Rete: Resnet18.

Dataset: ORIGA-light (168 glaucoma / 480 normali)

Split: 0.8 training / 0.2 validation (640 elementi)

Augmentation: Null

Options:

```
miniBatchSize = 10;
valFrequency = floor(numel(augimdsTrain.Files)/miniBatchSize);
options = trainingOptions('sgdm', ...
    'MiniBatchSize', miniBatchSize, ...
    'MaxEpochs', 9, ...
    'InitialLearnRate', 0.001, ...
    'Shuffle', 'every-epoch', ...
    'ValidationData', testAug, ...
    'ValidationFrequency', valFrequency, ...
    'Verbose', false, ...
    'Plots', 'training-progress');
```

Accuracy: 0.7813

Test:

Glaucoma

Im0643_g_ORIGA 0.0013 0.9987 Im0644_g_ORIGA 0.5145 0.4855 T Im0645_g_ORIGA 0.8328 0.1672 T Im0646_g_ORIGA 0.9370 0.0630 T Im0647_g_ORIGA 0.1806 0.8194

Normali

Im0478_ORIGA 0.0458 0.9542 T Im0479_ORIGA 0.1546 0.8454 T Im0480_ORIGA 0.5603 0.4397 Im0481_ORIGA 0.2263 0.7737 T Im0482_ORIGA 0.0000 1.0000 T

Rete: Resnet18.

Dataset: ORIGA-light (168 glaucoma / 480 normali)

Split: 0.8 training / 0.2 validation (640 elementi)

Augmentation:

```
pixelRange = [-22 22];
scaleRange = [0.9 1.1];
angleRange = [-10 10];
imageAugmenter = imageDataAugmenter( ...
    'RandXTranslation',pixelRange, ...
    'RandYTranslation',pixelRange, ...
    'RandXScale',scaleRange, ...
    'RandYScale',scaleRange, ...
```

```
'RandRotation', angleRange);
```

Options:

```
miniBatchSize = 10;
miniBatchSize = 9;
valFrequency = floor(numel(augimdsTrain.Files)/miniBatchSize);
options = trainingOptions('sgdm', ...
    'MiniBatchSize', miniBatchSize, ...
    'MaxEpochs',12, ...
    'InitialLearnRate',0.001, ...
    'L2Regularization', 0.0005,...
    'Shuffle','every-epoch', ...
    'ValidationData',testAug, ...
    'ValidationFrequency',valFrequency, ...
    'Verbose',false, ...
    'Plots','training-progress');
```

Accuracy: 0.7734

Test:

Glaucoma

Im0643_g_ORIGA 0.3055 0.6945 Im0644_g_ORIGA 0.3175 0.6825 Im0645_g_ORIGA 0.5141 0.4859 T Im0646_g_ORIGA 0.1274 0.8726 Im0647_g_ORIGA 0.3561 0.6439

Normali

Im0478_ORIGA 0.3973 0.6027 T Im0479_ORIGA 0.0699 0.9301 T Im0480_ORIGA 0.4574 0.5426 T Im0481_ORIGA 0.3458 0.6542T Im0482_ORIGA 0.2026 0.7974 T

Rete: Resnet18.

Dataset: ORIGA-light (168 glaucoma / 480 normali)

Split: 0.8 training / 0.2 validation (640 elementi)

Augmentation:

```
pixelRange = [-22 22];
scaleRange = [0.9 1.1];
angleRange = [-10 10];
imageAugmenter = imageDataAugmenter( ...
    'RandXTranslation',pixelRange, ...
    'RandYTranslation',pixelRange, ...
    'RandXScale',scaleRange, ...
    'RandYScale',scaleRange, ...
    'RandRotation', angleRange);
```

Options:

```
miniBatchSize = 9;
valFrequency = floor(numel(augimdsTrain.Files)/miniBatchSize);
options = trainingOptions('sgdm', ...
    'MiniBatchSize',miniBatchSize, ...
    'MaxEpochs',12, ...
    'InitialLearnRate',0.0001, ...
    'L2Regularization', 0.0005,...
    'Shuffle','every-epoch', ...
    'ValidationData',testAug, ...
    'ValidationFrequency',valFrequency, ...
    'Verbose',false, ...
    'Plots','training-progress');
    'Plots','training-progress');
```

Accuracy: 0.7578

Test:

Glaucoma

Im0643_g_ORIGA 0.0069 0.9931 Im0644_g_ORIGA 0.0245 0.9755 Im0645_g_ORIGA 0.3654 0.6346 Im0646_g_ORIGA 0.1020 0.8980 Im0647_g_ORIGA 0.0289 0.9711

Normali

Im0478_ORIGA 0.3197 0.6803 T Im0479_ORIGA 0.0003 0.9997 T Im0480_ORIGA 0.0067 0.9933 T Im0481_ORIGA 0.4560 0.5440 T Im0482_ORIGA 0.0041 0.9959 T