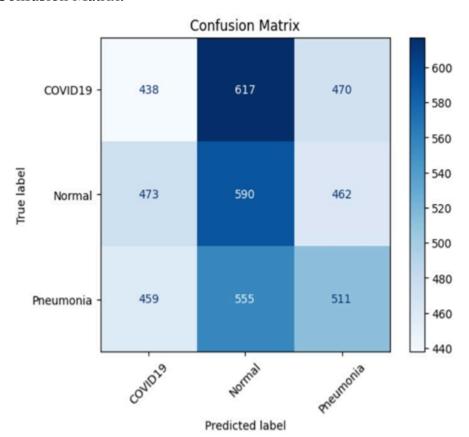
Mini_Project_Paper_Outcomes

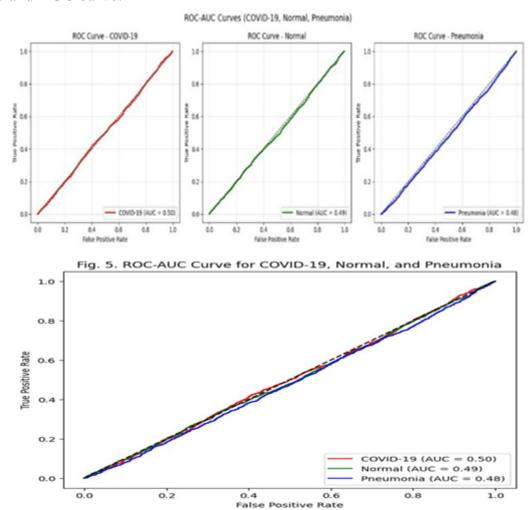
1. Confusion Matrix:



2. Classification Report:

| | Precision | Recall | F1-Score | Support |
|--------------|-----------|--------|----------|---------|
| COVID19 | 0.32 | 0.29 | 0.3 | 1525 |
| Normal | 0.33 | 0.39 | 0.36 | 1525 |
| Pneumonia | 0.35 | 0.34 | 0.34 | 1525 |
| Accuracy | | | 0.34 | 4575 |
| Macro Avg | 0.34 | 0.34 | 0.34 | 4575 |
| Weighted Avg | 0.34 | 0.34 | 0.34 | 4575 |

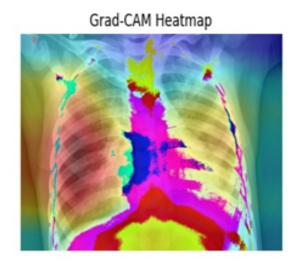
3.ROC and AUC curve:



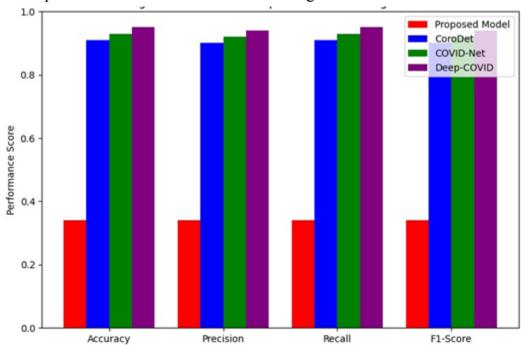
Overall curve for Pneumonia, COVID-19 and Normal

4. Explainability with Grad-CAM:

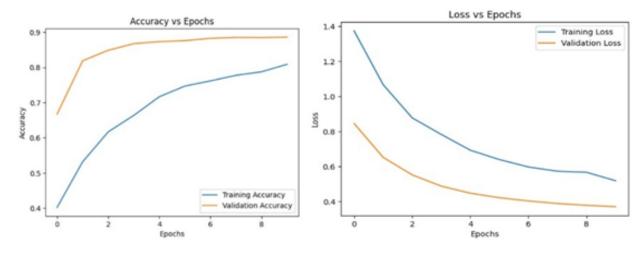




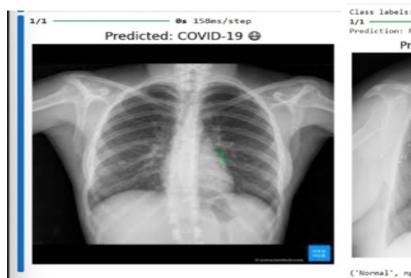
5. Comparative Discussion with other existing models:



6. Training and Validation performance analysis:



7. Predicted Output Visualization:



Class labels: ['COVID19', 'Normal', 'Pneumonia']
1/1 ______ 0s 264ms/step
Prediction: Normal (77.99%)

Predicted: Normal (77.99%)

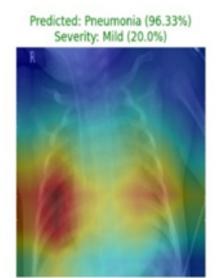


('Normal', np.float32(0.7799421))

8. Severity Analysis:



Os 252ms/step



{'prediction': 'Pneumonia', 'confidence': np.float32(0.96331114), 'severity_level': 'Mild', 'severity_score': np.float64(19.977678571428573)}