



Modality 1 - Thermal  
Non Falls - 48, Falls - 173

Modality 2 - IP  
Non Falls - 48, Falls - 173

Train Dataloader - 48  
Test Dataloader - 173

Device Used - cuda

Model Used - EarlySubtraction\_3DCAE  
Key Frame Extraction - False  
Feature Extraction - True  
Background Subtraction - True  
Background Subtraction Algorithm - GMG  
Data Augmentation - False  
Spatial Temporal Loss - False

Frame rate adjusted dataset - True  
Synchronise Video - True  
Video length adjustment method - Not Applicable

Window Length = 8  
Stride = 1  
Fair Comparison = True  
Dropout = 0.25  
Learning Rate = 0.0002  
Num Epochs = 20  
Chunk Size = 64  
Forward Chunk Size = 8  
Loss Fn = MSELoss()

Training has Begun  
epoch [1/20], loss:0.0085  
epoch [2/20], loss:0.0041  
epoch [3/20], loss:0.0020  
epoch [4/20], loss:0.0008  
epoch [5/20], loss:0.0004  
epoch [6/20], loss:0.0002  
epoch [7/20], loss:0.0002  
epoch [8/20], loss:0.0001  
epoch [9/20], loss:0.0001  
epoch [10/20], loss:0.0000  
epoch [11/20], loss:0.0000  
epoch [12/20], loss:0.0000  
epoch [13/20], loss:0.0000  
epoch [14/20], loss:0.0000  
epoch [15/20], loss:0.0000  
epoch [16/20], loss:0.0000  
epoch [17/20], loss:0.0000  
epoch [18/20], loss:0.0000  
epoch [19/20], loss:0.0000  
epoch [20/20], loss:0.0000  
Training has Completed

Forward pass occurring  
Forward pass completed

MultiModal\_Thermal\_T3\_IP\_T\_2024-04-19-11-17-35

-----  
STD Global Classification Results  
TPR 0.885, FPR 0.220, Precision 0.044, Recall 0.885  
tn 99514, fp 28013, fn 167, tp 1291  
std\_AUROC 0.907  
-----

-----  
Mean Global Classification Results  
TPR 0.899, FPR 0.248, Precision 0.040, Recall 0.899  
tn 95872, fp 31655, fn 147, tp 1311  
mean\_AUROC 0.889  
-----

d:\FYP-Human-Fall-Detection\Code\functions.py:250: RuntimeWarning: Mean of empty slice

final\_performance\_mean = np.nanmean(video\_metrics, axis=0) # get the mean performance across all videos

c:\Users\sindh\anaconda3\envs\fyp\_base\_paper\_2\lib\site-packages\numpy\lib\nanfunctions.py:1670: RuntimeWarning: Degrees of freedom <= 0 for slice.

var = nanvar(a, axis=axis, dtype=dtype, out=out, ddof=ddof,

-----  
STD Global Classification Results  
TPR 0.865, FPR 0.185, Precision 0.050, Recall 0.865  
tn 103959, fp 23578, fn 195, tp 1253  
std\_AUROC 0.906  
-----

-----  
Mean Global Classification Results  
TPR 0.885, FPR 0.254, Precision 0.038, Recall 0.885  
tn 95176, fp 32361, fn 167, tp 1281  
mean\_AUROC 0.880  
-----

```

c:\Users\sindh\anaconda3\envs\fyp_base_paper_2\lib\site-packages\sklearn\metrics\_ranking.py:1132: UndefinedMetricWarning: No positive samples in y_true, true positive value should be meaningless
  warnings.warn(
c:\Users\sindh\anaconda3\envs\fyp_base_paper_2\lib\site-packages\sklearn\metrics\_ranking.py:979: UserWarning: No positive class found in y_true, recall is set to one for all thresholds.
  warnings.warn(
c:\Users\sindh\anaconda3\envs\fyp_base_paper_2\lib\site-packages\sklearn\metrics\_ranking.py:1132: UndefinedMetricWarning: No positive samples in y_true, true positive value should be meaningless
  warnings.warn(
c:\Users\sindh\anaconda3\envs\fyp_base_paper_2\lib\site-packages\sklearn\metrics\_ranking.py:979: UserWarning: No positive class found in y_true, recall is set to one for all thresholds.
  warnings.warn(
d:\FYP-Human-Fall-Detection\Code\functions.py:250: RuntimeWarning: Mean of empty slice
  final_performance_mean = np.nanmean(video_metrics, axis=0) # get the mean performance across all videos
c:\Users\sindh\anaconda3\envs\fyp_base_paper_2\lib\site-packages\numpy\lib\nanfunctions.py:1670: RuntimeWarning: Degrees of freedom <= 0 for slice.
  var = nanvar(a, axis=axis, dtype=dtype, out=out, ddof=ddof,

-----
STD Global Classification Results
TPR 0.866, FPR 0.168, Precision 0.056, Recall 0.866
tn 106122, fp 21405, fn 196, tp 1262
std_AUROC 0.922
-----
-----
Mean Global Classification Results
TPR 0.923, FPR 0.283, Precision 0.036, Recall 0.923
tn 91410, fp 36117, fn 112, tp 1346
mean_AUROC 0.886
-----

d:\FYP-Human-Fall-Detection\Code\functions.py:250: RuntimeWarning: Mean of empty slice
  final_performance_mean = np.nanmean(video_metrics, axis=0) # get the mean performance across all videos
c:\Users\sindh\anaconda3\envs\fyp_base_paper_2\lib\site-packages\numpy\lib\nanfunctions.py:1670: RuntimeWarning: Degrees of freedom <= 0 for slice.
  var = nanvar(a, axis=axis, dtype=dtype, out=out, ddof=ddof,

()

```













