saved_models\cnn2d_model_normalized_before_relative_w1000ms.pth Training Report

Total Training Time: 379.54 seconds
Total Inference Time: 0.60 seconds

Train time per epoch: 18.98 seconds

Test Loss: 0.7810
Test Accuracy: 88.39%

Model Size: 17.17 MB

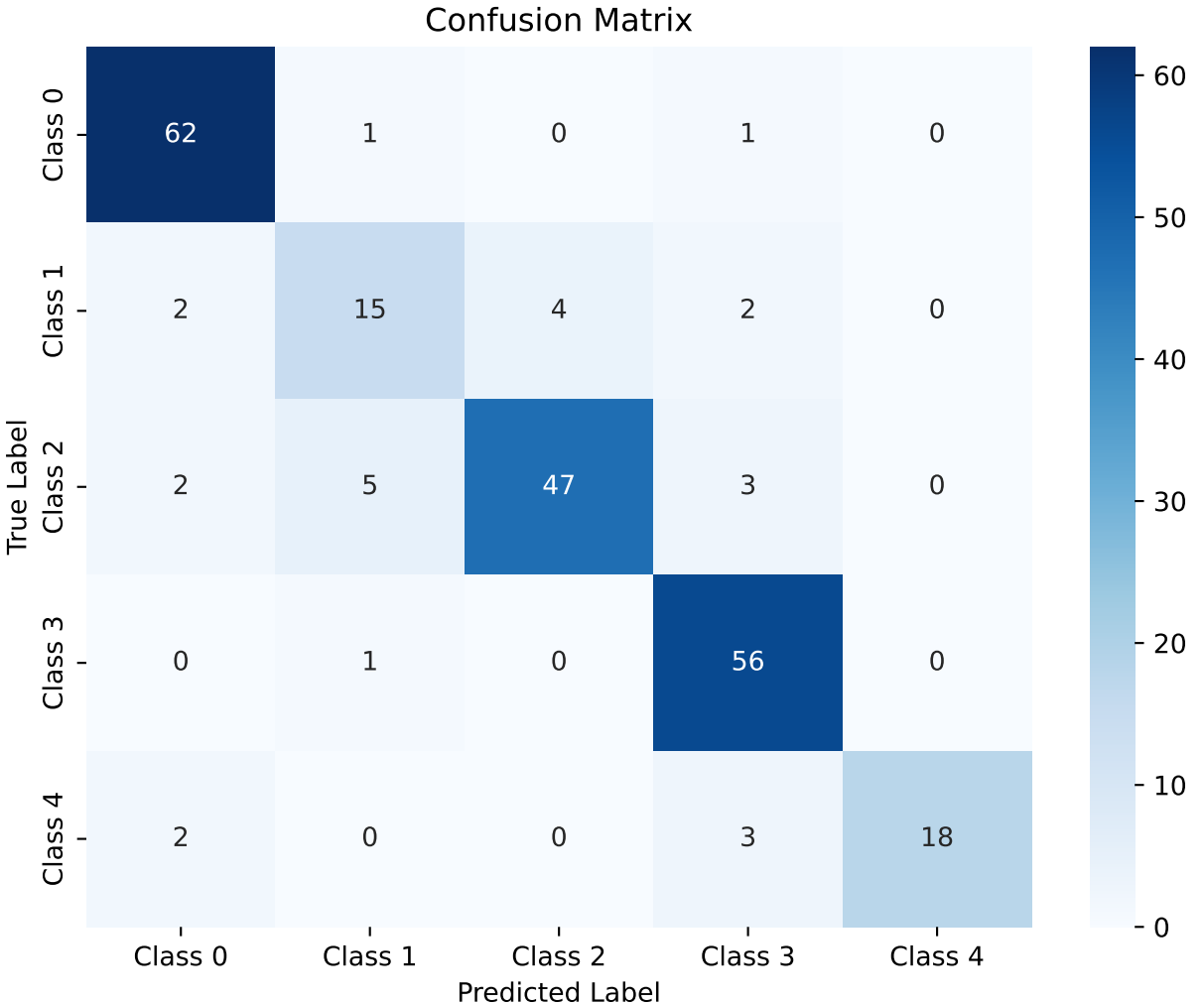
Configuration and Hyperparameters

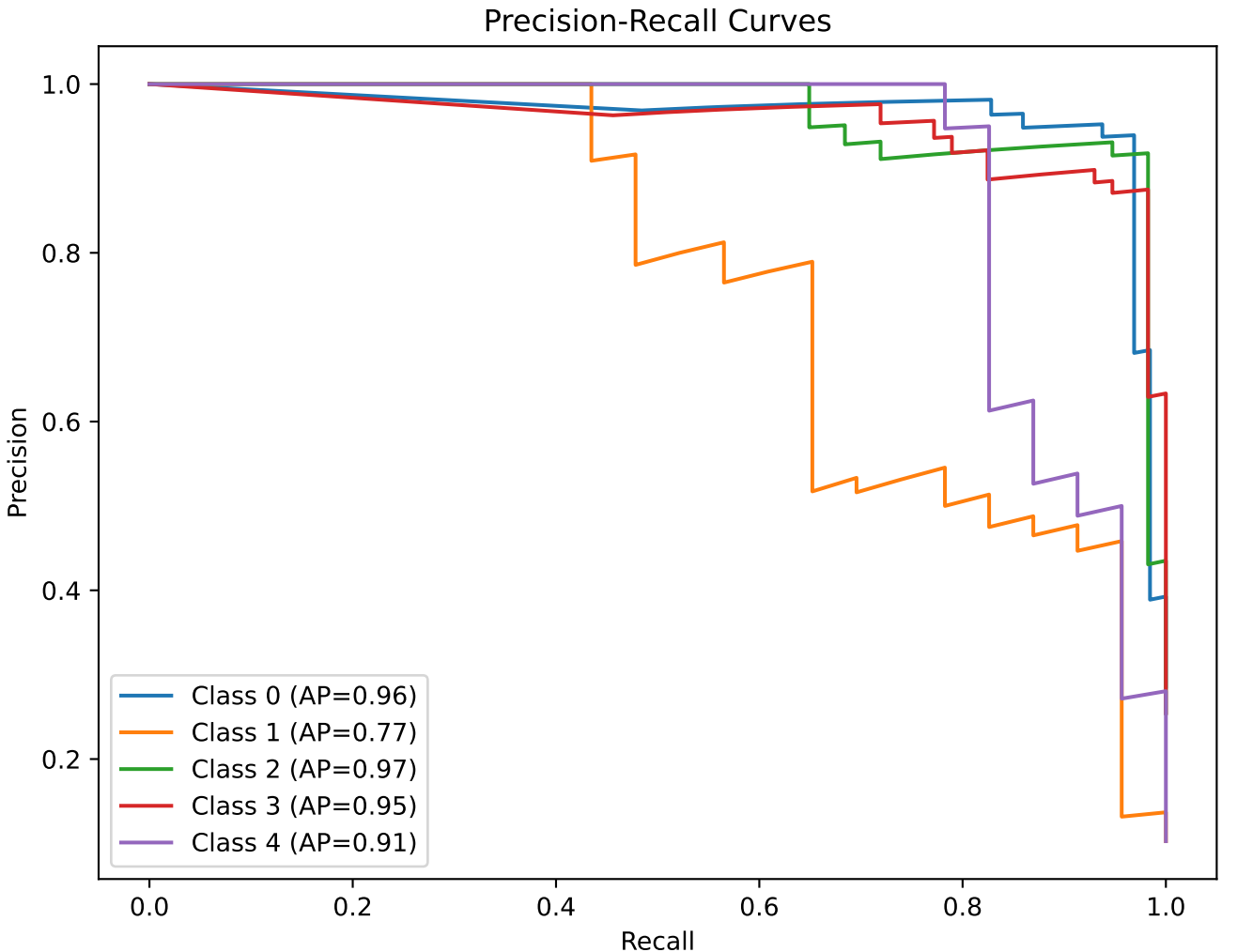
Data Paths:
  Data Directory: data\2024-11-24T10_13_28_d300sec_w1000ms
  Training Data File: data\2024-11-24T10_13_28_d300sec_w1000ms\training.csv
  Test Data File: data\2024-11-24T10_13_28_d300sec_w1000ms\testing.csv
  Model Save Path: saved_models\cnn2d_model_normalized_before_relative_w1000ms.pth
  PDF Report Path: run_reports\cnn2d_model_normalized_before_relative_w1000ms.pdf

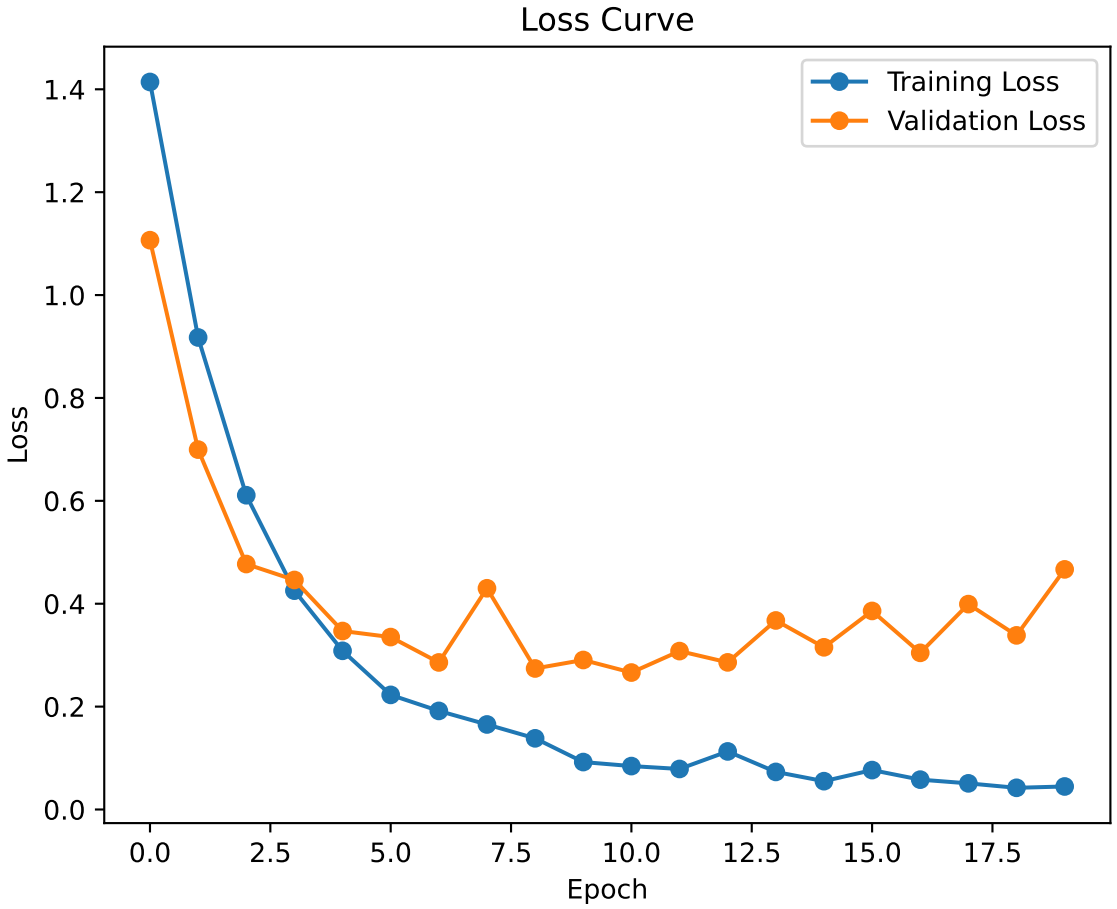
Basic Config:
  num_features: 72
  window_size: 60
  num_classes: 5
  batch_size: 32
  num_epochs: 20
  learning_rate: 0.001
  validation_split: 0.2

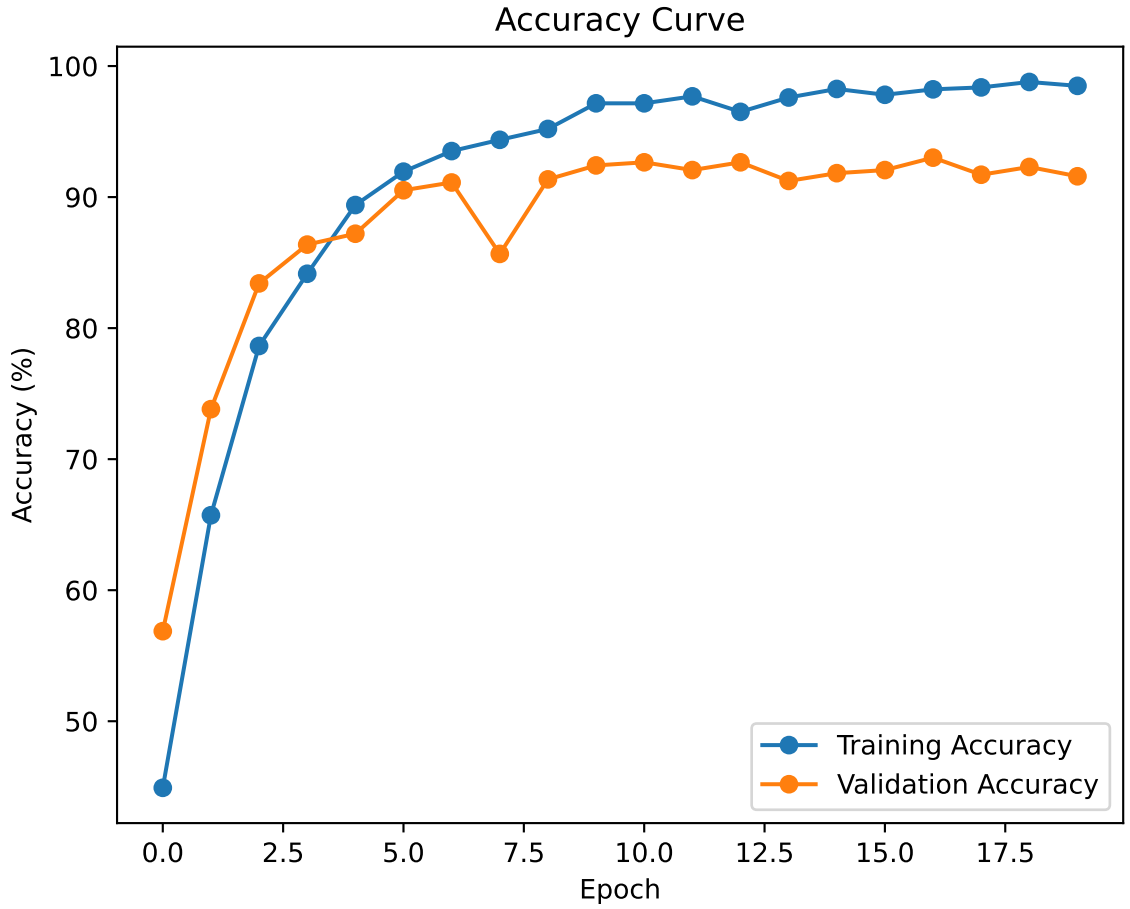
Classification Report

	precision	recall	f1-score	support
Class 0	0.91	0.97	0.94	64
Class 1	0.68	0.65	0.67	23
Class 2	0.92	0.82	0.87	57
Class 3	0.86	0.98	0.92	57
Class 4	1.00	0.78	0.88	23
accuracy			0.88	224
macro avg	0.88	0.84	0.85	224
weighted avg	0.89	0.88	0.88	224


Confusion Matrix
True Label
Predicted Label
Class 0
Class 1
Class 2
Class 3
Class 4
62 1 0 1 0
2 15 4 2 0
2 5 47 3 0
0 1 0 56 0
2 0 0 3 18
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=0.96)
Class 1 (AP=0.77)
Class 2 (AP=0.97)
Class 3 (AP=0.95)
Class 4 (AP=0.91)


Loss Curve
Training Loss
Validation Loss
Loss
Epoch
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5


Accuracy Curve
Training Accuracy
Validation Accuracy
Accuracy (%)
Epoch
50
60
70
80
90
100
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5