

Model: top_DecisionTree

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_emotions_0.png](#)

```
[[ 0  6  0  0  0  0  0  0  0  0  0  0  0  
  0  0  0 16  0  0 88  0 2023  0  0  0  
  0  1  0  0]  
[ 0 385  0  0  0  0  0  0  0  0  0  0  
  0  0  0  6  0  0 18  0 819  0  0  0  
  0  5  0  0]  
[ 0  6  0  0  0  0  0  0  0  0  0  0  
  0  0  0  4  0  0  3  0 1042  0  0  0  
  0  7  0  0]  
[ 0 26  0  0  0  0  0  0  0  0  0  0  
  0  0  0  7  0  0 17  0 1631  0  0  0  
  0  7  0  0]  
[ 0 13  0  0  0  0  0  0  0  0  0  0  
  0  0  0 12  0  0 34  0 2164  0  0  0  
  0  3  0  0]  
[ 0  3  0  0  0  0  0  0  0  0  0  0  
  0  0  0  1  0  0 15  0  635  0  0  0  
  0 15  0  0]  
[ 0  9  0  0  0  0  0  0  0  0  0  0  
  0  0  0  6  0  0 11  0  936  0  0  0  
  0  3  0  0]  
[ 0  8  0  0  0  0  0  0  0  0  0  0  
  0  0  0  7  0  0 15  0 1109  0  0  0  
  0  4  0  0]  
[ 0  4  0  0  0  0  0  0  0  0  0  0  
  0  0  0  1  0  0 23  0  411  0  0  0  
  0  0  0  0]  
[ 0 13  0  0  0  0  0  0  0  0  0  0  
  0  0  0  6  0  0  6  0  932  0  0  0  
  0 13  0  0]  
[ 0 14  0  0  0  0  0  0  0  0  0  0  
  0  0  0 12  0  0 15  0 1479  0  0  0]
```

```

0 17 0 0]
[ 0 5 0 0 0 0 0 0 0 0 0 0
0 0 0 1 0 0 2 0 574 0 0 0
0 3 0 0]
[ 0 4 0 0 0 0 0 0 0 0 0 0
0 0 0 2 0 0 5 0 286 0 0 0
0 6 0 0]
[ 0 4 0 0 0 0 0 0 0 0 0 0
0 0 0 1 0 0 11 0 581 0 0 0
0 0 0 0]
[ 0 4 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 2 0 310 0 0 0
0 1 0 0]
[ 0 2 0 0 0 0 0 0 0 0 0 0
0 0 0 1033 0 0 16 0 335 0 0 0
0 23 0 0]
[ 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 1 0 51 0 0 0
0 6 0 0]
[ 0 28 0 0 0 0 0 0 0 0 0 0
0 0 0 4 0 0 46 0 735 0 0 0
0 1 0 0]
[ 0 11 0 0 1 0 0 0 0 0 0 0
0 0 0 5 0 0 632 0 353 0 0 0
0 2 0 0]
[ 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 1 0 0 0 0 185 0 0 0
0 1 0 0]
[ 0 116 0 0 0 0 0 0 0 0 0 0
0 0 0 52 0 0 139 0 10724 0 0 0
0 36 0 0]
[ 0 6 0 0 0 0 0 0 0 0 0 0
0 0 0 3 0 0 17 0 885 0 0 0
0 3 0 0]
[ 0 1 0 0 0 0 0 0 0 0 0 0
0 0 0 1 0 0 0 0 155 0 0 0
0 0 0 0]
[ 0 10 0 0 0 0 0 0 0 0 0 0
0 0 0 4 0 0 10 0 942 0 0 0
0 6 0 0]
[ 0 2 0 0 0 0 0 0 0 0 0 0
0 0 0 8 0 0 2 0 144 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 0 0 109 0 0 0
0 163 0 0]
[ 0 5 0 0 0 0 0 0 0 0 0 0
0 0 0 2 0 0 5 0 696 0 0 0
0 87 0 0]
[ 0 4 0 0 0 0 0 0 0 0 0 0
0 0 0 2 0 0 3 0 680 0 0 0
0 2 0 0]]

```

Classsification Report:

View formatted classification report at:

[./precision/classification_reports/top_DecisionTree_0.txt](#)

	precision	recall	f1-score	support
admiration	0.00	0.00	0.00	2134
amusement	0.56	0.31	0.40	1233
anger	0.00	0.00	0.00	1062
annoyance	0.00	0.00	0.00	1688
approval	0.00	0.00	0.00	2226
caring	0.00	0.00	0.00	669
confusion	0.00	0.00	0.00	965
curiosity	0.00	0.00	0.00	1143
desire	0.00	0.00	0.00	439
disappointment	0.00	0.00	0.00	970
disapproval	0.00	0.00	0.00	1537
disgust	0.00	0.00	0.00	585
embarrassment	0.00	0.00	0.00	303
excitement	0.00	0.00	0.00	597
fear	0.00	0.00	0.00	317
gratitude	0.86	0.73	0.79	1409
grief	0.00	0.00	0.00	58
joy	0.00	0.00	0.00	814
love	0.56	0.63	0.59	1004
nervousness	0.00	0.00	0.00	187
neutral	0.35	0.97	0.51	11067
optimism	0.00	0.00	0.00	914
pride	0.00	0.00	0.00	157
realization	0.00	0.00	0.00	972
relief	0.00	0.00	0.00	156
remorse	0.39	0.60	0.47	272
sadness	0.00	0.00	0.00	795
surprise	0.00	0.00	0.00	691
accuracy		0.38		34364
macro avg	0.10	0.12	0.10	34364
weighted avg	0.19	0.38	0.23	34364

Classifications: Emotions

Confusion Matrix:

View Visual matrix at:

[./precision/confusion_matrix_figures/top_DecisionTree_sentiments_0.png](#)

```
[[ 1  0 3629 141]
 [ 0  5 7442 327]
 [ 0  1 10545 521]
 [ 0  2 8639 3111]]
```

Classsification Report:

View formatted classification report at:

[./precision/classification_reports/top_DecisionTree_1.txt](#)

	precision	recall	f1-score	support
ambiguous	1.00	0.00	0.00	3771
negative	0.62	0.00	0.00	7774
neutral	0.35	0.95	0.51	11067
positive	0.76	0.26	0.39	11752
accuracy			0.40	34364
macro avg	0.68	0.30	0.23	34364
weighted avg	0.62	0.40	0.30	34364