Entrenamiento Xception

Para el Fold 0: 10 épocas

```
Running for iteration 5 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 28s 6s/step
Accuracy value for test images: 0.9372
    ---- Running for iteration 6 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 32s 6s/step
Accuracy value for test images: 0.9405
    ---- Running for iteration 7 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 35s 6s/step
Accuracy value for test images:0.9339
          Running for iteration 8 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [------] - 31s 6s/step
Accuracy value for test images: 0.9417
---- Running for iteration 9 of 10 Size test data:156
Size test labels:156
Size filenames: 156
Number of test images: 156
5/5 [======] - 45s 9s/step
Accuracy value for test images: 0.9418
           Running for iteration 10 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 28s 6s/step
Accuracy value for test images: 0.9306
95.0 confidence interval 93.13% and 94.38%
```

Para el Fold 1:

```
Doing for Fold: 1
          Running for iteration 1 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======== ] - 27s 5s/step
Accuracy value for test images: 0.9688
    ---- Running for iteration 2 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 26s 5s/step
Accuracy value for test images: 0.9684
---- Running for iteration 3 of 10 Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 25s 5s/step
Accuracy value for test images: 0.9687
    ---- Running for iteration 4 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 27s 5s/step
Accuracy value for test images: 0.9757
```

```
---- Running for iteration 5 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 27s 5s/step
Accuracy value for test images:0.9691
    ---- Running for iteration 6 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 26s 5s/step
Accuracy value for test images:0.9682
    ---- Running for iteration 7 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 26s 5s/step
Accuracy value for test images:0.9712
    ---- Running for iteration 8 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
Accuracy value for test images:0.9768
    ---- Running for iteration 9 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 27s 5s/step
Accuracy value for test images:0.988
    ---- Running for iteration 10 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======== ] - 28s 5s/step
Accuracy value for test images:0.9827
95.0 confidence interval 96.82% and 98.68%
```

```
Doing for Fold: 2
    ---- Running for iteration 1 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 27s 5s/step
Accuracy value for test images: 0.957
    ---- Running for iteration 2 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
                       =======] - 26s 5s/step
Accuracy value for test images:0.9592
          Running for iteration 3 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 27s 5s/step
Accuracy value for test images: 0.9743
---- Running for iteration 4 of 10 Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 29s 6s/step
Accuracy value for test images:0.962
```

```
Running for iteration 5 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
                      ======= ] - 30s 6s/step
Accuracy value for test images:0.9691
    ---- Running for iteration 6 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=====
                      ========1 - 28s 6s/step
Accuracy value for test images:0.9568
          Running for iteration 7 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 33s 7s/step
Accuracy value for test images:0.9586
    ---- Running for iteration 8 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 27s 5s/step
Accuracy value for test images:0.9689
    ---- Running for iteration 9 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
                     ========] - 29s 5s/step
5/5 [=====
Accuracy value for test images:0.9621
```

Para el Fold 3:

```
Doing for Fold: 3
    ---- Running for iteration 1 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 27s 5s/step
Accuracy value for test images:0.9466
    ---- Running for iteration 2 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 26s 5s/step
Accuracy value for test images:0.9437
    ---- Running for iteration 3 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 29s 6s/step
Accuracy value for test images:0.9428
    ---- Running for iteration 4 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======= ] - 29s 6s/step
Accuracy value for test images:0.9366
```

```
---- Running for iteration 5 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 31s 6s/step
Accuracy value for test images:0.9481
      ---- Running for iteration 6 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 28s 5s/step
Accuracy value for test images: 0.9447
    ---- Running for iteration 7 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======== ] - 29s 6s/step
Accuracy value for test images:0.9391
    ---- Running for iteration 8 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 28s 6s/step
Accuracy value for test images:0.9475
           Running for iteration 9 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 35s 6s/step
Accuracy value for test images:0.9463
     ---- Running for iteration 10 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======== ] - 28s 5s/step
Accuracy value for test images:0.9392
95.0 confidence interval 93.72% and 94.80%
```

Para el Fold 4:

```
Doing for Fold: 4
    ---- Running for iteration 1 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 29s 6s/step
Accuracy value for test images:0.9689
      --- Running for iteration 2 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
Accuracy value for test images:0.9608
    ---- Running for iteration 3 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 33s 6s/step
Accuracy value for test images:0.9733
    ---- Running for iteration 4 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======= ] - 31s 6s/step
Accuracy value for test images:0.9558
```

```
---- Running for iteration 5 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 29s 5s/step
Accuracy value for test images:0.9602
     ---- Running for iteration 6 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 30s 5s/step
Accuracy value for test images: 0.955
     ---- Running for iteration 7 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
Accuracy value for test images:0.9689
     ---- Running for iteration 8 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======= ] - 40s 8s/step
Accuracy value for test images:0.9614
     ---- Running for iteration 9 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 44s 9s/step
Accuracy value for test images:0.9574
    ---- Running for iteration 10 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 44s 8s/step
Accuracy value for test images:0.9619
95.0 confidence interval 95.52% and 97.23%
```

Para el Fold 5:

```
Doing for Fold: 5
    ---- Running for iteration 1 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 37s 7s/step
Accuracy value for test images: 0.9676
    ---- Running for iteration 2 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 32s 6s/step
Accuracy value for test images: 0.9651
    ---- Running for iteration 3 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 30s 6s/step
Accuracy value for test images:0.9668
    ---- Running for iteration 4 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======== ] - 28s 5s/step
Accuracy value for test images: 0.9707
    ---- Running for iteration 5 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 29s 5s/step
Accuracy value for test images: 0.9758
```

```
---- Running for iteration 6 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 30s 6s/step
Accuracy value for test images:0.9674
          Running for iteration 7 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 29s 6s/step
Accuracy value for test images:0.9663
    ---- Running for iteration 8 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======= ] - 31s 6s/step
Accuracy value for test images:0.9657
    ---- Running for iteration 9 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 32s 6s/step
Accuracy value for test images:0.9681
    ---- Running for iteration 10 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 30s 6s/step
Accuracy value for test images:0.9638
95.0 confidence interval 96.41% and 97.47%
```

Para el Fold 6

```
Doing for Fold: 6
    ---- Running for iteration 1 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 28s 5s/step
Accuracy value for test images:0.9583
    ---- Running for iteration 2 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 32s 7s/step
Accuracy value for test images: 0.9549
    ---- Running for iteration 3 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 31s 6s/step
Accuracy value for test images:0.9512
    ---- Running for iteration 4 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 29s 5s/step
Accuracy value for test images:0.9509
    ---- Running for iteration 5 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 28s 5s/step
Accuracy value for test images:0.9482
```

```
---- Running for iteration 6 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 38s 8s/step
Accuracy value for test images:0.9485
          Running for iteration 7 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 28s 5s/step
Accuracy value for test images:0.9582
    ---- Running for iteration 8 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 29s 6s/step
Accuracy value for test images:0.9471
    ---- Running for iteration 9 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 27s 5s/step
Accuracy value for test images: 0.9678
    ---- Running for iteration 10 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 28s 5s/step
Accuracy value for test images:0.9514
95.0 confidence interval 94.73% and 96.57%
```

Para el Fold 7:

```
Doing for Fold: 7
    ---- Running for iteration 1 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 29s 6s/step
Accuracy value for test images:0.9574
    ---- Running for iteration 2 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 34s 7s/step
Accuracy value for test images: 0.9564
    ---- Running for iteration 3 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 29s 6s/step
Accuracy value for test images:0.9542
    ---- Running for iteration 4 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 27s 5s/step
Accuracy value for test images:0.9556
    ---- Running for iteration 5 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 30s 6s/step
Accuracy value for test images:0.9525
```

```
---- Running for iteration 6 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 37s 8s/step
Accuracy value for test images: 0.9639
       --- Running for iteration 7 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 27s 5s/step
Accuracy value for test images:0.9545
    ---- Running for iteration 8 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 27s 5s/step
Accuracy value for test images:0.9524
    ---- Running for iteration 9 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 28s 5s/step
Accuracy value for test images:0.9526
    ---- Running for iteration 10 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 35s 7s/step
Accuracy value for test images:0.9621
95.0 confidence interval 95.24% and 96.35%
```

Para el Fold 8:

```
---- Running for iteration 6 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=====] - 29s 6s/step
Accuracy value for test images: 0.9548
          Running for iteration 7 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 29s 5s/step
Accuracy value for test images:0.9569
          Running for iteration 8 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======== ] - 26s 5s/step
Accuracy value for test images:0.9612
---- Running for iteration 9 of 10 Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 28s 6s/step
Accuracy value for test images: 0.9568
    ---- Running for iteration 10 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 28s 5s/step
Accuracy value for test images:0.9681
95.0 confidence interval 95.34% and 96.78%
```

Para el Fold 9:

```
Doing for Fold: 9
    ---- Running for iteration 1 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======= ] - 31s 6s/step
Accuracy value for test images:0.9772
    ---- Running for iteration 2 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 31s 6s/step
Accuracy value for test images:0.9748
    ---- Running for iteration 3 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======= ] - 34s 7s/step
Accuracy value for test images:0.9753
    ---- Running for iteration 4 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======== ] - 30s 6s/step
Accuracy value for test images:0.9757
    ---- Running for iteration 5 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 27s 5s/step
Accuracy value for test images:0.9782
```

```
---- Running for iteration 6 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 27s 5s/step
Accuracy value for test images:0.9774
          Running for iteration 7 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 31s 6s/step
Accuracy value for test images: 0.9746
    ---- Running for iteration 8 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 35s 7s/step
Accuracy value for test images:0.9784
    ---- Running for iteration 9 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 32s 6s/step
Accuracy value for test images:0.98
    ---- Running for iteration 10 of 10
Size test data:156
Size test labels:156
Size filenames:156
Accuracy value for test images:0.9848
95.0 confidence interval 97.46% and 98.37%
Average for lower values: Fold: 9 -> 0.9541
Average for higher values: Fold: 9 -> 0.9679
95.0 Average confidence interval 95.41% and 96.79%
```

```
Doing for Fold: 8
          Running for iteration 1 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [=======] - 33s 6s/step
Accuracy value for test images: 0.9669
    ---- Running for iteration 2 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 29s 5s/step
Accuracy value for test images:0.953
    ---- Running for iteration 3 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======] - 30s 6s/step
Accuracy value for test images:0.9616
    ---- Running for iteration 4 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======== ] - 30s 6s/step
Accuracy value for test images:0.9653
           Running for iteration 5 of 10
Size test data:156
Size test labels:156
Size filenames:156
Number of test images: 156
5/5 [======== ] - 35s 7s/step
Accuracy value for test images:0.9577
```