_loss: 0.2012
- y2 output loss: 0.6368 - y1 output root mean squared error: 0.4499 -
y2 output root mean squared error: 0.8015 - val_loss: 0.9433 - val_y1_output_loss: 0.2774 - val_y2
output loss: 0.6609 - val y1 output root mean squared error: 0.5239 -
val y2 output root mean squared error: 0.8178
Epoch 435/500
- y2 output loss: 0.4308 - y1 output root mean squared error: 0.3465
y2_output_root_mean_squared_error: 0.6583 - val_loss: 0.8706 - val_y1_output_loss: 0.1772 - val_y2
output loss: 0.6754 - val_y1_output_root_mean_squared_error: 0.4252 -
val_y2_output_root_mean_squared_error: 0.8305
Epoch 436/500
- y2 output loss: 0.5550 - y1 output root mean squared error: 0.3847 -
y2 output root mean squared error: 0.7464 - val loss: 1.8184 - val y1 output loss: 0.9550 - val y2
output loss: 0.8907 - val y1 output root mean squared error: 0.9701 -
val y2 output root mean squared error: 0.9367
Epoch 437/500
- y2 output loss: 0.3944 - y1 output root mean squared error: 0.3676 -
y2 output root mean squared error: 0.6286 - val loss: 0.7271 - val y1 output loss: 0.1546 - val y2
_output_loss: 0.5523 - val_y1_output_root_mean_squared_error: 0.3971 -
val_y2_output_root_mean_squared_error: 0.7545
Epoch 438/500
- y2 output loss: 0.3638 - y1 output root mean squared error: 0.3533 -
y2 output root mean squared error: 0.6028 - val loss: 0.9222 - val y1 output loss: 0.1438 - val y2
_output_loss: 0.7540 - val_y1_output_root_mean_squared_error: 0.3856 -
val y2 output root mean squared error: 0.8795
Epoch 439/500
- y2 output loss: 0.4095 - y1 output root mean squared error: 0.3602 -
y2 output root mean squared error: 0.6405 - val loss: 1.0456 - val y1 output loss: 0.1629 - val y2
_output_loss: 0.8514 - val_y1_output_root_mean_squared_error: 0.4087 -
val y2 output root mean squared error: 0.9373
Epoch 440/500
- y2 output loss: 0.3366 - y1 output root mean squared error: 0.3405 -
y2_output_root_mean_squared_error: 0.5823 - val_loss: 0.9891 - val_y1_output_loss: 0.2465 - val_y2
_output_loss: 0.7262 - val_y1_output_root_mean_squared_error: 0.4963 -
val y2 output root mean squared error: 0.8619
Epoch 441/500
- y2_output_loss: 0.4433 - y1_output_root_mean_squared_error: 0.3688 -
y2_output_root_mean_squared_error: 0.6634 - val_loss: 1.8565 - val_y1_output_loss: 0.3641 - val_y2
_output_loss: 1.4507 - val_y1_output_root_mean_squared_error: 0.6089 -
val y2 output root mean squared error: 1.2189
Epoch 442/500
- y2 output_loss: 0.3659 - y1_output_root_mean_squared_error: 0.3504 -
y2_output_root_mean_squared_error: 0.6074 - val_loss: 0.7549 - val_y1_output_loss: 0.2063 - val_y2
_output_loss: 0.5274 - val_y1_output_root_mean_squared_error: 0.4583
val_y2_output_root_mean_squared_error: 0.7381
Epoch 443/500
- y2_output_loss: 0.4759 - y1_output_root_mean_squared_error: 0.4121 -
y2 output root mean squared error: 0.6925 - val loss: 1.1334 - val y1 output loss: 0.2188 - val y2
_output_loss: 0.8990 - val_y1_output_root_mean_squared_error: 0.4603 -
val_y2_output_root_mean_squared_error: 0.9599
Epoch 444/500
- y2 output loss: 0.5411 - y1 output root mean squared error: 0.4059 -
y2 output root mean squared error: 0.7343 - val loss: 1.0640 - val y1 output loss: 0.2478 - val y2
output loss: 0.8355 - val y1 output root mean squared error: 0.4880 -
val y2 output root mean squared error: 0.9088
Epoch 445/500
- y2 output loss: 0.5624 - y1_output_root_mean_squared_error: 0.3974 -
```

v2 output root mean squared error. 0 7434 - val loss. 1 1169 - val v1 output loss. 0 3638 - val v2

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yz_output_loss: 0.7197 - val_yl_output_root_mean_squared_error: 0.6120 -
                                               val y2 output root mean squared error: 0.8616
Epoch 446/500
- y2_output_loss: 0.3940 - y1_output_root_mean_squared_error: 0.3572 -
y2 output root mean squared error: 0.6231 - val loss: 1.8191 - val y1 output loss: 0.1583 - val y2
output_loss: 1.5992 - val_y1_output_root_mean_squared_error: 0.4036 -
val_y2_output_root_mean_squared error: 1.2869
Epoch 447/500
- y2 output loss: 0.4875 - y1 output root mean squared error: 0.3369 -
y2 output root mean squared error: 0.7007 - val loss: 0.7743 - val y1 output loss: 0.1640 - val y2
output loss: 0.5888 - val y1 output root mean squared error: 0.4093 -
val y2 output root mean squared error: 0.7790
Epoch 448/500
- y2_output_loss: 0.4651 - y1_output_root_mean_squared_error: 0.3789 -
y2_output_root_mean_squared_error: 0.6846 - val_loss: 0.9515 - val_y1_output_loss: 0.1890 - val_y2
output loss: 0.7352 - val y1 output root mean squared error: 0.4402 -
val_y2_output_root_mean_squared_error: 0.8705
Epoch 449/500
- y2 output loss: 0.4083 - y1 output root mean squared error: 0.3342 -
y2 output root mean squared error: 0.6420 - val loss: 0.8079 - val y1 output loss: 0.1599 - val y2
output loss: 0.6470 - val y1 output root mean squared error: 0.3970 -
val_y2_output_root_mean_squared_error: 0.8064
Epoch 450/500
- y2 output loss: 0.2596 - y1 output root mean squared error: 0.3206 -
y2 output root mean squared error: 0.5096 - val loss: 0.8678 - val y1 output loss: 0.1886 - val y2
_output_loss: 0.6556 - val_y1_output_root_mean_squared_error: 0.4354 -
val_y2_output_root_mean_squared_error: 0.8236
Epoch 451/500
- y2 output loss: 0.3368 - y1 output root mean squared error: 0.3334 -
y2 output root mean squared error: 0.5817 - val loss: 1.3178 - val y1 output loss: 0.2719 - val y2
_output_loss: 1.0437 - val_y1_output_root_mean_squared_error: 0.5210 -
val y2 output root mean squared error: 1.0229
Epoch 452/500
- y2 output loss: 0.4478 - y1 output root mean squared error: 0.3721 -
y2 output root mean squared error: 0.6717 - val loss: 0.8138 - val y1 output loss: 0.1393 - val y2
output loss: 0.6490 - val y1 output root mean squared error: 0.3763 -
val y2 output root mean squared error: 0.8199
Epoch 453/500
- y2_output_loss: 0.3528 - y1_output_root_mean_squared_error: 0.3442 -
y2_output_root_mean_squared_error: 0.5950 - val_loss: 1.3574 - val_y1_output_loss: 0.1529 - val_y2
_output_loss: 1.1747 - val_y1_output_root_mean_squared error: 0.3972
val_y2_output_root_mean_squared_error: 1.0953
Epoch 454/500
- y2_output_loss: 0.3787 - y1_output_root_mean_squared_error: 0.3666 -
y2_output_root_mean_squared_error: 0.6064 - val_loss: 2.1410 - val_y1_output_loss: 0.2259 - val_y2
output loss: 1.9235 - val y1 output root mean squared error: 0.4736 -
val y2 output root mean squared error: 1.3844
Epoch 455/500
- y2_output_loss: 0.5234 - y1_output_root_mean_squared_error: 0.3701 -
y2_output_root_mean_squared_error: 0.7211 - val_loss: 1.2634 - val_y1_output_loss: 0.2762 - val_y2
_output_loss: 0.9678 - val_y1_output_root_mean_squared_error: 0.5187 -
val_y2_output_root_mean_squared_error: 0.9971
Epoch 456/500
- y2_output_loss: 0.4907 - y1_output_root_mean_squared_error: 0.3810 -
y2 output root mean squared error: 0.7028 - val loss: 1.3165 - val y1 output loss: 0.2114 - val y2
_output_loss: 1.0692 - val_y1_output_root_mean_squared_error: 0.4665 -
val y2 output root mean squared error: 1.0483
Epoch 457/500
614/614 [=============] - Os 149us/sample - loss: 0.6016 - y1 output loss: 0.1413
- y2 output loss: 0.4563 - y1 output root mean squared error: 0.3765
y2 output root mean squared error: 0.6781 - val loss: 0.9885 - val y1 output loss: 0.2166 - val y2
output_loss: 0.7684 - val_y1_output_root_mean_squared_error: 0.4592 -
val y2 output root mean squared error: 0.8819
Epoch 458/500
- v2 outnut loss. 0 3846 - v1 outnut root mean equared error. 0 3741 -
```

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- yz_output_root_mean_squared_error: 0.6227 - val_loss: 1.0618 - val_y1_output_loss: 0.2068 - val_y2
output_loss: 0.8427 - val_y1_output_root_mean_squared_error: 0.4575 -
val y2 output root mean squared error: 0.9233
Epoch 459/500
- y2 output loss: 0.4110 - y1 output root mean squared error: 0.3610
y2 output root mean squared error: 0.6375 - val loss: 1.7961 - val y1 output loss: 0.4453 - val y2
output loss: 1.3228 - val y1 output root mean squared error: 0.6706 -
val y2 output root mean squared error: 1.1603
Epoch 460/500
- y2 output loss: 0.2964 - y1 output root mean squared error: 0.3554 -
y2 output root mean squared error: 0.5440 - val loss: 1.0359 - val y1 output loss: 0.1596 - val y2
output loss: 0.8536 - val y1 output root mean squared error: 0.4044 -
val y2 output root mean squared error: 0.9340
Epoch 461/500
- y2_output_loss: 0.2897 - y1_output_root_mean_squared_error: 0.3119 -
y2_output_root_mean_squared_error: 0.5394 - val_loss: 0.7777 - val_y1_output loss: 0.1536 - val_y2
output loss: 0.6125 - val y1 output root mean squared error: 0.3934 -
val_y2_output_root_mean_squared_error: 0.7893
Epoch 462/500
- y2 output_loss: 0.3440 - y1_output_root_mean_squared_error: 0.3533 -
y2 output root mean squared error: 0.5890 - val loss: 0.7831 - val y1 output loss: 0.1652 - val y2
output loss: 0.6032 - val y1 output root mean squared error: 0.4049 -
val y2 output root mean squared error: 0.7869
Epoch 463/500
- y2 output loss: 0.3295 - y1 output root mean squared error: 0.3456 -
y2_output_root_mean_squared_error: 0.5739 - val_loss: 1.2383 - val_y1_output_loss: 0.2042 - val_y2
_output_loss: 1.0099 - val_y1_output_root_mean_squared_error: 0.4480 -
val_y2_output_root_mean_squared_error: 1.0186
Epoch 464/500
- y2 output loss: 0.3418 - y1 output root mean squared error: 0.3378 -
y2_output_root_mean_squared_error: 0.5839 - val_loss: 1.2607 - val_y1_output_loss: 0.1878 - val_y2
_output_loss: 1.0414 - val_y1_output_root_mean_squared_error: 0.4386 -
val y2 output root mean squared error: 1.0336
Epoch 465/500
- y2 output loss: 0.3901 - y1 output root mean squared error: 0.3541 -
y2 output root mean squared error: 0.6271 - val loss: 0.6436 - val y1 output loss: 0.1238 - val y2
_output_loss: 0.5015 - val_y1_output_root_mean_squared error: 0.3564 -
val y2 output root mean squared error: 0.7187
Epoch 466/500
- y2_output_loss: 0.3013 - y1_output_root_mean_squared_error: 0.3543 -
y2_output_root_mean_squared_error: 0.5494 - val_loss: 0.9911 - val_y1_output_loss: 0.3811 - val_y2
output loss: 0.6090 - val y1 output root mean squared error: 0.6111
val_y2_output_root_mean_squared_error: 0.7859
Epoch 467/500
- y2_output_loss: 0.5399 - y1_output_root_mean_squared_error: 0.3999 -
y2 output root mean squared error: 0.7327 - val_loss: 2.5043 - val_y1_output_loss: 0.5533 - val_y2
_output_loss: 1.9666 - val_y1_output_root_mean_squared_error: 0.7342 -
val_y2_output_root_mean_squared_error: 1.4019
Epoch 468/500
- y2_output_loss: 1.2877 - y1_output_root_mean_squared_error: 0.5467 -
y2_output_root_mean_squared_error: 1.1401 - val_loss: 0.7284 - val_y1_output_loss: 0.1253 - val_y2
_output_loss: 0.5770 - val_y1_output_root_mean_squared_error: 0.3600
val_y2_output_root_mean_squared_error: 0.7738
Epoch 469/500
614/614 [============] - 0s 144us/sample - loss: 0.5314 - y1_output_loss: 0.1288
- y2_output_loss: 0.3990 - y1_output_root_mean_squared_error: 0.3601 -
y2 output root mean squared_error: 0.6338 - val_loss: 0.7717 - val_y1_output_loss: 0.1819 - val_y2
output_loss: 0.5778 - val_y1_output_root_mean_squared_error: 0.4248 -
val y2 output root mean squared error: 0.7689
Epoch 470/500
- y2 output loss: 0.2689 - y1 output root mean squared error: 0.3320 -
y2 output root mean squared error: 0.5100 - val loss: 2.5847 - val y1 output loss: 0.3003 - val y2
output loss: 2.2811 - val y1 output root mean squared error: 0.5452 -
val y2 output root mean squared error: 1.5124
Epoch 471/500
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- y2 output loss: 0.6929 - y1 output root mean squared error: 0.4467 -
y2_output_root_mean_squared_error: 0.8342 - val_loss: 0.9250 - val_y1_output_loss: 0.2211 - val_y2
_output_loss: 0.6923 - val_y1_output_root_mean_squared_error: 0.4659 -
val y2 output root mean squared error: 0.8414
Epoch 472/500
- y2 output loss: 0.3708 - y1 output root mean squared error: 0.3706 -
y2_output_root_mean_squared_error: 0.6096 - val_loss: 0.9737 - val_y1_output_loss: 0.1536 - val_y2
output loss: 0.7902 - val y1 output root mean squared error: 0.3950 -
val_y2_output_root_mean_squared_error: 0.9042
Epoch 473/500
- y2 output loss: 0.4133 - y1 output root mean squared error: 0.3618 -
y2 output root mean squared error: 0.6453 - val loss: 0.7290 - val y1 output loss: 0.1892 - val y2
output loss: 0.5271 - val y1 output root mean squared error: 0.4325 -
val y2 output root mean squared error: 0.7362
Epoch 474/500
- y2_output_loss: 0.3621 - y1_output_root_mean_squared_error: 0.3576 -
y2 output root mean squared error: 0.6033 - val loss: 0.7639 - val y1 output loss: 0.1653 - val y2
_output_loss: 0.5763 - val_y1_output_root_mean_squared_error: 0.4129 -
val_y2_output_root_mean_squared_error: 0.7704
Epoch 475/500
- y2 output loss: 0.3857 - y1_output_root_mean_squared_error: 0.3492 -
y2 output root mean squared error: 0.6207 - val loss: 1.0884 - val y1 output loss: 0.2445 - val y2
output loss: 0.8152 - val y1 output root mean squared error: 0.4994 -
val y2 output root mean squared error: 0.9160
Epoch 476/500
- y2 output loss: 0.3221 - y1 output root mean squared error: 0.3384 -
y2_output_root_mean_squared_error: 0.5622 - val_loss: 1.0109 - val_y1_output_loss: 0.1594 - val_y2
_output_loss: 0.8530 - val_y1_output_root_mean_squared_error: 0.4035 -
val y2 output root mean squared error: 0.9209
Epoch 477/500
614/614 [=============] - Os 169us/sample - loss: 0.4600 - y1 output loss: 0.1267
- y2 output loss: 0.3345 - y1 output root mean squared error: 0.3551 -
y2_output_root_mean_squared_error: 0.5779 - val_loss: 1.8611 - val_y1_output_loss: 0.3609 - val_y2
_output_loss: 1.4912 - val_y1_output_root_mean_squared_error: 0.5969 -
val y2 output root mean squared error: 1.2267
Epoch 478/500
- y2 output_loss: 0.3353 - y1_output_root_mean_squared_error: 0.3502 -
y2 output root_mean_squared_error: 0.5785 - val_loss: 1.1578 - val_y1_output_loss: 0.1916 - val_y2
output loss: 0.9778 - val y1 output root mean squared error: 0.4329 -
val y2 output root mean squared error: 0.9851
Epoch 479/500
- y2_output_loss: 0.2257 - y1_output_root_mean_squared_error: 0.3118 -
y2_output_root_mean_squared_error: 0.4772 - val_loss: 0.7052 - val_y1_output_loss: 0.1338 - val_y2
_output_loss: 0.5512 - val_y1_output_root_mean_squared_error: 0.3698
val_y2_output_root_mean_squared_error: 0.7540
Epoch 480/500
614/614 [============== ] - Os 139us/sample - loss: 0.5639 - y1 output loss: 0.1443
- y2_output_loss: 0.4250 - y1_output_root_mean_squared_error: 0.3776 -
y2 output root mean squared error: 0.6491 - val loss: 2.4739 - val y1 output loss: 0.5581 - val y2
output loss: 1.8738 - val y1 output root mean squared error: 0.7524 -
val y2 output root mean squared error: 1.3812
Epoch 481/500
- y2_output_loss: 0.3355 - y1_output_root_mean_squared_error: 0.3600 -
y2_output_root_mean_squared_error: 0.5818 - val_loss: 0.6868 - val_y1_output_loss: 0.1262 - val_y2
_output_loss: 0.5363 - val_y1_output_root_mean_squared_error: 0.3612 -
val_y2_output_root_mean_squared_error: 0.7458
Epoch 482/500
- y2 output loss: 0.4824 - y1 output root mean squared error: 0.3696 -
y2 output root mean squared error: 0.6967 - val loss: 0.9957 - val y1 output loss: 0.1635 - val y2
output loss: 0.8013 - val y1 output root mean squared error: 0.4097 -
val y2 output root mean squared error: 0.9099
Epoch 483/500
614/614 [===========] - Os 141us/sample - loss: 0.5701 - y1 output loss: 0.1472
- y2 output loss: 0.4335 - y1 output root mean squared error: 0.3740 -
y2 output root mean squared error: 0.6559 - val loss: 1.5768 - val y1 output loss: 0.4388 - val y2
output loss: 1.2191 - val y1 output root mean squared error: 0.6511 -
val_y2_output_root_mean_squared_error: 1.0737
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Epocn 484/500
614/614 [=============] - Os 142us/sample - loss: 0.4162 - y1 output loss: 0.1158
- y2 output loss: 0.2989 - y1 output root mean squared error: 0.3416 -
y2_output_root_mean_squared_error: 0.5473 - val_loss: 0.8597 - val_y1_output_loss: 0.1616 - val_y2
output loss: 0.6835 - val yl output root mean squared error: 0.4038 -
val_y2_output_root_mean_squared_error: 0.8346
Epoch 485/500
- y2_output_loss: 0.3090 - y1_output_root_mean_squared_error: 0.3427 -
y2_output_root_mean_squared_error: 0.5571 - val_loss: 0.7527 - val_y1_output_loss: 0.1522 - val_y2
output loss: 0.5864 - val y1 output root mean squared error: 0.3885 -
val y2 output root mean squared error: 0.7757
Epoch 486/500
- y2_output_loss: 0.2413 - y1_output_root_mean_squared_error: 0.3568 -
y2 output root mean squared error: 0.4908 - val loss: 0.8315 - val y1 output loss: 0.2225 - val y2
output loss: 0.6070 - val y1 output root mean squared error: 0.4632 -
val_y2_output_root_mean_squared_error: 0.7854
Epoch 487/500
- y2_output_loss: 0.2808 - y1_output_root_mean_squared_error: 0.3390 -
y2 output root mean squared error: 0.5305 - val loss: 0.6720 - val y1 output loss: 0.1590 - val y2
_output_loss: 0.5063 - val_y1_output_root_mean_squared_error: 0.3953 -
val_y2_output_root_mean_squared_error: 0.7181
Epoch 488/500
- y2 output loss: 0.3675 - y1 output root mean squared error: 0.3662 -
y2 output root mean squared error: 0.6088 - val loss: 0.9118 - val y1 output loss: 0.1342 - val y2
_output_loss: 0.7543 - val_y1_output_root_mean_squared_error: 0.3713 -
val_y2_output_root_mean_squared_error: 0.8798
Epoch 489/500
- y2 output loss: 0.3568 - y1 output root mean squared error: 0.3763 -
y2_output_root_mean_squared_error: 0.5973 - val_loss: 1.0201 - val_y1_output_loss: 0.2486 - val_y2
_output_loss: 0.7756 - val_y1_output_root_mean_squared_error: 0.4951 -
val_y2_output_root_mean_squared_error: 0.8803
Epoch 490/500
- y2_output_loss: 0.2892 - y1_output_root_mean_squared_error: 0.3458 -
y2_output_root_mean_squared_error: 0.5380 - val_loss: 0.8764 - val_y1_output_loss: 0.2787 - val_y2
output loss: 0.5681 - val y1 output root mean squared error: 0.5355
val y2 output root mean squared error: 0.7678
Epoch 491/500
- y2_output_loss: 0.2486 - y1_output_root_mean_squared_error: 0.3293 -
y2_output_root_mean_squared_error: 0.5004 - val_loss: 0.7894 - val_y1_output_loss: 0.2340 - val_y2
output loss: 0.5455 - val y1 output root mean squared error: 0.4778 -
val_y2_output_root_mean_squared_error: 0.7491
Epoch 492/500
- y2_output_loss: 0.3184 - y1_output_root_mean_squared_error: 0.3334 -
y2_output_root_mean_squared_error: 0.5627 - val_loss: 1.2487 - val_y1_output_loss: 0.2360 - val_y2
output loss: 0.9932 - val y1 output root mean squared error: 0.4858 -
val_y2_output_root_mean_squared_error: 1.0064
Epoch 493/500
- y2 output_loss: 0.4170 - y1_output_root_mean_squared_error: 0.4023 -
y2 output root mean squared error: 0.6479 - val loss: 0.8582 - val y1 output loss: 0.2529 - val y2
output_loss: 0.6074 - val_y1_output_root_mean_squared_error: 0.4939 -
val y2 output root mean squared error: 0.7837
Epoch 494/500
614/614 [=============] - Os 139us/sample - loss: 0.4578 - y1 output loss: 0.1233
- y2 output loss: 0.3343 - y1 output root mean squared error: 0.3503
y2_output_root_mean_squared_error: 0.5789 - val_loss: 0.7189 - val_y1_output_loss: 0.1353 - val_y2
_output_loss: 0.5608 - val_y1_output_root_mean_squared_error: 0.3705 -
val y2 output root mean squared error: 0.7627
Epoch 495/500
- y2_output_loss: 0.3113 - y1_output_root_mean_squared_error: 0.3427 -
y2_output_root_mean_squared_error: 0.5582 - val_loss: 0.9291 - val_y1_output_loss: 0.1569 - val_y2
output loss: 0.7471 - val y1 output root mean squared error: 0.3979 -
val_y2_output_root_mean_squared_error: 0.8779
Epoch 496/500
- y2 output loss: 0.3732 - y1 output root mean squared error: 0.3433 -
y2_output_root_mean_squared_error: 0.6137 - val_loss: 0.8230 - val y1 output loss: 0.1749 - val y2
_output_loss: 0.6554 - val_y1_output_root_mean_squared_error: 0.4133 -
```

```
val y2 output root mean squared error: 0.80/5
Epoch 497/500
- y2_output_loss: 0.2522 - y1_output_root_mean_squared_error: 0.3178 -
y2_output_root_mean_squared_error: 0.5044 - val loss: 0.6672 - val y1 output loss: 0.1389 - val y2
output loss: 0.5137 - val y1 output root mean squared error: 0.3752 -
val_y2_output_root_mean_squared_error: 0.7256
Epoch 498/500
- y2_output_loss: 0.2639 - y1_output_root_mean_squared_error: 0.3177 -
y2 output root mean squared error: 0.5155 - val loss: 0.7663 - val y1 output loss: 0.1468 - val y2
output loss: 0.6030 - val y1 output root mean squared error: 0.3816 -
val_y2_output_root_mean_squared_error: 0.7878
Epoch 499/500
- y2 output loss: 0.2190 - y1 output root mean squared error: 0.3301 -
y2 output root mean squared error: 0.4633 - val loss: 1.5760 - val y1 output loss: 0.1816 - val y2
output loss: 1.3493 - val y1 output root mean squared error: 0.4332 -
val y2 output root mean squared error: 1.1783
Epoch 500/500
- y2_output_loss: 0.4021 - y1_output_root_mean_squared_error: 0.3399 -
y2_output_root_mean_squared_error: 0.6368 - val_loss: 0.8939 - val_y1_output_loss: 0.1641 - val_y2
_output_loss: 0.6991 - val_y1_output_root_mean_squared_error: 0.4115 -
val y2 output root mean squared error: 0.8512
```

Evaluate the Model and Plot Metrics

In [7]:

In [8]:

```
# Plot the loss and mse
Y_pred = model.predict(norm_test_X)
plot_diff(test_Y[0], Y_pred[0], title='Y1')
plot_diff(test_Y[1], Y_pred[1], title='Y2')
plot_metrics(metric_name='y1_output_root_mean_squared_error', title='Y1 RMSE', ylim=6)
plot_metrics(metric_name='y2_output_root_mean_squared_error', title='Y2 RMSE', ylim=7)
```









