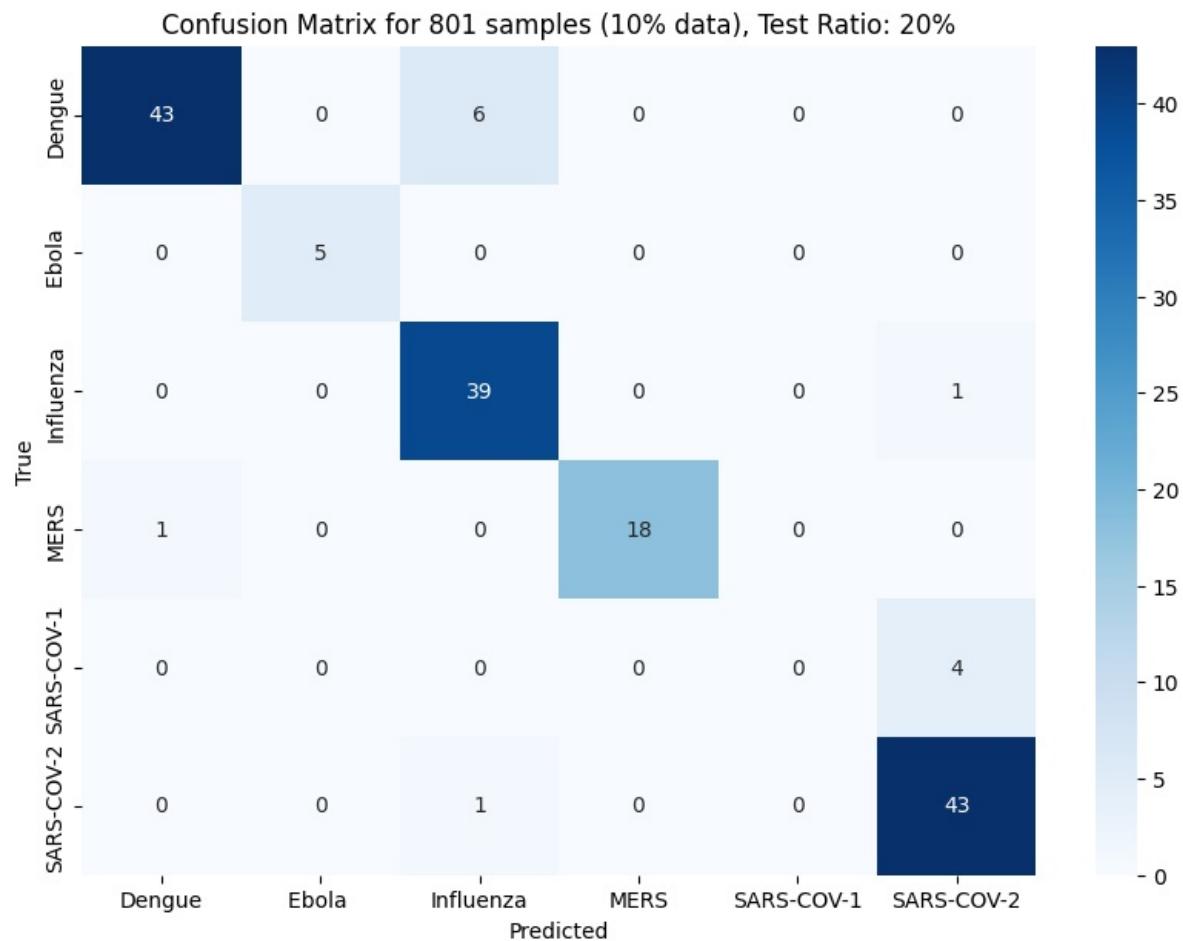


Consolidated Transformer Model Evaluation Report

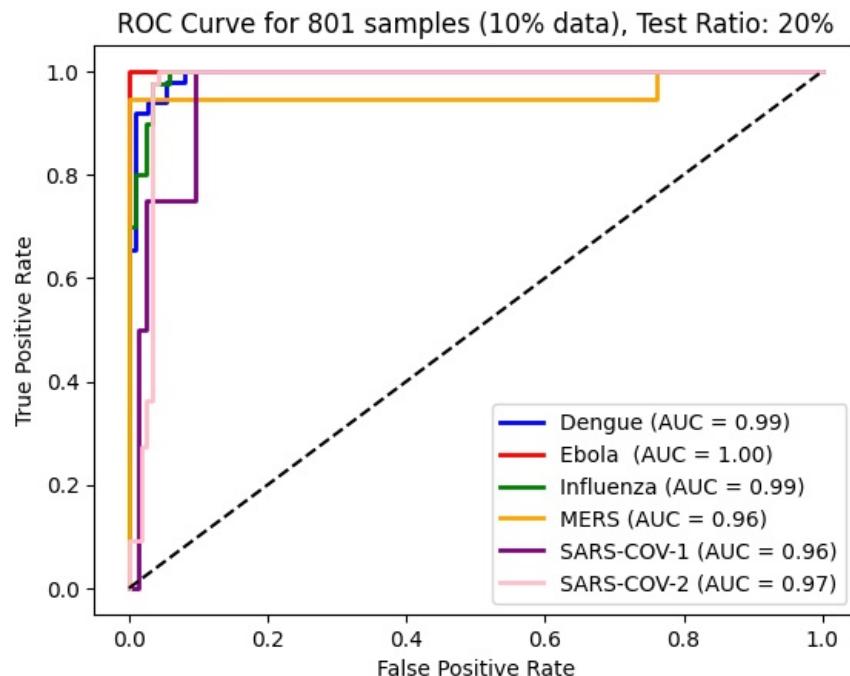
Data Size: 801 samples, Test Ratio: 0.2

- Accuracy: 0.9193
- Precision: 0.9535
- Recall: 0.7962
- F1_score: 0.7899

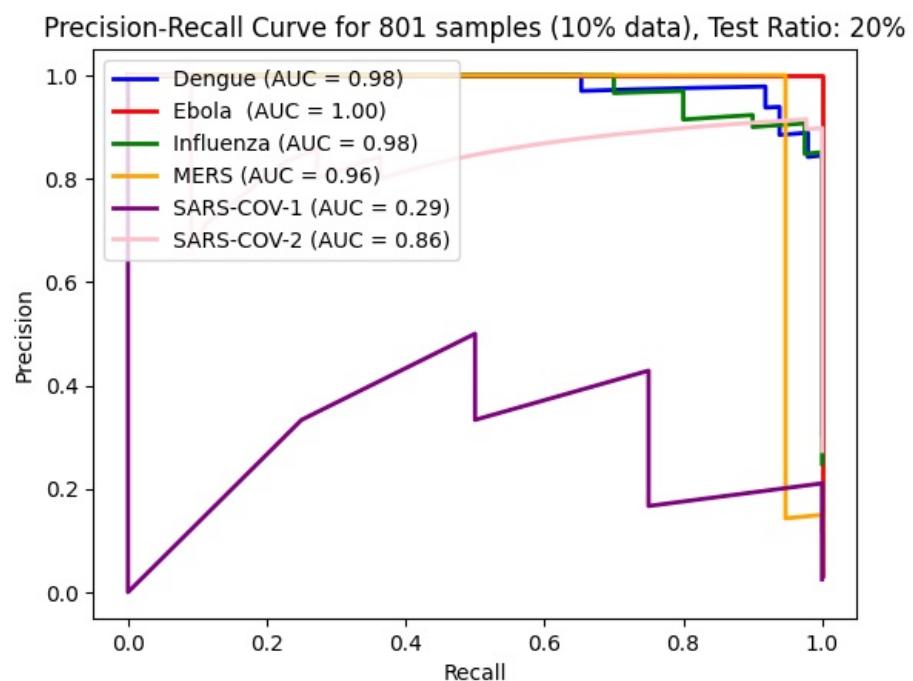
Confusion Matrix for 801 samples (10% data), Test Ratio: 20%



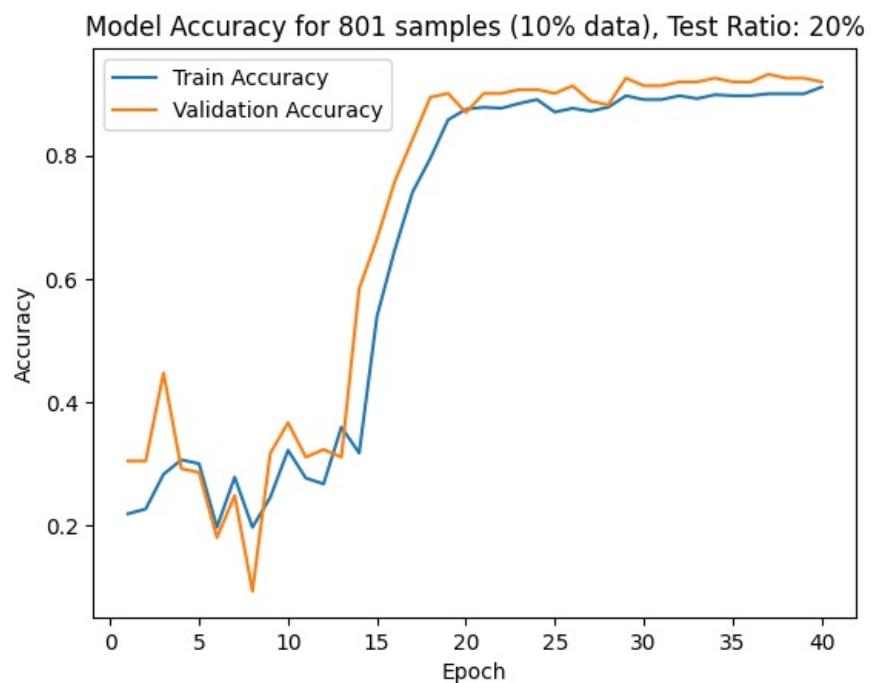
ROC Curve for 801 samples (10% data), Test Ratio: 20%



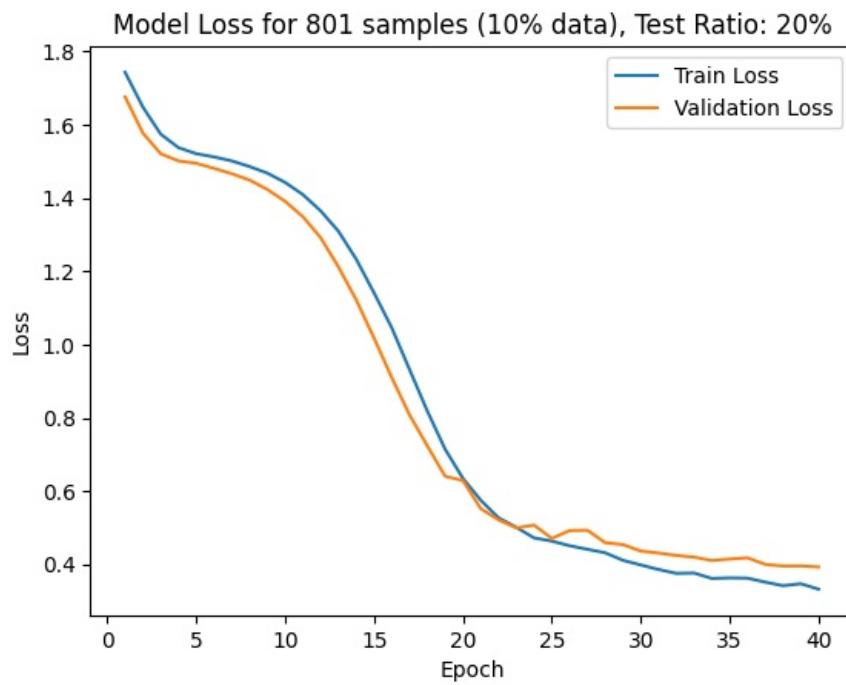
Precision-Recall Curve for 801 samples (10% data), Test Ratio: 20%



Model Accuracy for 801 samples (10% data), Test Ratio: 20%



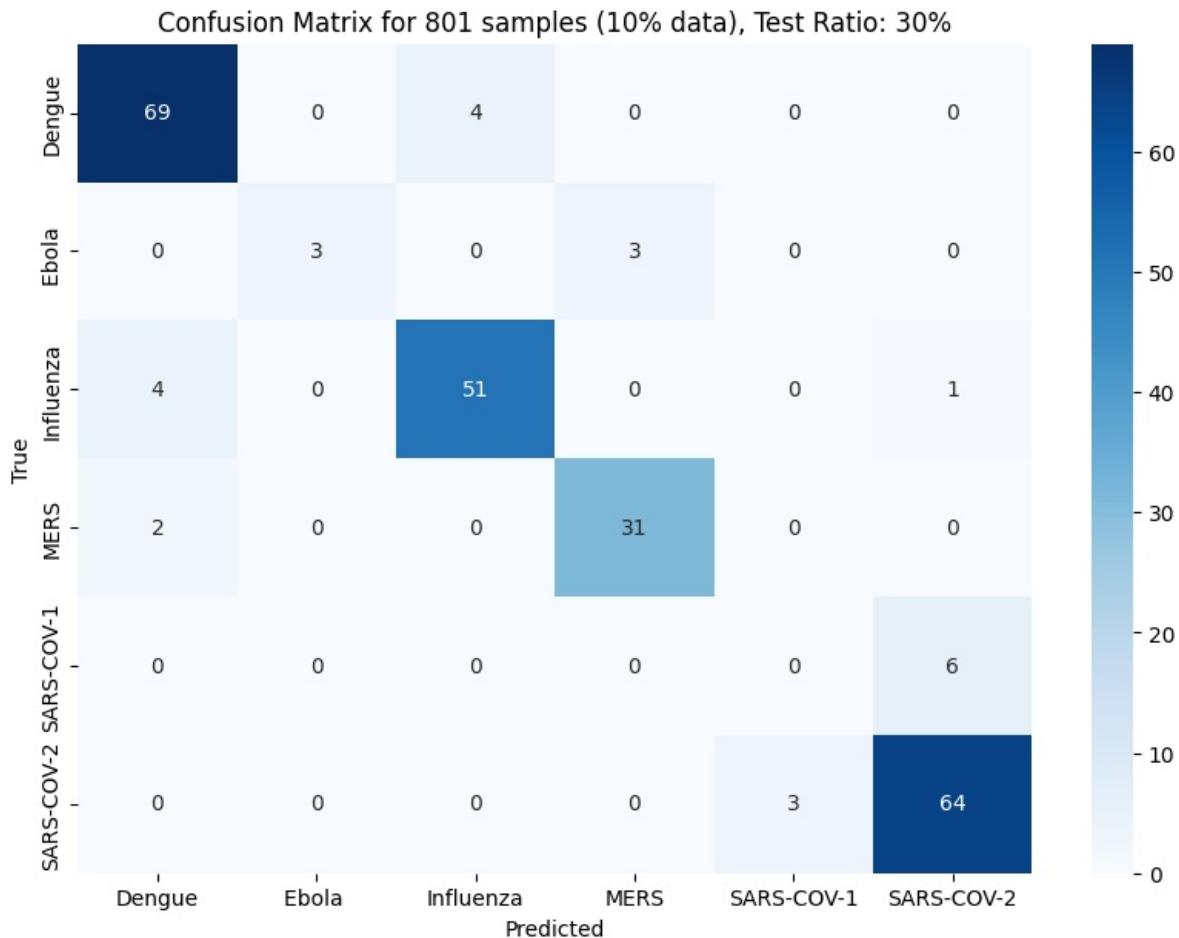
Model Loss for 801 samples (10% data), Test Ratio: 20%



Data Size: 801 samples, Test Ratio: 0.3

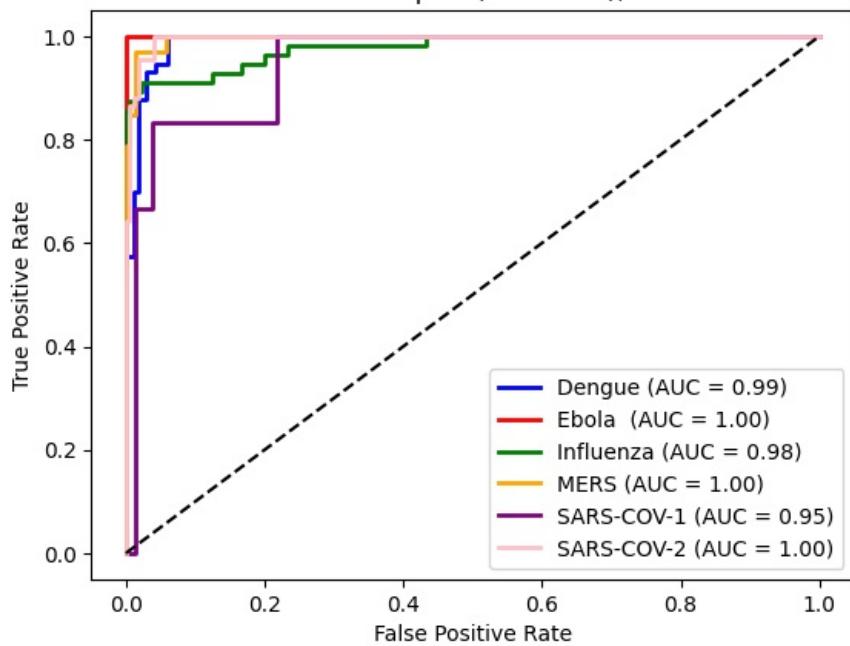
- Accuracy: 0.9046
- Precision: 0.7767
- Recall: 0.7084
- F1_score: 0.7285

Confusion Matrix for 801 samples (10% data), Test Ratio: 30%

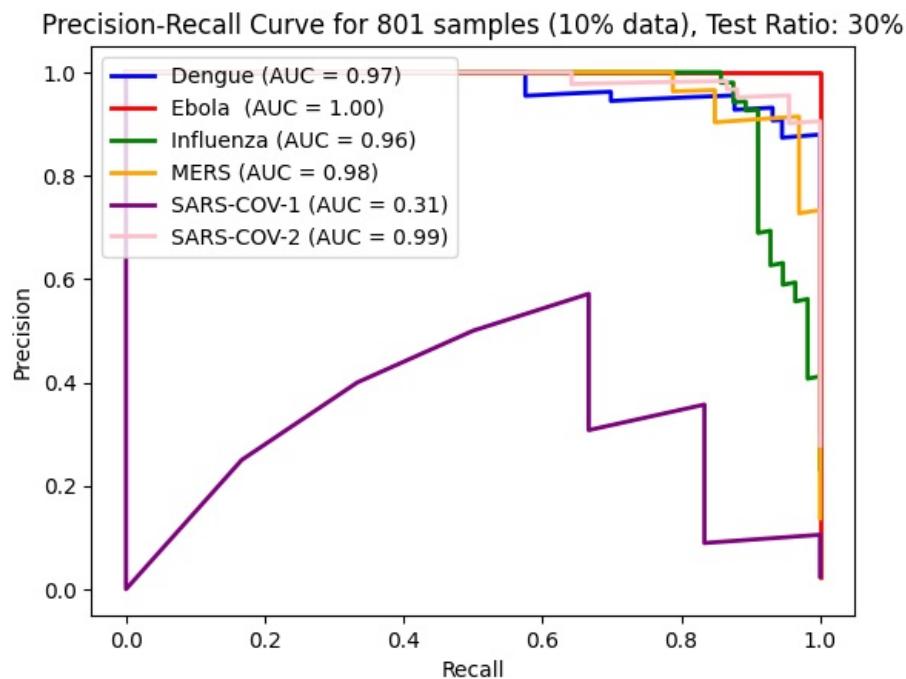


ROC Curve for 801 samples (10% data), Test Ratio: 30%

ROC Curve for 801 samples (10% data), Test Ratio: 30%

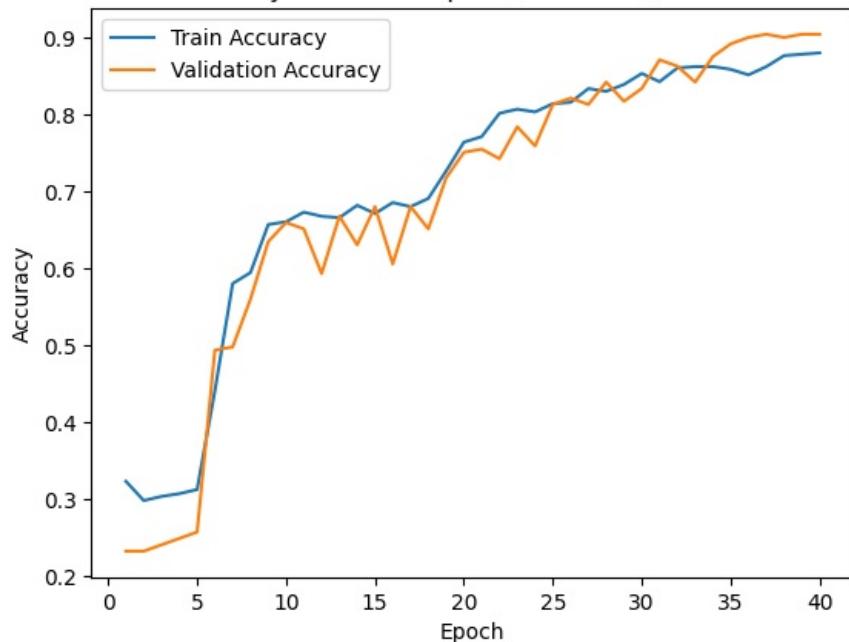


Precision-Recall Curve for 801 samples (10% data), Test Ratio: 30%

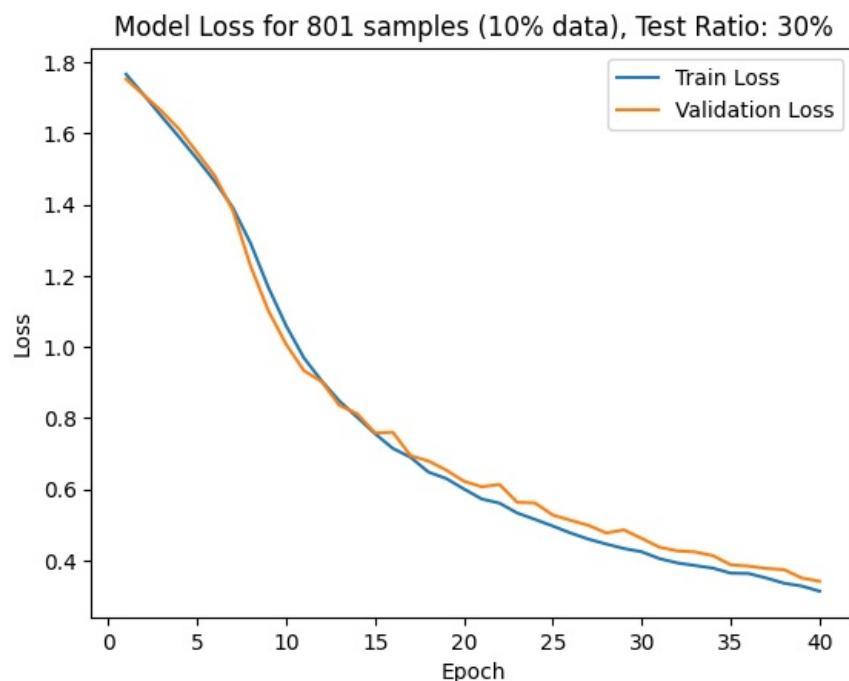


Model Accuracy for 801 samples (10% data), Test Ratio: 30%

Model Accuracy for 801 samples (10% data), Test Ratio: 30%



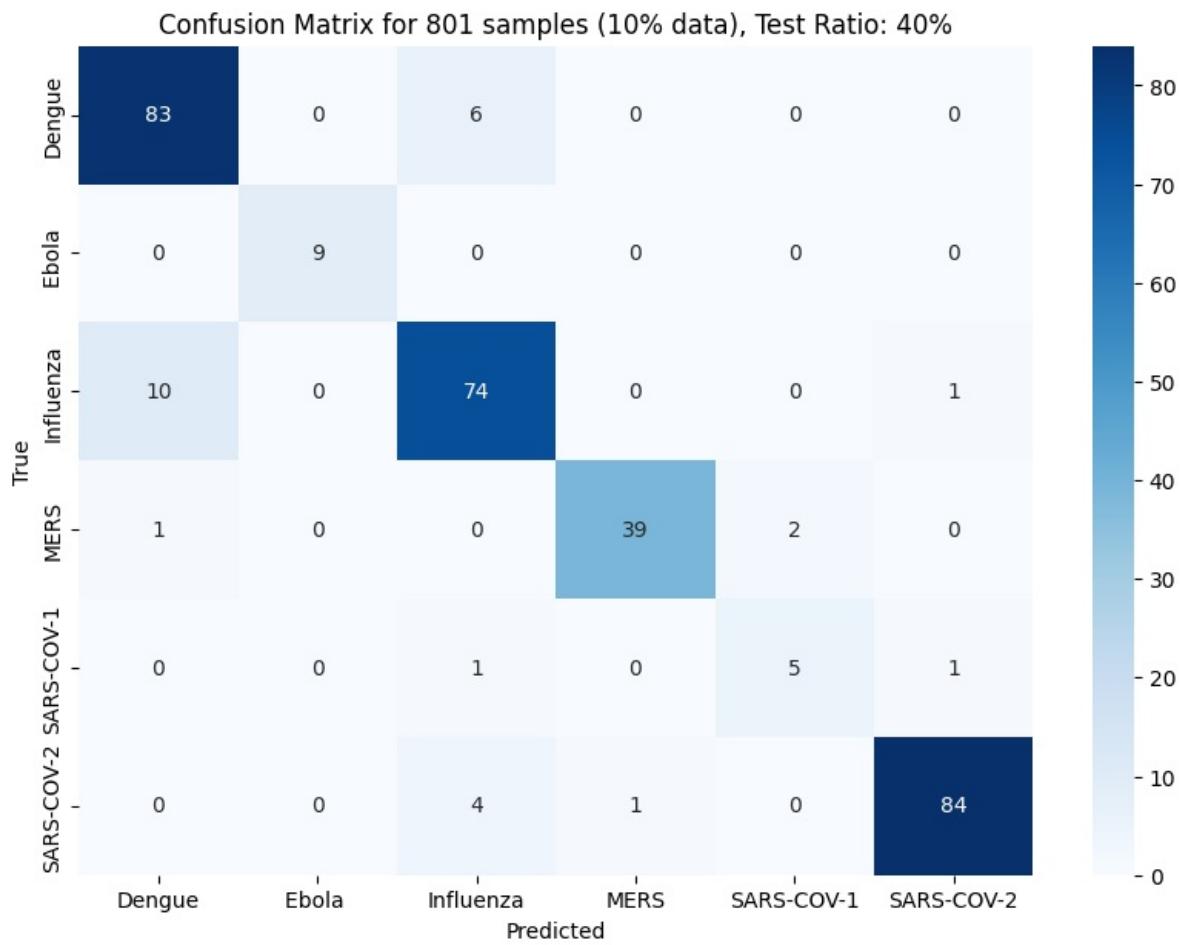
Model Loss for 801 samples (10% data), Test Ratio: 30%



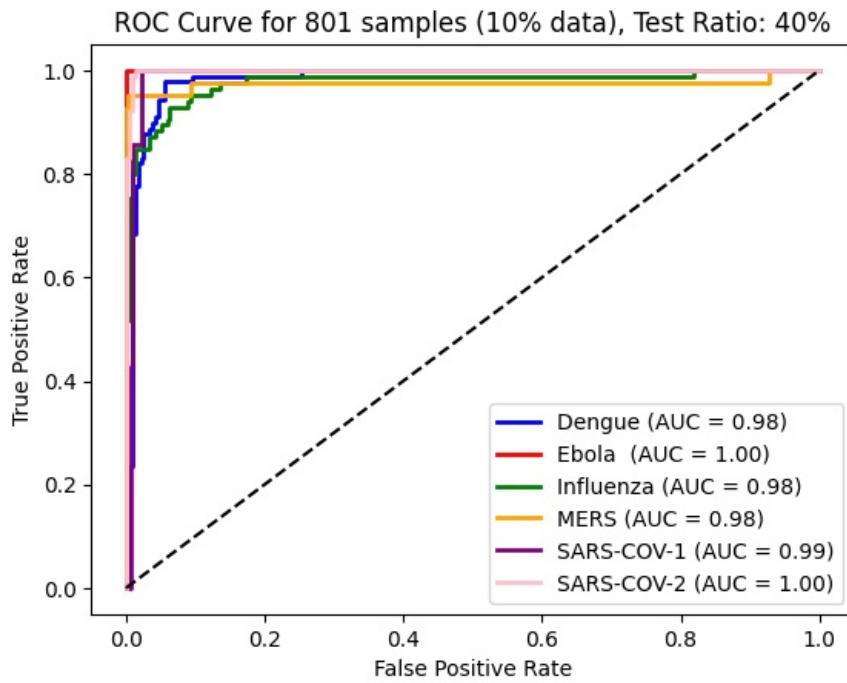
Data Size: 801 samples, Test Ratio: 0.4

- Accuracy: 0.9159
- Precision: 0.9033
- Recall: 0.8983
- F1_score: 0.9005

Confusion Matrix for 801 samples (10% data), Test Ratio: 40%

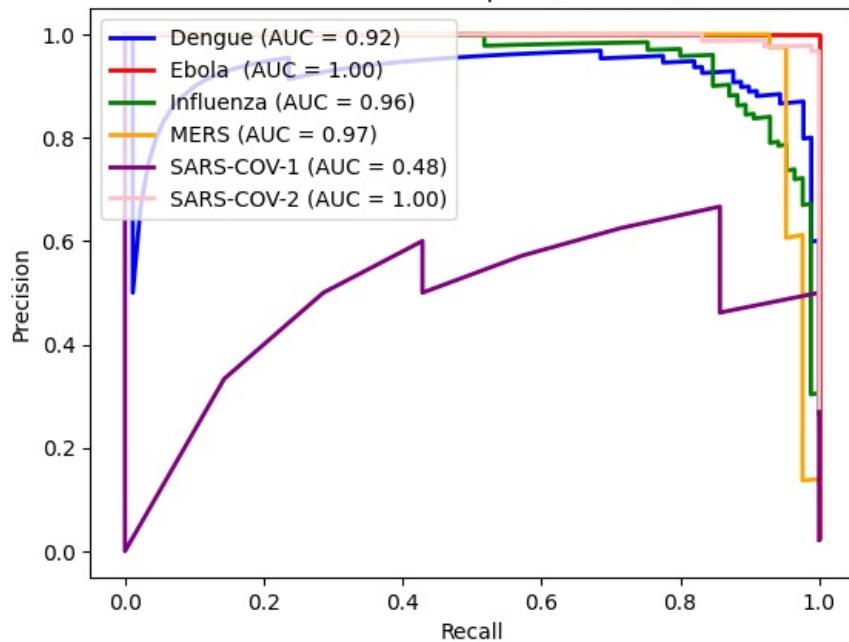


ROC Curve for 801 samples (10% data), Test Ratio: 40%

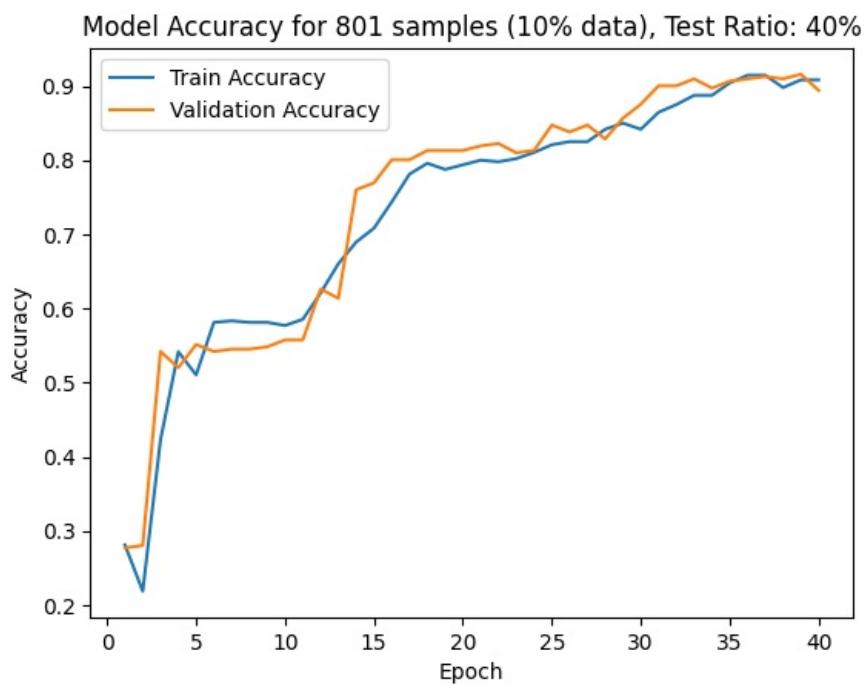


Precision-Recall Curve for 801 samples (10% data), Test Ratio: 40%

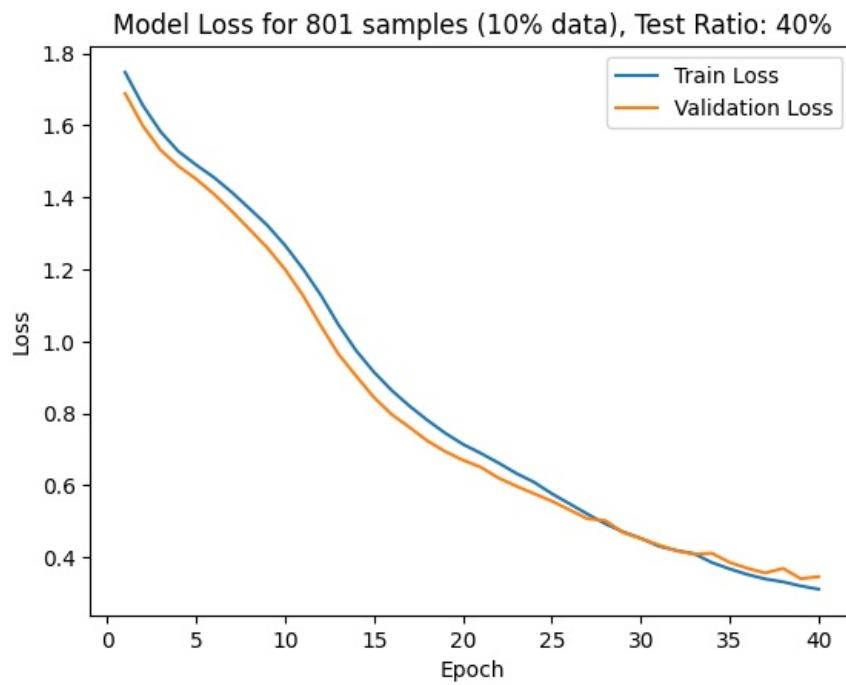
Precision-Recall Curve for 801 samples (10% data), Test Ratio: 40%



Model Accuracy for 801 samples (10% data), Test Ratio: 40%



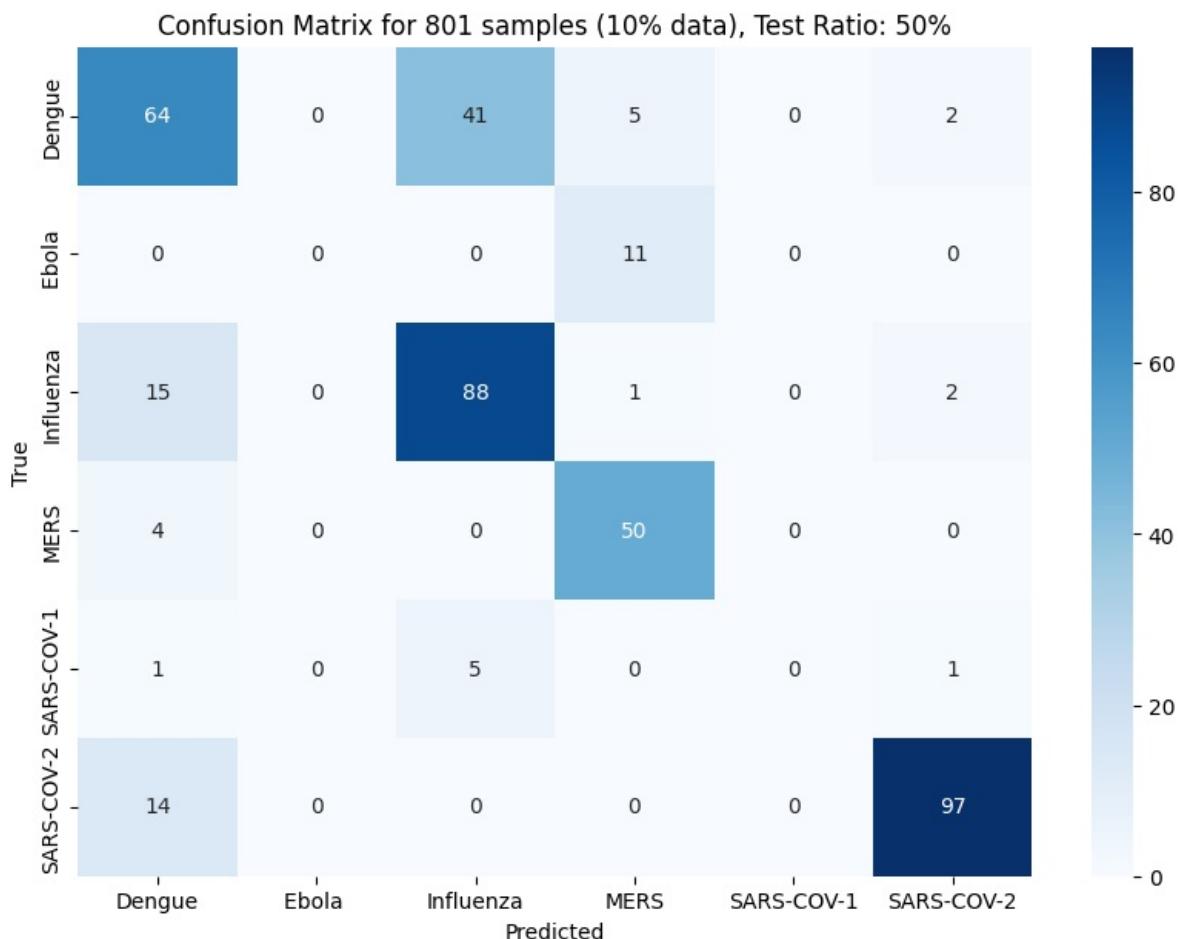
Model Loss for 801 samples (10% data), Test Ratio: 40%



Data Size: 801 samples, Test Ratio: 0.5

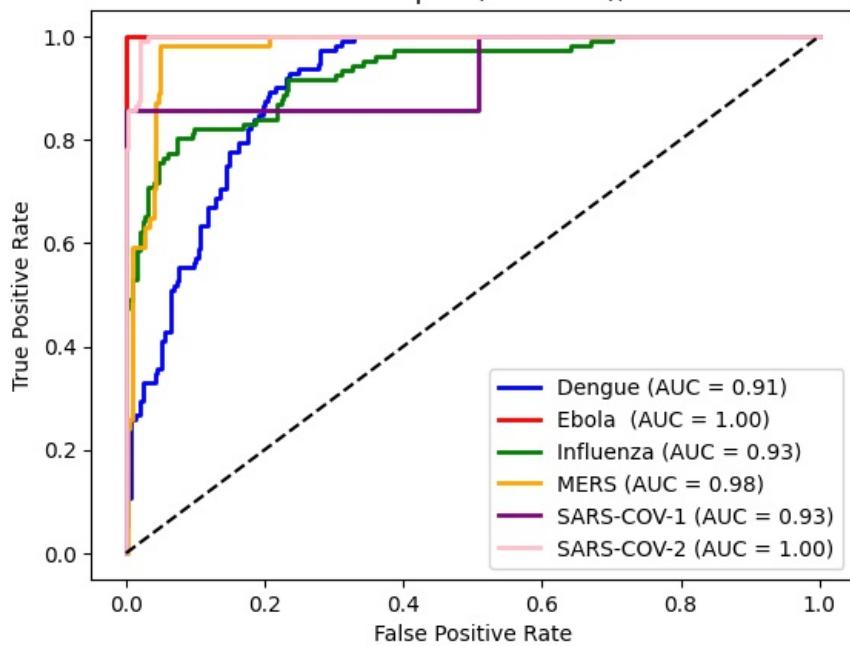
- Accuracy: 0.7456
- Precision: 0.8345
- Recall: 0.5336
- F1_score: 0.5134

Confusion Matrix for 801 samples (10% data), Test Ratio: 50%

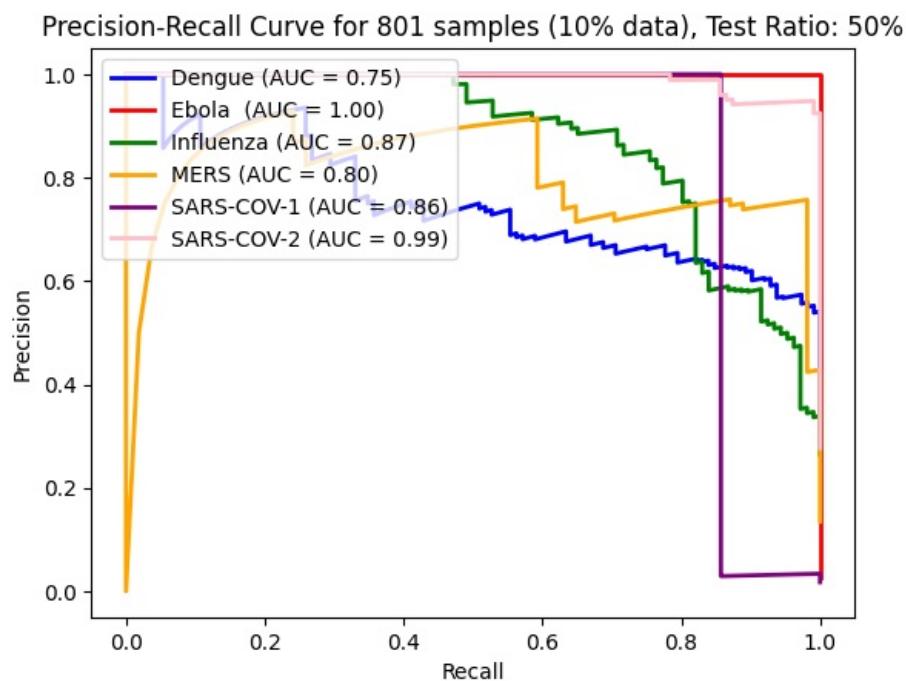


ROC Curve for 801 samples (10% data), Test Ratio: 50%

ROC Curve for 801 samples (10% data), Test Ratio: 50%

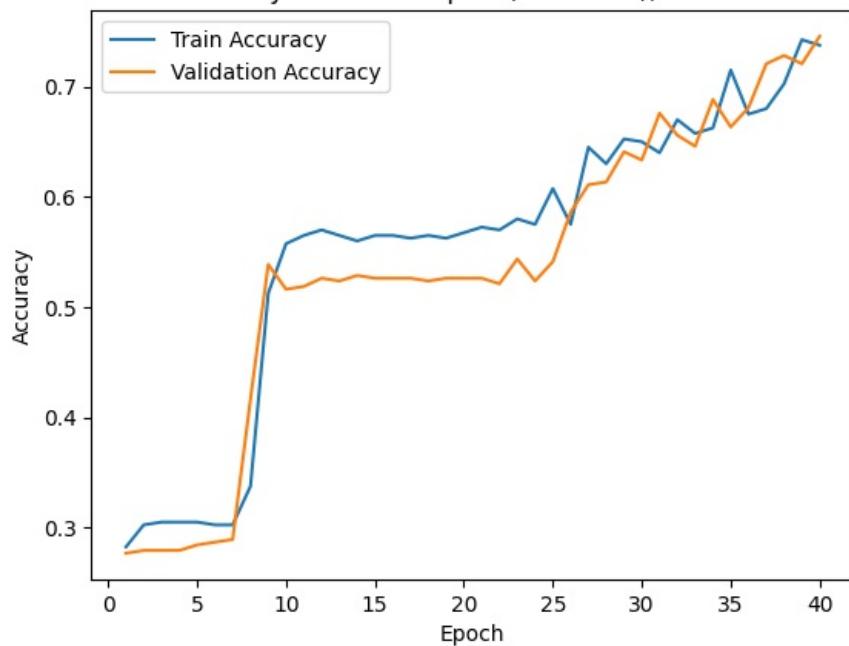


Precision-Recall Curve for 801 samples (10% data), Test Ratio: 50%

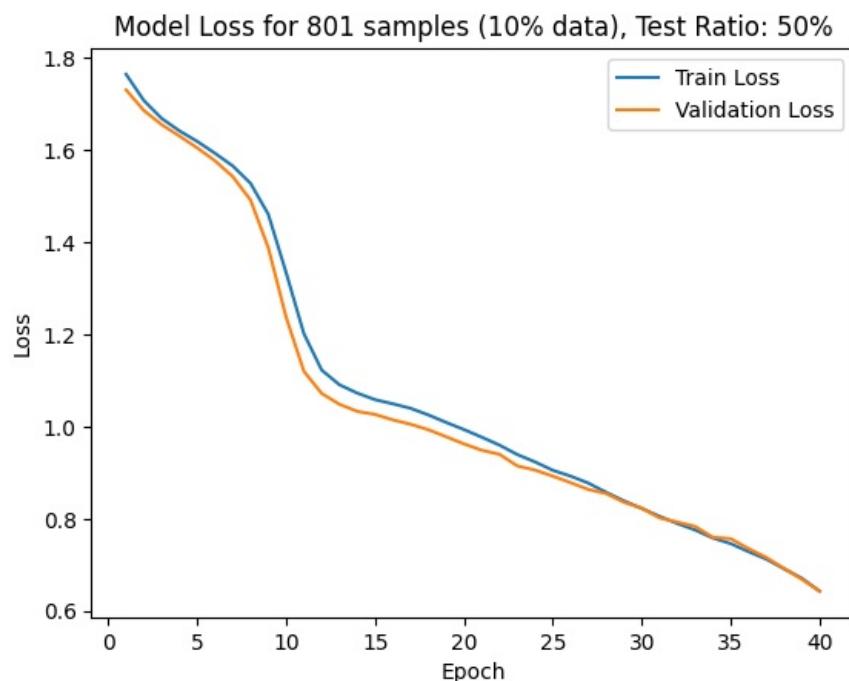


Model Accuracy for 801 samples (10% data), Test Ratio: 50%

Model Accuracy for 801 samples (10% data), Test Ratio: 50%



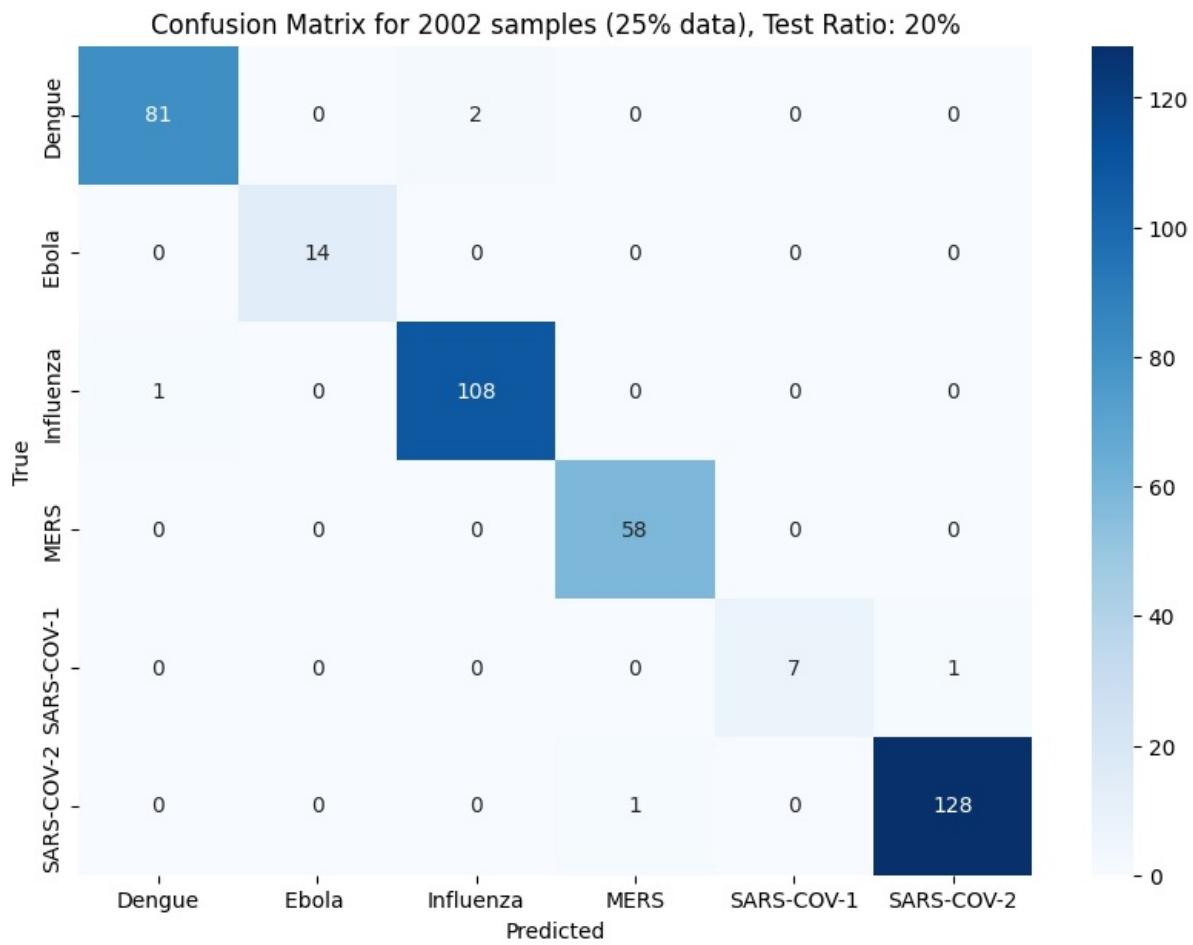
Model Loss for 801 samples (10% data), Test Ratio: 50%



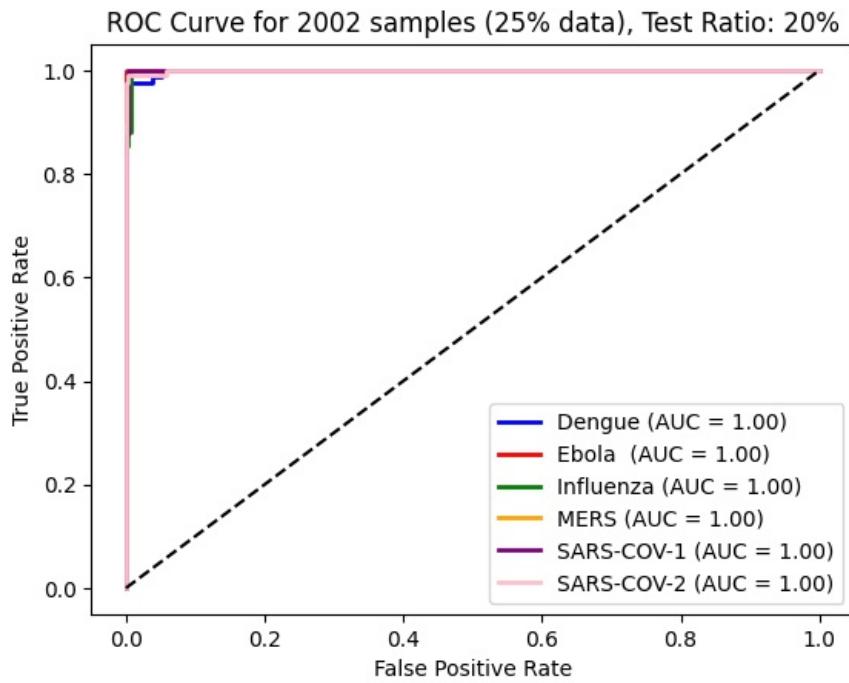
Data Size: 2002 samples, Test Ratio: 0.2

- Accuracy: 0.9875
- Precision: 0.9908
- Recall: 0.9723
- F1_score: 0.9809

Confusion Matrix for 2002 samples (25% data), Test Ratio: 20%

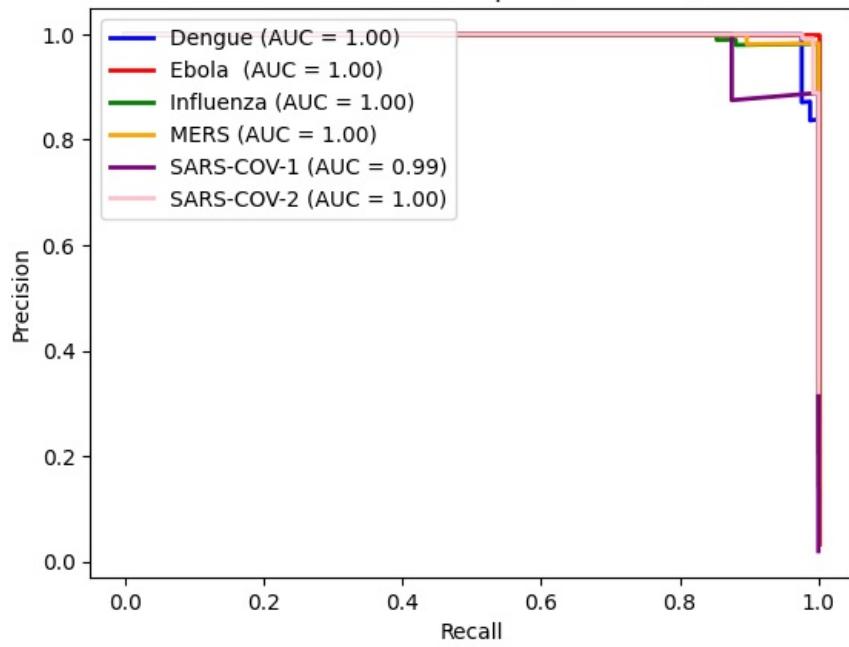


ROC Curve for 2002 samples (25% data), Test Ratio: 20%

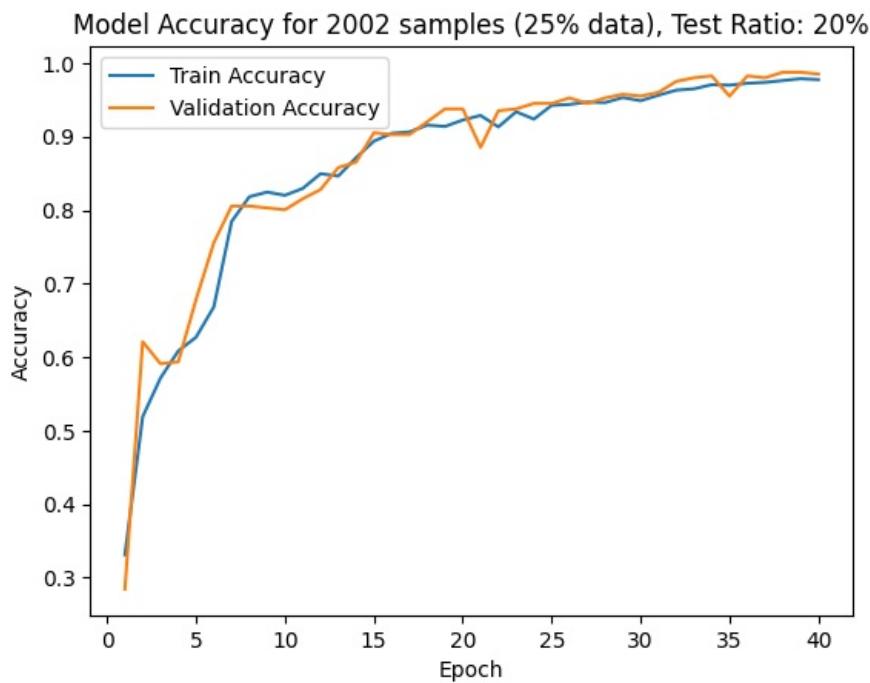


Precision-Recall Curve for 2002 samples (25% data), Test Ratio: 20%

Precision-Recall Curve for 2002 samples (25% data), Test Ratio: 20%

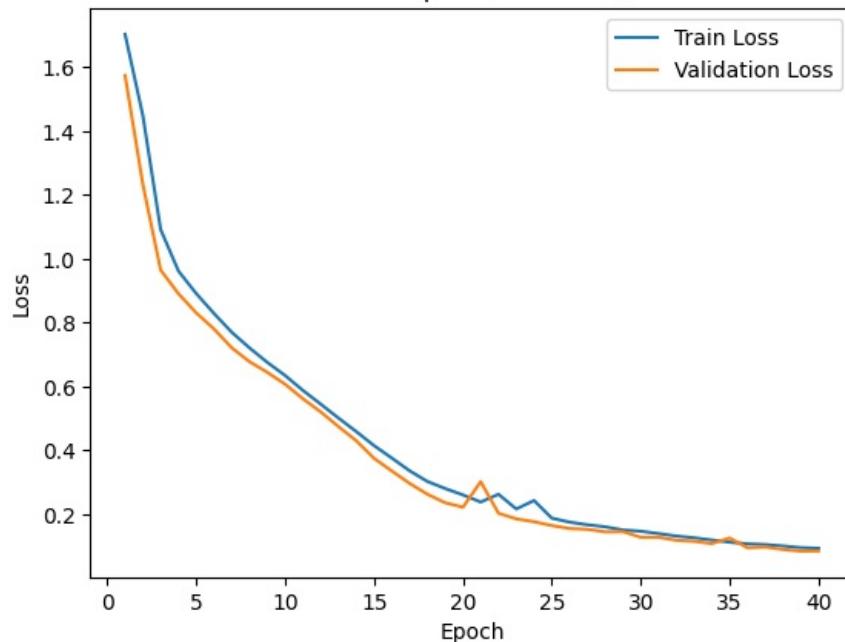


Model Accuracy for 2002 samples (25% data), Test Ratio: 20%



Model Loss for 2002 samples (25% data), Test Ratio: 20%

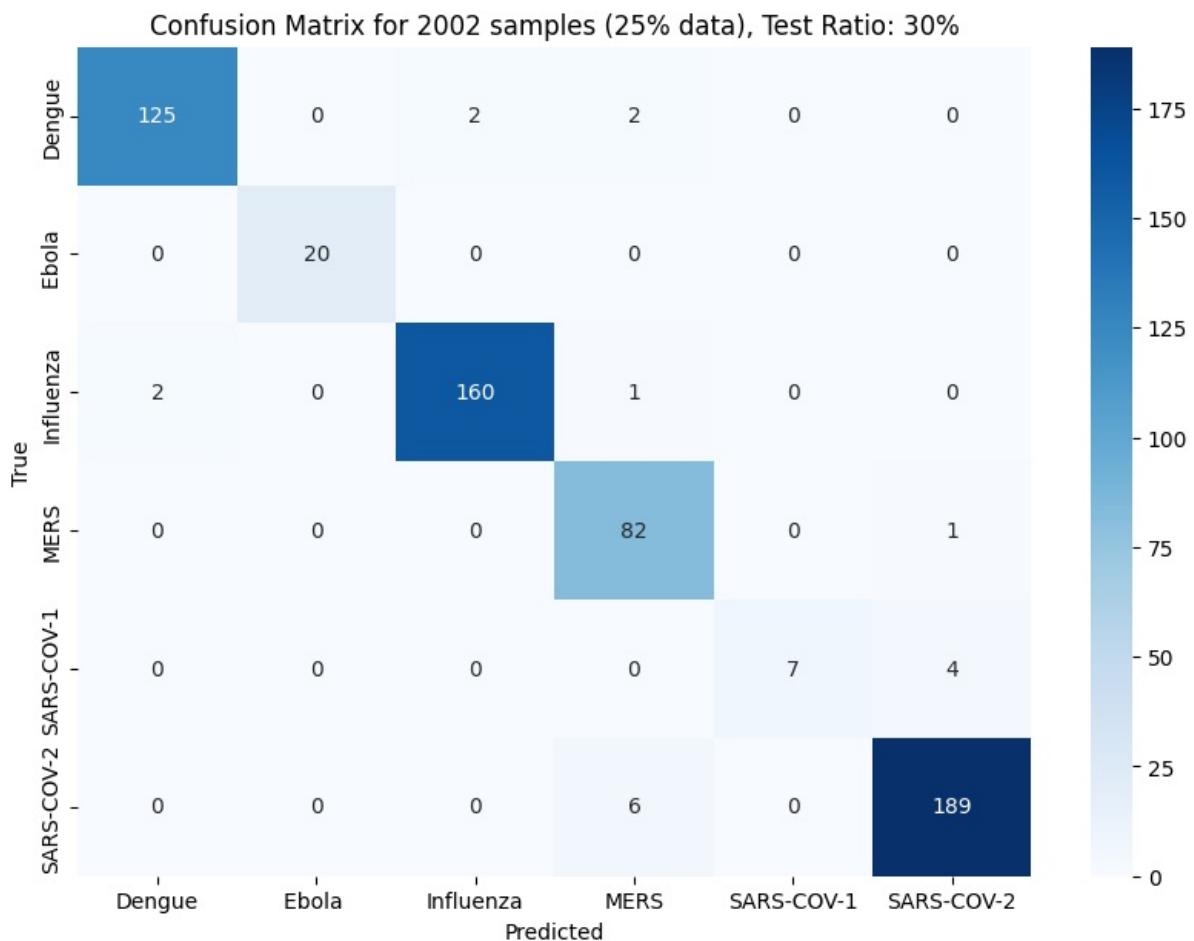
Model Loss for 2002 samples (25% data), Test Ratio: 20%



Data Size: 2002 samples, Test Ratio: 0.3

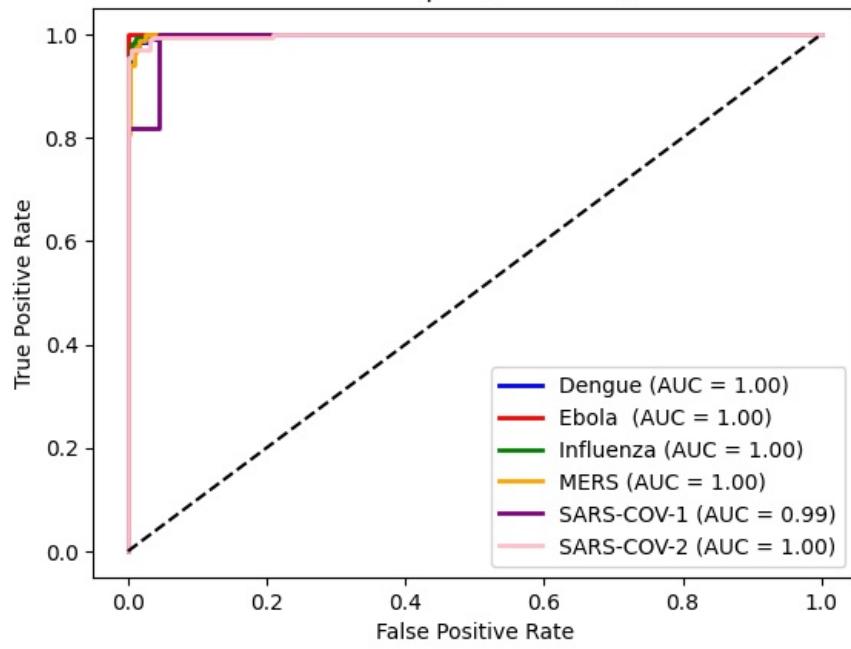
- Accuracy: 0.9700
- Precision: 0.9745
- Recall: 0.9240
- F1_score: 0.9422

Confusion Matrix for 2002 samples (25% data), Test Ratio: 30%

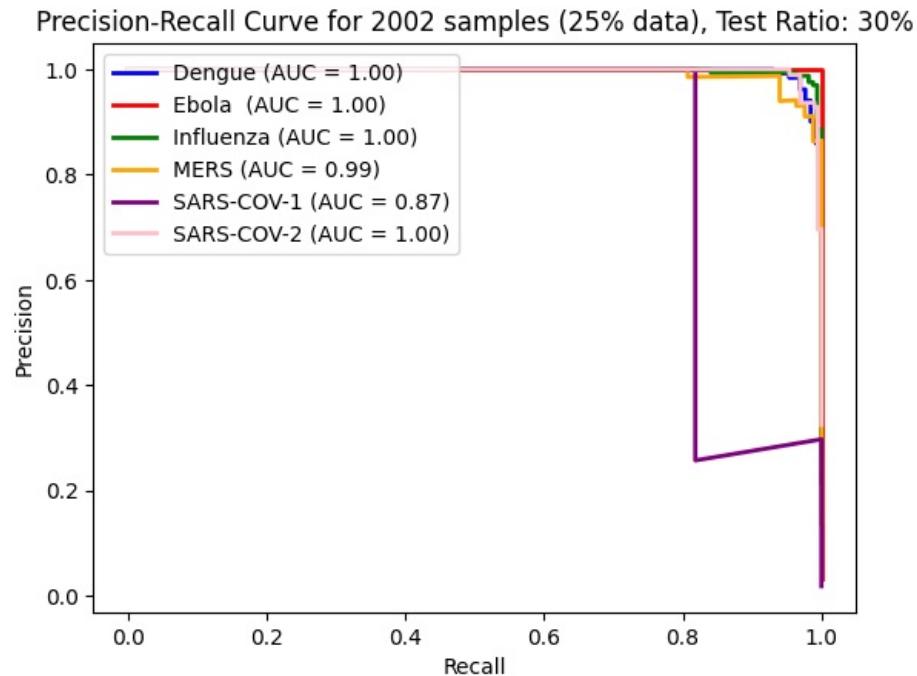


ROC Curve for 2002 samples (25% data), Test Ratio: 30%

ROC Curve for 2002 samples (25% data), Test Ratio: 30%

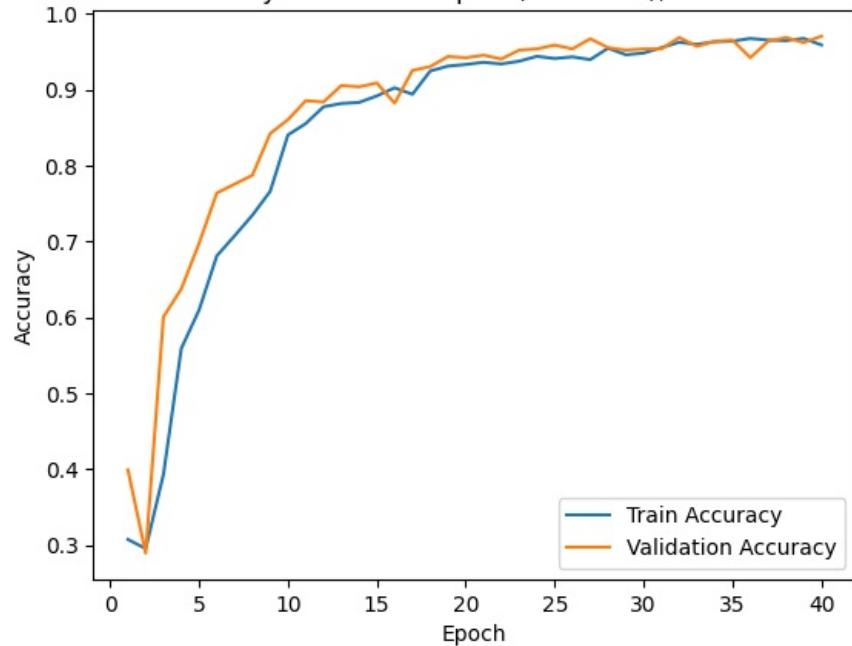


Precision-Recall Curve for 2002 samples (25% data), Test Ratio: 30%

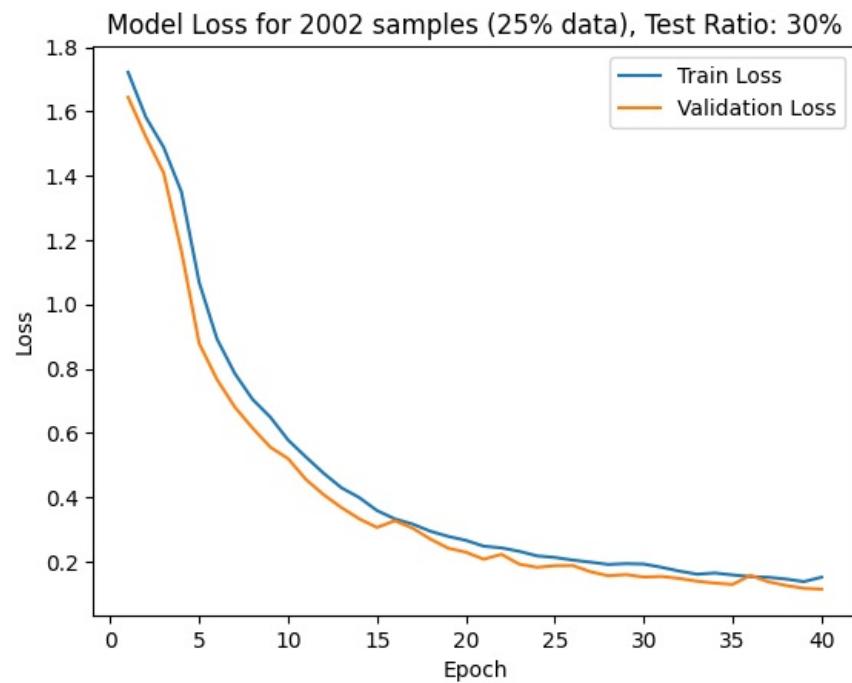


Model Accuracy for 2002 samples (25% data), Test Ratio: 30%

Model Accuracy for 2002 samples (25% data), Test Ratio: 30%



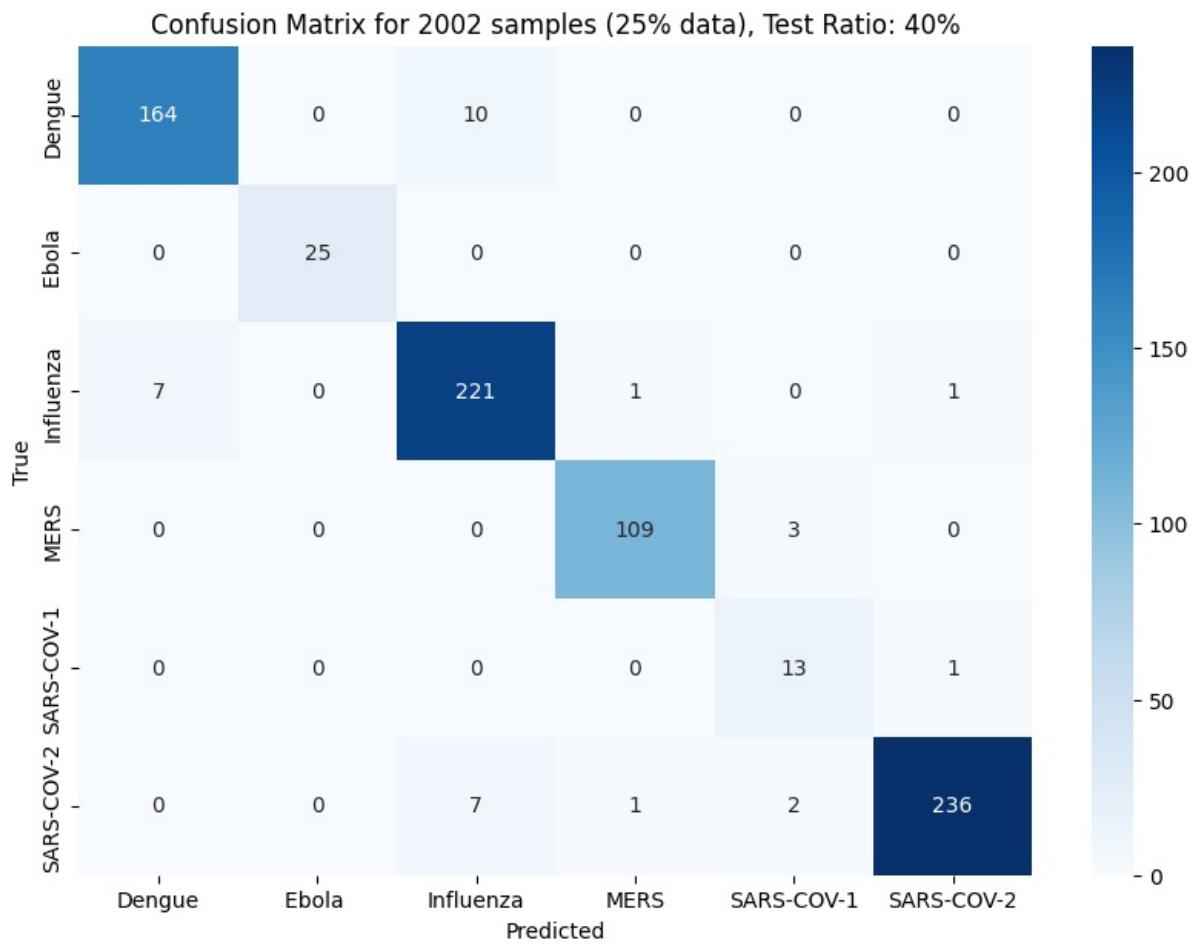
Model Loss for 2002 samples (25% data), Test Ratio: 30%



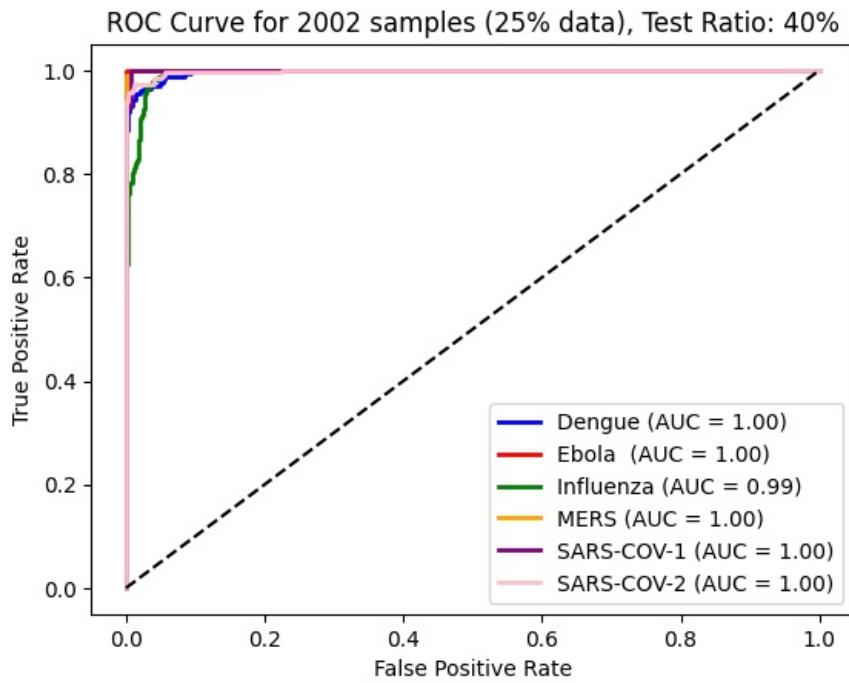
Data Size: 2002 samples, Test Ratio: 0.4

- Accuracy: 0.9588
- Precision: 0.9306
- Recall: 0.9608
- F1_score: 0.9434

Confusion Matrix for 2002 samples (25% data), Test Ratio: 40%

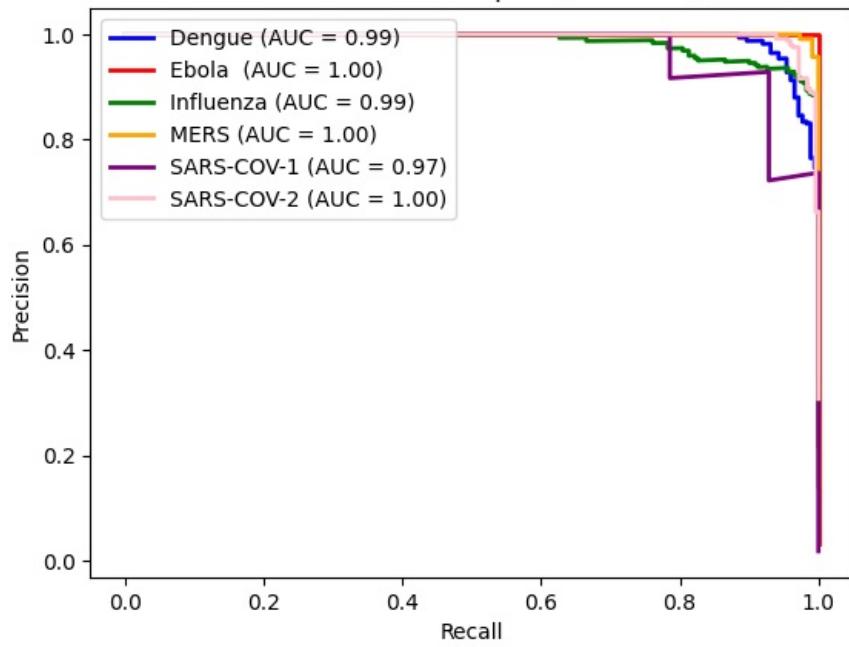


ROC Curve for 2002 samples (25% data), Test Ratio: 40%

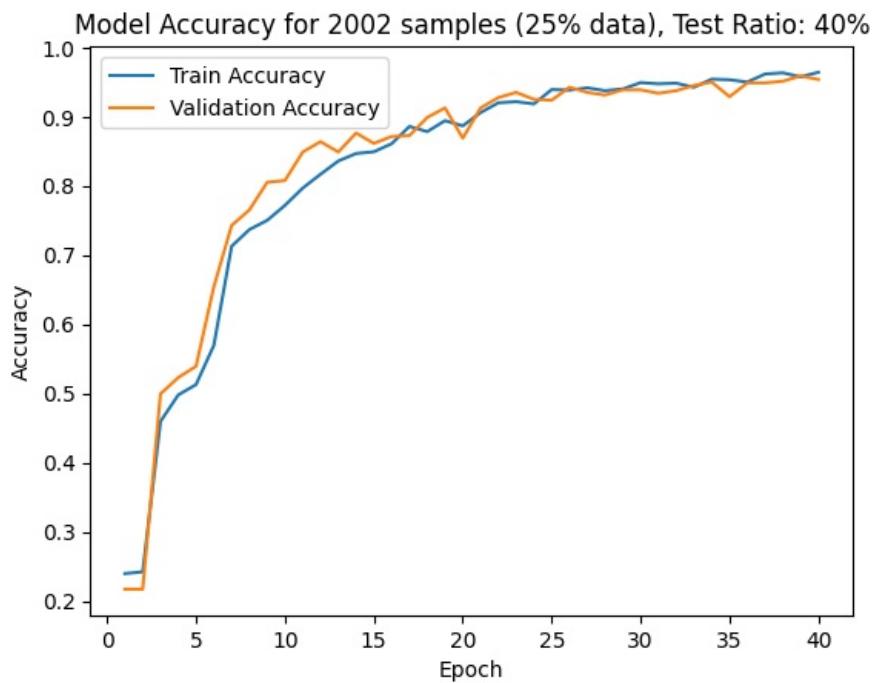


Precision-Recall Curve for 2002 samples (25% data), Test Ratio: 40%

Precision-Recall Curve for 2002 samples (25% data), Test Ratio: 40%

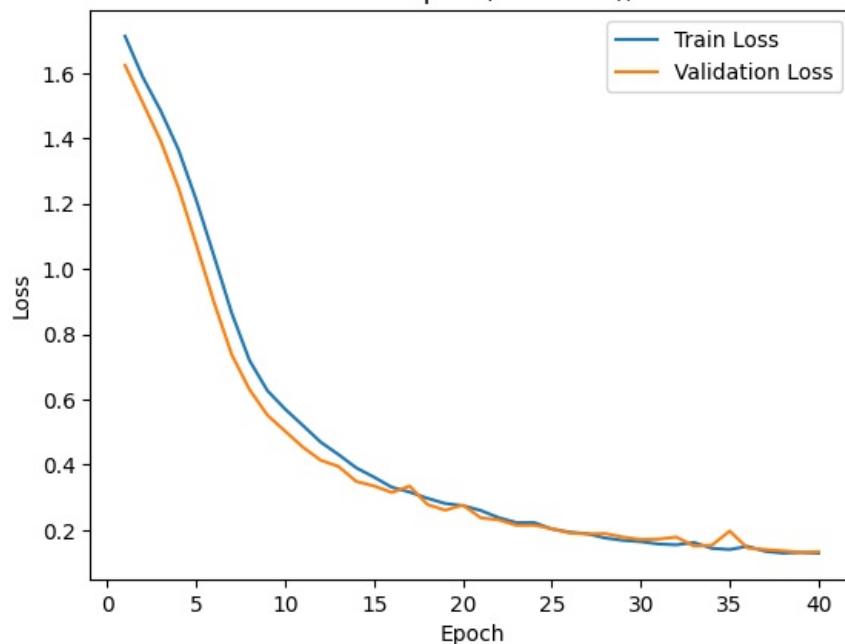


Model Accuracy for 2002 samples (25% data), Test Ratio: 40%



Model Loss for 2002 samples (25% data), Test Ratio: 40%

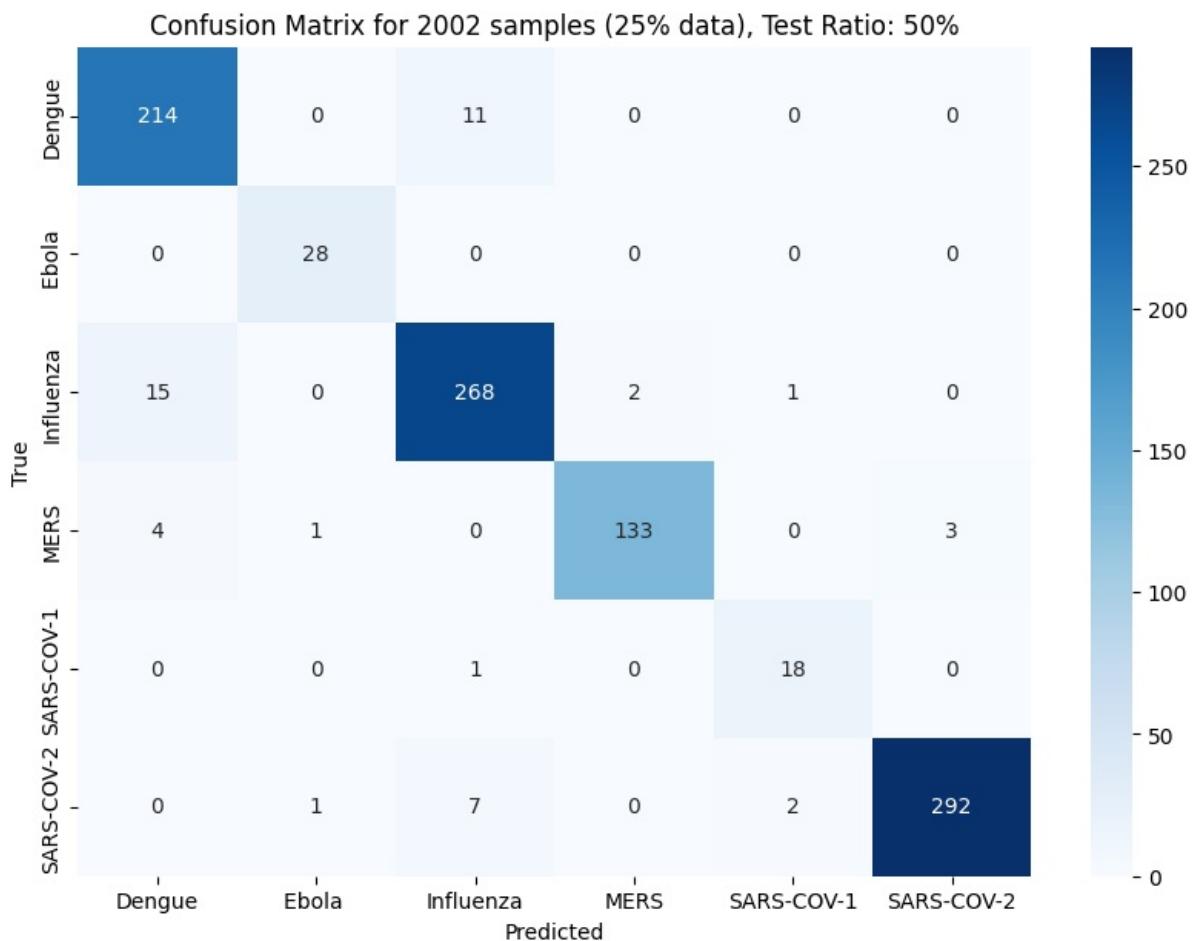
Model Loss for 2002 samples (25% data), Test Ratio: 40%



Data Size: 2002 samples, Test Ratio: 0.5

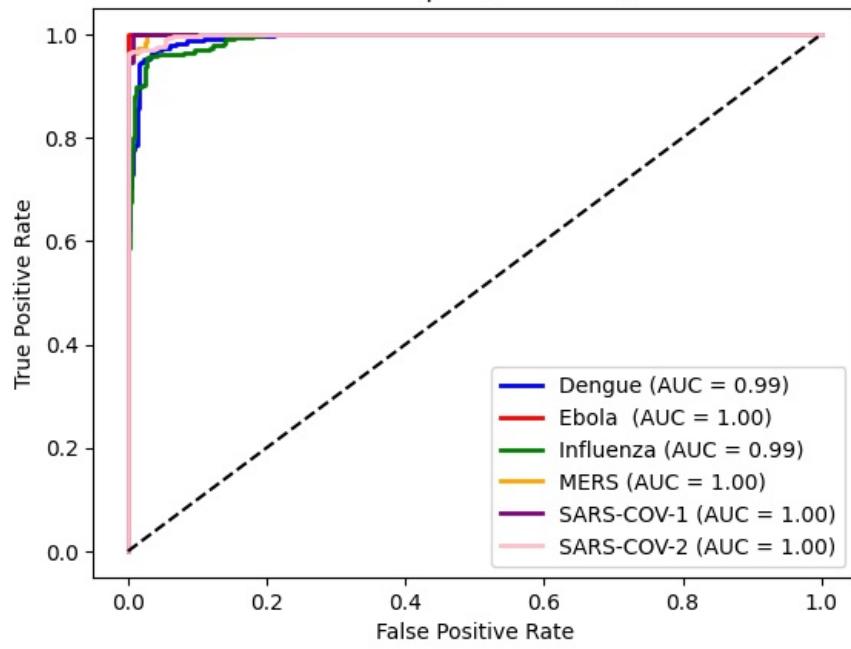
- Accuracy: 0.9520
- Precision: 0.9363
- Recall: 0.9576
- F1_score: 0.9462

Confusion Matrix for 2002 samples (25% data), Test Ratio: 50%

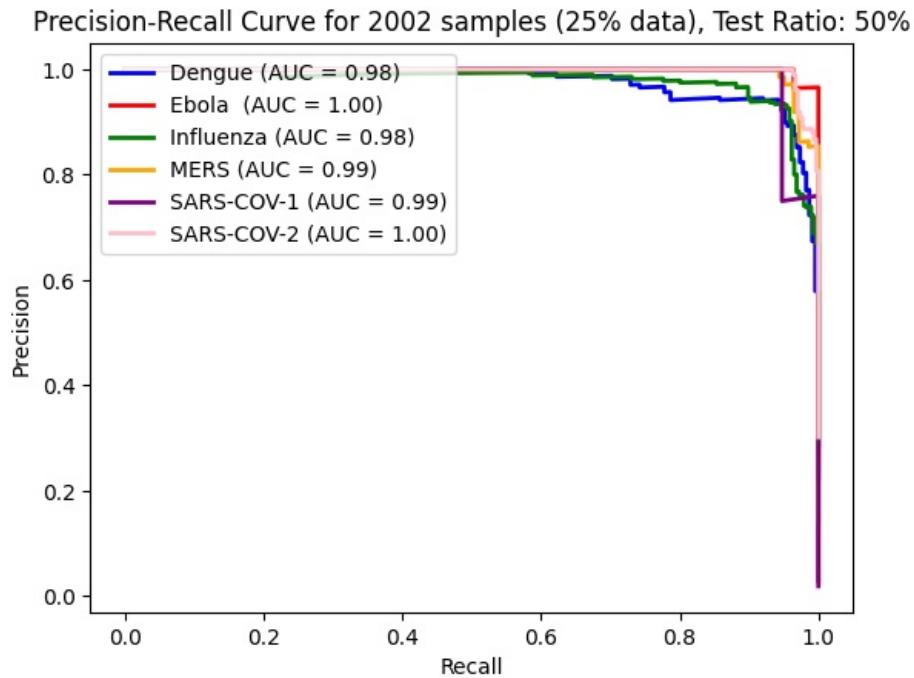


ROC Curve for 2002 samples (25% data), Test Ratio: 50%

ROC Curve for 2002 samples (25% data), Test Ratio: 50%

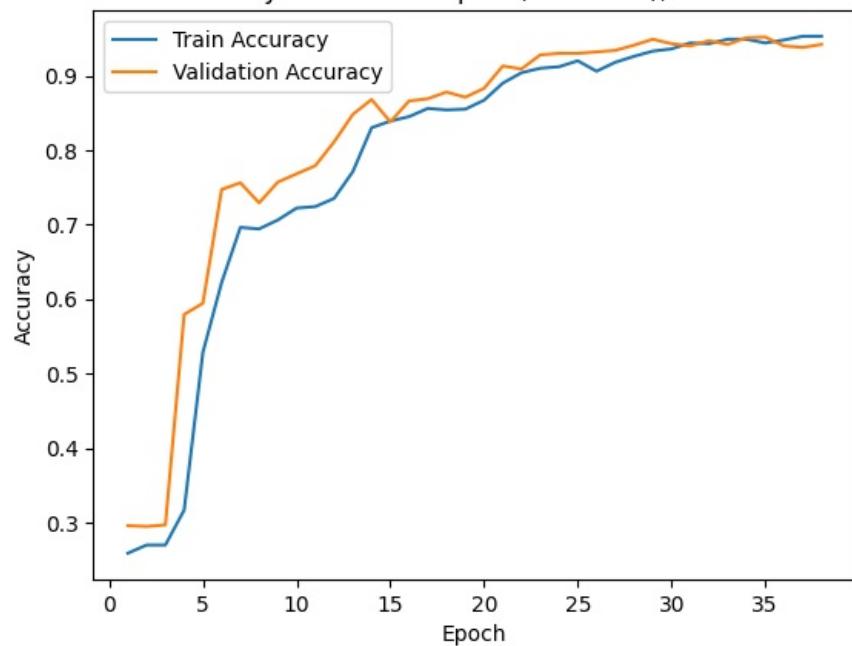


Precision-Recall Curve for 2002 samples (25% data), Test Ratio: 50%

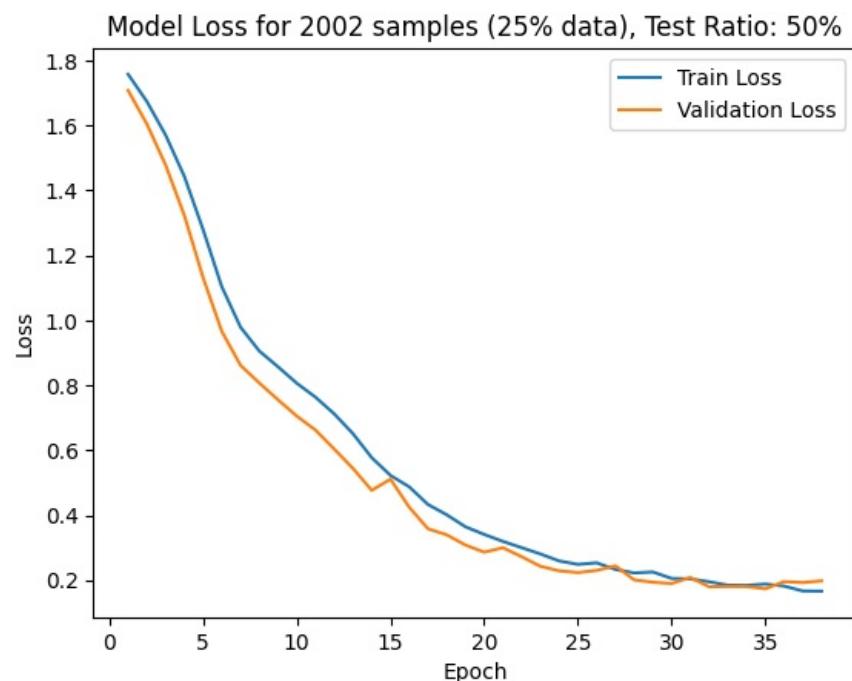


Model Accuracy for 2002 samples (25% data), Test Ratio: 50%

Model Accuracy for 2002 samples (25% data), Test Ratio: 50%



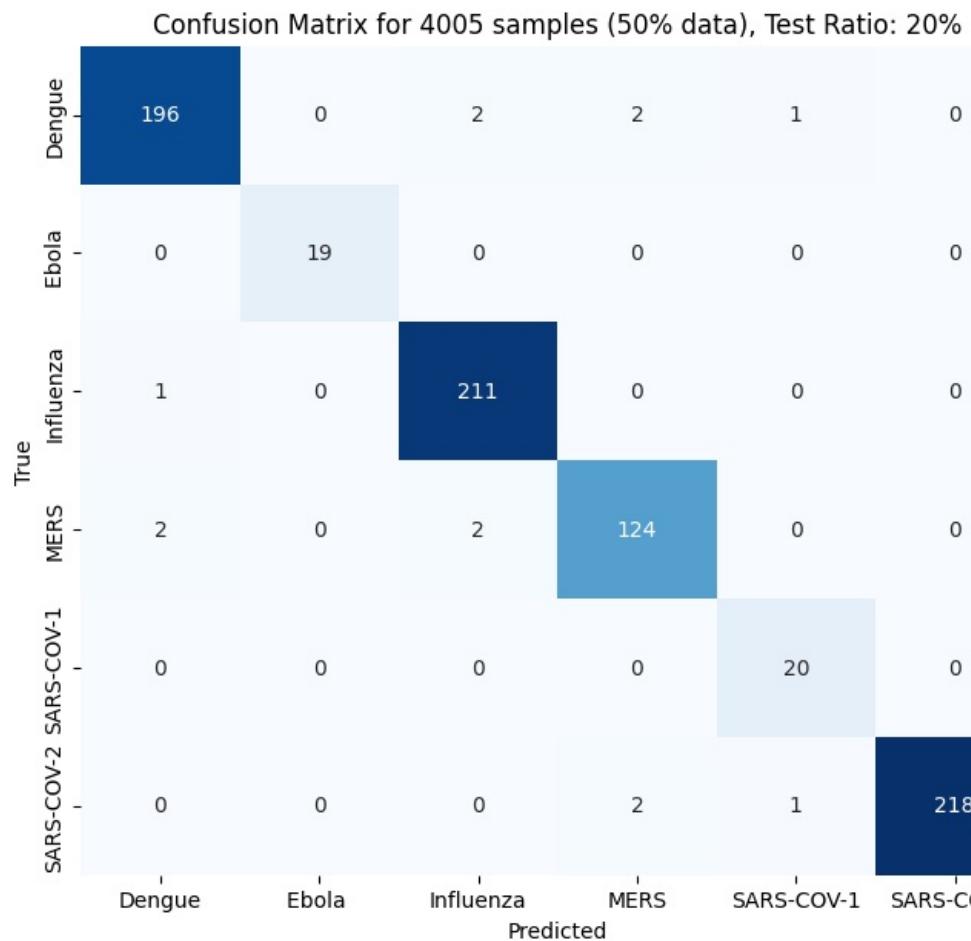
Model Loss for 2002 samples (25% data), Test Ratio: 50%



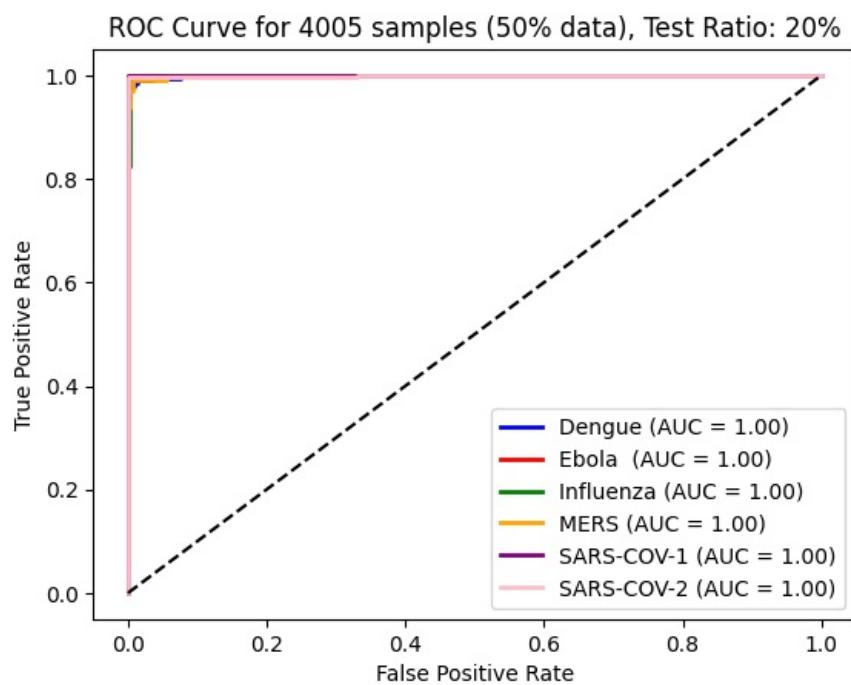
Data Size: 4005 samples, Test Ratio: 0.2

- Accuracy: 0.9838
- Precision: 0.9740
- Recall: 0.9876
- F1_score: 0.9804

Confusion Matrix for 4005 samples (50% data), Test Ratio: 20%

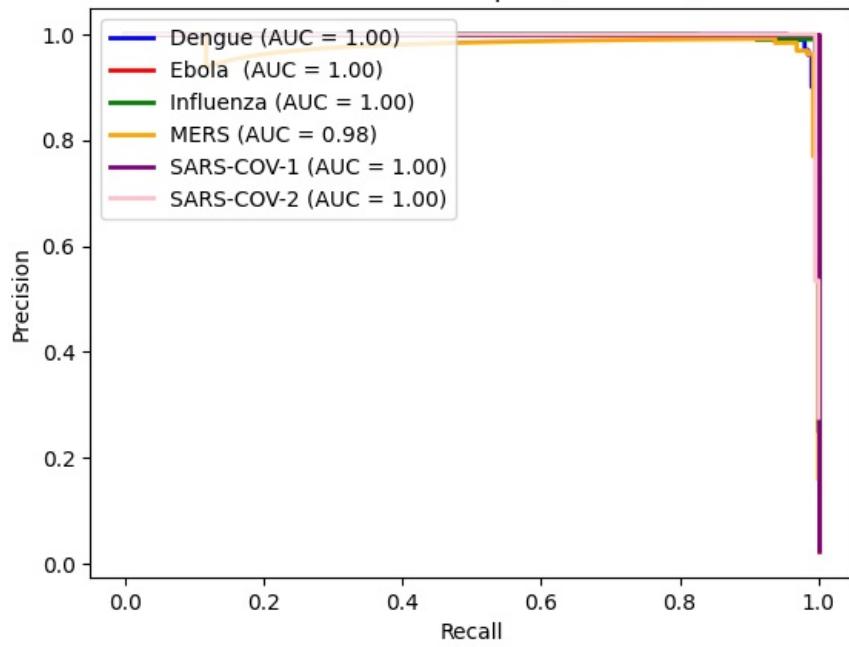


ROC Curve for 4005 samples (50% data), Test Ratio: 20%

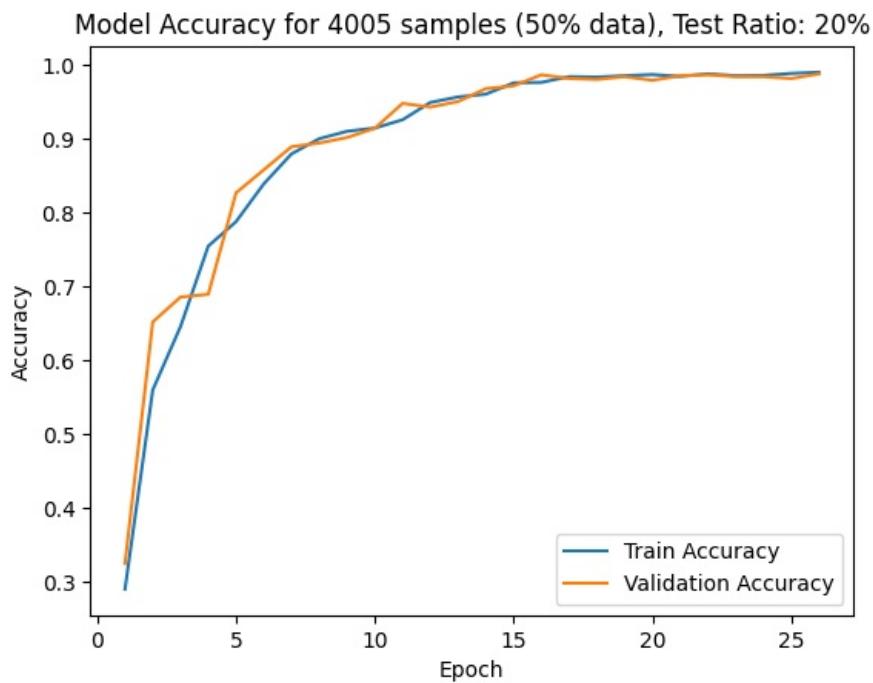


Precision-Recall Curve for 4005 samples (50% data), Test Ratio: 20%

Precision-Recall Curve for 4005 samples (50% data), Test Ratio: 20%

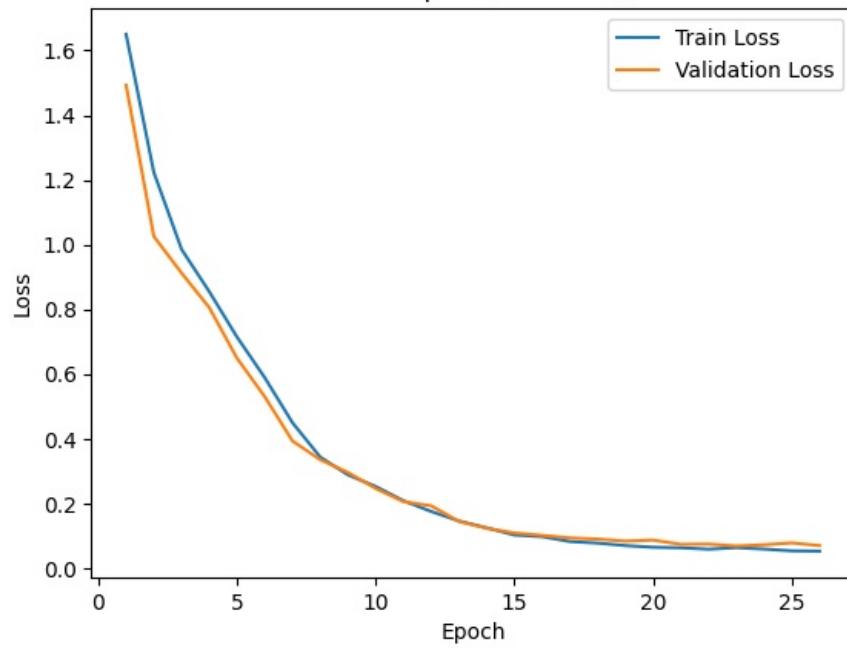


Model Accuracy for 4005 samples (50% data), Test Ratio: 20%



Model Loss for 4005 samples (50% data), Test Ratio: 20%

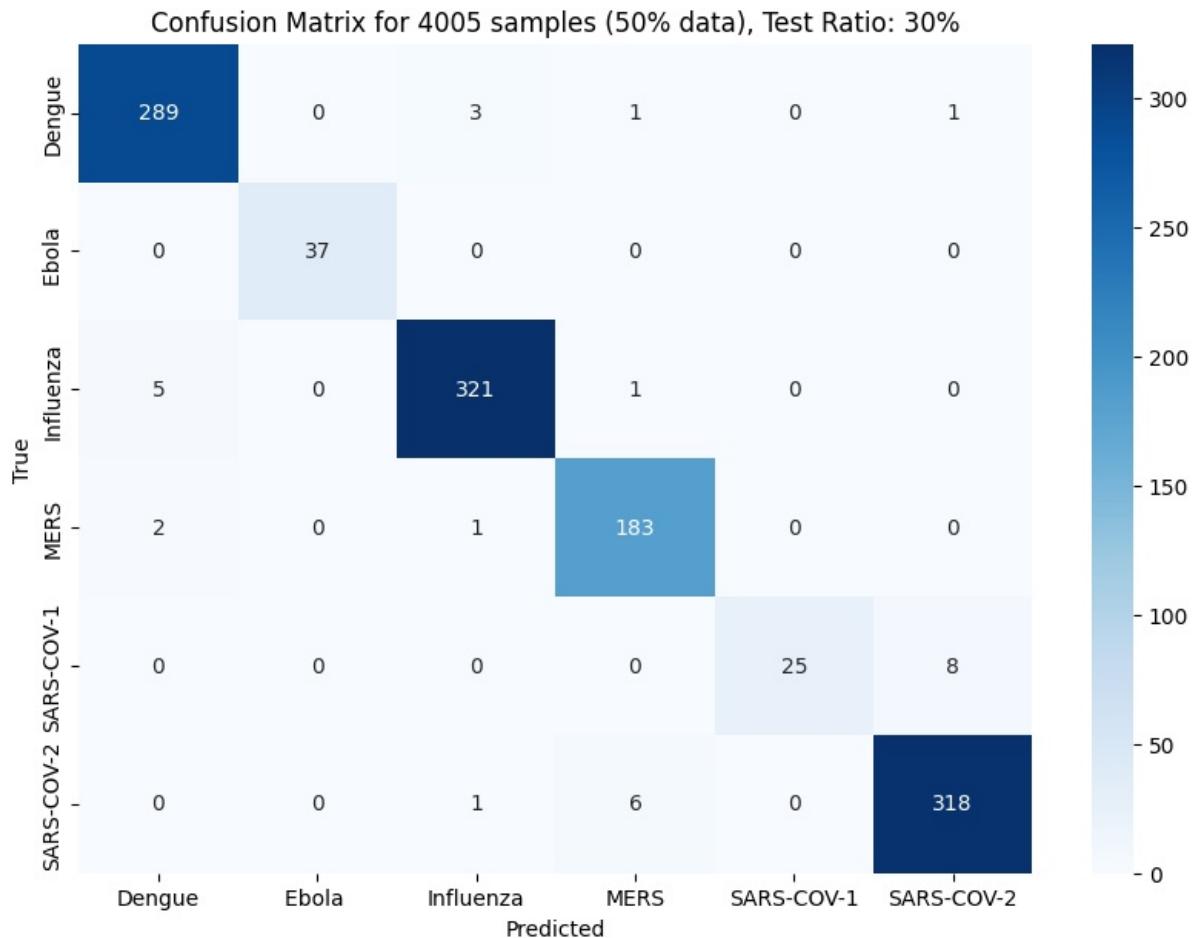
Model Loss for 4005 samples (50% data), Test Ratio: 20%



Data Size: 4005 samples, Test Ratio: 0.3

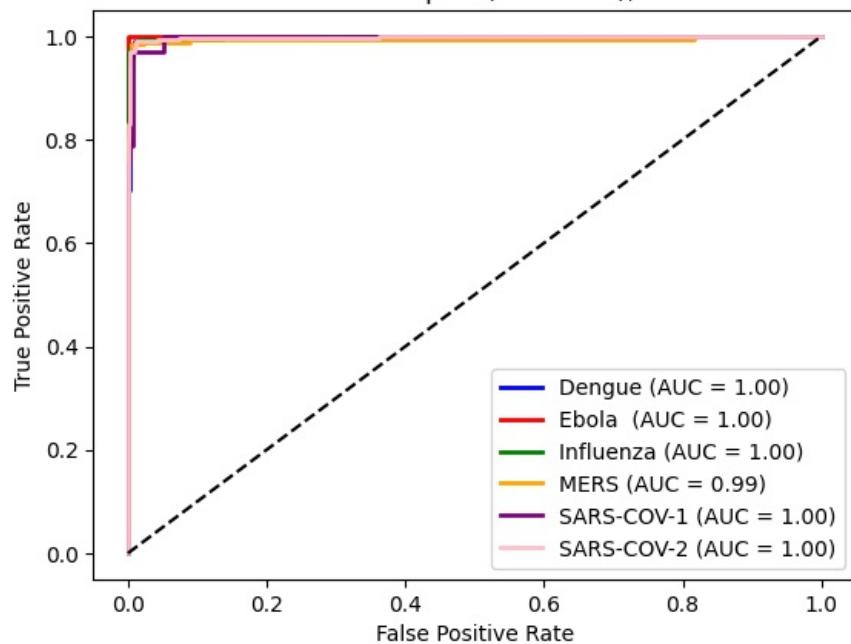
- Accuracy: 0.9759
- Precision: 0.9819
- Recall: 0.9474
- F1_score: 0.9619

Confusion Matrix for 4005 samples (50% data), Test Ratio: 30%

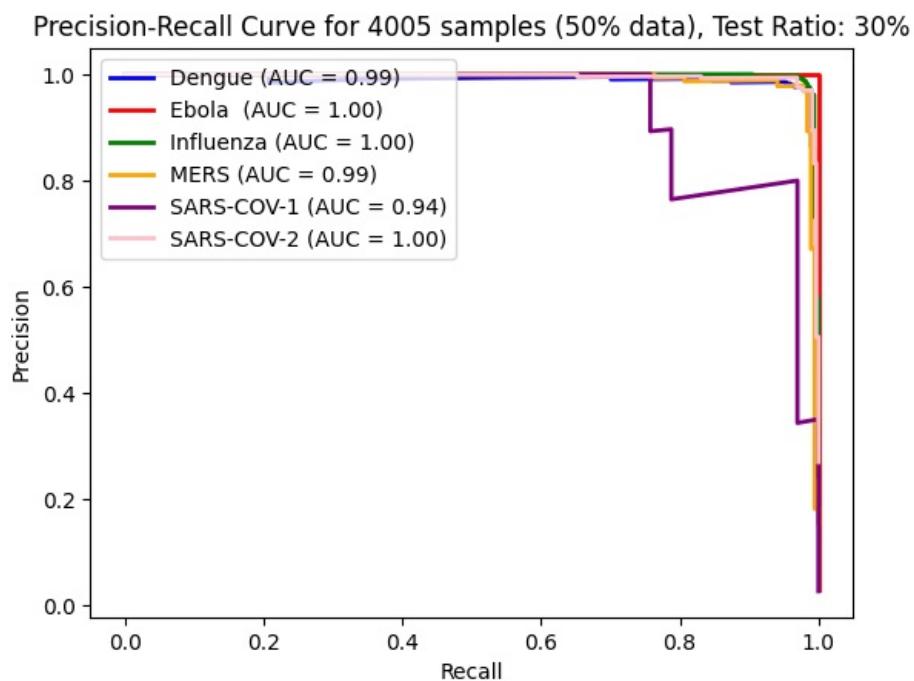


ROC Curve for 4005 samples (50% data), Test Ratio: 30%

ROC Curve for 4005 samples (50% data), Test Ratio: 30%

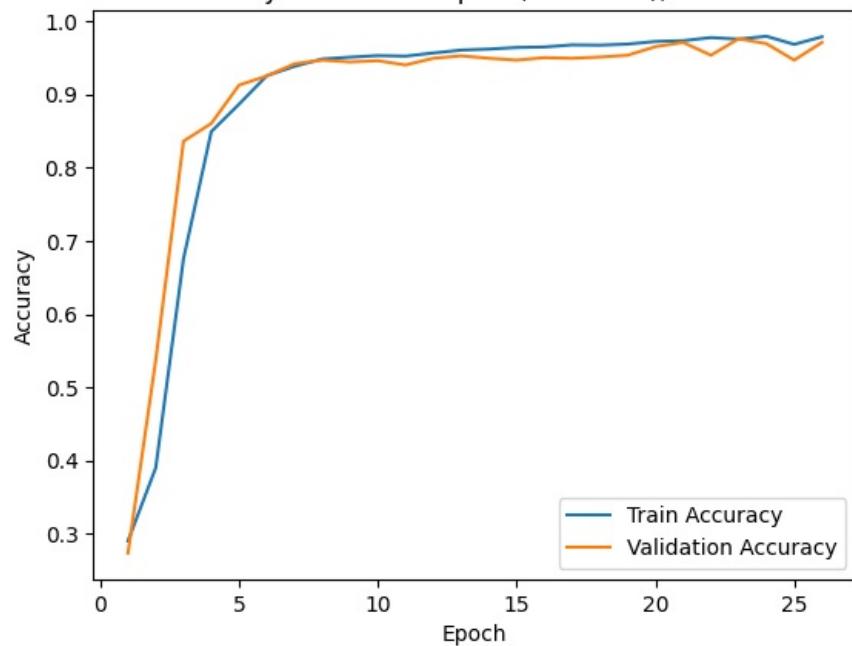


Precision-Recall Curve for 4005 samples (50% data), Test Ratio: 30%

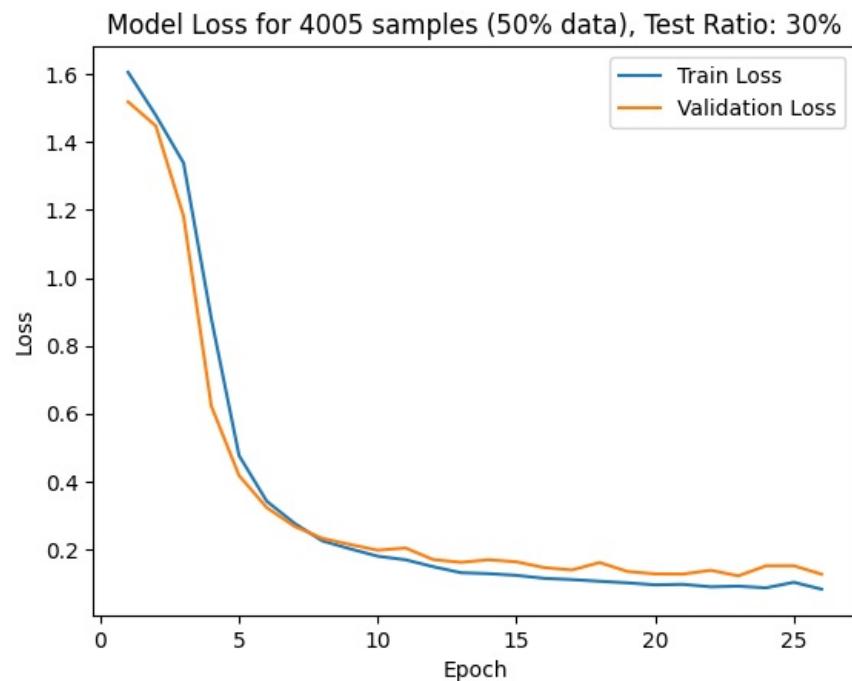


Model Accuracy for 4005 samples (50% data), Test Ratio: 30%

Model Accuracy for 4005 samples (50% data), Test Ratio: 30%



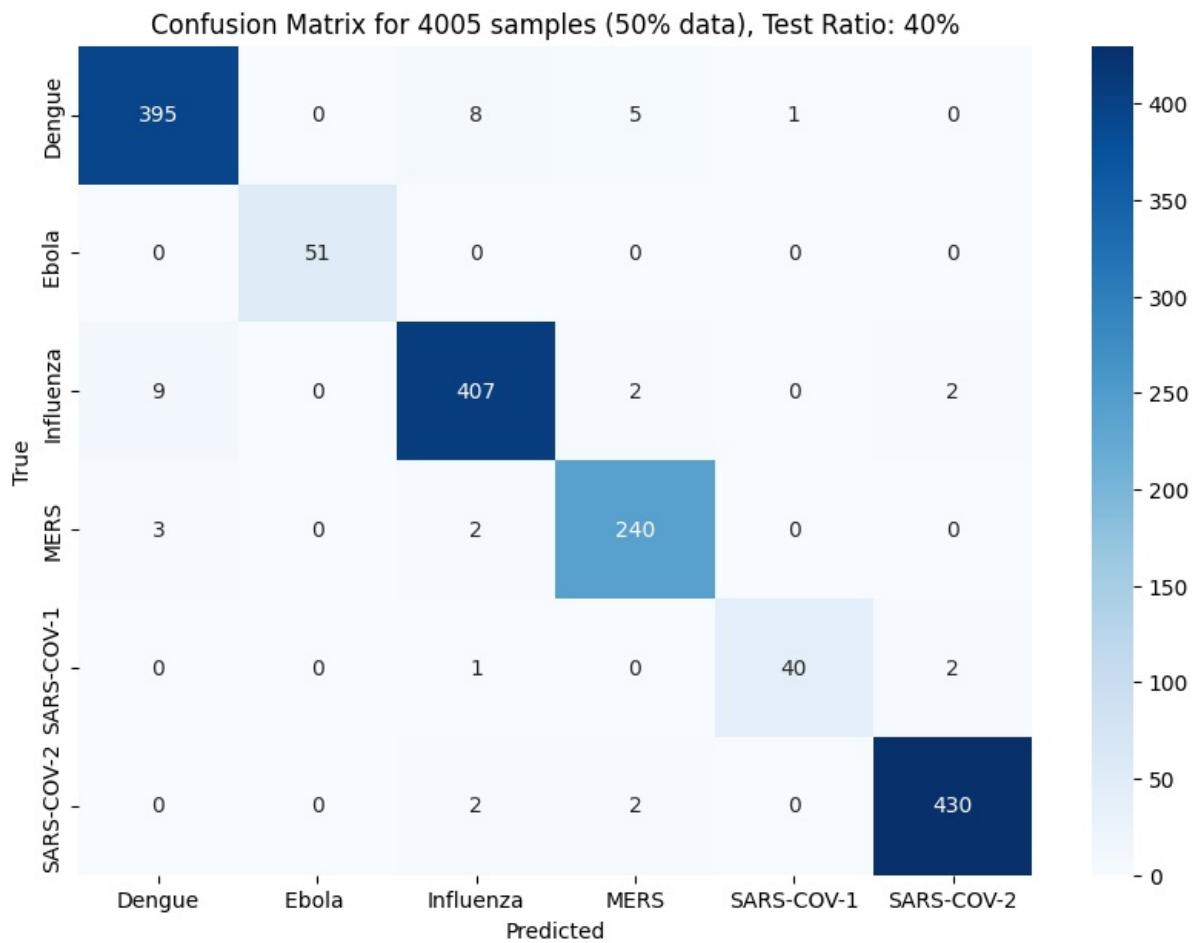
Model Loss for 4005 samples (50% data), Test Ratio: 30%



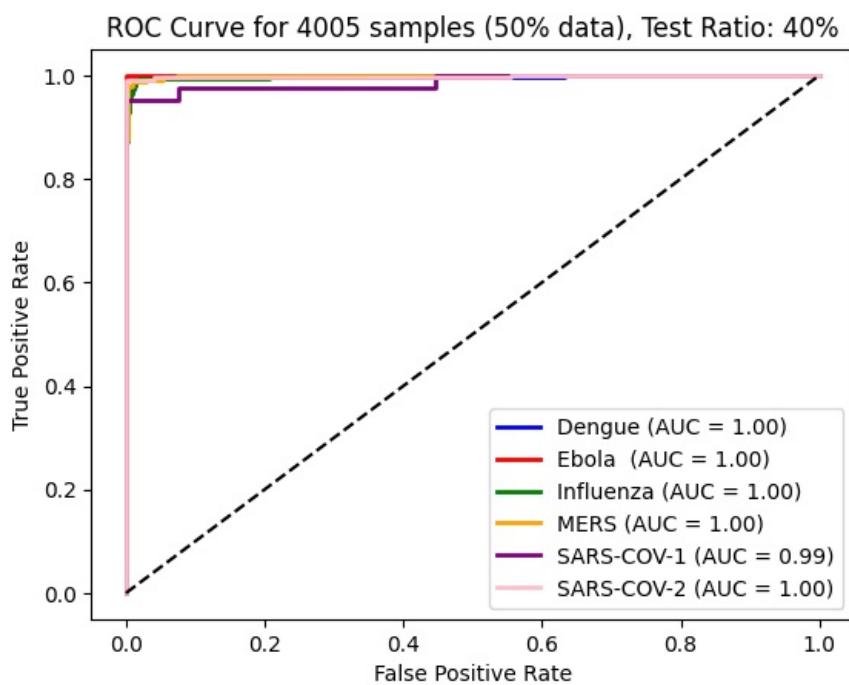
Data Size: 4005 samples, Test Ratio: 0.4

- Accuracy: 0.9757
- Precision: 0.9783
- Recall: 0.9726
- F1_score: 0.9753

Confusion Matrix for 4005 samples (50% data), Test Ratio: 40%

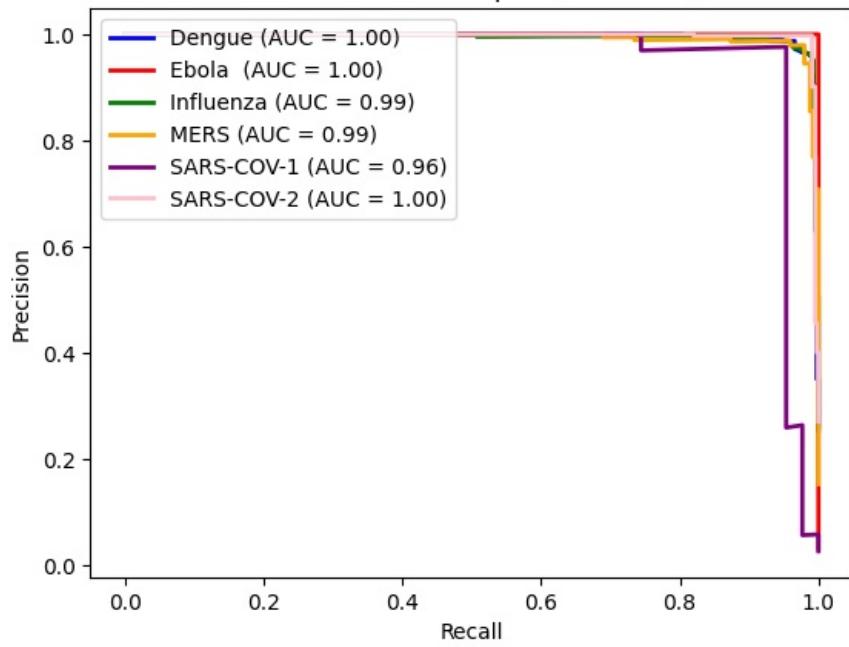


ROC Curve for 4005 samples (50% data), Test Ratio: 40%

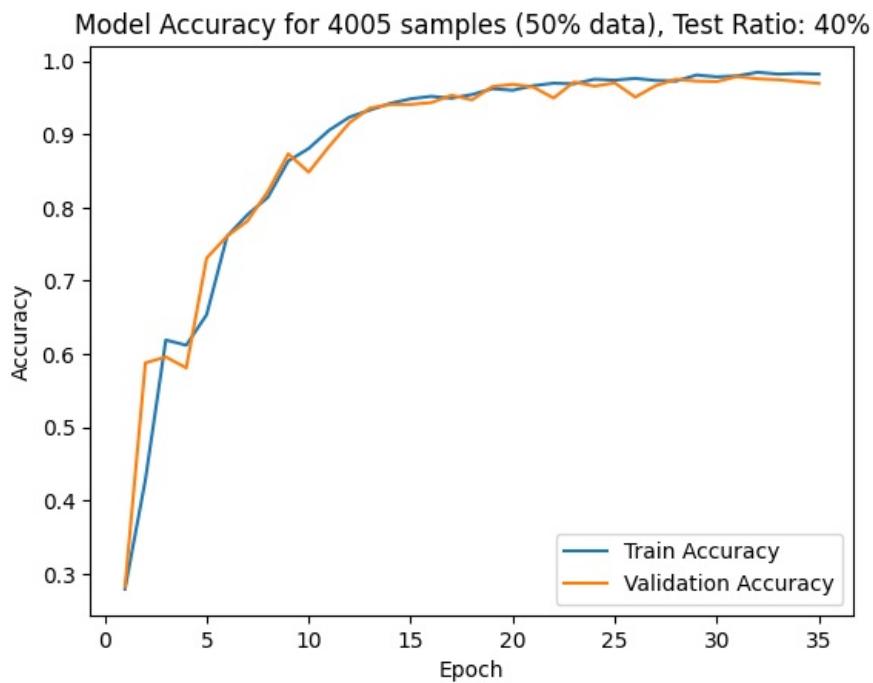


Precision-Recall Curve for 4005 samples (50% data), Test Ratio: 40%

Precision-Recall Curve for 4005 samples (50% data), Test Ratio: 40%

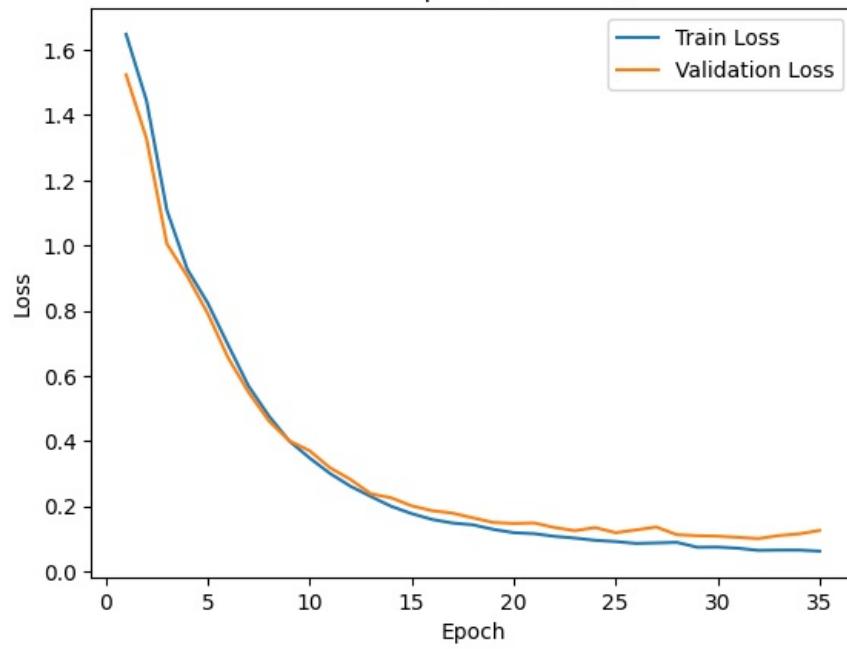


Model Accuracy for 4005 samples (50% data), Test Ratio: 40%



Model Loss for 4005 samples (50% data), Test Ratio: 40%

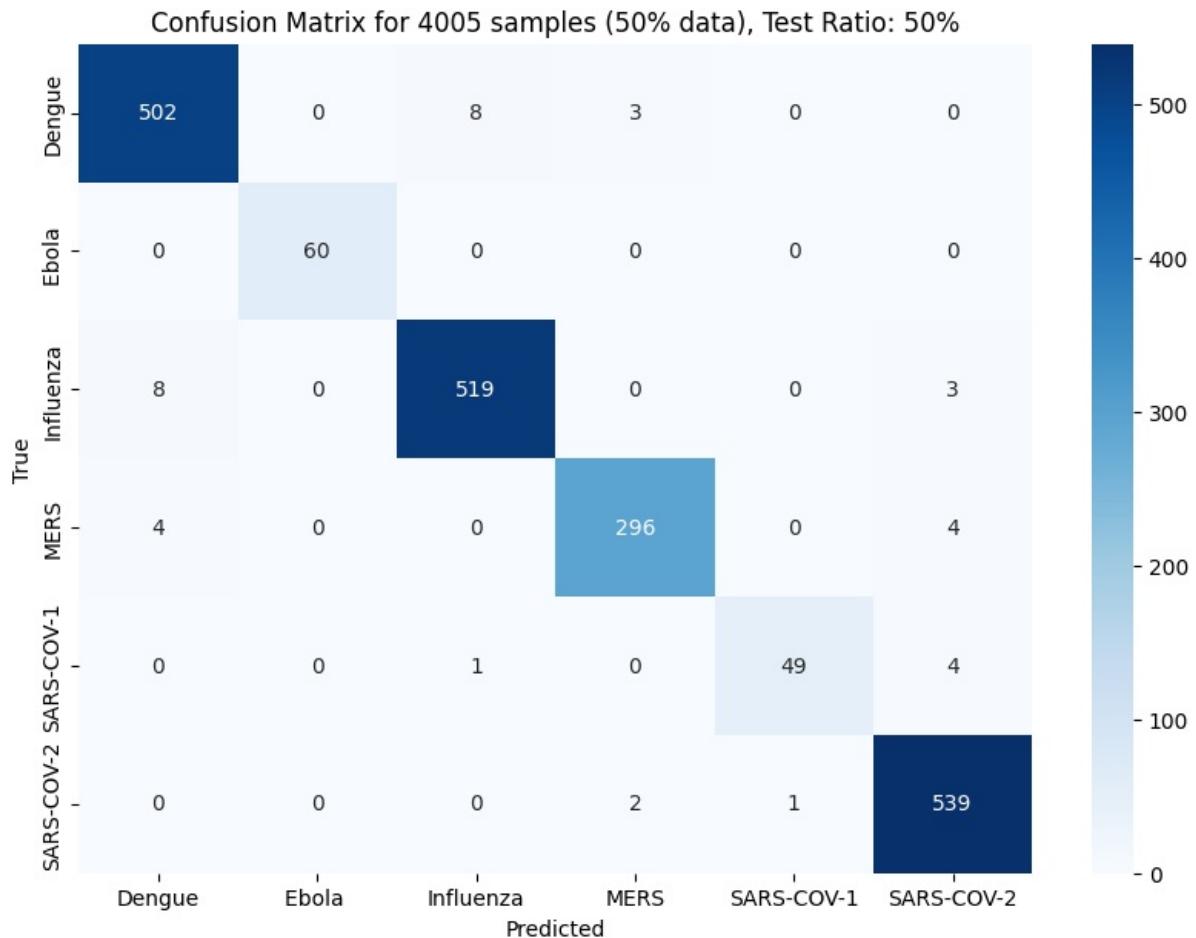
Model Loss for 4005 samples (50% data), Test Ratio: 40%



Data Size: 4005 samples, Test Ratio: 0.5

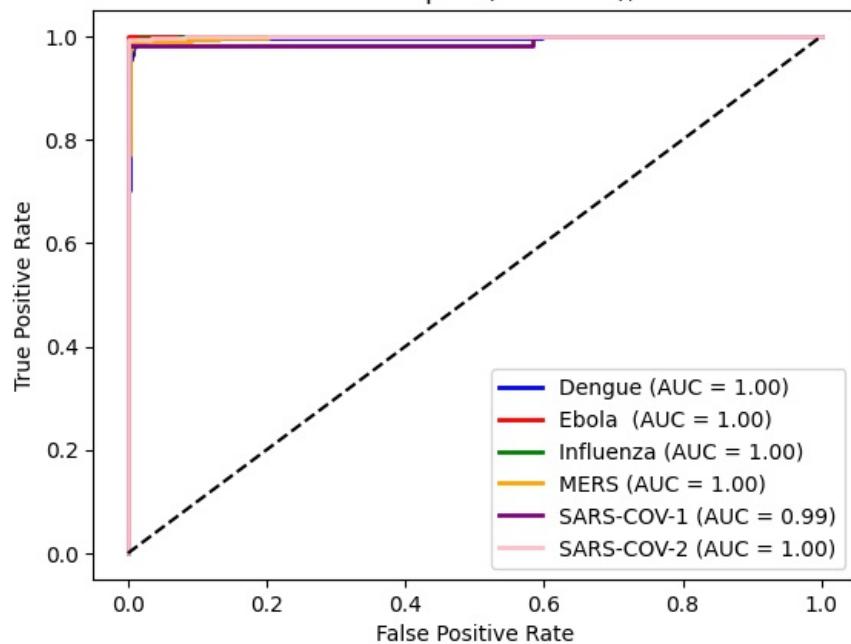
- Accuracy: 0.9810
- Precision: 0.9838
- Recall: 0.9722
- F1_score: 0.9778

Confusion Matrix for 4005 samples (50% data), Test Ratio: 50%

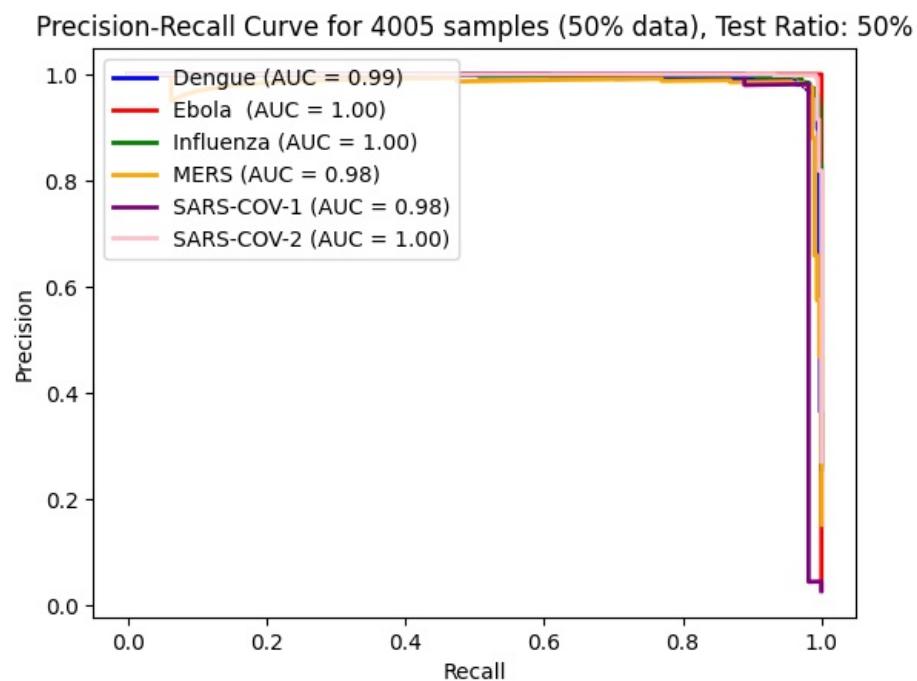


ROC Curve for 4005 samples (50% data), Test Ratio: 50%

ROC Curve for 4005 samples (50% data), Test Ratio: 50%

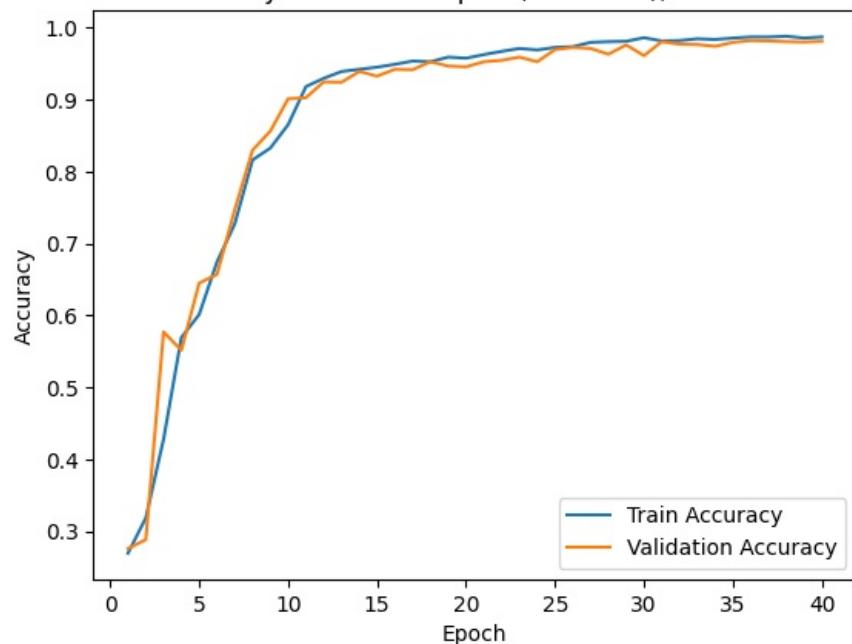


Precision-Recall Curve for 4005 samples (50% data), Test Ratio: 50%

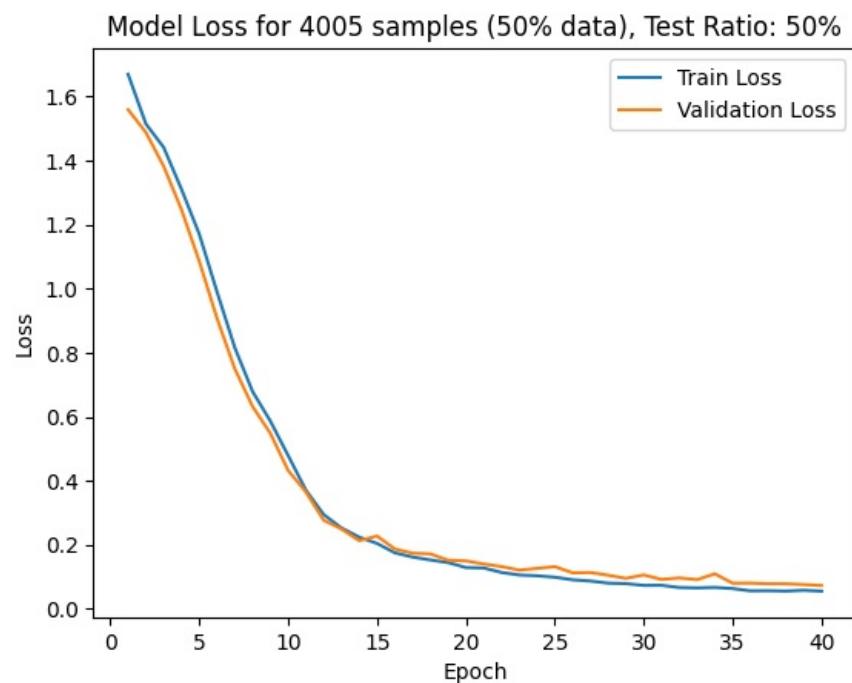


Model Accuracy for 4005 samples (50% data), Test Ratio: 50%

Model Accuracy for 4005 samples (50% data), Test Ratio: 50%



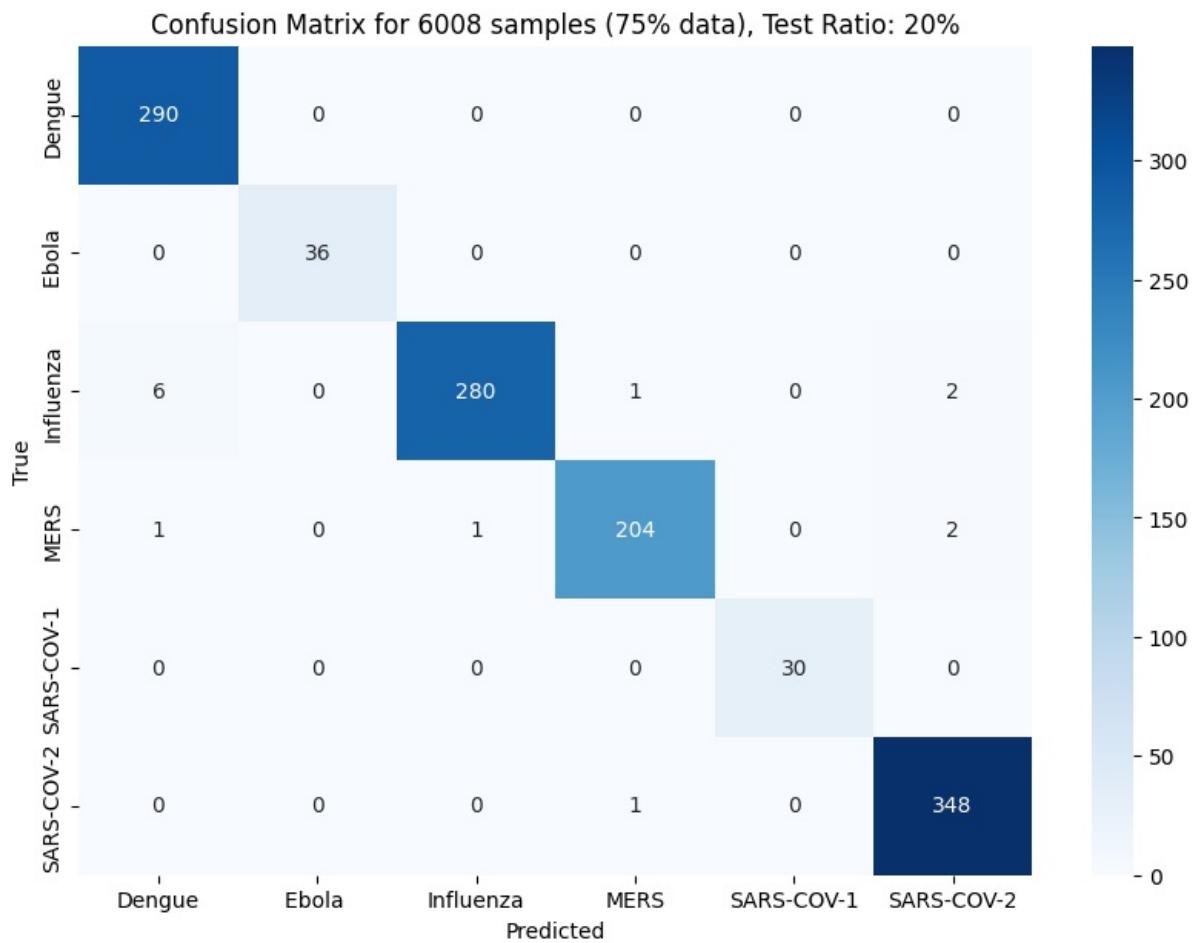
Model Loss for 4005 samples (50% data), Test Ratio: 50%



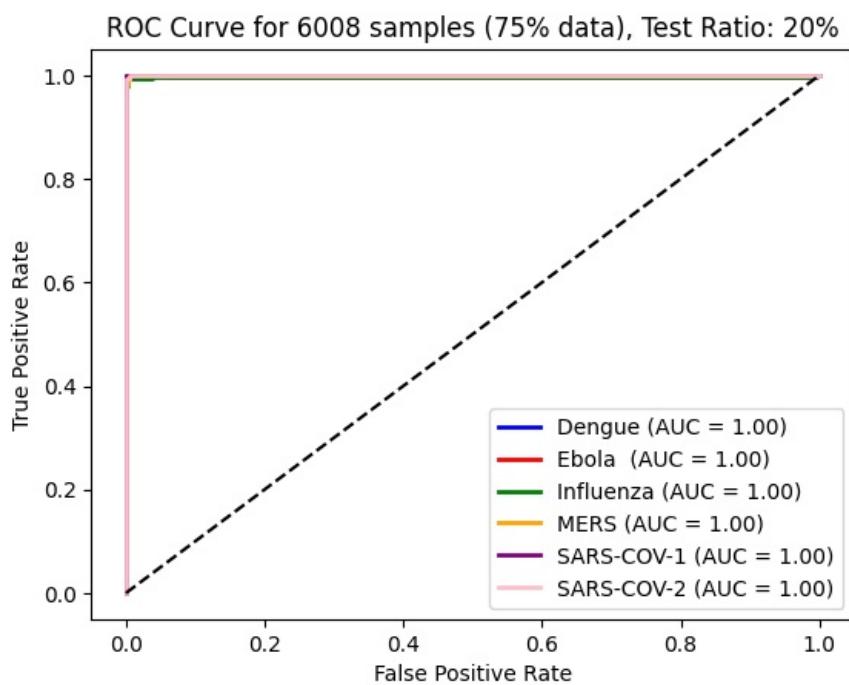
Data Size: 6008 samples, Test Ratio: 0.2

- Accuracy: 0.9884
- Precision: 0.9920
- Recall: 0.9911
- F1_score: 0.9915

Confusion Matrix for 6008 samples (75% data), Test Ratio: 20%

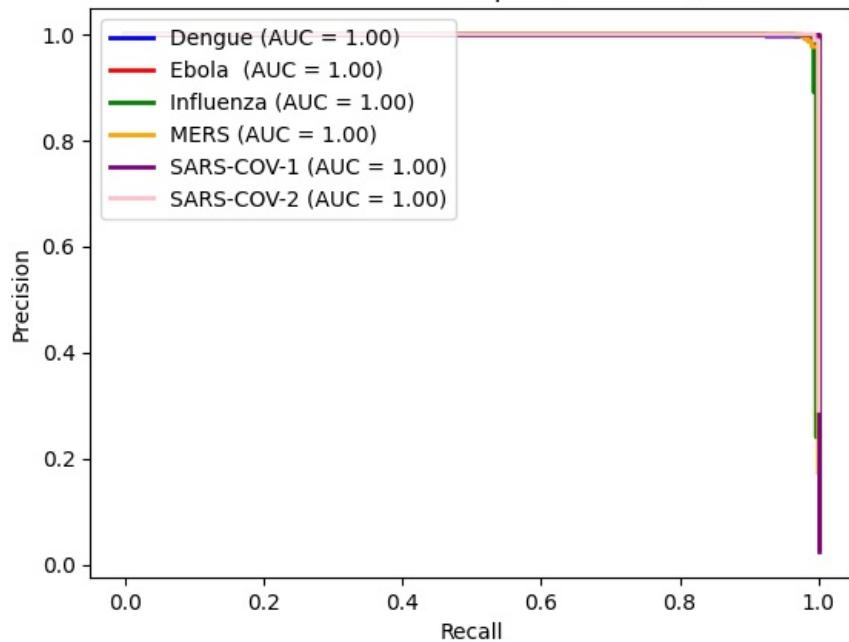


ROC Curve for 6008 samples (75% data), Test Ratio: 20%

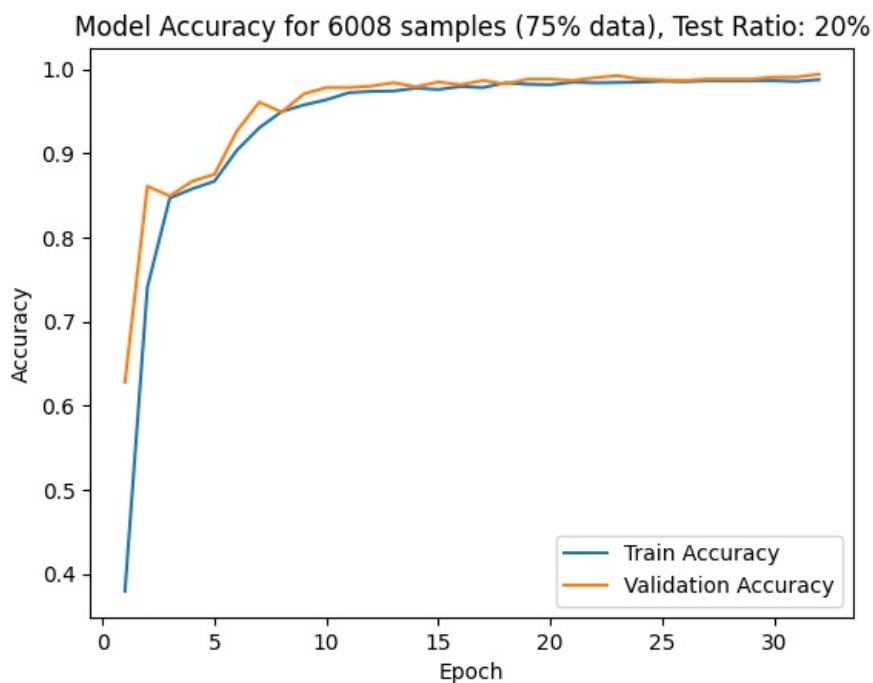


Precision-Recall Curve for 6008 samples (75% data), Test Ratio: 20%

Precision-Recall Curve for 6008 samples (75% data), Test Ratio: 20%

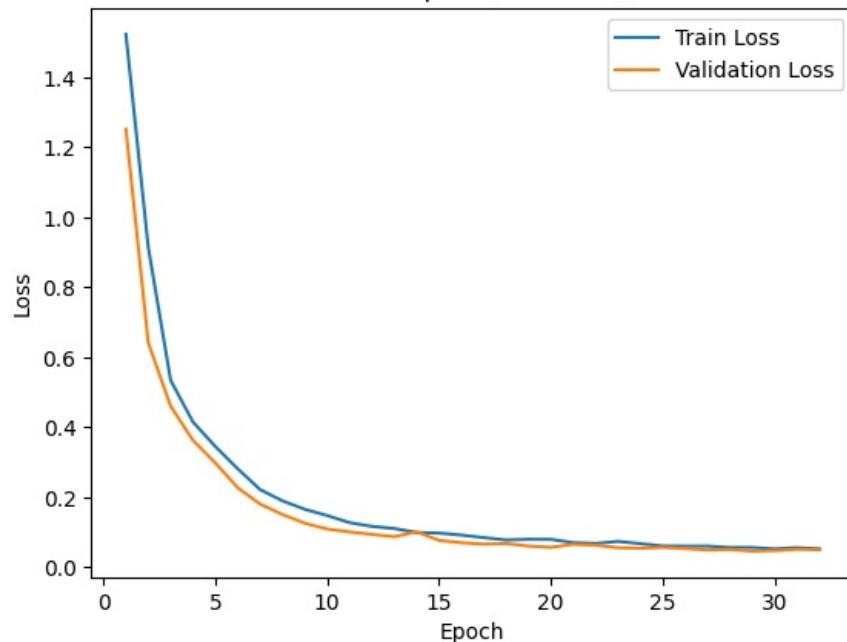


Model Accuracy for 6008 samples (75% data), Test Ratio: 20%



Model Loss for 6008 samples (75% data), Test Ratio: 20%

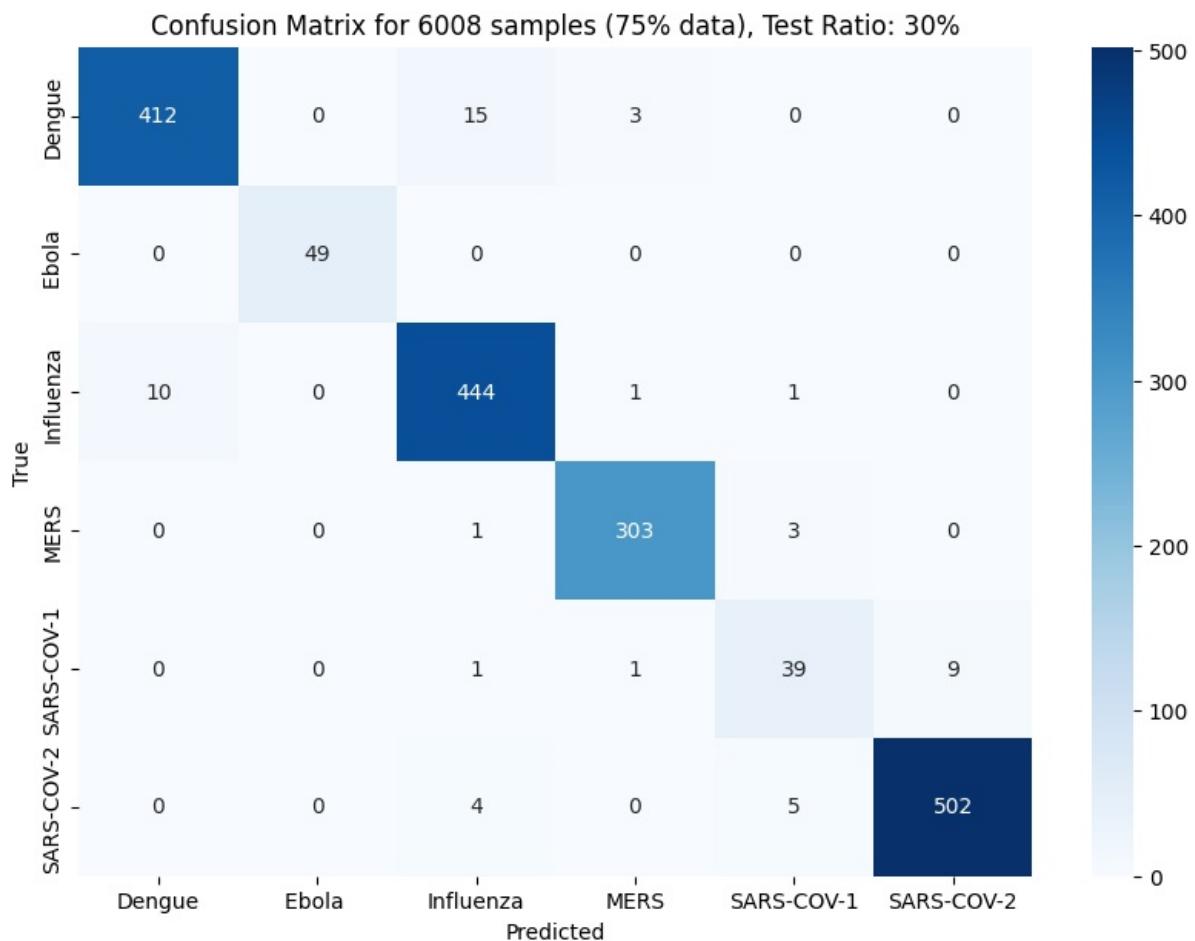
Model Loss for 6008 samples (75% data), Test Ratio: 20%



Data Size: 6008 samples, Test Ratio: 0.3

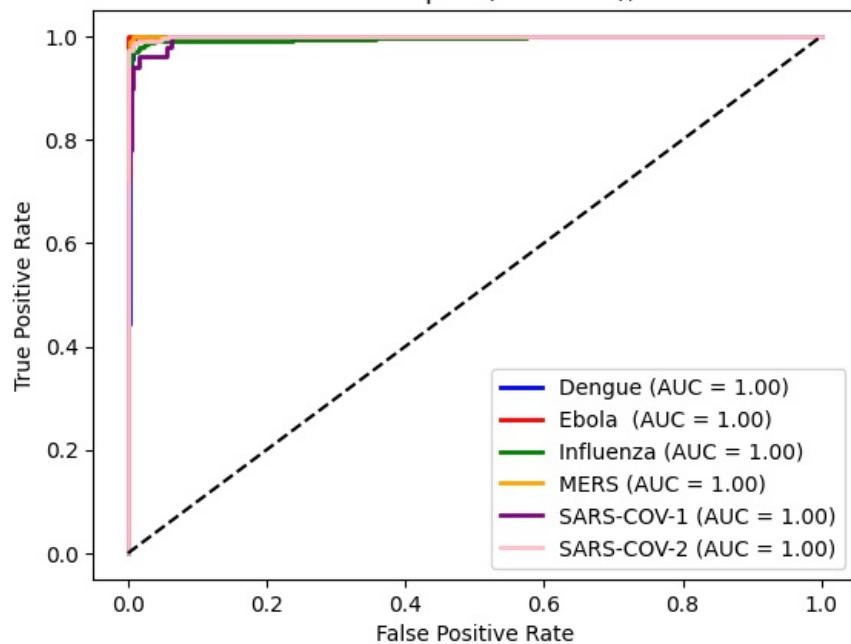
- Accuracy: 0.9700
- Precision: 0.9516
- Recall: 0.9469
- F1_score: 0.9492

Confusion Matrix for 6008 samples (75% data), Test Ratio: 30%

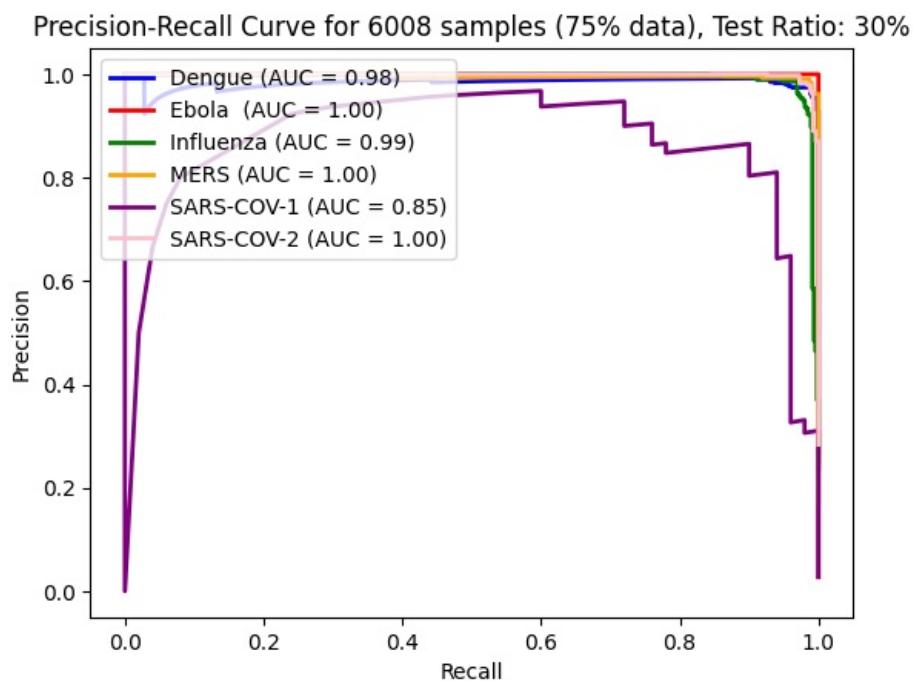


ROC Curve for 6008 samples (75% data), Test Ratio: 30%

ROC Curve for 6008 samples (75% data), Test Ratio: 30%

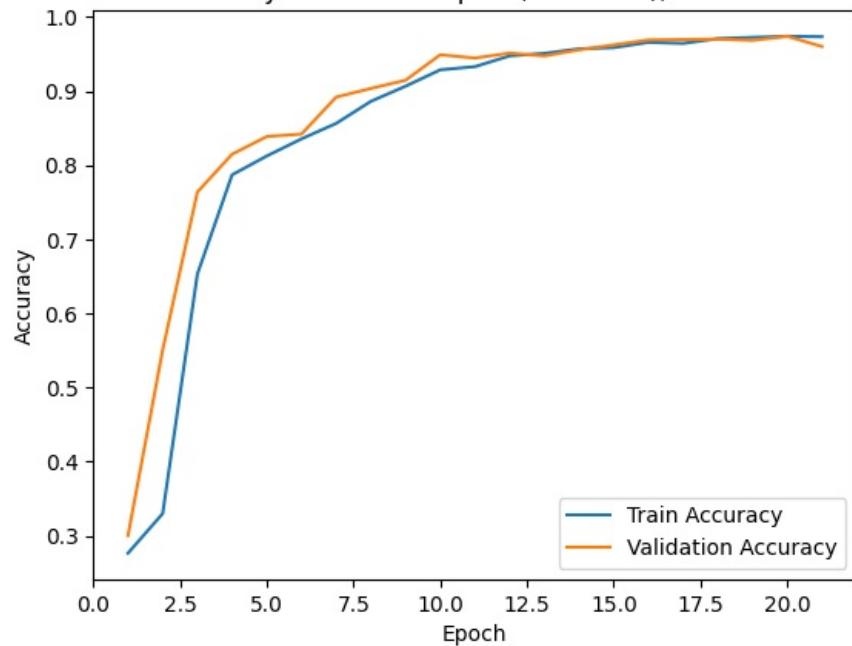


Precision-Recall Curve for 6008 samples (75% data), Test Ratio: 30%

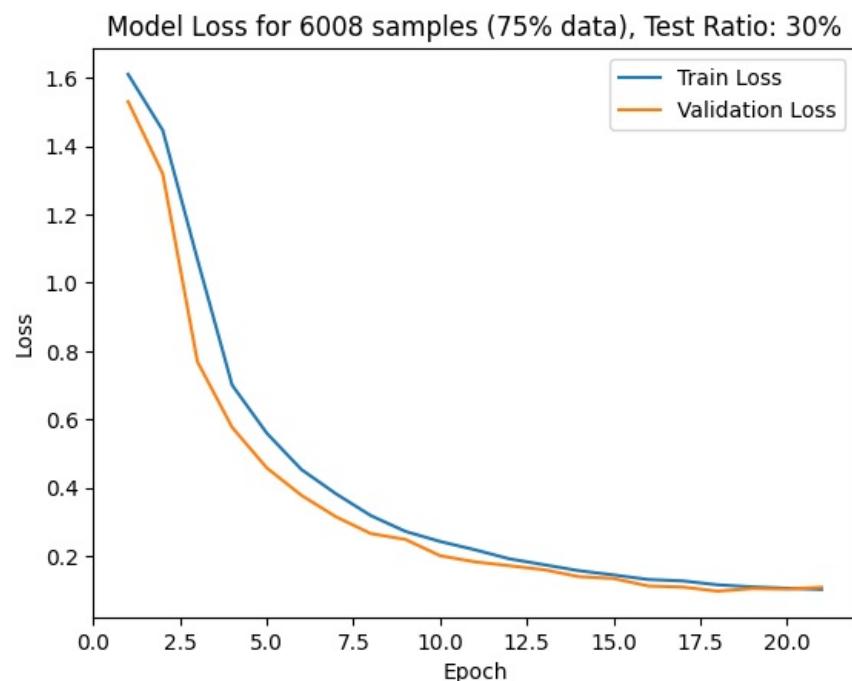


Model Accuracy for 6008 samples (75% data), Test Ratio: 30%

Model Accuracy for 6008 samples (75% data), Test Ratio: 30%



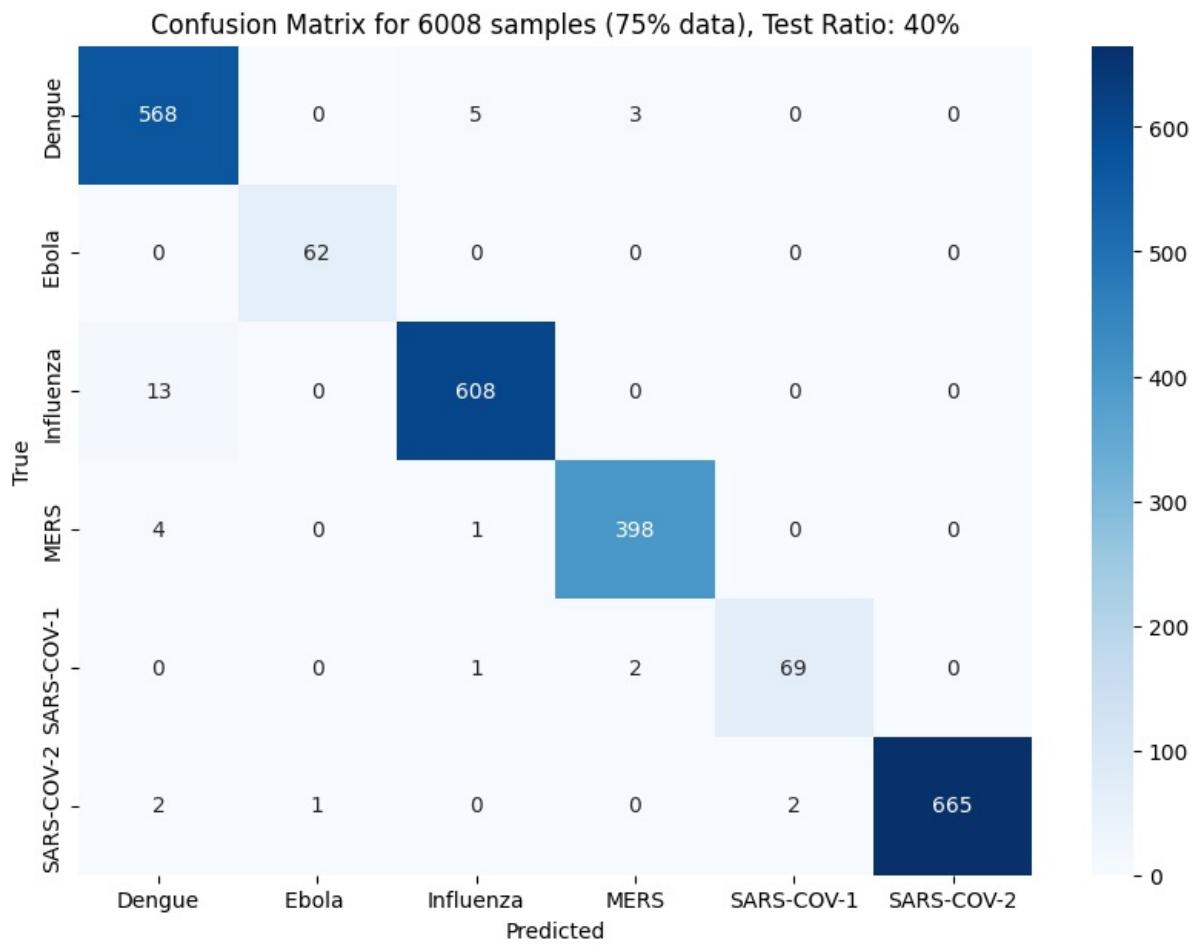
Model Loss for 6008 samples (75% data), Test Ratio: 30%



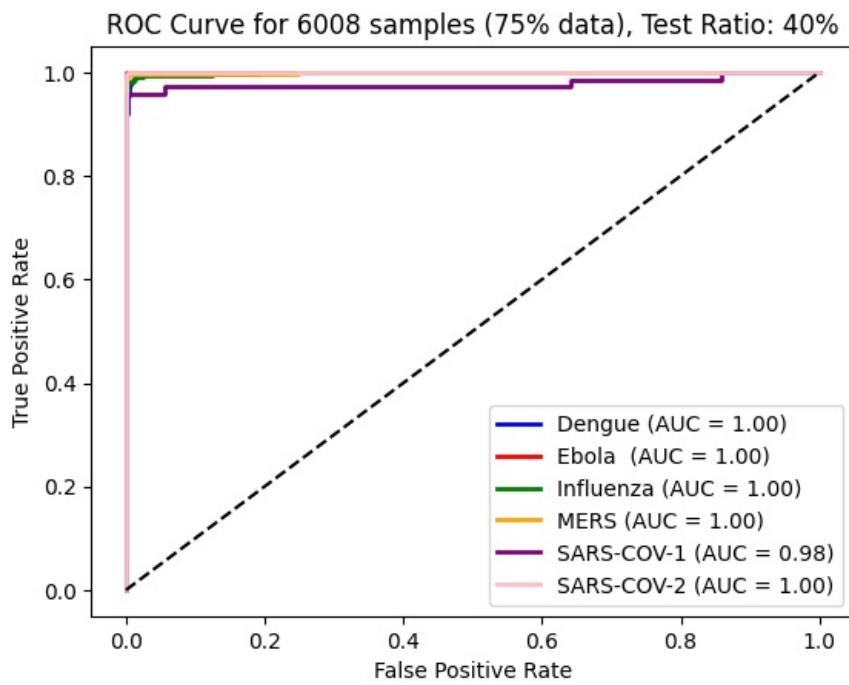
Data Size: 6008 samples, Test Ratio: 0.4

- Accuracy: 0.9859
- Precision: 0.9833
- Recall: 0.9839
- F1_score: 0.9836

Confusion Matrix for 6008 samples (75% data), Test Ratio: 40%

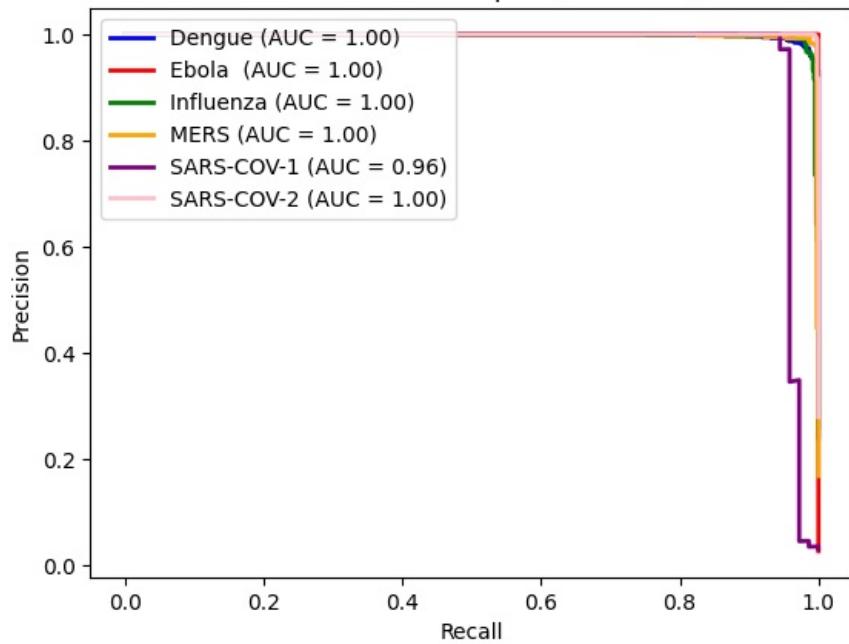


ROC Curve for 6008 samples (75% data), Test Ratio: 40%

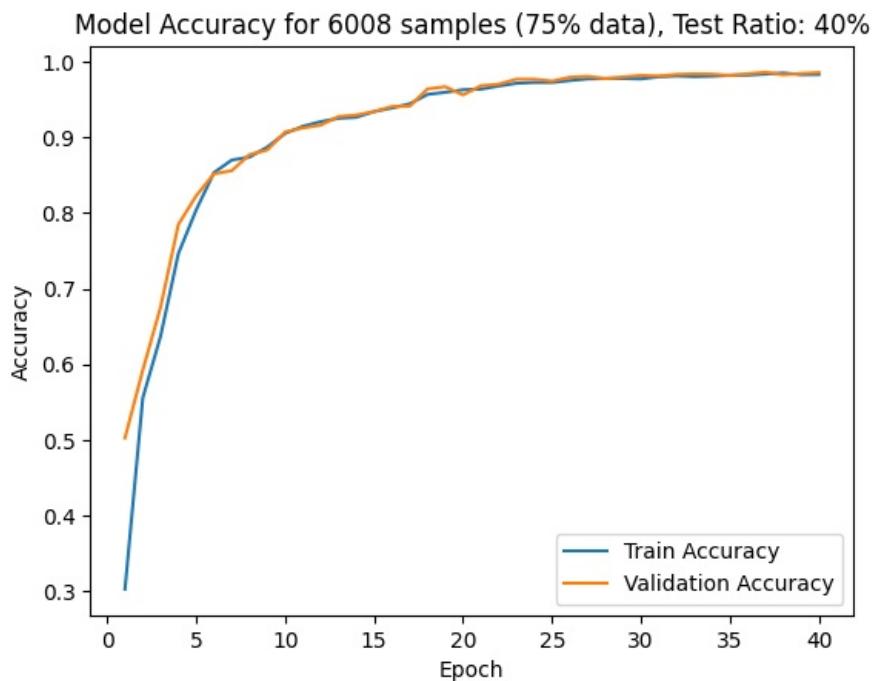


Precision-Recall Curve for 6008 samples (75% data), Test Ratio: 40%

Precision-Recall Curve for 6008 samples (75% data), Test Ratio: 40%

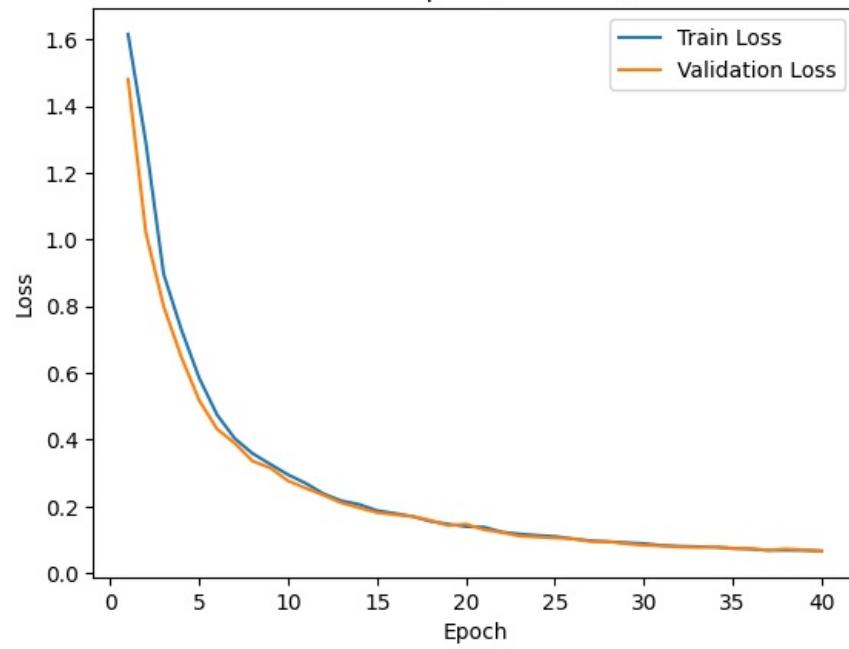


Model Accuracy for 6008 samples (75% data), Test Ratio: 40%



Model Loss for 6008 samples (75% data), Test Ratio: 40%

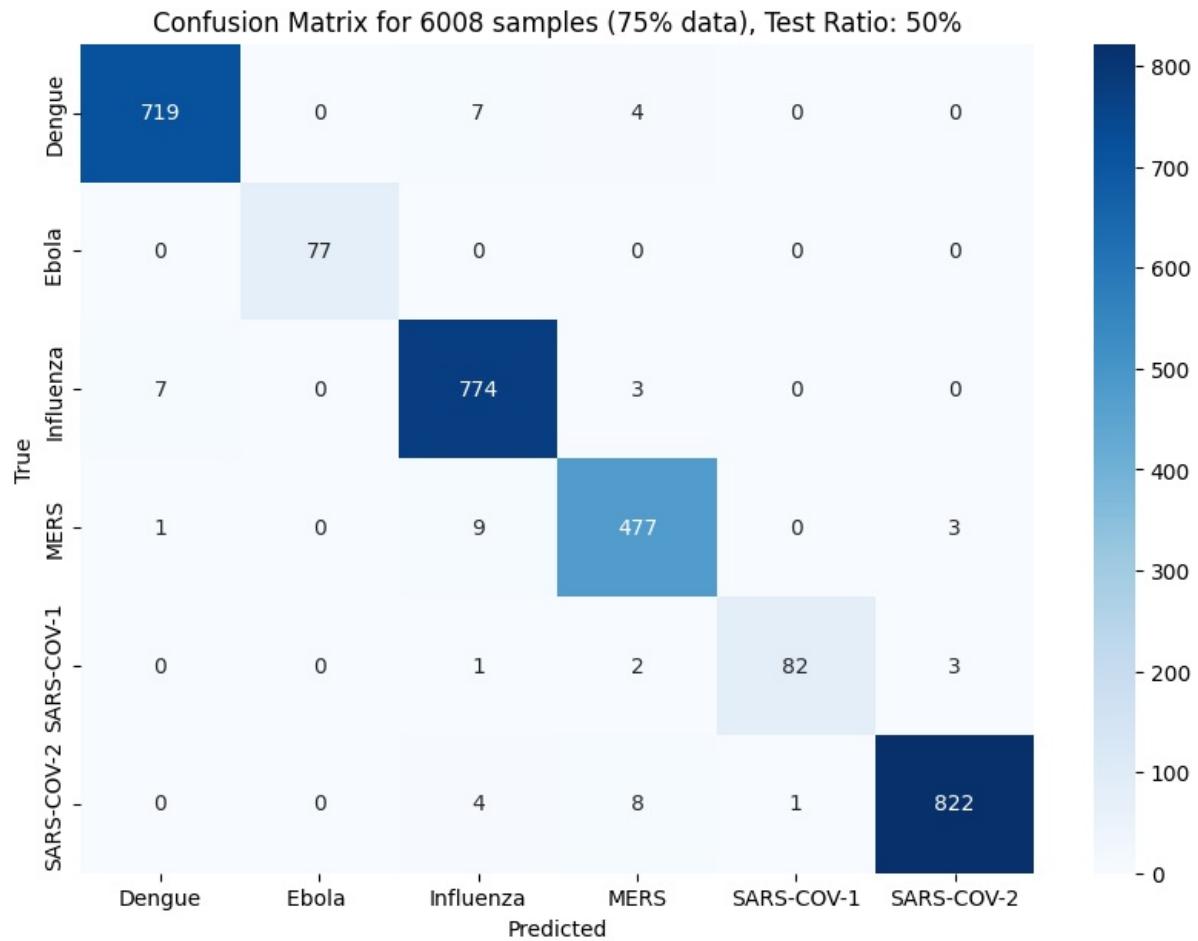
Model Loss for 6008 samples (75% data), Test Ratio: 40%



Data Size: 6008 samples, Test Ratio: 0.5

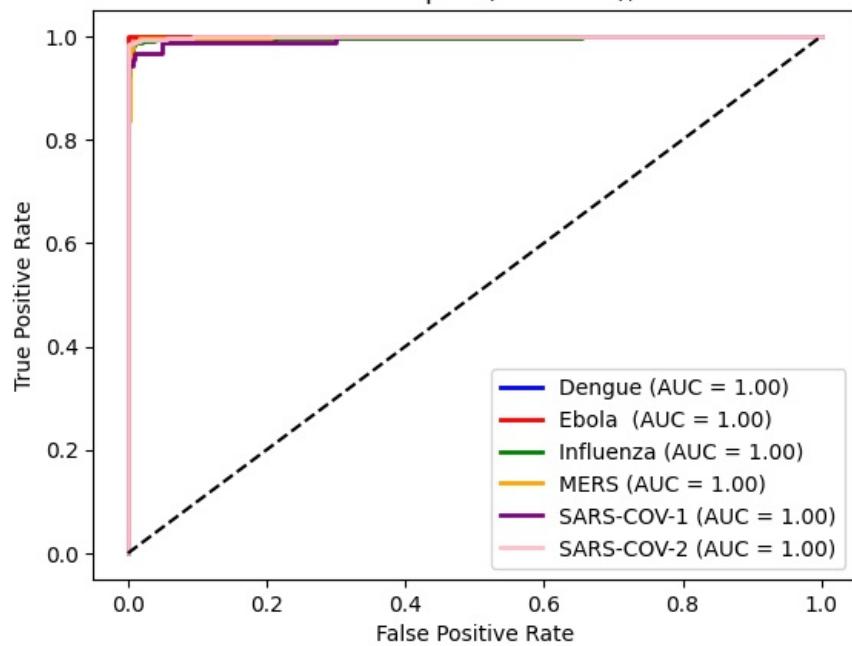
- Accuracy: 0.9824
- Precision: 0.9848
- Recall: 0.9770
- F1_score: 0.9807

Confusion Matrix for 6008 samples (75% data), Test Ratio: 50%

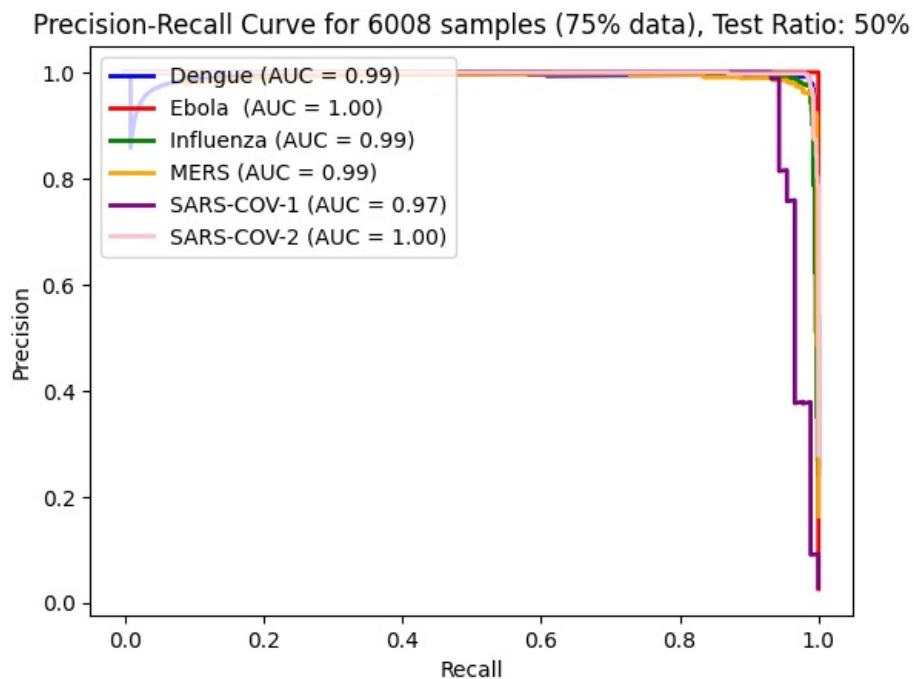


ROC Curve for 6008 samples (75% data), Test Ratio: 50%

ROC Curve for 6008 samples (75% data), Test Ratio: 50%

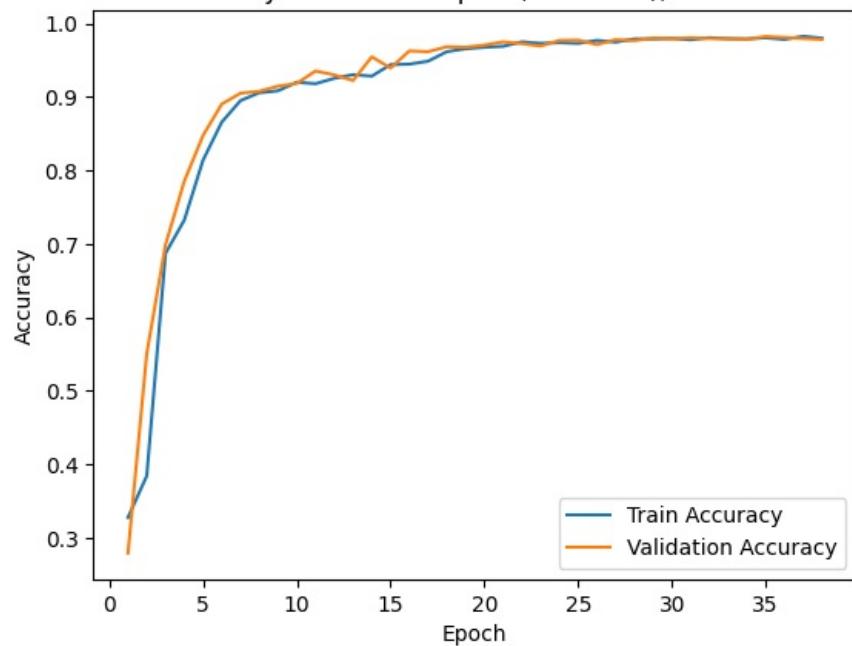


Precision-Recall Curve for 6008 samples (75% data), Test Ratio: 50%

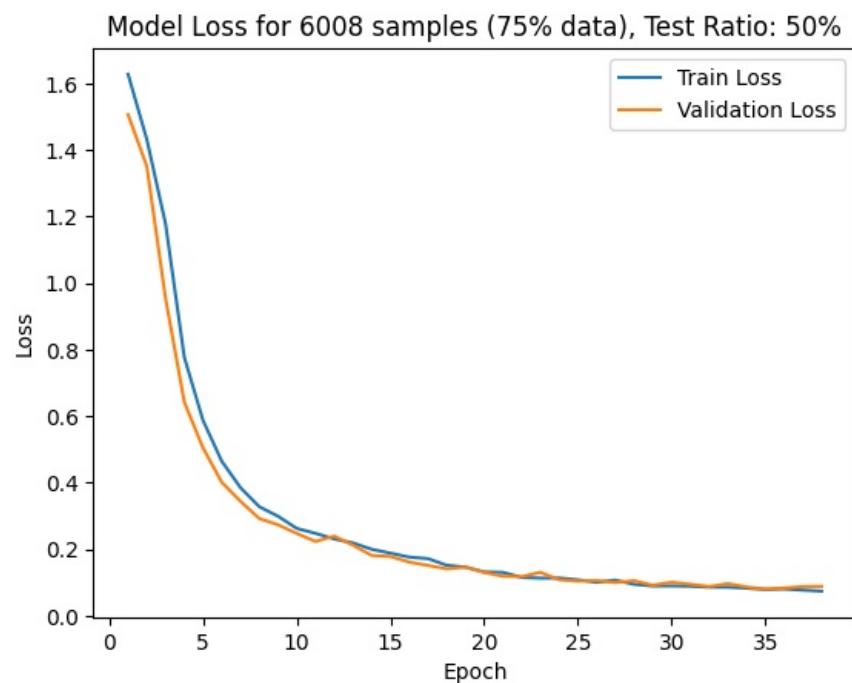


Model Accuracy for 6008 samples (75% data), Test Ratio: 50%

Model Accuracy for 6008 samples (75% data), Test Ratio: 50%



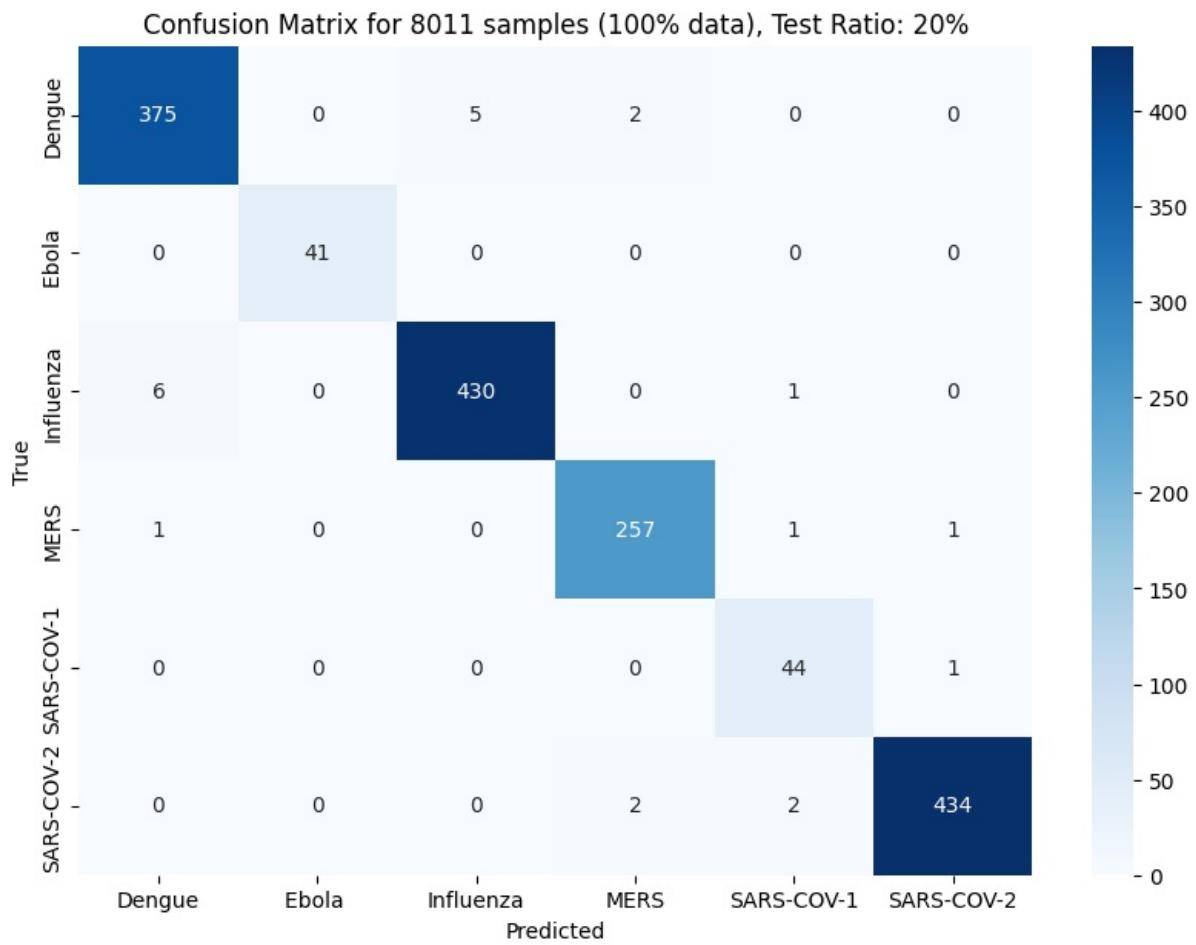
Model Loss for 6008 samples (75% data), Test Ratio: 50%



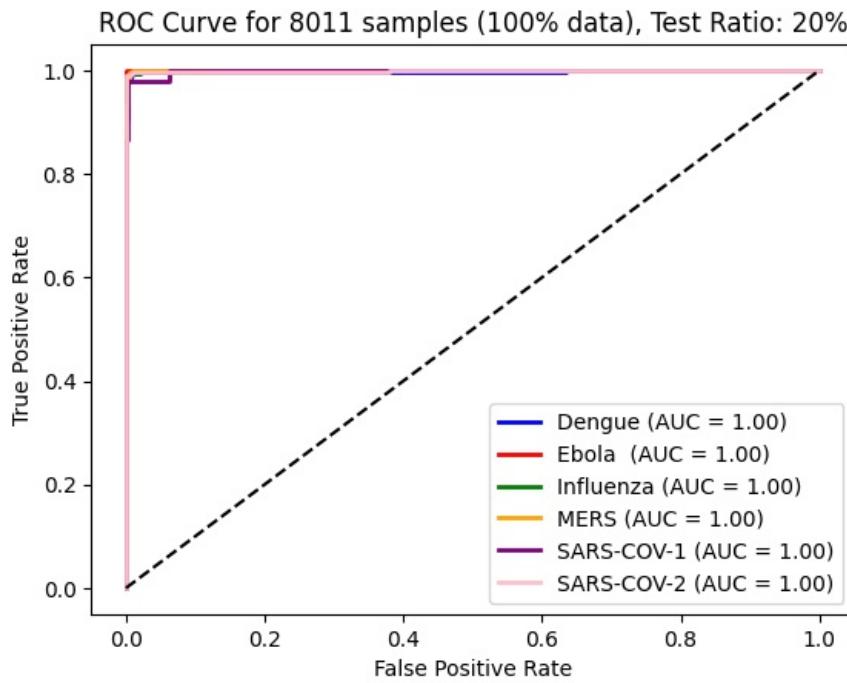
Data Size: 8011 samples, Test Ratio: 0.2

- Accuracy: 0.9863
- Precision: 0.9778
- Recall: 0.9871
- F1_score: 0.9823

Confusion Matrix for 8011 samples (100% data), Test Ratio: 20%

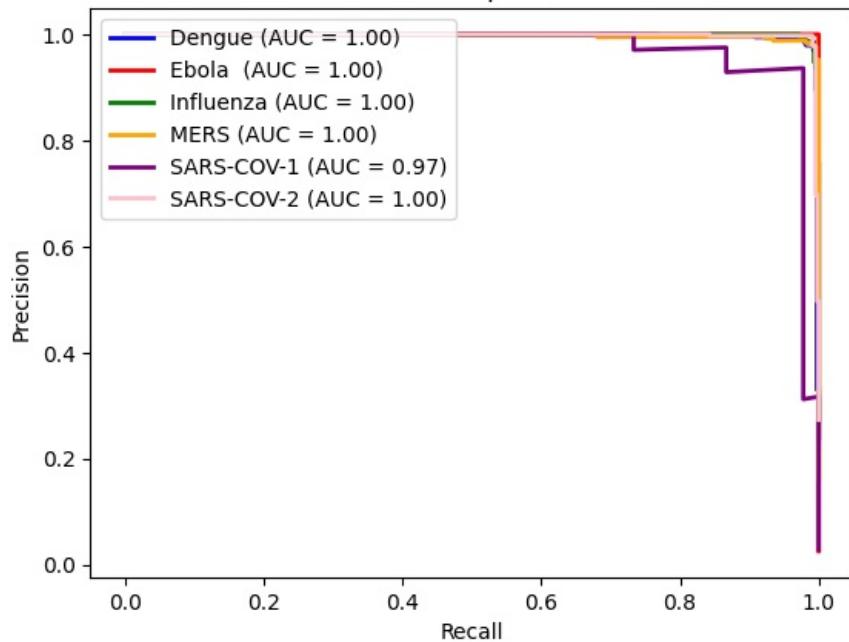


ROC Curve for 8011 samples (100% data), Test Ratio: 20%

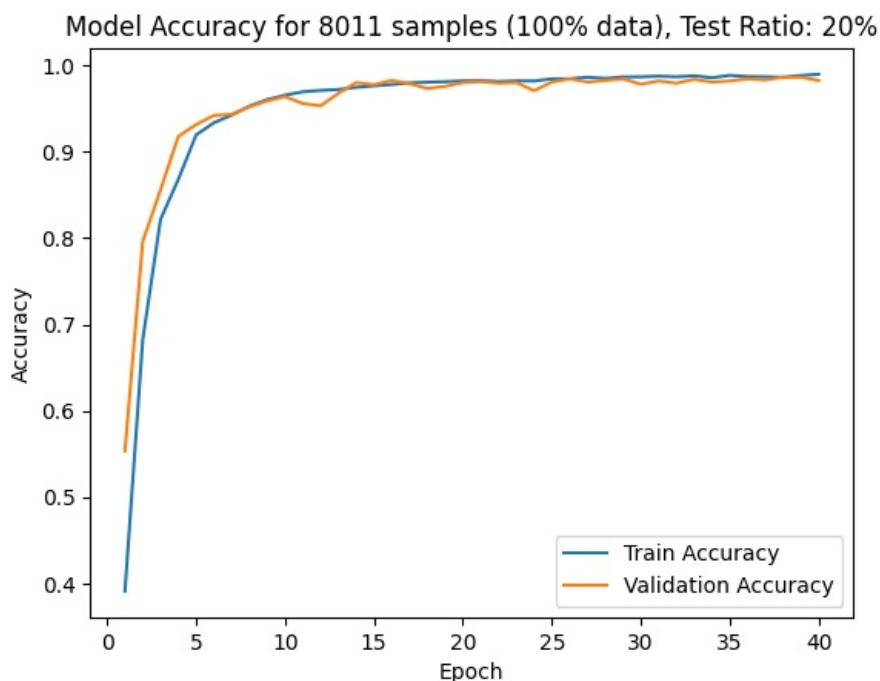


Precision-Recall Curve for 8011 samples (100% data), Test Ratio: 20%

Precision-Recall Curve for 8011 samples (100% data), Test Ratio: 20%

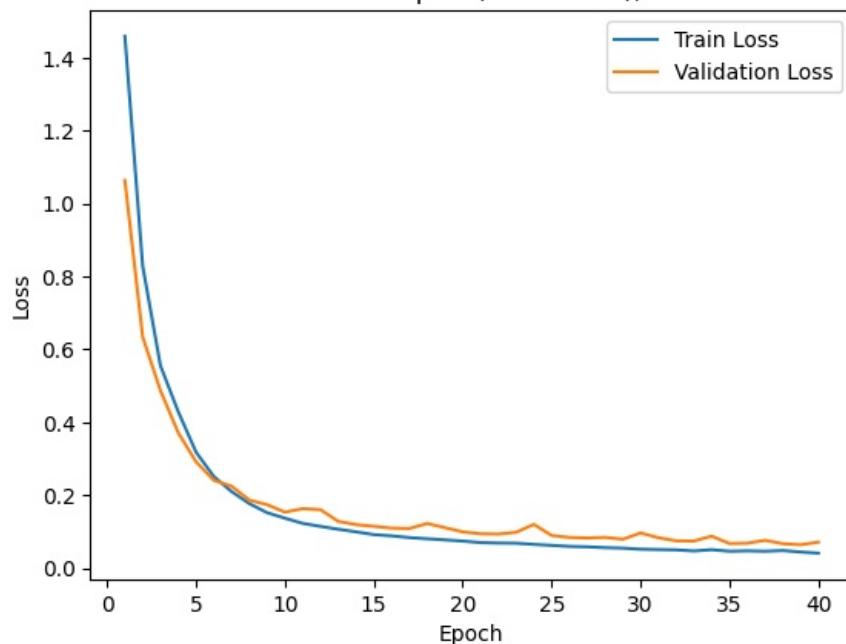


Model Accuracy for 8011 samples (100% data), Test Ratio: 20%



Model Loss for 8011 samples (100% data), Test Ratio: 20%

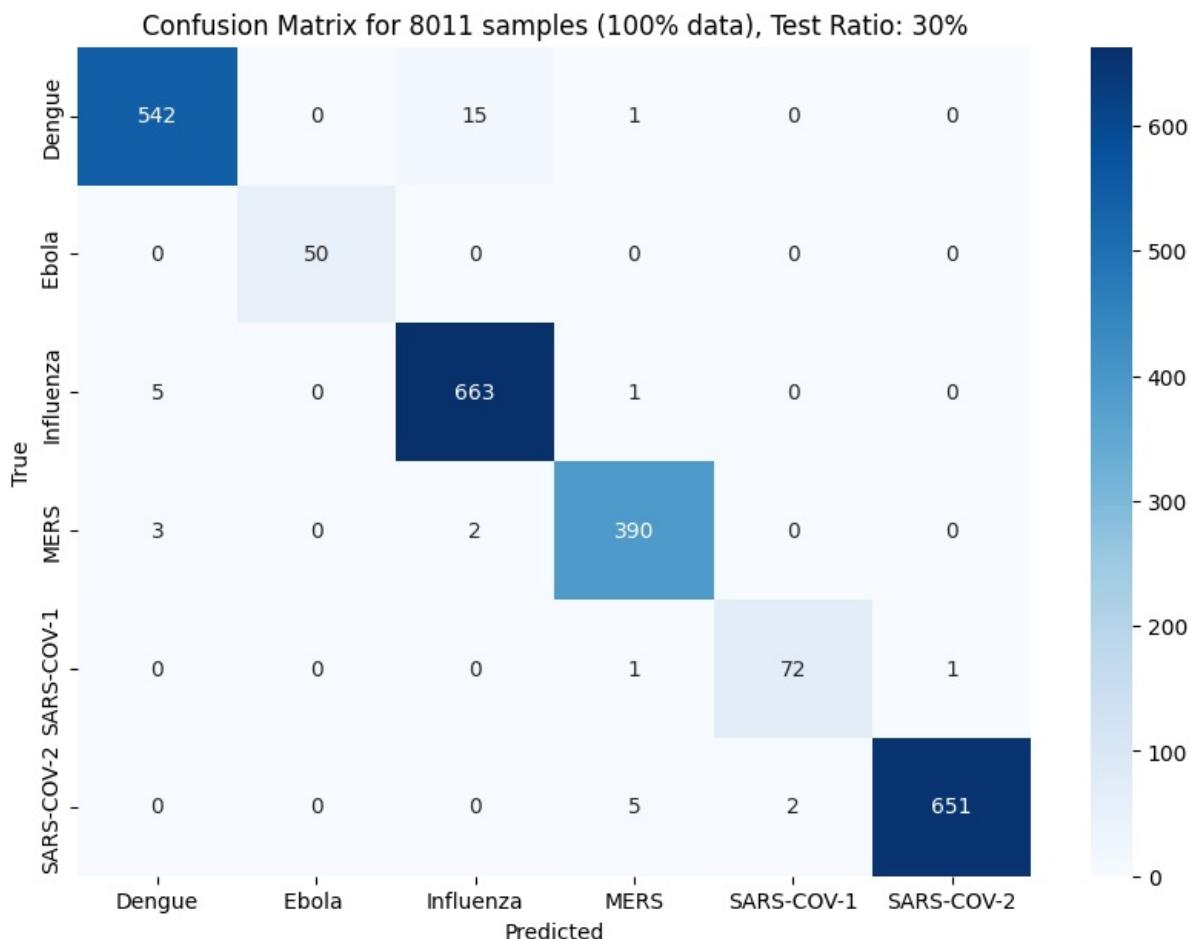
Model Loss for 8011 samples (100% data), Test Ratio: 20%



Data Size: 8011 samples, Test Ratio: 0.3

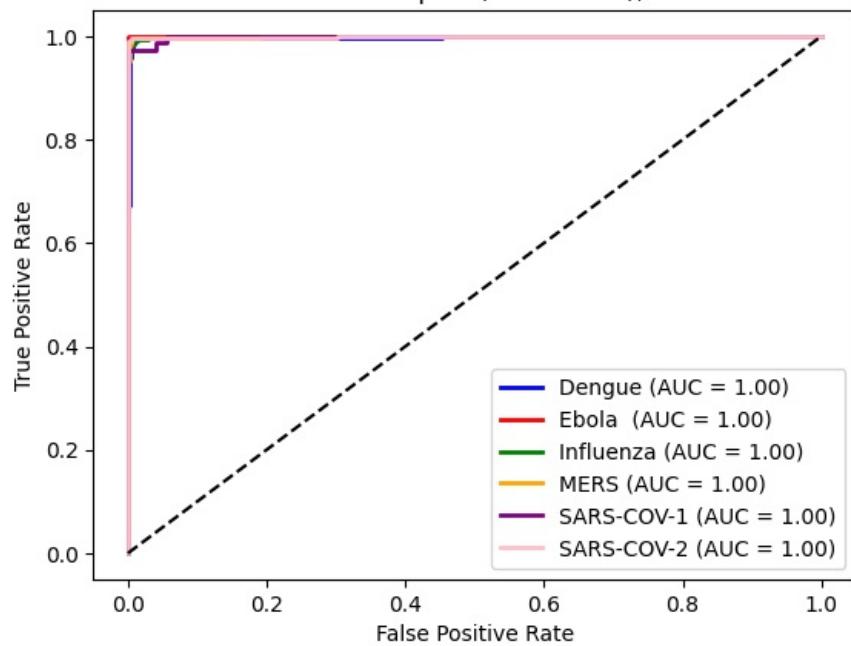
- Accuracy: 0.9850
- Precision: 0.9853
- Recall: 0.9853
- F1_score: 0.9853

Confusion Matrix for 8011 samples (100% data), Test Ratio: 30%

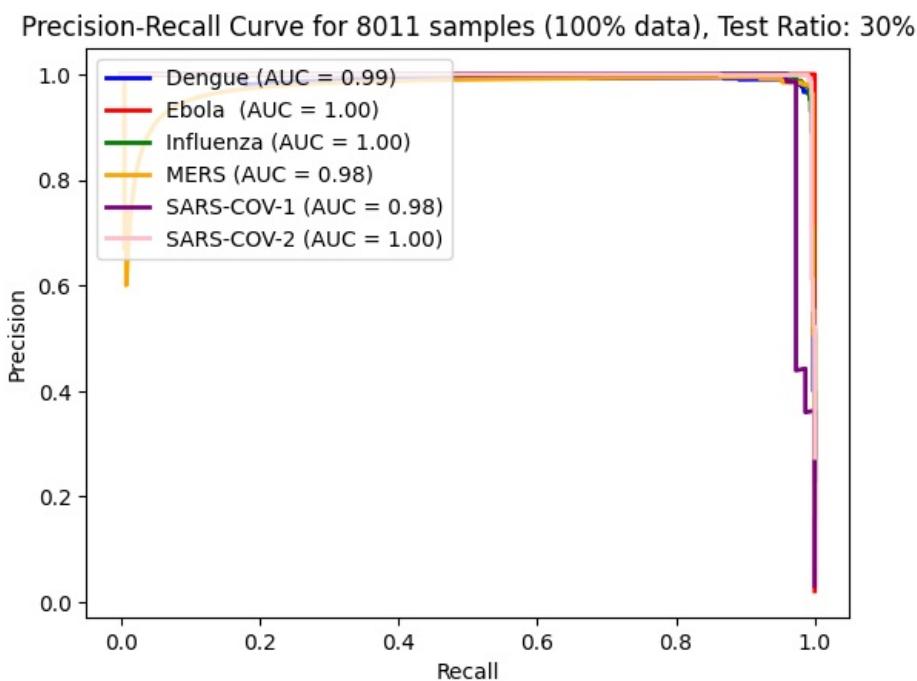


ROC Curve for 8011 samples (100% data), Test Ratio: 30%

ROC Curve for 8011 samples (100% data), Test Ratio: 30%

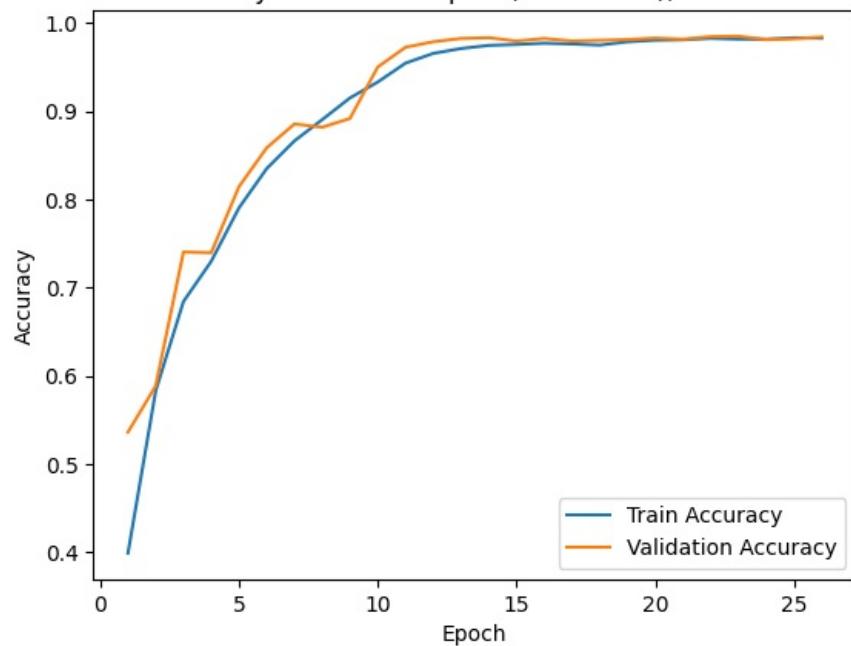


Precision-Recall Curve for 8011 samples (100% data), Test Ratio: 30%

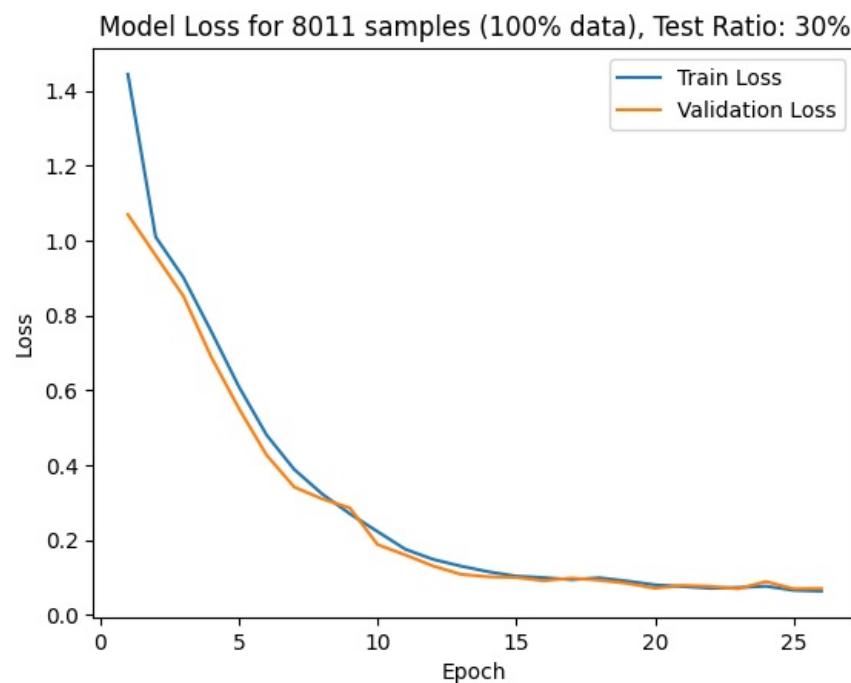


Model Accuracy for 8011 samples (100% data), Test Ratio: 30%

Model Accuracy for 8011 samples (100% data), Test Ratio: 30%



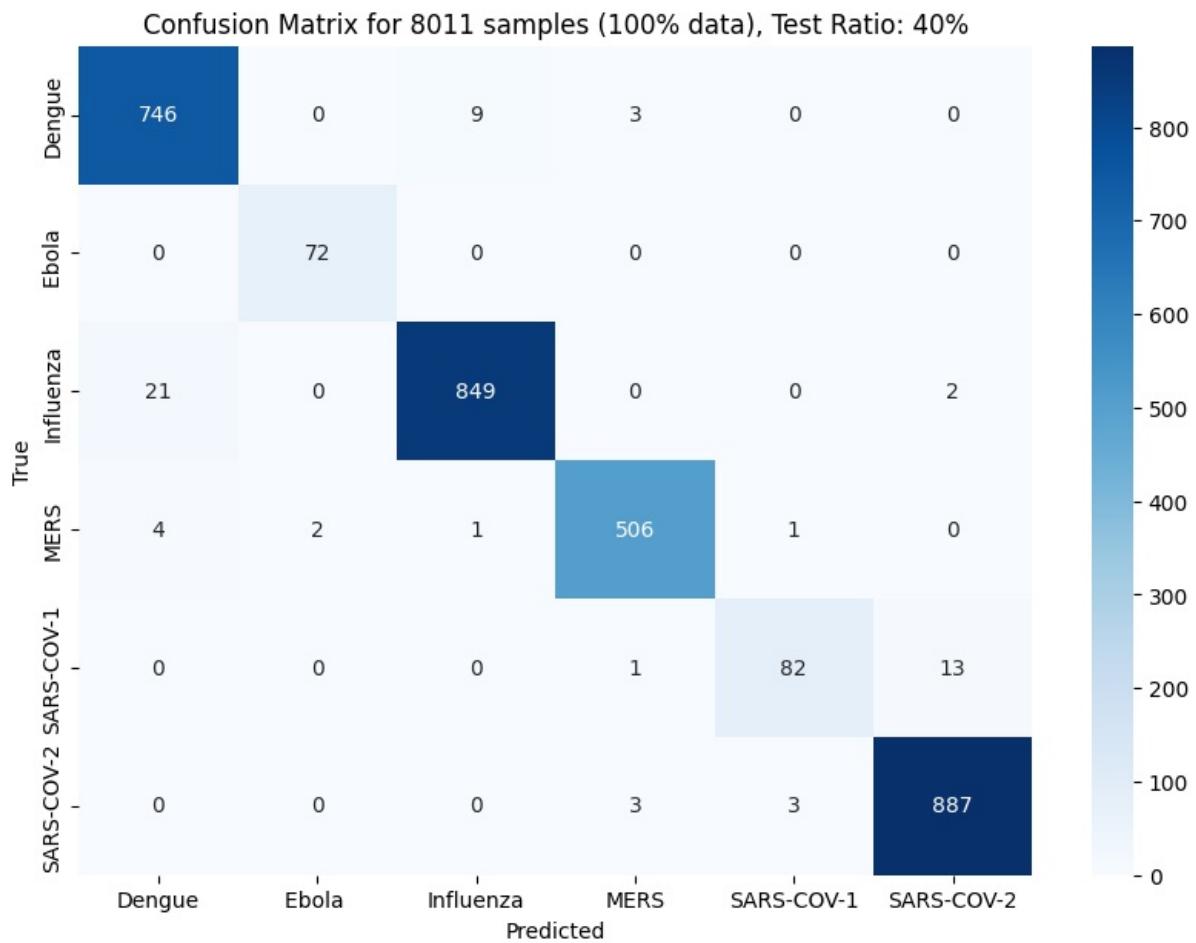
Model Loss for 8011 samples (100% data), Test Ratio: 30%



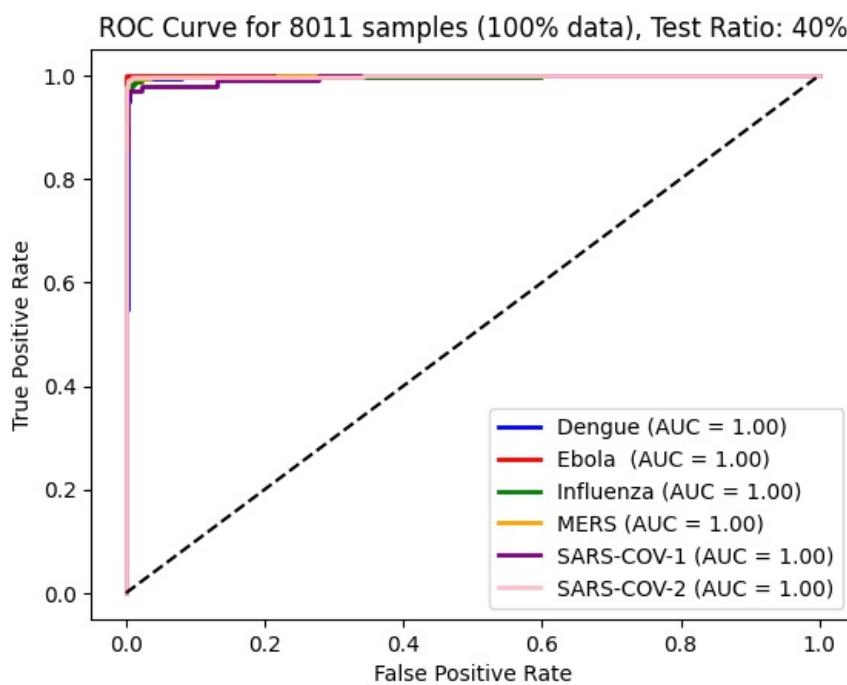
Data Size: 8011 samples, Test Ratio: 0.4

- Accuracy: 0.9803
- Precision: 0.9754
- Recall: 0.9649
- F1_score: 0.9696

Confusion Matrix for 8011 samples (100% data), Test Ratio: 40%

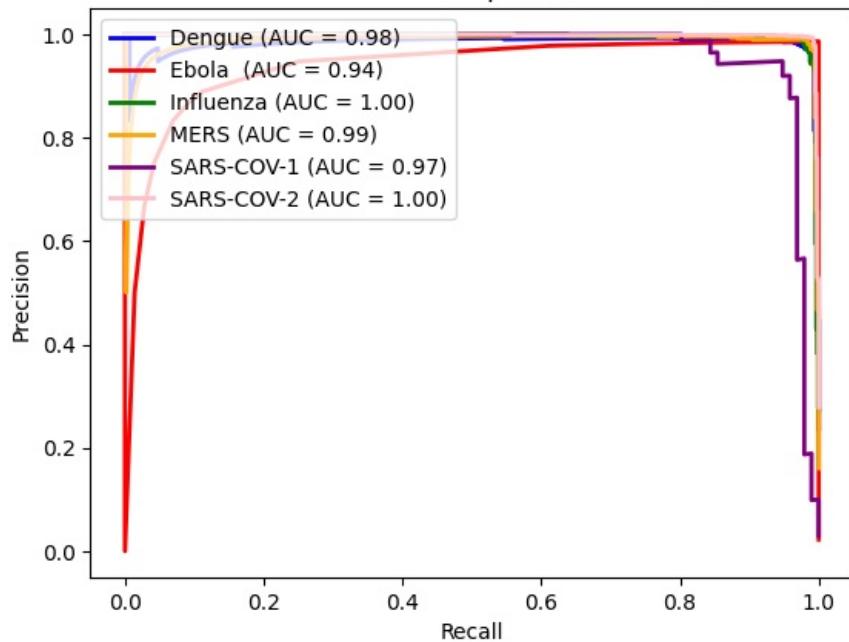


ROC Curve for 8011 samples (100% data), Test Ratio: 40%

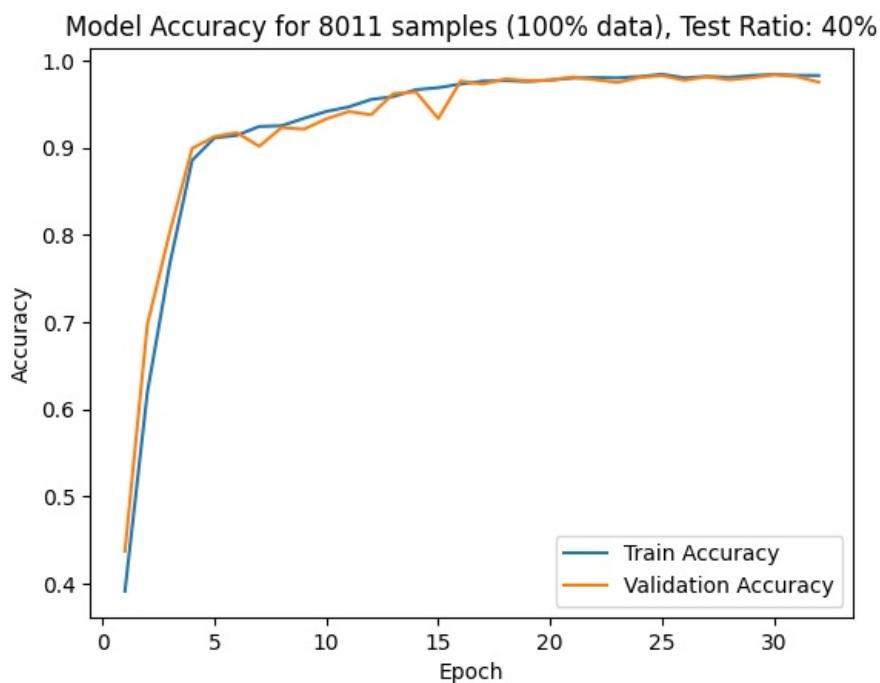


Precision-Recall Curve for 8011 samples (100% data), Test Ratio: 40%

Precision-Recall Curve for 8011 samples (100% data), Test Ratio: 40%

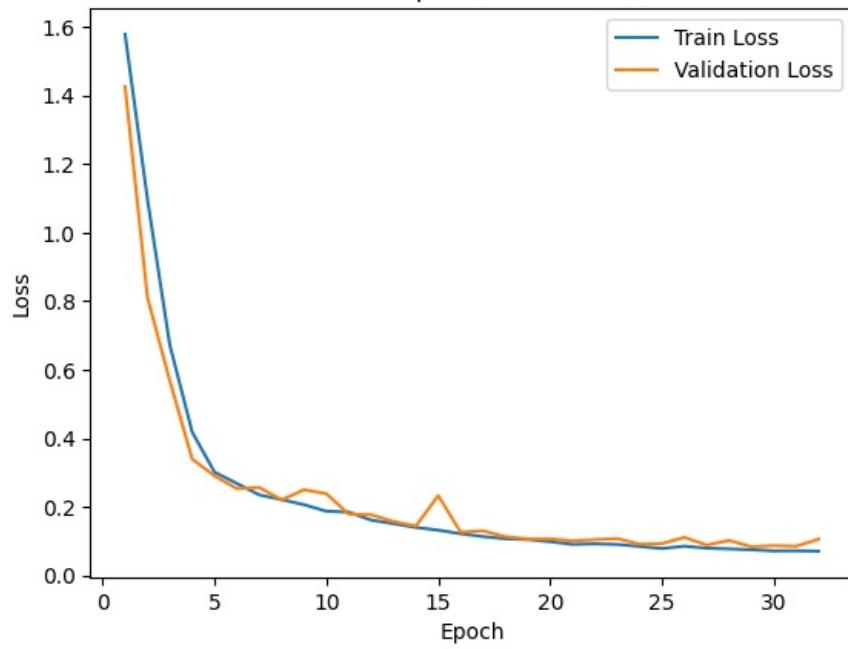


Model Accuracy for 8011 samples (100% data), Test Ratio: 40%



Model Loss for 8011 samples (100% data), Test Ratio: 40%

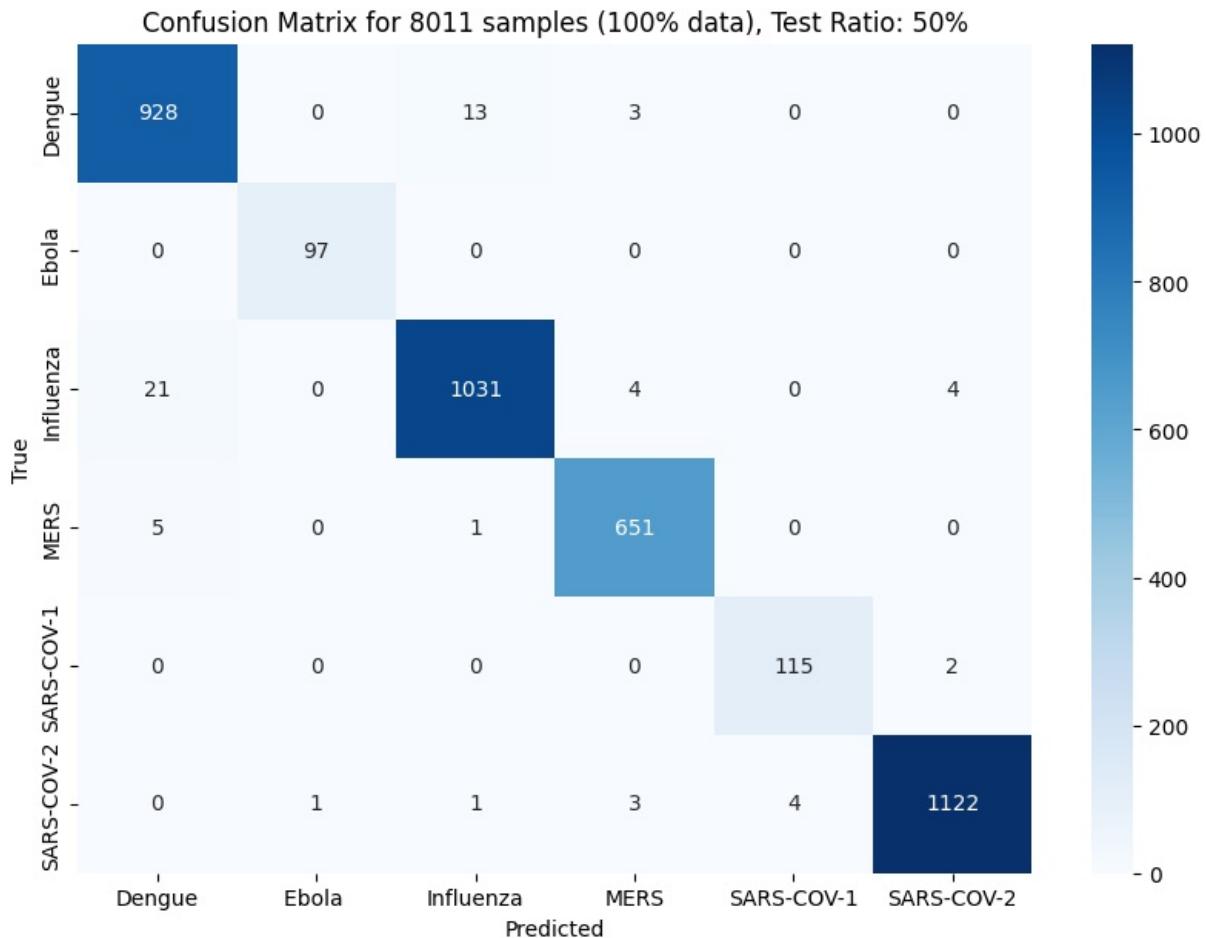
Model Loss for 8011 samples (100% data), Test Ratio: 40%



Data Size: 8011 samples, Test Ratio: 0.5

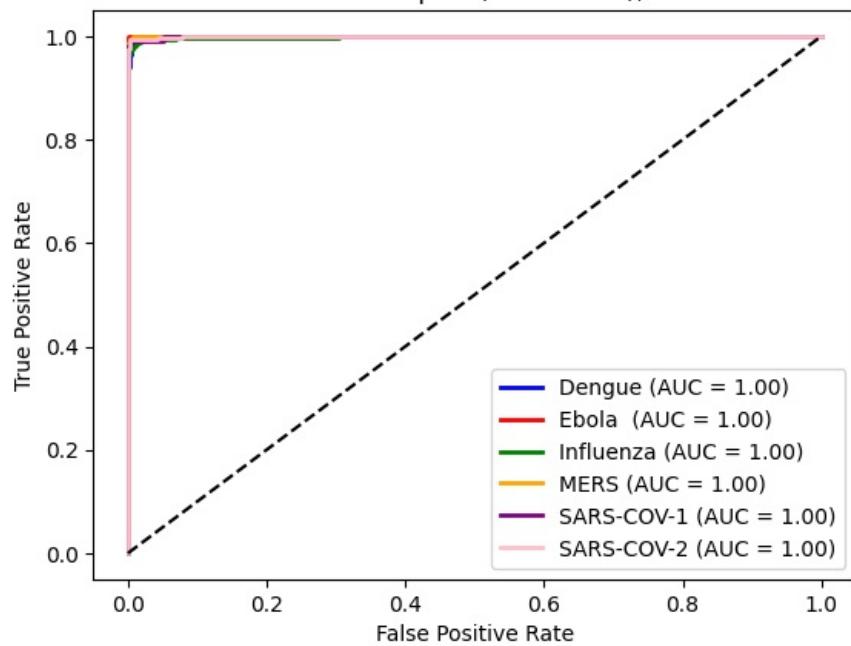
- Accuracy: 0.9845
- Precision: 0.9824
- Recall: 0.9869
- F1_score: 0.9846

Confusion Matrix for 8011 samples (100% data), Test Ratio: 50%

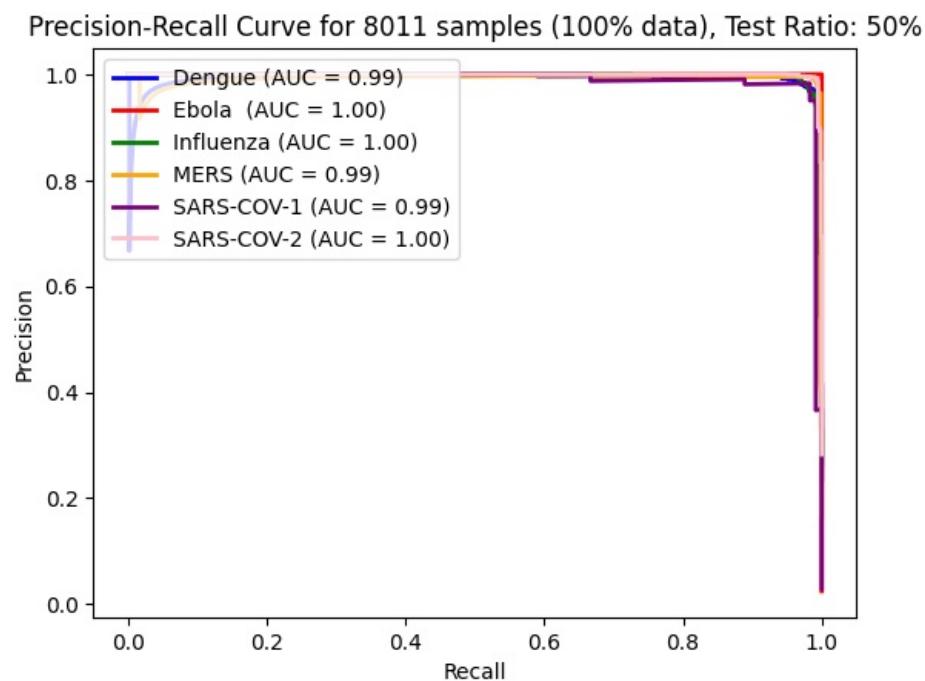


ROC Curve for 8011 samples (100% data), Test Ratio: 50%

ROC Curve for 8011 samples (100% data), Test Ratio: 50%

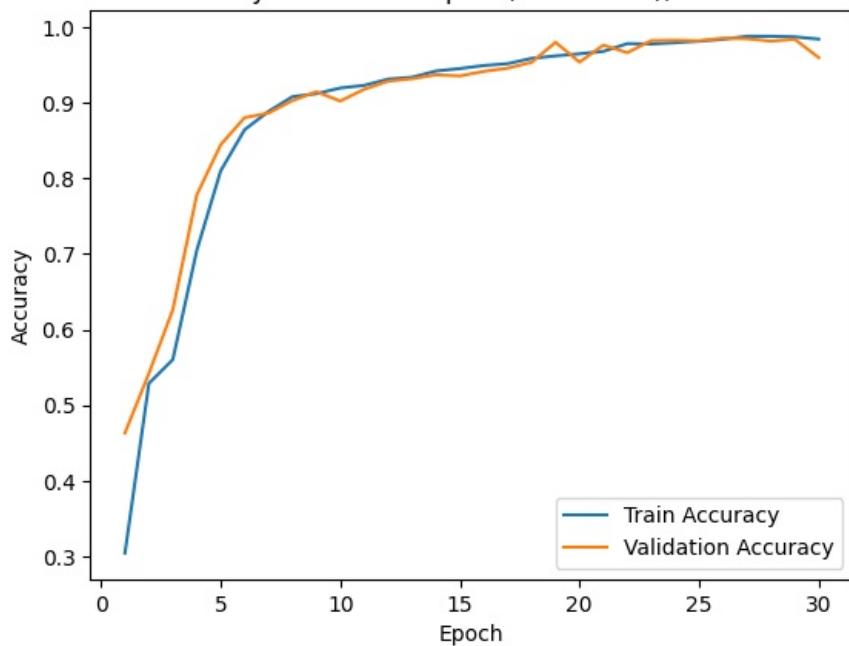


Precision-Recall Curve for 8011 samples (100% data), Test Ratio: 50%



Model Accuracy for 8011 samples (100% data), Test Ratio: 50%

Model Accuracy for 8011 samples (100% data), Test Ratio: 50%



Model Loss for 8011 samples (100% data), Test Ratio: 50%

