

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

Modality 2 - IP
Non Falls - 58, Falls - 180

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:0.0141
epoch [2/20], loss:0.0108
epoch [3/20], loss:0.0089
epoch [4/20], loss:0.0074
epoch [5/20], loss:0.0064
epoch [6/20], loss:0.0057
epoch [7/20], loss:0.0051
epoch [8/20], loss:0.0046
epoch [9/20], loss:0.0042
epoch [10/20], loss:0.0039
epoch [11/20], loss:0.0037
epoch [12/20], loss:0.0036
epoch [13/20], loss:0.0034
epoch [14/20], loss:0.0033
epoch [15/20], loss:0.0032
epoch [16/20], loss:0.0031
epoch [17/20], loss:0.0030
epoch [18/20], loss:0.0029
epoch [19/20], loss:0.0029
epoch [20/20], loss:0.0028
Training has Completed

Forward pass occuring
Forward pass completed

MultiModal_Thermal_T3_IP_T_2024-03-21-19-32-31

STD Global Classification Results
TPR 0.840, FPR 0.299, Precision 0.043, Recall 0.840
tn 46563, fp 19826, fn 171, tp 901
std_AUROC 0.807

Mean Global Classification Results
TPR 0.772, FPR 0.311, Precision 0.039, Recall 0.772
tn 45757, fp 20632, fn 244, tp 828
mean_AUROC 0.777

```
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





