# ClearML Analysis Report

## Task: Run-20241115-135615

### Configuration:

dataset: {'class\_distribution': {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}}, 'test\_size': 48, 'train\_size': 380}

loss\_function: {'parameters': {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [1, 2]}, 'type': 'FocalLoss'}

model: {'architecture': 'MultiBranchECGNet', 'num\_channels': 8, 'num\_classes': 2, 'parameters': {'dropout\_rate': 0.3, 'learning\_rate': 0.001}}

optimizer: {'parameters': {'lr': 0.001, 'weight\_decay': 1e-05}, 'type': 'Adam'}

## Task: Run-57583ace

### Configuration:

dataset: {'class\_distribution': {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}}, 'test\_size': 48, 'train\_size': 380}

loss\_function: {'parameters': {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [1, 2]}, 'type': 'BCEWithLogitsLoss'}

model: {'architecture': 'MultiBranchECGNet', 'num\_channels': 8, 'num\_classes': 2, 'parameters': {'dropout\_rate': 0.3, 'learning\_rate': 0.001}}

optimizer: {'parameters': {'lr': 0.001, 'weight\_decay': 1e-05}, 'type': 'Adam'}

## Task: Run-cb5ff308

### Configuration:

dataset: {'class\_distribution': {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}}, 'test\_size': 48, 'train\_size': 380}

loss\_function: {'parameters': {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [2, 1]}, 'type': 'BCEWithLogitsLoss'}

model: {'architecture': 'MultiBranchECGNet', 'num\_channels': 8, 'num\_classes': 2, 'parameters': {'dropout\_rate': 0.3, 'learning\_rate': 0.001}}

optimizer: {'parameters': {'lr': 0.001, 'weight\_decay': 1e-05}, 'type': 'Adam'}

## Task: Run-23a8d16a

### Configuration:

dataset: {'class\_distribution': {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}}, 'test\_size': 48, 'train\_size': 380}

loss\_function: {'parameters': {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [6, 1]}, 'type': 'BCEWithLogitsLoss'}

model: {'architecture': 'MultiBranchECGNet', 'num\_channels': 8, 'num\_classes': 2, 'parameters': {'dropout\_rate': 0.5, 'learning\_rate': 0.001}}

optimizer: {'parameters': {'lr': 0.001, 'weight\_decay': 0.0001}, 'type': 'Adam'}

## Task: Run-ca8c66a7

### Configuration:

dataset: {'class\_distribution': {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}}, 'test\_size': 48, 'train\_size': 380}

loss\_function: {'parameters': {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [1, 6]}, 'type': 'BCEWithLogitsLoss'}

model: {'architecture': 'MultiBranchECGNet', 'num\_channels': 8, 'num\_classes': 2, 'parameters': {'dropout\_rate': 0.5, 'learning\_rate': 0.001}}

optimizer: {'parameters': {'lr': 0.001, 'weight\_decay': 0.0001}, 'type': 'Adam'}

## Task: Run-20fb01d2

### Configuration:

dataset: {'class\_distribution': {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}}, 'test\_size': 48, 'train\_size': 380}

loss\_function: {'parameters': {'alpha': 3.0, 'gamma': 4.0, 'pos\_weight': [1, 6]}, 'type': 'FocalLoss'}

model: {'architecture': 'MultiBranchECGNet', 'num\_channels': 8, 'num\_classes': 2, 'parameters': {'dropout\_rate': 0.5, 'learning\_rate': 0.001}}

optimizer: {'parameters': {'lr': 0.001, 'weight\_decay': 0.0001}, 'type': 'Adam'}

## Task: Run-9255d68e

### Configuration:

dataset: {'class\_distribution': {'test': {0: 40, 1: 8}, 'train': {0: 132, 1: 132}}, 'test\_size': 48, 'train\_size': 264}

loss\_function: {'parameters': {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [1, 6]}, 'type': 'FocalLoss'}

model: {'architecture': 'MultiBranchECGNet', 'num\_channels': 8, 'num\_classes': 2, 'parameters': {'dropout\_rate': 0.5, 'learning\_rate': 0.001}}

optimizer: {'parameters': {'lr': 0.001, 'weight\_decay': 0.0001}, 'type': 'Adam'}

## Task: Run-006d95fc

### Configuration:

dataset: {'class\_distribution': {'test': {0: 40, 1: 8}, 'train': {0: 132, 1: 132}}, 'test\_size': 48, 'train\_size': 264}

loss\_function: {'parameters': {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [1, 6]}, 'type': 'BCEWithLogitsLoss'}

model: {'architecture': 'MultiBranchECGNet', 'num\_channels': 8, 'num\_classes': 2, 'parameters': {'dropout\_rate': 0.5, 'learning\_rate': 0.001}}

optimizer: {'parameters': {'lr': 0.001, 'weight\_decay': 0.0001}, 'type': 'Adam'}

## Task: Run-3347a14f

### Configuration:

dataset: {'class\_distribution': {'test': {0: 40, 1: 8}, 'train': {0: 132, 1: 132}}, 'test\_size': 48, 'train\_size': 264}

loss\_function: {'parameters': {'alpha': 1.0, 'gamma': 0.5, 'pos\_weight': [1, 6]}, 'type': 'FocalLoss'}

model: {'architecture': 'MultiBranchECGNet', 'num\_channels': 8, 'num\_classes': 2, 'parameters': {'dropout\_rate': 0.5, 'learning\_rate': 0.001}}

optimizer: {'parameters': {'lr': 0.001, 'weight\_decay': 0.0001}, 'type': 'Adam'}

## Task: Run-16b9c735

### Configuration:

dataset: {'class\_distribution': {'test': {0: 40, 1: 8}, 'train': {0: 132, 1: 132}}, 'test\_size': 48, 'train\_size': 264}

loss\_function: {'parameters': {'alpha': 1.0, 'gamma': 1, 'pos\_weight': [1, 6]}, 'type': 'FocalLoss'}

model: {'architecture': 'MultiBranchECGNet', 'num\_channels': 8, 'num\_classes': 2, 'parameters': {'dropout\_rate': 0.5, 'learning\_rate': 0.001}}

optimizer: {'parameters': {'lr': 0.001, 'weight\_decay': 0.0001}, 'type': 'Adam'}

## Task: Run-29bc190c

### Configuration:

dataset: {'class\_distribution': {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}}, 'test\_size': 48, 'train\_size': 380}

loss\_function: {'parameters': {'alpha': 1.0, 'gamma': 1, 'pos\_weight': [1, 3]}, 'type': 'FocalLoss'}

model: {'architecture': 'MultiBranchECGNet', 'num\_channels': 8, 'num\_classes': 2, 'parameters': {'dropout\_rate': 0.1, 'learning\_rate': 0.001}}

optimizer: {'parameters': {'lr': 0.001, 'weight\_decay': 1e-05}, 'type': 'Adam'}

## Metrics Summary

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Task Name | Precision | Recall | Classes Distribution | Loss function | Loss parameters | Optimizer parameters | Optimizer type | dropout\_rate |
| Run-20241115-135615 | 0.455 | 0.625 | {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}} | FocalLoss | {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [1, 2]} | {'lr': 0.001, 'weight\_decay': 1e-05} | Adam | 0.3 |
| Run-57583ace | 0.333 | 0.375 | {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}} | BCEWithLogitsLoss | {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [1, 2]} | {'lr': 0.001, 'weight\_decay': 1e-05} | Adam | 0.3 |
| Run-cb5ff308 | 0.273 | 0.375 | {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}} | BCEWithLogitsLoss | {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [2, 1]} | {'lr': 0.001, 'weight\_decay': 1e-05} | Adam | 0.3 |
| Run-23a8d16a | 0.308 | 0.500 | {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}} | BCEWithLogitsLoss | {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [6, 1]} | {'lr': 0.001, 'weight\_decay': 0.0001} | Adam | 0.5 |
| Run-ca8c66a7 | 0.429 | 0.750 | {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}} | BCEWithLogitsLoss | {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [1, 6]} | {'lr': 0.001, 'weight\_decay': 0.0001} | Adam | 0.5 |
| Run-20fb01d2 | 0.400 | 0.750 | {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}} | FocalLoss | {'alpha': 3.0, 'gamma': 4.0, 'pos\_weight': [1, 6]} | {'lr': 0.001, 'weight\_decay': 0.0001} | Adam | 0.5 |
| Run-9255d68e | 0.273 | 0.750 | {'test': {0: 40, 1: 8}, 'train': {0: 132, 1: 132}} | FocalLoss | {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [1, 6]} | {'lr': 0.001, 'weight\_decay': 0.0001} | Adam | 0.5 |
| Run-006d95fc | 0.462 | 0.750 | {'test': {0: 40, 1: 8}, 'train': {0: 132, 1: 132}} | BCEWithLogitsLoss | {'alpha': 2.0, 'gamma': 3.0, 'pos\_weight': [1, 6]} | {'lr': 0.001, 'weight\_decay': 0.0001} | Adam | 0.5 |
| Run-16b9c735 | 0.400 | 0.750 | {'test': {0: 40, 1: 8}, 'train': {0: 132, 1: 132}} | FocalLoss | {'alpha': 1.0, 'gamma': 1, 'pos\_weight': [1, 6]} | {'lr': 0.001, 'weight\_decay': 0.0001} | Adam | 0.5 |
| Run-29bc190c | 0.417 | 0.625 | {'test': {0: 40, 1: 8}, 'train': {0: 248, 1: 132}} | FocalLoss | {'alpha': 1.0, 'gamma': 1, 'pos\_weight': [1, 3]} | {'lr': 0.001, 'weight\_decay': 1e-05} | Adam | 0.1 |