



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 - LateSubtraction\_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 = SmoothL1Loss()

Training has Begun  
epoch [1/20], loss:0.0001  
epoch [2/20], loss:0.0000  
epoch [3/20], loss:0.0000  
epoch [4/20], loss:0.0000  
epoch [5/20], loss:0.0000  
epoch [6/20], loss:0.0000  
epoch [7/20], loss:0.0000  
epoch [8/20], loss:0.0000  
epoch [9/20], loss:0.0000  
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\_2024-04-24-19-35-01

```
-----  
STD Global Classification Results  
TPR 0.885, FPR 0.220, Precision 0.044, Recall 0.885  
tn 99482, fp 28045, fn 167, tp 1291  
std_AUROC 0.909  
-----
```

```
-----  
Mean Global Classification Results  
TPR 0.870, FPR 0.187, Precision 0.051, Recall 0.870  
tn 103732, fp 23795, fn 190, tp 1268  
mean_AUROC 0.919  
-----
```

```
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\naf  
functions.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 0.867, FPR 0.187, Precision 0.050, Recall 0.867  
tn 103669, fp 23868, fn 193, tp 1255  
std_AUROC 0.904  
-----
```

```
-----  
Mean Global Classification Results  
TPR 0.898, FPR 0.262, Precision 0.037, Recall 0.898  
tn 94128, fp 33409, fn 147, tp 1301  
mean_AUROC 0.875  
-----
```

```

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 106119, fp 21408, fn 196, tp 1262
std_AUROC 0.922
-----
-----
Mean Global Classification Results
TPR 0.899, FPR 0.211, Precision 0.046, Recall 0.899
tn 100614, fp 26913, fn 147, tp 1311
mean_AUROC 0.918
-----

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,

```

()













