

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

Modality 2 - ONI_IR
Non Falls - 58, Falls - 182

Train Dataloader - 48
Test Dataloader - 173

Device Used - cuda

Model Used - MultiModal_3DCAE
Feature Extraction - False
Data Augmentation - False
Spatial Temporal Loss - False

Frame rate adjusted dataset - False
Video length adjustment method - Trim Maximum

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

Training has Begun
epoch [1/20], loss:0.0048
epoch [2/20], loss:0.0037
epoch [3/20], loss:0.0031
epoch [4/20], loss:0.0027
epoch [5/20], loss:0.0025
epoch [6/20], loss:0.0023
epoch [7/20], loss:0.0022
epoch [8/20], loss:0.0021
epoch [9/20], loss:0.0020
epoch [10/20], loss:0.0019
epoch [11/20], loss:0.0018
epoch [12/20], loss:0.0017
epoch [13/20], loss:0.0017
epoch [14/20], loss:0.0017
epoch [15/20], loss:0.0016
epoch [16/20], loss:0.0016
epoch [17/20], loss:0.0016
epoch [18/20], loss:0.0015
epoch [19/20], loss:0.0016
epoch [20/20], loss:0.0016
Training has Completed

Forward pass occuring
Forward pass completed

MultiModal_Thermal_T3_ONI_IR_T_2024-03-21-20-19-16

STD Global Classification Results
TPR 0.908, FPR 0.385, Precision 0.037, Recall 0.908
tn 40837, fp 25552, fn 99, tp 973
std_AUROC 0.798

Mean Global Classification Results
TPR 0.780, FPR 0.286, Precision 0.042, Recall 0.780
tn 47378, fp 19011, fn 236, tp 836
mean_AUROC 0.784

```
d:\Abdul Rasheed NITT\Academics\Eigth Semester\FYP\Implementation\FallDetection\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\abdul\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,
```

()

Receiver Operating Characteristic for STD of Reconstruction Error





