# Training Report: LstmAttentionReductionHybridFastKAN dcac07f3-37b2-4c8c-9268-c91d595b4e56

## **Best Epoch Performance Metrics**

```
Summary of Metrics:
- Samples: 1678
- Loss: 1.303
- Accuracy: 80.191%
- Precision (PPV): 82.216%
- Recall (Sensitivity): 80.191%
- Specificity (TNR): 99.047%
- F1-Score: 80.360%
- ROC AUC: 94.108%
- PR AUC: 74.394%
- Performance: 82.558%
- Weighted: True
```

### **Model Configuration**

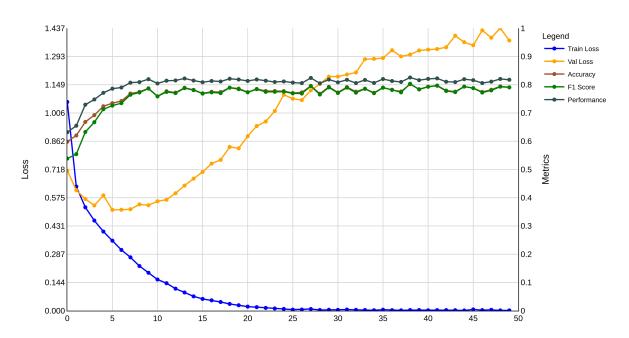
```
- in_channels: 1024
- in_seq_len: 1023
- out_channels: 10
- reduced_seq_len: 10
- lstm_hidden_size: 128
- lstm_num_layers: 2
- dropout_rate: 0.25
- hidden_layers: HiddenLayers(kind=Type.RELATIVE, value=(0.04, 1))
- num_heads: 8
- grid_diff: 1.0
- num_grids: 8
```

## **Memory Size:**

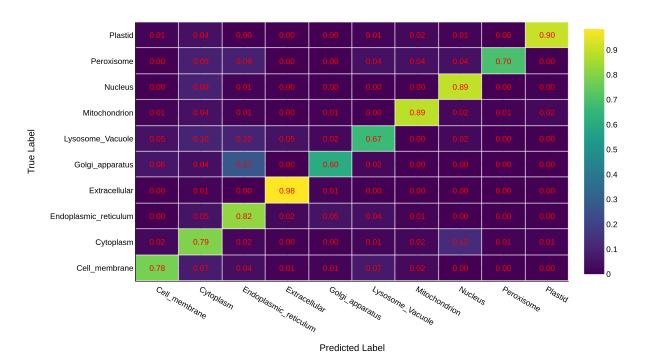
```
14.053 MB
```

# Figures & Visualizations

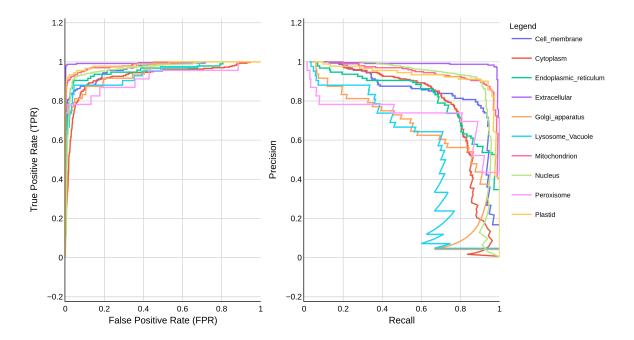
TrainingLoss & TrainingPerformance (epoch: 49) | LstmAttentionReductionHybridFastKAN



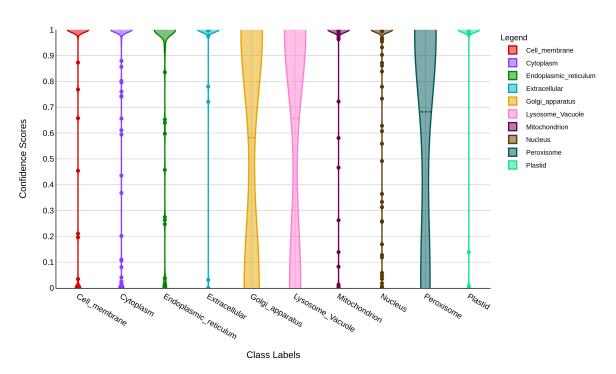
#### Confusion Matrix (LstmAttentionReductionHybridFastKAN)



#### MultiFigure: ROCCurve | PRCurve



#### Prediction Confidence Distribution (LstmAttentionReductionHybridFastKAN)



# Final Evaluation Report: LstmAttentionReductionHybridFastKAN (dcac07f3-37b2-4c8c-9268-c91d595b4e56)

#### **Test Set Performance**

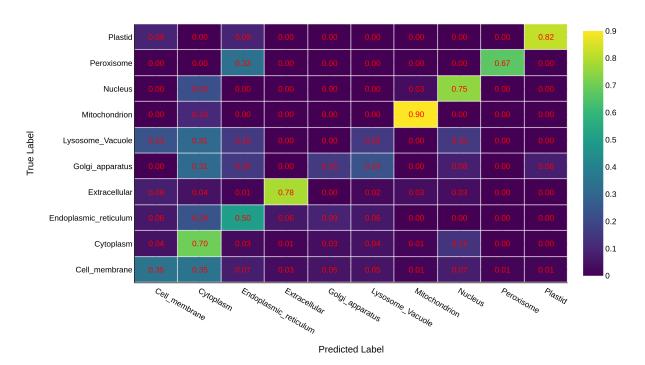
```
Summary of Metrics:
- Samples: 490
- Loss: 3.683
- Accuracy: 61.837%
- Precision (PPV): 55.735%
- Recall (Sensitivity): 57.704%
- Specificity (TNR): 95.374%
- F1-Score: 55.519%
- ROC AUC: 87.198%
- PR AUC: 58.491%
- Performance: 64.452%
- Weighted: False
```

## **Test Set Performance (Sampled Statistics)**

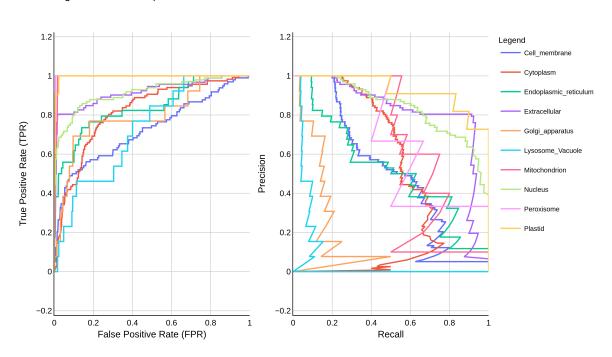
```
MetricsSampled Summary:
mean metric 95% confidence interval
Accuracy: 61.86 [61.75 - 61.96]
Sensitivity: 57.35 [57.13 - 57.56]
Specificity: 95.38 [95.36 - 95.39]
F1-Score: 54.34 [54.15 - 54.53]
```

# Figures & Visualizations

Confusion Matrix (LstmAttentionReductionHybridFastKAN)



MultiFigure: ROCCurve | PRCurve



#### $Prediction\ Confidence\ Distribution\ (LstmAttentionReductionHybridFastKAN)$

