

Steps:

1. Download and extract the zip file named "COVID19\_PNEUMONIA\_DETECTOR"
2. Open the two python programs "covid19\_ai\_diagnoser.py" and "covid19\_ai\_diagnoser\_optimal\_model\_architecture" in any python id. We have used Spyder.
3. Run "covid19\_ai\_diagnoser.py" and you should see the desired results and figures like given below.
4. JPG version of confusion metrics are saved under the name "covid19PneumoniaCM.jpg" and "pneumoniaCM.jpg"

```
CONFUSION MATRIX FORMAT -----  
  
[true positives    false positives]  
[false negatives   true negatives]  
  
CONFUSION MATRIX -----  
[[191   1]  
 [ 31  91]]  
  
TEST METRICS -----  
Accuracy: 89.80891719745223%  
Precision: 98.91304347826086%  
Recall/Sensitivity: 74.59016393442623%  
Specificity 99.47916666666666%  
F1-score: 85.04672897196261
```