saved_models\transformer_normalized_absolute_w1000ms.pth Training Report

Total Training Time: 366.50 seconds
Total Inference Time: 0.31 seconds

Train time per epoch: 14.66 seconds

Test Loss: 0.0000
Test Accuracy: 100.00%

Model Size: 7.02 MB

Configuration and Hyperparameters

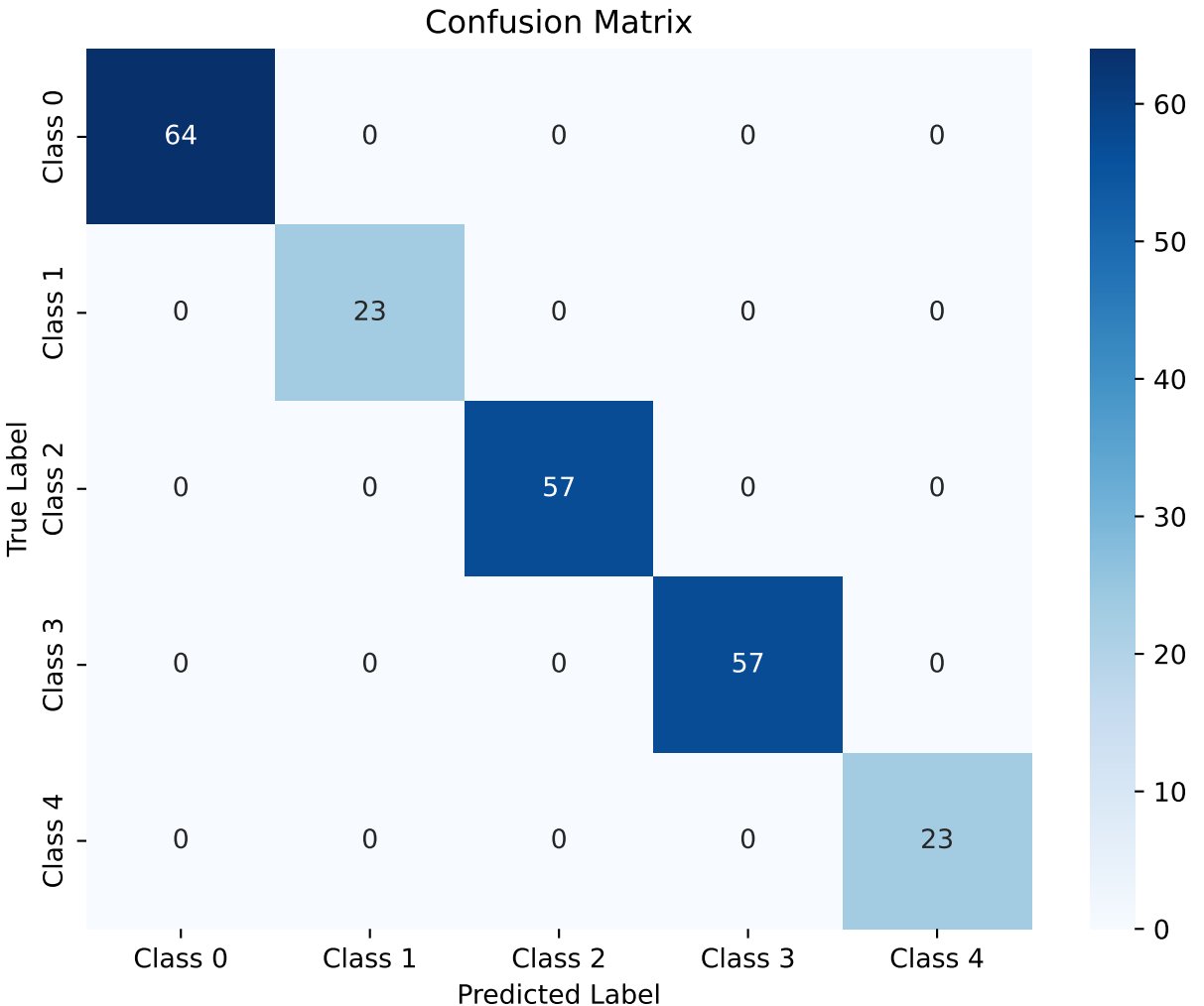
Data Paths:
  Data Directory: data\2024-11-24T10_13_28_d300sec_w1000ms
  Training Data File: data\2024-11-24T10_13_28_d300sec_w1000ms\training.csv
  Test Data File: data\2024-11-24T10_13_28_d300sec_w1000ms\testing.csv
  Model Save Path: saved_models\transformer_normalized_absolute_w1000ms.pth
  PDF Report Path: run_reports\transformer_normalized_absolute_w1000ms.pdf

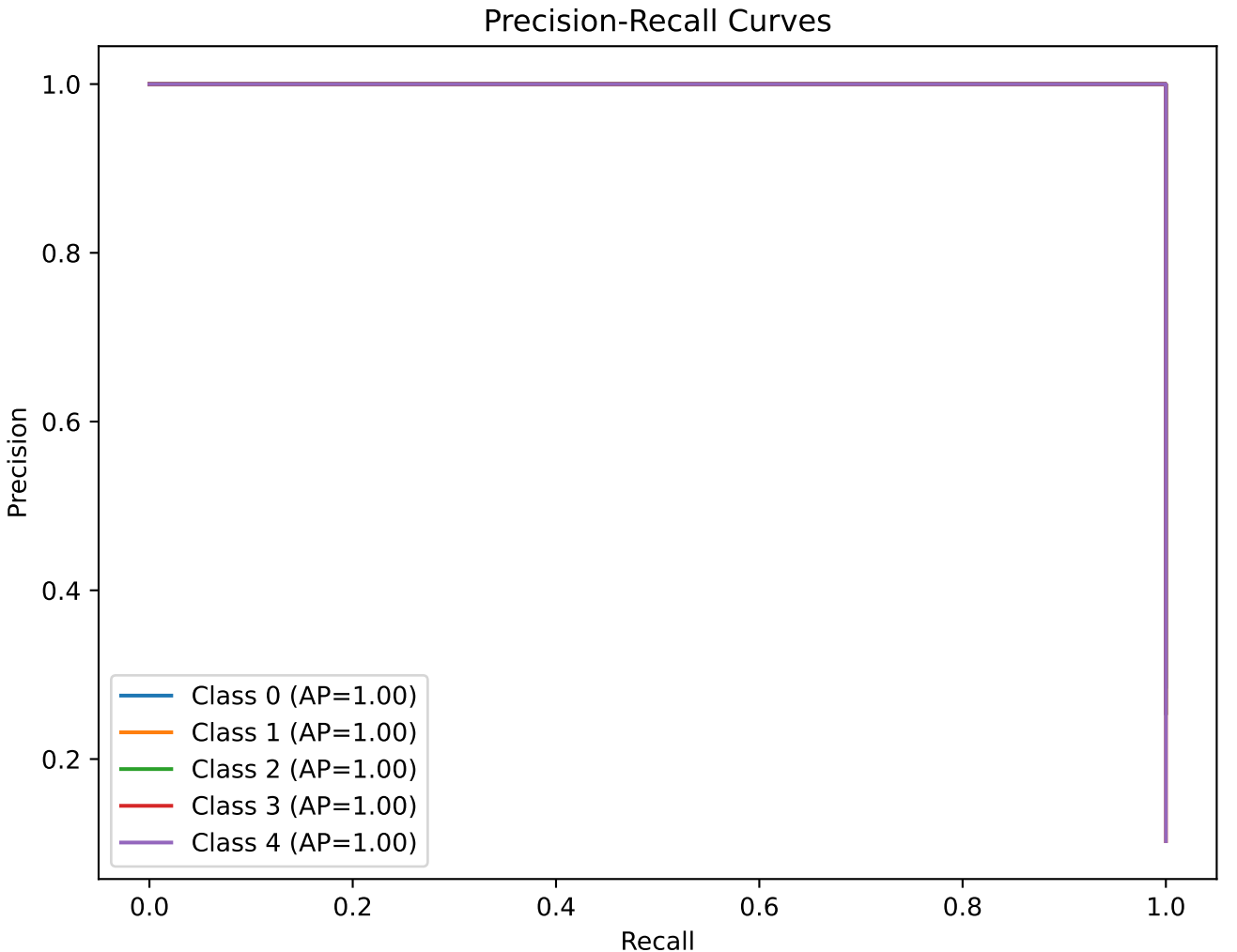
Basic Config:
  num_features: 72
  window_size: 60
  num_classes: 5
  batch_size: 32
  num_epochs: 25
  learning_rate: 0.001
  validation_split: 0.2

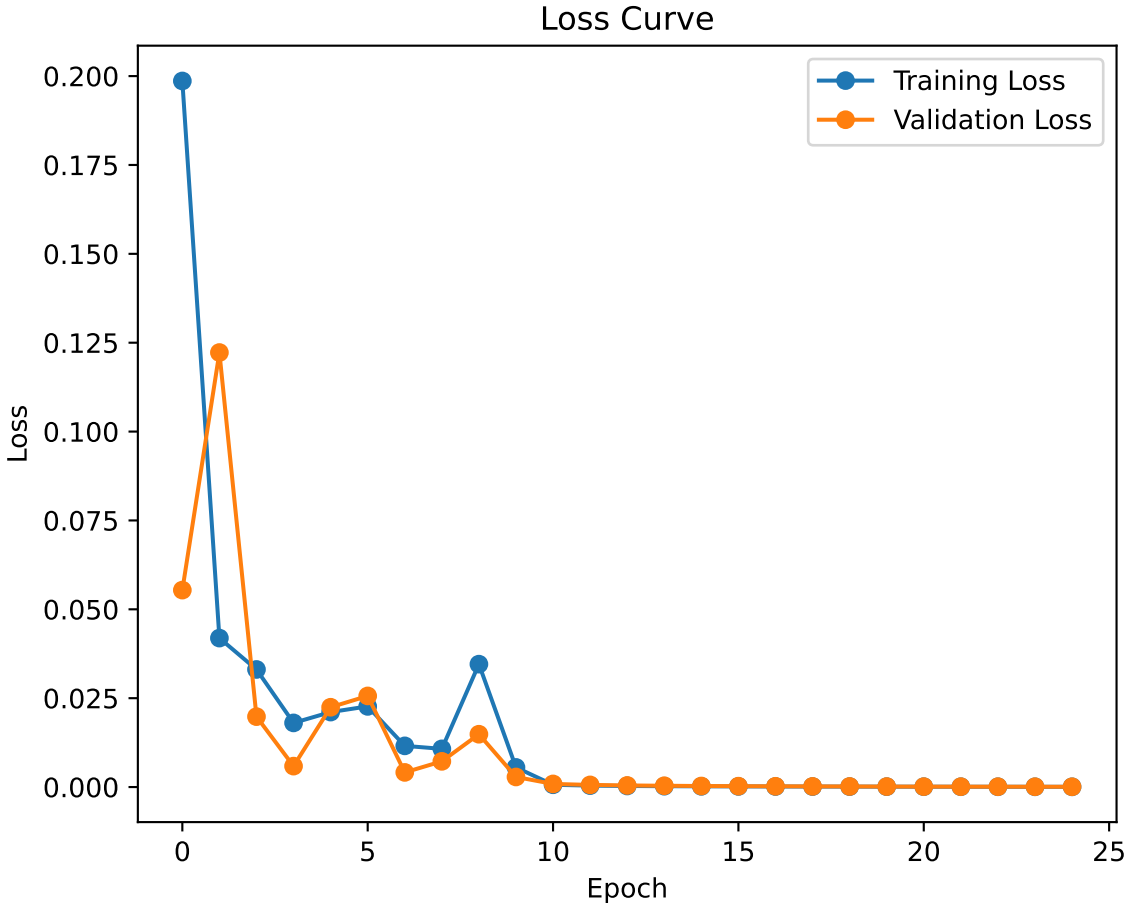
Transformer Hyperparameters:
  d_model: 128
  num_heads: 4
  num_layers: 2
  dropout: 0.1

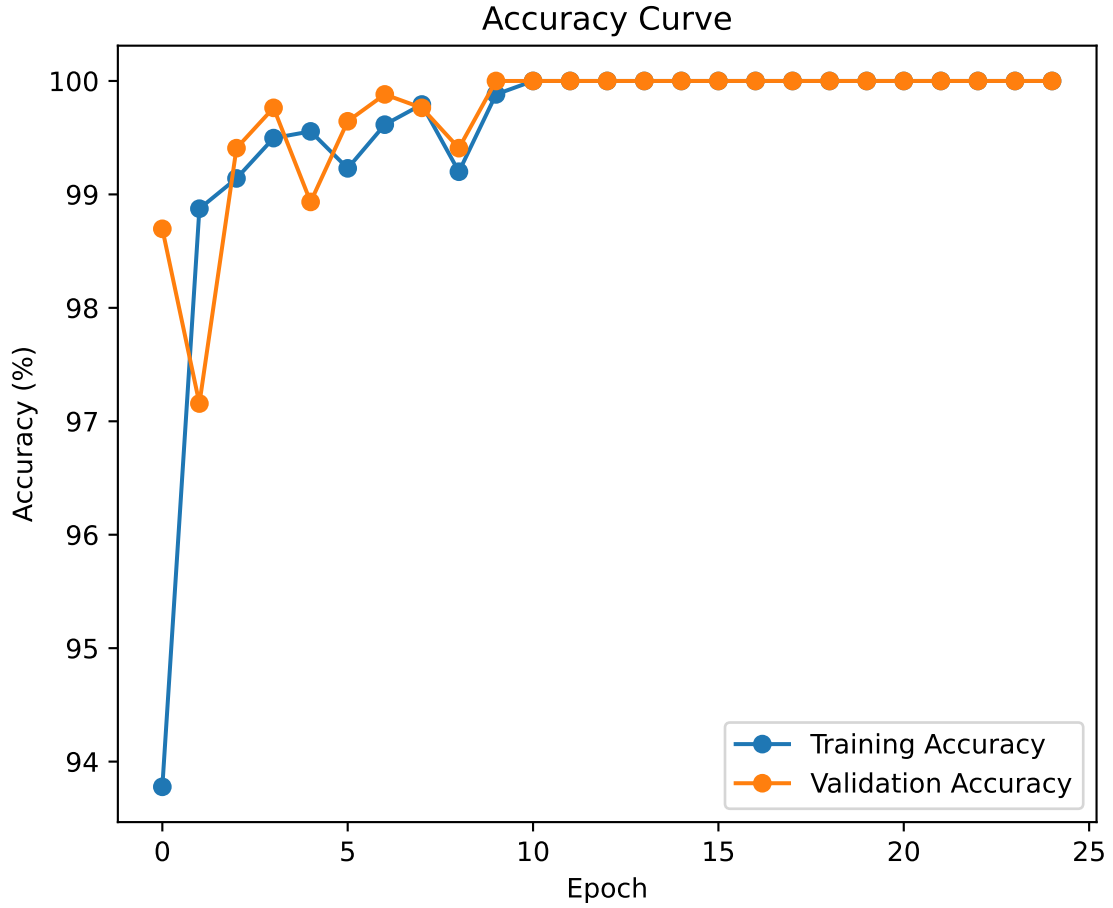
Classification Report

	precision	recall	f1-score	support
Class 0	1.00	1.00	1.00	64
Class 1	1.00	1.00	1.00	23
Class 2	1.00	1.00	1.00	57
Class 3	1.00	1.00	1.00	57
Class 4	1.00	1.00	1.00	23
accuracy			1.00	224
macro avg	1.00	1.00	1.00	224
weighted avg	1.00	1.00	1.00	224


Confusion Matrix
True Label
Predicted Label
Class 0
Class 1
Class 2
Class 3
Class 4
64
0
0
0
0
0
23
0
0
0
0
0
57
0
0
0
0
0
57
0
0
0
0
0
23
60
50
40
30
20
10
0


Precision-Recall Curves
Precision
Recall
1.0
0.8
0.6
0.4
0.2
0.0
0.2
0.4
0.6
0.8
1.0
Class 0 (AP=1.00)
Class 1 (AP=1.00)
Class 2 (AP=1.00)
Class 3 (AP=1.00)
Class 4 (AP=1.00)


Loss Curve
Training Loss
Validation Loss
Loss
Epoch
0.200
0.175
0.150
0.125
0.100
0.075
0.050
0.025
0.000
0
5
10
15
20
25


Accuracy Curve
Training Accuracy
Validation Accuracy
Accuracy (%)
Epoch
100
99
98
97
96
95
94
0
5
10
15
20
25