

```
In [74]: 'C:/Users/User/Documents/Python Scripts/Emotions/Resumo.py'
        = 'C:/Users/User/Documents/Python Scripts/Emotions'
```

```
Fitting 3 folds for each of 200 candidates, totalling 600 fits
[Parallel(n_jobs=1)]: Using backend SequentialBackend with 1 concurrent
workers.
```

```
Model with rank: 1
```

```
Mean validation score: 0.813 (std: 0.004)
```

```
Parameters: {'colsample_bytree': 0.97000771555796, 'gamma':
0.35956053931056275, 'learning_rate': 0.05862303494712339, 'max_depth': 8,
'n_estimators': 72, 'subsample': 0.9337682505327215}
```

```
[0]    validation_0-error:0.157895
```

```
Will train until validation_0-error hasn't improved in 5 rounds.
```

```
[1]    validation_0-error:0.184211
```

```
[2]    validation_0-error:0.210526
```

```
[3]    validation_0-error:0.236842
```

```
[4]    validation_0-error:0.184211
```

```
[5]    validation_0-error:0.184211
```

```
Stopping. Best iteration:
```

```
[0]    validation_0-error:0.157895
```

```
[0]    validation_0-error:0.210526
```

```
Will train until validation_0-error hasn't improved in 5 rounds.
```

```
[1]    validation_0-error:0.157895
```

```
[Parallel(n_jobs=1)]: Done 600 out of 600 | elapsed: 55.1s finished
```

```
[2]    validation_0-error:0.210526
```

```
[3]    validation_0-error:0.210526
```

```
[4]    validation_0-error:0.210526
```

```
[5]    validation_0-error:0.210526
```

```
[6]    validation_0-error:0.263158
```

```
Stopping. Best iteration:
```

```
[1]    validation_0-error:0.157895
```

```
[0]    validation_0-error:0.210526
```

```
Will train until validation_0-error hasn't improved in 5 rounds.
```

```
[1]    validation_0-error:0.157895
```

```
[2]    validation_0-error:0.157895
```

```
[3]    validation_0-error:0.157895
```

```
[4]    validation_0-error:0.184211
```

```
[5]    validation_0-error:0.184211
```

```
[6]    validation_0-error:0.184211
```

```
Stopping. Best iteration:
```

```
[1]    validation_0-error:0.157895
```

```
[0]    validation_0-error:0.315789
```

```
Will train until validation_0-error hasn't improved in 5 rounds.
```

```
[1]    validation_0-error:0.289474
```

```
[2]    validation_0-error:0.315789
```

```
[3]    validation_0-error:0.263158
```

```
[4]    validation_0-error:0.289474
```

```
[5]    validation_0-error:0.263158
```

```
[6]    validation_0-error:0.263158
```

```
[7]    validation_0-error:0.289474
```

```
[8]    validation_0-error:0.289474
```

```
Stopping. Best iteration:
```

```
[3]    validation_0-error:0.263158
```

```
[0]    validation_0-error:0.263158
```

```
Will train until validation_0-error hasn't improved in 5 rounds.
```

```
[1]    validation_0-error:0.263158
```

```
[2]    validation_0-error:0.236842
```

```

[3] validation_0-error:0.210526
[4] validation_0-error:0.236842
[5] validation_0-error:0.210526
[6] validation_0-error:0.210526
[7] validation_0-error:0.236842
[8] validation_0-error:0.210526
Stopping. Best iteration:
[3] validation_0-error:0.210526

[0] validation_0-error:0.184211
Will train until validation_0-error hasn't improved in 5 rounds.
[1] validation_0-error:0.184211
[2] validation_0-error:0.210526
[3] validation_0-error:0.184211
[4] validation_0-error:0.210526
[5] validation_0-error:0.184211
Stopping. Best iteration:
[0] validation_0-error:0.184211

[0] validation_0-error:0.184211
Will train until validation_0-error hasn't improved in 5 rounds.
[1] validation_0-error:0.131579
[2] validation_0-error:0.210526
[3] validation_0-error:0.184211
[4] validation_0-error:0.157895
[5] validation_0-error:0.131579
[6] validation_0-error:0.131579
Stopping. Best iteration:
[1] validation_0-error:0.131579

[0] validation_0-error:0.210526
Will train until validation_0-error hasn't improved in 5 rounds.
[1] validation_0-error:0.184211
[2] validation_0-error:0.157895
[3] validation_0-error:0.157895
[4] validation_0-error:0.157895
[5] validation_0-error:0.184211
[6] validation_0-error:0.184211
[7] validation_0-error:0.184211
Stopping. Best iteration:
[2] validation_0-error:0.157895

[0] validation_0-error:0.131579
Will train until validation_0-error hasn't improved in 5 rounds.
[1] validation_0-error:0.105263
[2] validation_0-error:0.105263
[3] validation_0-error:0.105263
[4] validation_0-error:0.105263
[5] validation_0-error:0.105263
[6] validation_0-error:0.105263
Stopping. Best iteration:
[1] validation_0-error:0.105263

[0] validation_0-error:0.236842
Will train until validation_0-error hasn't improved in 5 rounds.
[1] validation_0-error:0.210526
[2] validation_0-error:0.289474
[3] validation_0-error:0.236842
[4] validation_0-error:0.263158
[5] validation_0-error:0.210526
[6] validation_0-error:0.184211
[7] validation_0-error:0.210526
[8] validation_0-error:0.236842

```

```
[9]      validation_0-error:0.236842
[10]     validation_0-error:0.236842
[11]     validation_0-error:0.236842
Stopping. Best iteration:
[6]      validation_0-error:0.184211
```

```
best score: 0.184211, best iteration: 6, best ntree limit 7
[[ 3  5]
 [ 3 27]]
```

```
Scores: [0.45883147]
Mean: 0.459
Std: 0.000
[[ 4  2]
 [ 4 28]]
```

```
Scores: [0.45883147 0.39735971]
Mean: 0.428
Std: 0.031
[[ 4  4]
 [ 2 28]]
```

```
Scores: [0.45883147 0.39735971 0.39735971]
Mean: 0.418
Std: 0.029
[[ 3 10]
 [ 0 25]]
```

```
Scores: [0.45883147 0.39735971 0.39735971 0.51298918]
Mean: 0.442
Std: 0.048
[[ 0  7]
 [ 3 28]]
```

```
Scores: [0.45883147 0.39735971 0.39735971 0.51298918 0.51298918]
Mean: 0.456
Std: 0.052
[[ 2  6]
 [ 1 29]]
```

```
Scores: [0.45883147 0.39735971 0.39735971 0.51298918 0.51298918 0.42919754]
Mean: 0.451
Std: 0.048
[[ 3  3]
 [ 4 28]]
```

```
Scores: [0.45883147 0.39735971 0.39735971 0.51298918 0.51298918 0.42919754
0.42919754]
Mean: 0.448
Std: 0.045
[[ 2  6]
 [ 2 28]]
```

```
Scores: [0.45883147 0.39735971 0.39735971 0.51298918 0.51298918 0.42919754
0.42919754 0.45883147]
```

```
Mean: 0.450
Std: 0.043
[[ 2  2]
 [ 1 33]]
```

```
Scores: [0.45883147 0.39735971 0.39735971 0.51298918 0.51298918 0.42919754
0.42919754 0.45883147 0.28097574]
Mean: 0.431
Std: 0.066
[[ 2  7]
 [ 1 28]]
```

```
Scores: [0.45883147 0.39735971 0.39735971 0.51298918 0.51298918 0.42919754
0.42919754 0.45883147 0.28097574 0.45883147]
Mean: 0.434
Std: 0.064
Acertos Over 1.5: 282/334 - 84.43%
Acertos de Under 1.5 :25/46 - 54.35%
```

In [75]: