Found 4400 images belonging to 3 classes.

Found 1538 images belonging to 3 classes.

/usr/local/lib/python3.10/dist-packages/keras/src/trainers/data\_adapters/py\_dataset\_adapter.py:121: UserWarning: Your `PyDataset` class should call `super().\_\_init\_\_(\*\*kwargs)` in its constructor. `\*\*kwargs` can include `workers`, `use\_multiprocessing`, `max\_queue\_size`. Do not pass these arguments to `fit()`, as they will be ignored.

self.\_warn\_if\_super\_not\_called()

**138/138** ━━━━━━━━━━━━━━━━━━━━ **418s** 3s/step

**49/49** ━━━━━━━━━━━━━━━━━━━━ **143s** 3s/step

Accuracy: 82.64%

A blue squares with white text

Description automatically generated

Precision: 86.96%

Recall: 82.64%

F1 Score: 83.48%

precision recall f1-score support

COVID-19 0.57 0.99 0.72 209

Pneumonia-Bacteria 0.97 0.80 0.88 1001

Pneumonia-Viral 0.76 0.80 0.78 328

accuracy 0.83 1538

macro avg 0.77 0.86 0.79 1538

weighted avg 0.87 0.83 0.83 1538

A graph of a positive result

Description automatically generated with medium confidence

A x-ray of a person's chest

Description automatically generatedA diagram of a graph

Description automatically generated with medium confidence

**Random Forest Pneumonia Classification**