Rete: INception -V3.

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

Split: 0.9 training / 0.1 validation (640 elementi)

Augmentation:

Options:

```
miniBatchSize = 9;
valFrequency = floor(numel(augimdsTrain.Files)/miniBatchSize);
options = trainingOptions('sgdm', ...
    'MiniBatchSize',miniBatchSize, ...
    'MaxEpochs',13, ...
    'InitialLearnRate',0.001, ...
    'L2Regularization', 0.0005,...
    'Shuffle','every-epoch', ...
    'ValidationData',testAug, ...
    'ValidationFrequency',valFrequency, ...
    'Verbose',false, ...
    'Plots','training-progress'
```

Accuracy: 0.7578
Test:
Glaucoma
Im0646_g_ORIGA 0.0905 0.9095
Im0647_g_ORIGA 0.0366 0.9634
Im0648_g_ORIGA 0.0402 0.9598
Im0649_g_ORIGA 0.8169 0.1831 T
Im0650_g_ORIGA 0.0504 0.9496

Normali
Im0478_ORIGA 0.0066 0.9934 T
Im0479_ORIGA 0.0008 0.9992 T
Im0480_ORIGA 0.0001 0.9999 T
Im0481_ORIGA 0.1374 0.8626 T
Im0482_ORIGA 0.0000 1.0000 T

Rete: INception -V3.

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

Split: 0.9 training / 0.1 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 = 20;
valFrequency = floor(numel(augimdsTrain.Files)/miniBatchSize);
options = trainingOptions('sgdm', ...
    'MiniBatchSize',miniBatchSize, ...
    'MaxEpochs',10, ...
    'InitialLearnRate',0.0001, ...
    'L2Regularization', 0.0005,...
    'Shuffle','every-epoch', ...
    'ValidationData',testAug, ...
    'ValidationFrequency',valFrequency, ...
    'Verbose',false, ...
    'Plots','training-progress');
```

Accuracy: 0.7969
Test:
Glaucoma
Im0646_g_ORIGA 0.0446 0.9554
Im0647_g_ORIGA 0.3163 0.6837
Im0648_g_ORIGA 0.2512 0.7488
Im0649_g_ORIGA 0.2945 0.7055
Im0650_g_ORIGA 0.1394 0.8606

Normali
Im0478_ORIGA 0.1296 0.8704T
Im0479_ORIGA 0.0713 0.9287 T
Im0480_ORIGA 00.0700 0.9300T
Im0481_ORIGA 0.0700 0.9300T
Im0482_ORIGA 0.1241 0.8759 T

Rete: INception -V3.

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

Split: 0.9 training / 0.1 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;
valFrequency = floor(numel(augimdsTrain.Files)/miniBatchSize);
options = trainingOptions('sgdm', ...
    'MiniBatchSize',miniBatchSize, ...
    'MaxEpochs',15, ...
    'InitialLearnRate',0.0001, ...
    'L2Regularization', 0.0005,...
    'Shuffle','every-epoch', ...
    'ValidationData',testAug, ...
    'ValidationFrequency',valFrequency, ...
    'Verbose',false, ...
    'Plots','training-progress');
```

Accuracy: 0.7969

Test:

Glaucoma

Im0646_g_ORIGA 0.1784 0.8216

Im0647_g_ORIGA 0.4941 0.5059

Im0648_g_ORIGA 0.0240 0.9760

Im0649_g_ORIGA 0.7961 0.2039 T

Im0650_g_ORIGA 0.3068 0.6932

Normali

Im0478_ORIGA 0.0904 0.9096 T

Im0479_ORIGA 0.0233 0.9767 T

Im0480_ORIGA 0.4845 0.5155 T

Im0481_ORIGA 0.0319 0.9681 T

Im0482_ORIGA 0.0204 0.9796 T
