

Model: top_DecisionTree_2.5

HyperParams:

```
{
  "criterion": [
    "entropy"
  ],
  "max_depth": [
    2,
    5
  ],
  "min_samples_split": [
    1,
    2,
    3
  ]
}
```

Classifications: Emotions

Confusion Matrix:

View Visual matrix at:

[./precision/confusion_matrix_figures/top_DecisionTree_2.5_emotions_1.png](#)

```
[[ 0 23 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 42 0 0 211 0 4940 0 0 0 0
  0 5 0 0]
 [ 0 1028 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 18 0 0 30 0 2043 0 0 0 0
  0 11 0 0]
 [ 0 20 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 10 0 0 16 0 2567 0 0 0 0
  0 12 0 0]
 [ 0 68 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 24 0 0 47 0 4007 0 0 0 0
  0 23 0 0]
 [ 0 42 0 0 0 1 0 0 0 1 0 0 0
  0 0 0 22 0 0 84 0 5404 0 0 0 0
  0 8 0 0]
 [ 0 8 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 5 0 0 37 0 1656 0 0 0 0
  0 42 0 0]
 [ 0 28 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 10 0 0 21 0 2386 0 0 0 0
  0 11 0 0]
 [ 0 32 0 0 0 0 0 0 0 0 1 0 0
  0 0 0 9 0 0 28 0 2828 0 0 0 0
  0 12 0 0]
 [ 0 8 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 6 0 0 39 0 1026 0 0 0 0
  0 1 0 0]
 [ 0 22 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 12 0 0 21 0 2356 0 0 0 0
  0 36 0 0]
 [ 0 38 0 0 0 2 0 0 0 0 0 0 0
  0 0 0 21 0 0 27 0 3758 0 0 0 0]
```

```

0 34 0 0]
[ 0 11 0 0 0 0 0 0 0 0 0 0
0 0 0 3 0 0 6 0 1413 0 0 0
0 4 0 0]
[ 0 8 0 0 0 0 0 0 0 0 0 0
0 0 0 5 0 0 8 0 708 0 0 0
0 20 0 0]
[ 0 7 0 0 0 0 0 0 0 0 0 0
0 0 0 6 0 0 43 0 1495 0 0 0
0 2 0 0]
[ 0 14 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 5 0 864 0 0 0
0 2 0 0]
[ 0 11 0 0 0 0 0 0 0 0 0 0
0 0 0 2635 0 0 31 0 846 0 0 0
0 66 0 0]
[ 0 1 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 1 0 160 0 0 0
0 12 0 0]
[ 0 67 0 0 0 1 0 0 0 0 0 0
0 0 0 13 0 0 122 0 1908 0 0 0
0 3 0 0]
[ 0 30 0 0 0 4 0 0 0 0 0 0
0 0 0 10 0 0 1561 0 929 0 0 0
0 3 0 0]
[ 0 2 0 0 0 0 0 0 0 0 0 0
0 0 0 1 0 0 2 0 410 0 0 0
0 3 0 0]
[ 0 284 0 1 0 5 0 0 0 0 3 0
0 0 0 113 0 0 336 0 26628 0 0 0
0 100 0 0]
[ 0 14 0 0 0 0 0 0 0 0 0 0
0 0 0 10 0 0 31 0 2178 0 0 0
0 7 0 0]
[ 0 1 0 0 0 0 0 0 0 0 0 0
0 0 0 1 0 0 0 0 362 0 0 0
0 0 0 0]
[ 0 21 0 0 0 0 0 0 0 0 0 0
0 0 0 6 0 0 23 0 2294 0 0 0
0 20 0 0]
[ 0 3 0 0 0 0 0 0 0 0 0 0
0 0 0 22 0 0 2 0 374 0 0 0
0 0 0 0]
[ 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 1 0 307 0 0 0
0 393 0 0]
[ 0 16 0 0 0 0 0 0 0 1 0 0
0 0 0 4 0 0 12 0 1723 0 0 0
0 191 0 0]
[ 0 15 0 0 0 0 0 0 0 0 0 0
0 0 0 2 0 0 10 0 1708 0 0 0
0 4 0 0]]

```

Classsification Report:

View formatted classification report at:

[./precision/classification_reports/top_DecisionTree_2.5_2.txt](#)

	precision	recall	f1-score	support
admiration	0.00	0.00	0.00	5221
amusement	0.56	0.33	0.42	3130
anger	0.00	0.00	0.00	2625
annoyance	0.00	0.00	0.00	4169
approval	0.00	0.00	0.00	5562
caring	0.00	0.00	0.00	1748
confusion	0.00	0.00	0.00	2456
curiosity	0.00	0.00	0.00	2910
desire	0.00	0.00	0.00	1080
disappointment	0.00	0.00	0.00	2447
disapproval	0.00	0.00	0.00	3880
disgust	0.00	0.00	0.00	1437
embarrassment	0.00	0.00	0.00	749
excitement	0.00	0.00	0.00	1553
fear	0.00	0.00	0.00	885
gratitude	0.88	0.73	0.80	3589
grief	0.00	0.00	0.00	174
joy	0.00	0.00	0.00	2114
love	0.57	0.62	0.59	2537
nervousness	0.00	0.00	0.00	418
neutral	0.34	0.97	0.51	27470
optimism	0.00	0.00	0.00	2240
pride	0.00	0.00	0.00	364
realization	0.00	0.00	0.00	2364
relief	0.00	0.00	0.00	401
remorse	0.38	0.56	0.46	701
sadness	0.00	0.00	0.00	1947
surprise	0.00	0.00	0.00	1739
accuracy		0.38		85910
macro avg	0.10	0.11	0.10	85910
weighted avg	0.19	0.38	0.23	85910

Classifications: Emotions

Confusion Matrix:

View Visual matrix at:

[./precision/confusion_matrix_figures/top_DecisionTree_2.5_sentiments_1.png](#)

```
[[ 2  2 9138 327]
 [ 1 23 18633 775]
 [ 1 15 26244 1210]
 [ 4 38 21701 7796]]
```

Classsification Report:

View formatted classification report at:

[./precision/classification_reports/top_DecisionTree_2.5_3.txt](#)

	precision	recall	f1-score	support
ambiguous	0.25	0.00	0.00	9469
negative	0.29	0.00	0.00	19432
neutral	0.35	0.96	0.51	27470
positive	0.77	0.26	0.39	29539
accuracy			0.40	85910
macro avg	0.42	0.31	0.23	85910
weighted avg	0.47	0.40	0.30	85910