CNN2D Model Training Report

Total Training Time: 582.50 seconds
Total Inference Time: 0.93 seconds

Train time per epoch: 19.42 seconds

Test Loss: 0.3812
Test Accuracy: 92.86%

Model Size: 17.17 MB

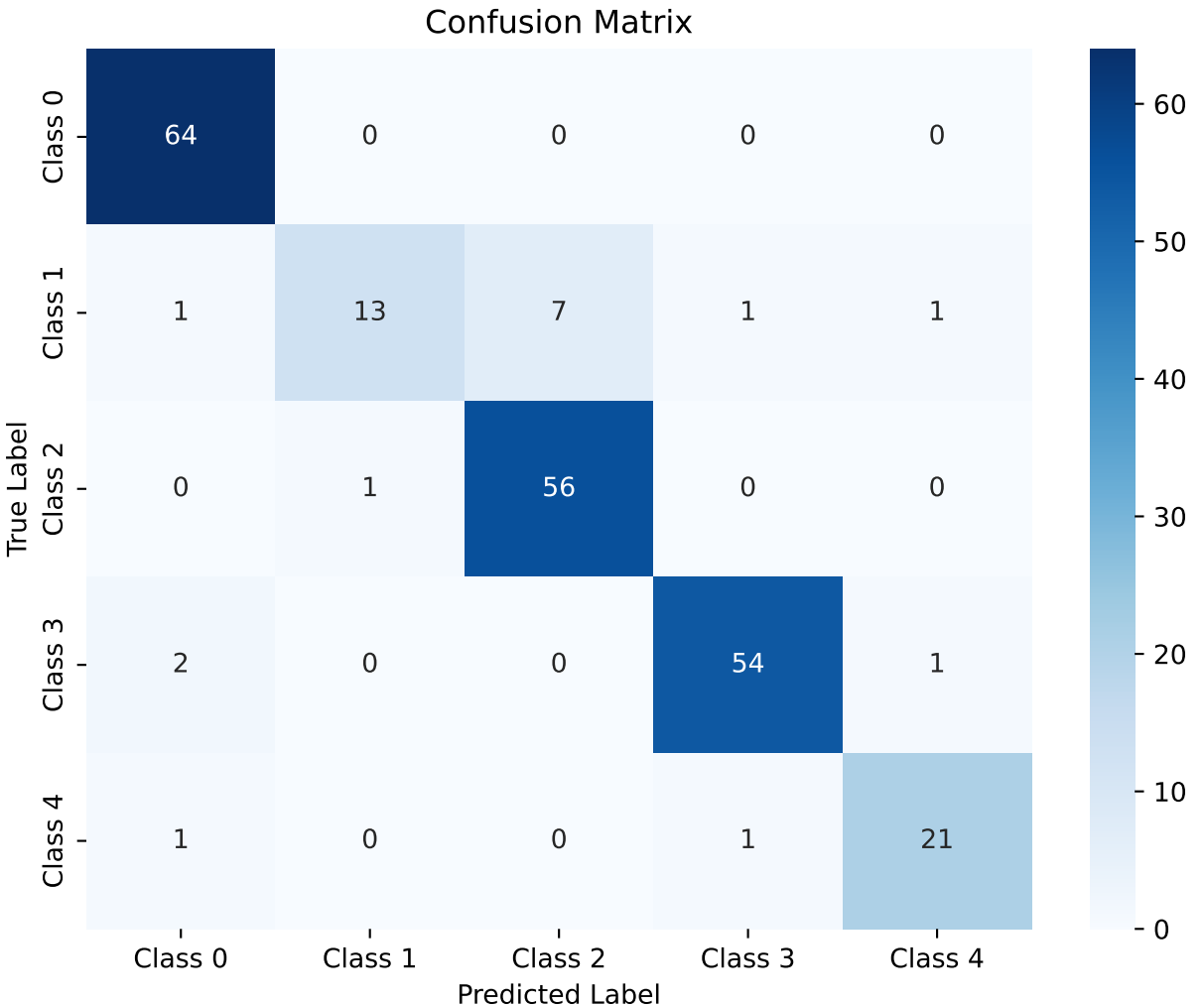
Configuration and Hyperparameters

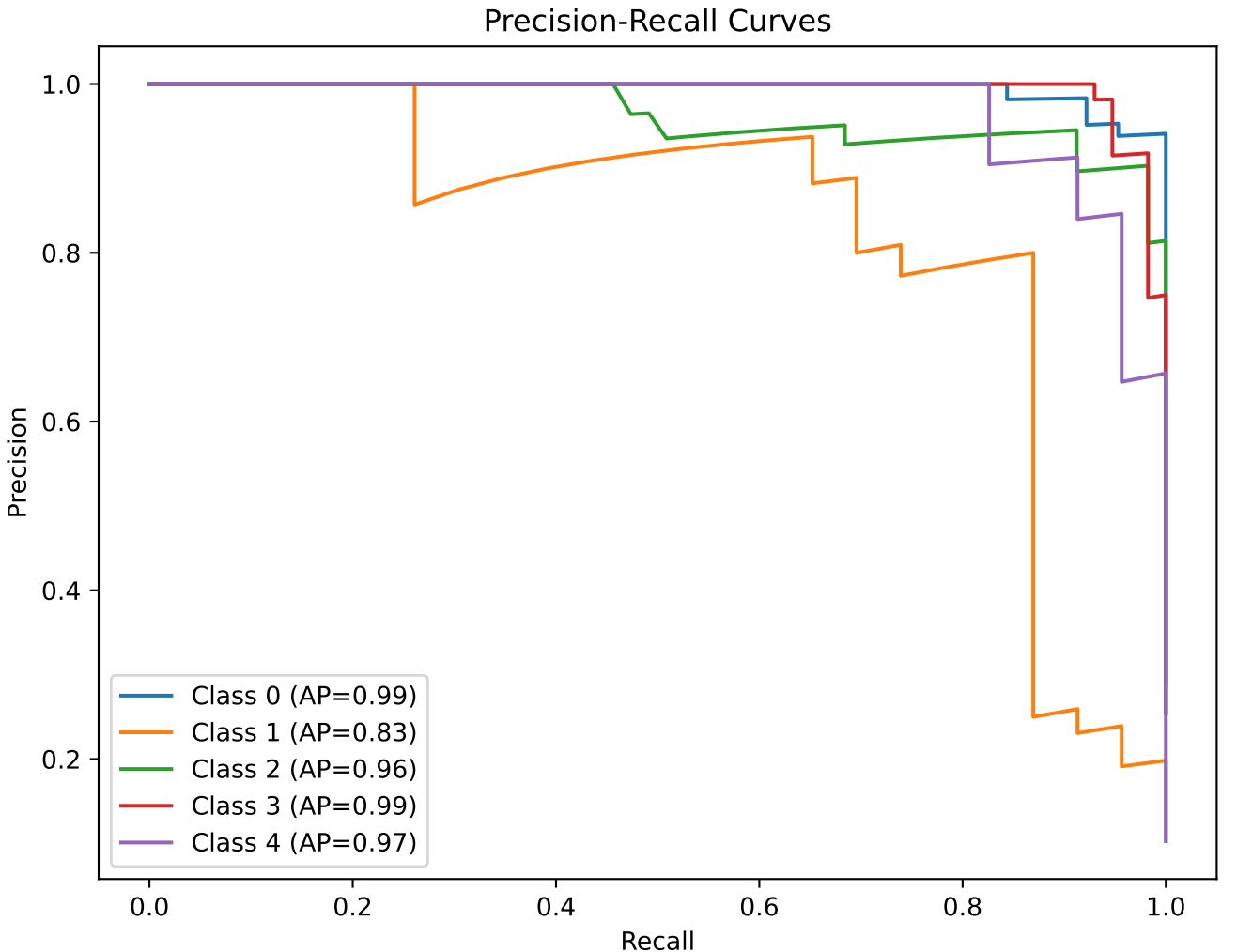
Data Paths:
  Data Directory: data\2024-11-24T10_13_28_d300sec_w1000ms
  Training Data File: data\2024-11-24T10_13_28_d300sec_w1000ms\training.csv
  Test Data File: data\2024-11-24T10_13_28_d300sec_w1000ms\testing.csv
  Model Save Path: saved_models\cnn2d_model_normalized_relative_w1000ms.pth
  PDF Report Path: run_reports\cnn2d_model_normalized_relative_w1000ms.pdf

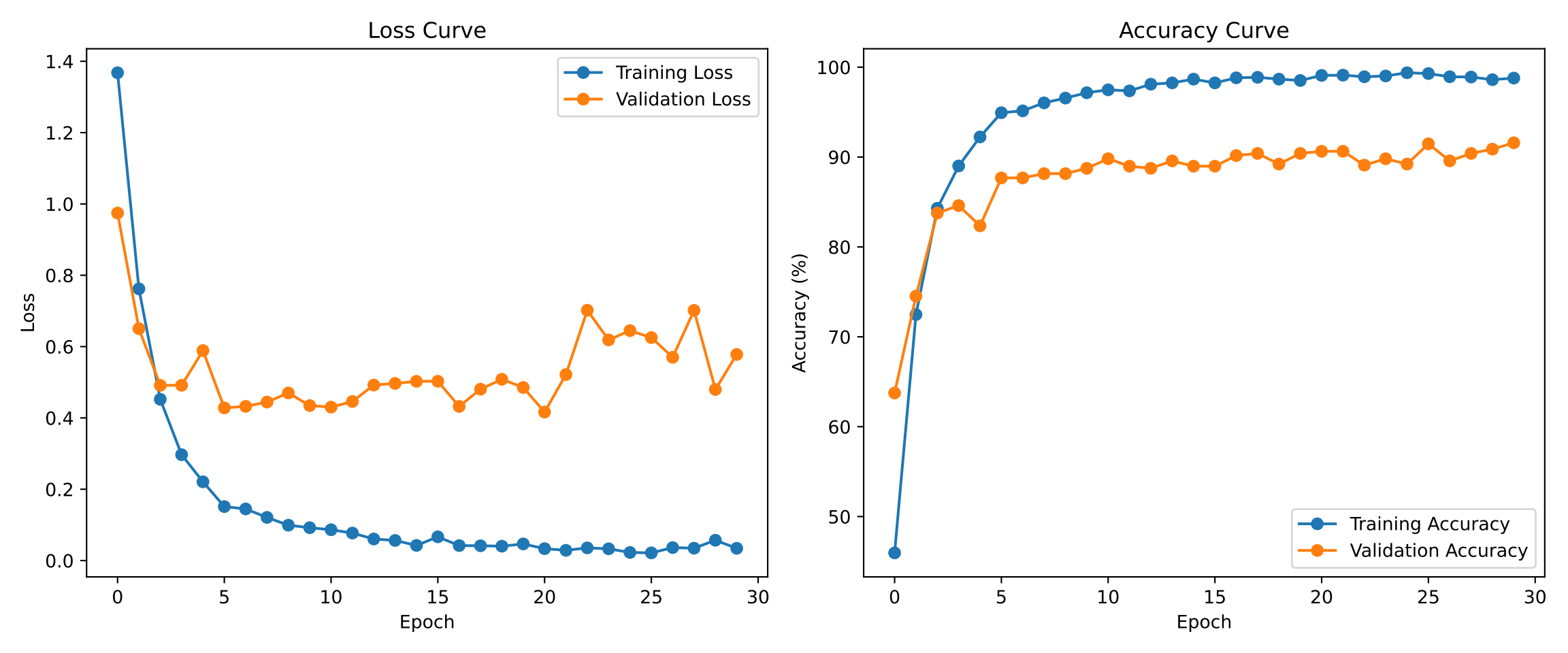
Basic Config:
  num_features: 72
  window_size: 60
  num_classes: 5
  batch_size: 32
  num_epochs: 30
  learning_rate: 0.001
  validation_split: 0.2

Classification Report

	precision	recall	f1-score	support
Class 0	0.94	1.00	0.97	64
Class 1	0.93	0.57	0.70	23
Class 2	0.89	0.98	0.93	57
Class 3	0.96	0.95	0.96	57
Class 4	0.91	0.91	0.91	23
accuracy			0.93	224
macro avg	0.93	0.88	0.89	224
weighted avg	0.93	0.93	0.92	224


Confusion Matrix
True Label
Predicted Label
Class 0
Class 1
Class 2
Class 3
Class 4
64 0 0 0 0
1 13 7 1 1
0 1 56 0 0
2 0 0 54 1
1 0 0 1 21
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=0.99)
Class 1 (AP=0.83)
Class 2 (AP=0.96)
Class 3 (AP=0.99)
Class 4 (AP=0.97)


Loss Curve
Training Loss
Validation Loss
Loss
Epoch
Accuracy Curve
Training Accuracy
Validation Accuracy
Accuracy (%)
Epoch