

Predicting Financial Time Series using Deep Learning

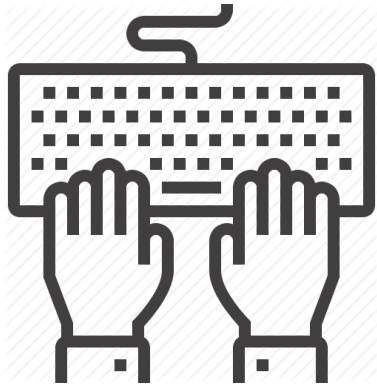
Module2. Tensorboard on Google Colab

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Hands on Labs Tensorboard on Google Colab



Tensorboard on Google Colab

Lab2_Tensorboard_on_Google_Colab.ipynb

<https://colab.research.google.com/drive/1a4FunGwLD3uV3q2II8fAihBZ9LYWGGfU>

- Install Ngrok

```
!wget https://bin.equinox.io/c/4VmDzA7iaHb/ngrok-stable-linux-amd64.zip
!unzip ngrok-stable-linux-amd64.zip
```

- Run Tensorboard

```
LOG_DIR = './log'
get_ipython().system_raw(
    'tensorboard --logdir {} --host 0.0.0.0 --port 6006 &'
    .format(LOG_DIR)
)
```

- Run Ngrok

```
get_ipython().system_raw('./ngrok http 6006 &')
```

- Get Url: You can check the result in Url

```
!curl -s http://localhost:4040/api/tunnels | python3 -c \
"import sys, json; print(json.load(sys.stdin)['tunnels'][0]['public_url'])"
```

<https://39eb00f7.ngrok.io>

- Run a Keras Model

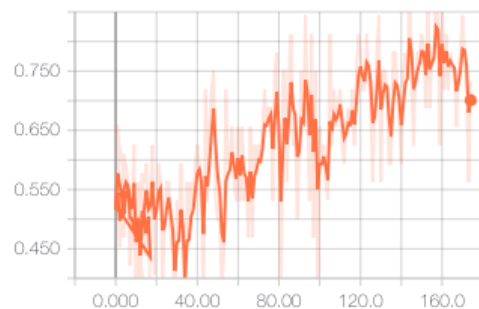
```
from tensorflow.keras.callbacks import TensorBoard
```

```
tbCallBack = TensorBoard(log_dir='./log', histogram_freq=1,
                          write_graph=True,
                          write_grads=True,
                          write_images=True)
```

```
model.fit(X_train, y_train, batch_size=32, epochs=5, validation_split=0.3,
          callbacks=[tbCallBack])
```

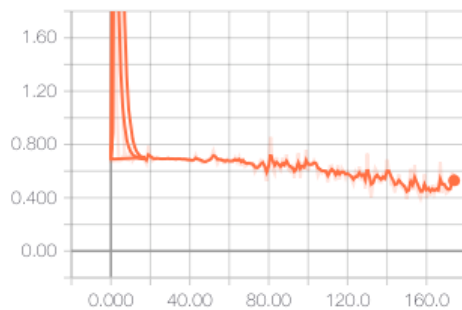
batch_acc

batch_acc



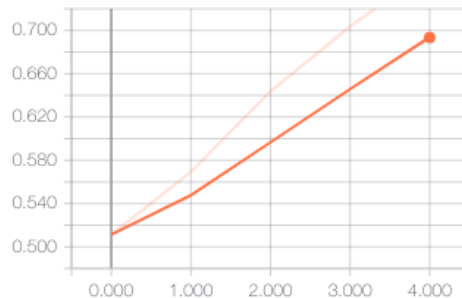
batch_loss

batch_loss



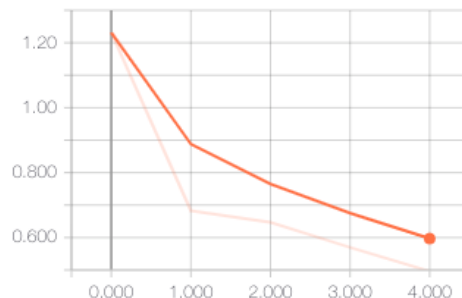
epoch_acc

epoch_acc



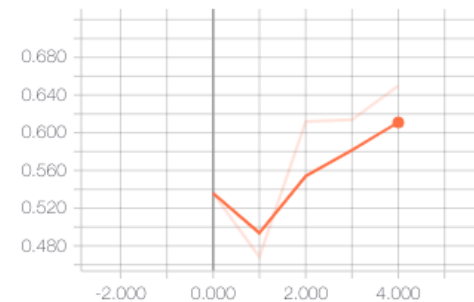
epoch_loss

epoch_loss



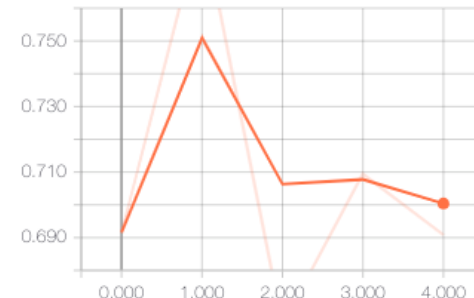
epoch_val_acc

epoch_val_acc



epoch_val_loss

epoch_val_loss



Thank you ☺

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References

- Quick guide to run TensorBoard in Google Colab, <https://www.dlology.com/blog/quick-guide-to-run-tensorboard-in-google-colab/>, 2018