RESNET34-WOF

ON COVIDXCT

```
Epoch 0/9
train_total Loss: 0.4092 Acc: 86.2760%
Confusion matrix, without normalization
```

confusion matrix
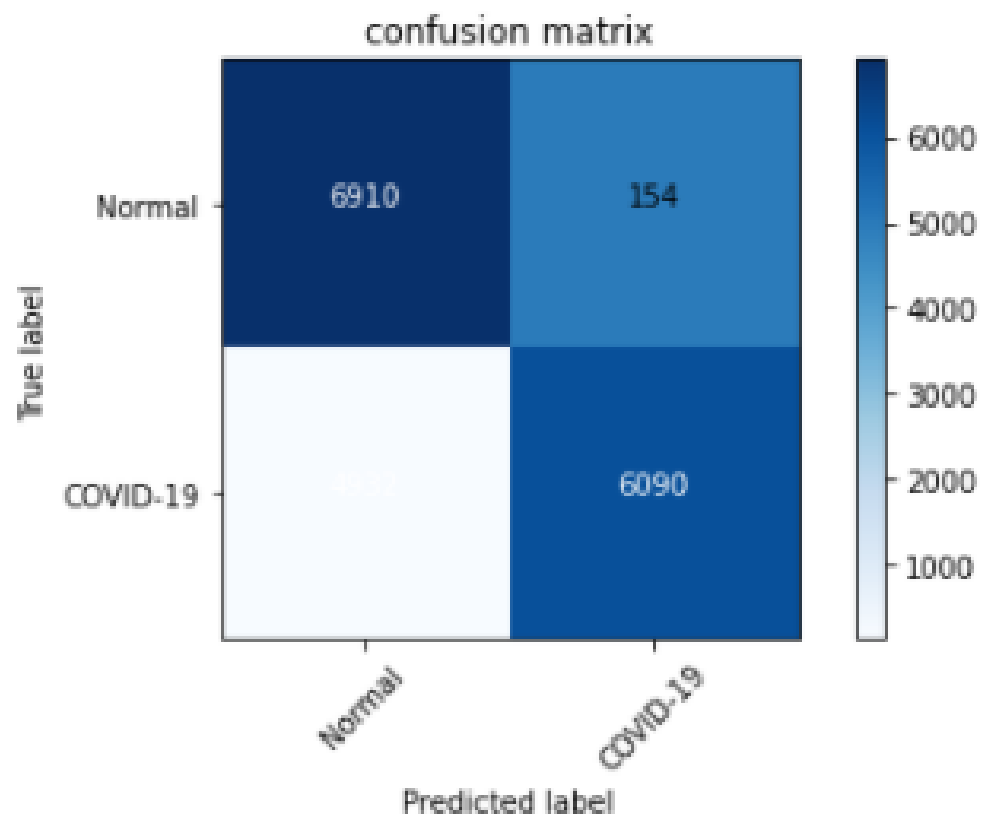

```
val_total Loss: 0.7484 Acc: 71.8788%
all_prediction:71.88
0        Normal      prediction= 97.82 %,   recall= 58.35 %,      f1= 73.1
1        COVID-19    prediction= 55.25 %,   recall= 97.53 %,      f1= 70.54
MACRO-averaged:
prediction= 76.54 %,recall= 77.94 %,f1= 77.23
-------------------------------------------------------------------
```

Epoch1

Epoch 1/9
train_total Loss: 0.1277 Acc: 94.6737%
Confusion matrix, without normalization

confusion matrix
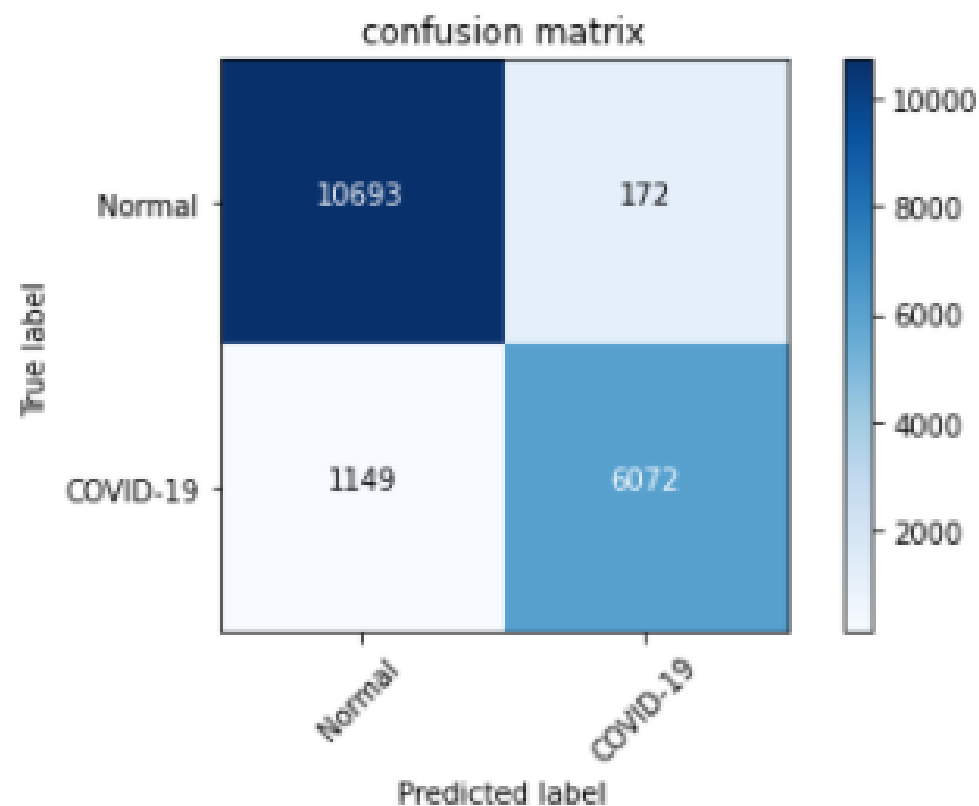
val_total Loss: 0.1678 Acc: 92.6960%
all_prediction:92.7
0   Normal   prediction= 98.42 %,   recall= 90.3 %, f1= 94.19
1   COVID-19   prediction= 84.09 %,   recall= 97.25 %,   f1= 90.19
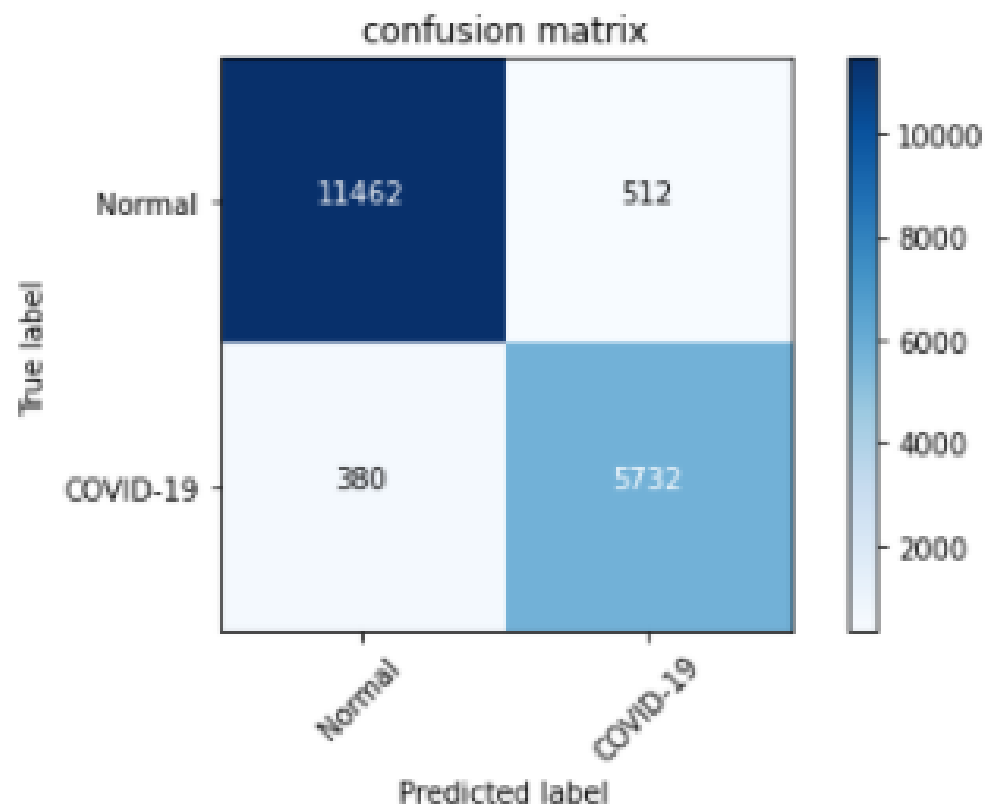MACRO-averaged:
prediction= 91.26 %,recall= 93.78 %,f1= 92.5

Epoch2

Epoch 2/9
train_total Loss: 0.1075 Acc: 95.6291%
Confusion matrix, without normalization

confusion matrix

val_total Loss: 0.1149 Acc: 95.0680%
all_prediction:95.07
0   Normal   prediction= 95.72 %,   recall= 96.79 %,   f1= 96.25
1   COVID-19   prediction= 93.78 %,   recall= 91.8 %, f1= 92.78
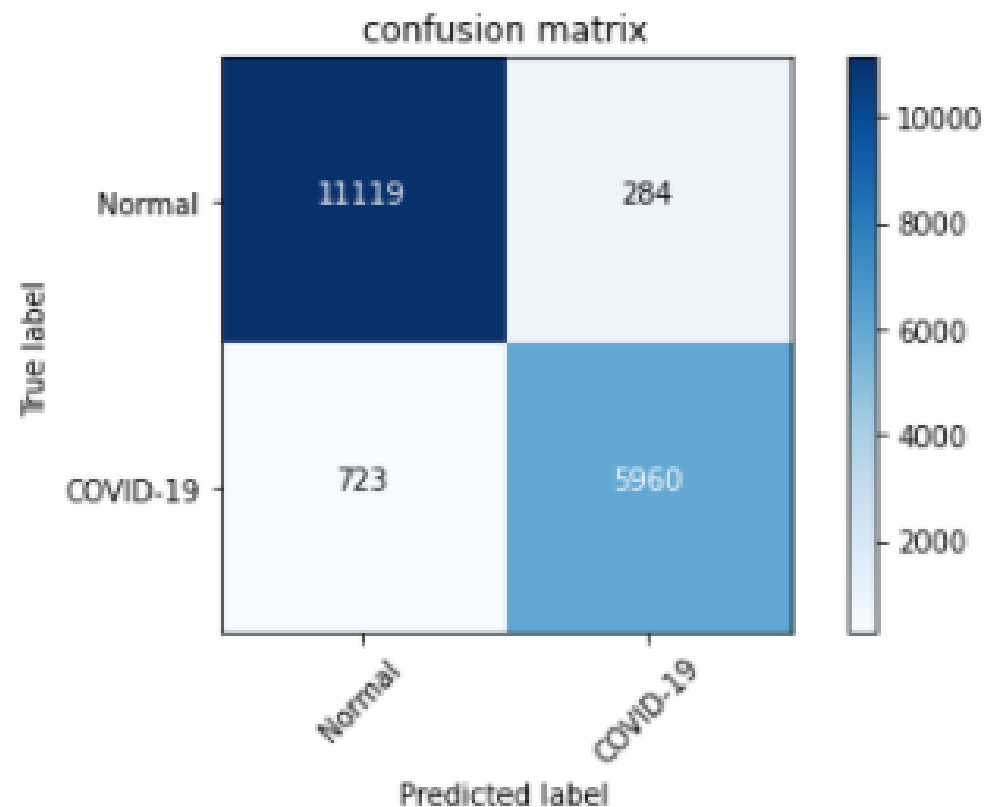MACRO-averaged:
prediction= 94.75 %,recall= 94.3 %,f1= 94.52

Epoch3

Epoch 3/9
train_total Loss: 0.0962 Acc: 96.1101%
Confusion matrix, without normalization

confusion matrix

val_total Loss: 0.1273 Acc: 94.4322%
all_prediction:94.43

| 0 | Normal | prediction= 97.51 %, | recall= 93.89 %, | f1= 95.6: |
| 1 | COVID-19 | prediction= 89.18 %, | recall= 95.45 %, | f1= 92.2: |

MACRO-averaged:
prediction= 93.34 %,recall= 94.67 %,f1= 94.0

Epoch4

```
--------------------------------------------------------------
Epoch 4/9
train_total Loss: 0.0854 Acc: 96.6039%
Confusion matrix, without normalization
```

confusion matrix
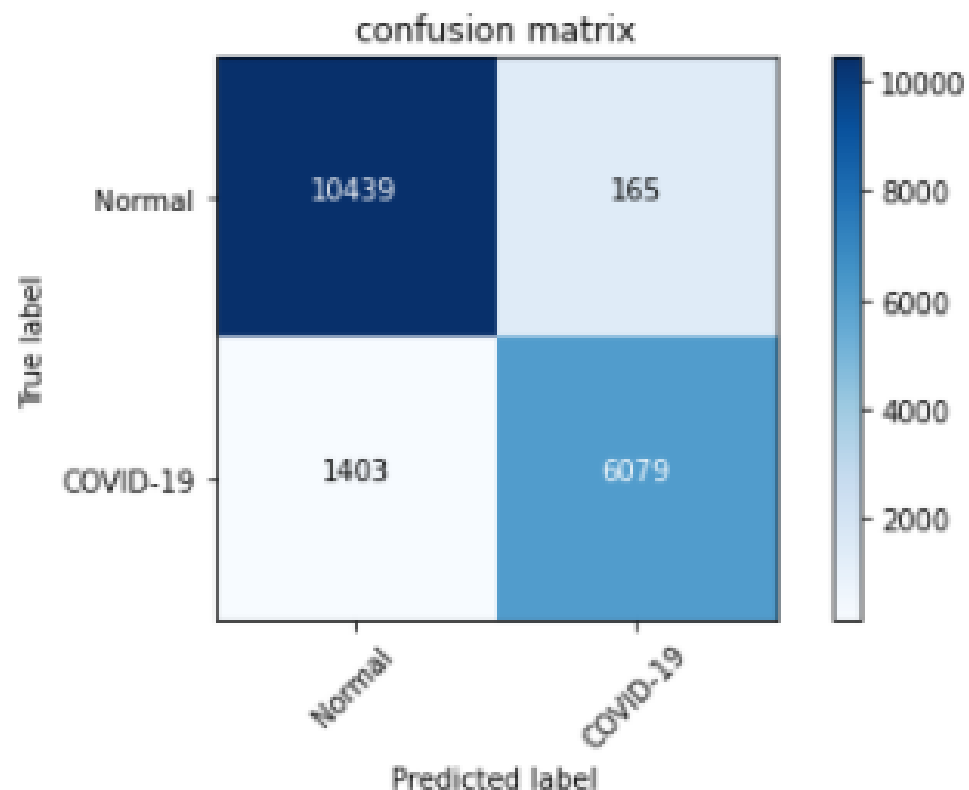
```
val_total Loss: 0.2040 Acc: 91.3303%
all_prediction:91.33
0        Normal          prediction= 98.44 %,   recall= 88.15 %,        f1= 93.01
1        COVID-19        prediction= 81.25 %,   recall= 97.36 %,        f1= 88.58
MACRO-averaged:
prediction= 89.84 %,recall= 92.76 %,f1= 91.28
--------------------------------------------------------------
```

Epoch5

Epoch 5/9
train_total Loss: 0.0784 Acc: 96.9488%
Confusion matrix, without normalization

confusion matrix
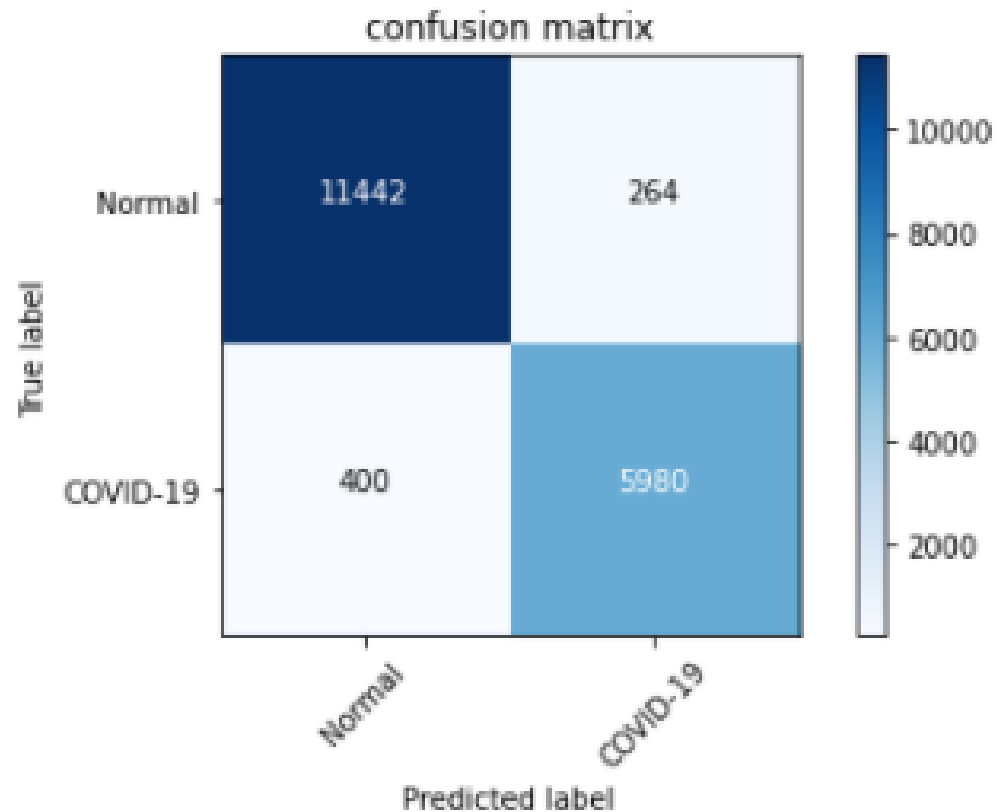
val_total Loss: 0.0947 Acc: 96.3287%
all_prediction:96.33
0   Normal   prediction= 97.74 %,   recall= 96.62 %,   f1= 97.18
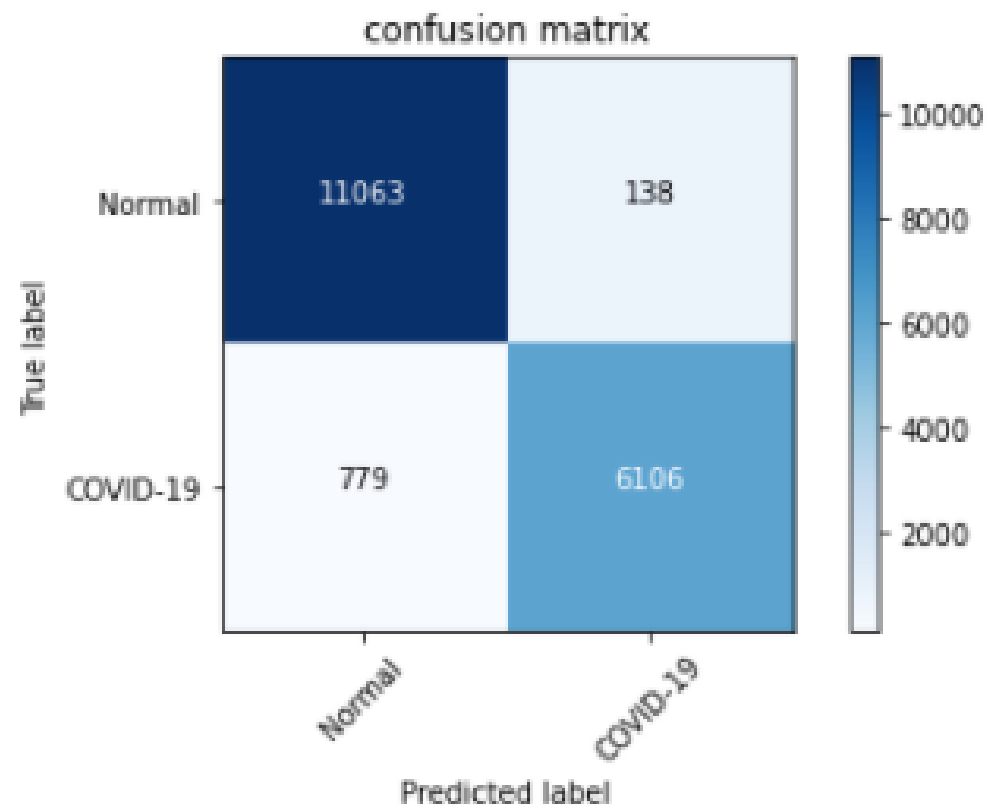1   COVID-19   prediction= 93.73 %,   recall= 95.77 %,   f1= 94.74
MACRO-averaged:
prediction= 95.74 %,recall= 96.2 %,f1= 95.97

Epoch6

Epoch 6/9
train_total Loss: 0.0701 Acc: 97.2971%
Confusion matrix, without normalization

confusion matrix

val_total Loss: 0.1217 Acc: 94.9298%
all_prediction:94.93
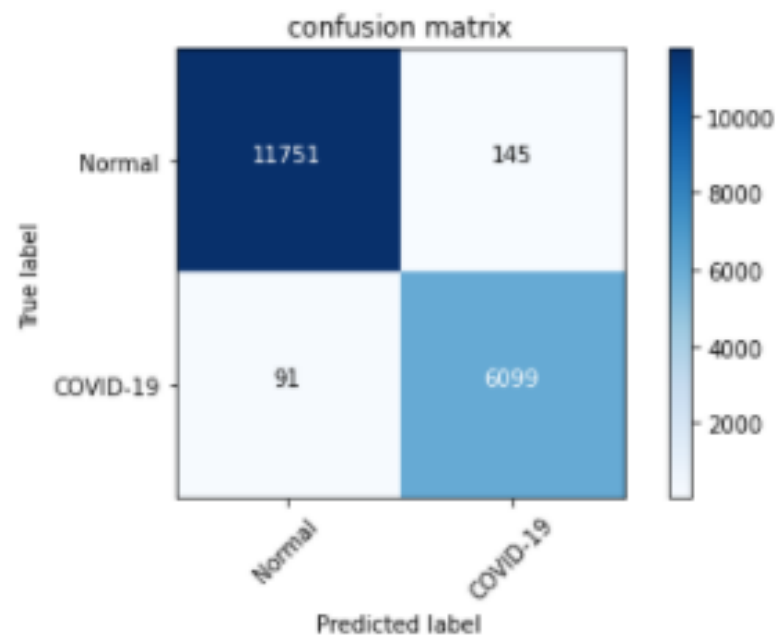0   Normal   prediction= 98.77 %,   recall= 93.42 %,   f1= 96.02
1   COVID-19   prediction= 88.69 %,   recall= 97.79 %,   f1= 93.02
MACRO-averaged:
prediction= 93.73 %,recall= 95.6 %,f1= 94.66

Epoch7

Results

- Trained for 25 epochs
- Took almost 8-9 hrs
- Best Acc : 98.8%
- Test Acc : 98.6%

```
val_total Loss: 0.0400 Acc: 98.6951%
all_prediction:98.7
0        Normal          prediction= 98.78 %,    recall= 99.23 %,        f1= 99.0
1        COVID-19        prediction= 98.53 %,    recall= 97.68 %,        f1= 98.1
MACRO-averaged:
prediction= 98.66 %,recall= 98.46 %,f1= 98.56
*********************************************************************************
********
best_acc:0.9879464779387372
```