

```
Test size: 0.2
Model: top_MLP
HyperParams:
{
  "activation": [
    "logistic",
    "tanh",
    "relu",
    "identity"
  ],
  "hidden_layer_sizes": [
    [
      10,
      30
    ],
    [
      10,
      10,
      10
    ]
  ],
  "solver": [
    "adam",
    "sgd"
  ],
  "max_iter": [
    2
  ]
}
```

Classifications: Emotions

Confusion Matrix:

View Visual matrix at: [./precision/confusion\\_matrix\\_figures/top\\_MLP\\_emotions\\_0.png](#)

```
[[1130 24 8 3 26 8 0 4 3 0 4 2 1 1
  0 35 0 44 91 0 700 24 0 0 0 0 2 24]
 [ 32 686 4 6 2 1 0 3 1 0 1 3 1 1
  2 15 0 29 13 0 417 2 0 0 0 1 1 12]
 [ 5 18 252 54 1 2 0 3 1 4 10 14 0 0
  4 4 0 5 3 0 661 5 0 0 0 3 8 5]
 [ 19 51 107 74 9 5 4 14 5 9 31 17 0 0
  1 7 0 8 14 0 1265 13 0 0 0 5 15 15]
 [ 120 26 6 13 111 14 8 5 8 7 19 4 0 1
  3 17 0 23 38 0 1746 30 0 1 0 5 16 5]
 [ 28 7 3 2 1 33 2 6 3 0 5 2 0 0
  1 9 0 9 8 0 490 37 0 0 0 14 7 2]
 [ 13 14 11 8 7 0 63 22 0 0 23 1 0 0
  4 9 0 2 15 0 750 4 0 8 0 1 3 7]
 [ 19 12 13 2 0 1 11 122 1 4 8 2 2 0
  2 7 0 5 16 0 889 6 0 0 0 3 2 16]
 [ 16 9 1 4 2 10 1 3 66 0 3 1 0 0
  1 1 0 4 21 0 251 39 0 0 0 1 2 3]
 [ 6 20 21 12 12 3 3 2 3 35 11 10 0 0
  2 7 0 1 8 0 732 10 0 1 0 9 55 7]
```

```

[ 16 28 25 28 15 5 16 1 1 3 65 10 2 0
 6 12 0 5 7 0 1237 15 0 1 0 14 17 8]
[ 5 13 55 24 1 0 0 1 1 11 19 97 1 0
 6 2 0 1 1 0 328 3 0 0 0 2 8 6]
[ 2 6 8 11 0 1 3 2 2 1 9 11 8 0
 1 2 0 2 5 0 206 2 0 1 0 7 4 9]
[ 84 13 15 1 4 0 2 11 0 1 0 1 0 23
 1 7 0 45 17 0 338 8 0 0 0 1 6 19]
[ 1 10 5 5 1 1 0 1 0 4 8 1 0 1
 75 0 0 2 2 0 194 3 0 0 0 0 2 1]
[ 96 8 1 0 2 6 0 1 1 0 0 0 0 0
 0 1088 0 38 9 0 124 14 0 0 0 17 4 0]
[ 1 0 1 0 0 0 0 0 0 0 0 0 0 0
 2 2 0 0 0 0 43 1 0 0 0 4 4 0]
[ 85 105 3 2 3 1 0 2 0 1 1 0 0 1
 2 21 0 204 62 0 306 8 0 0 0 1 4 2]
[ 61 14 2 1 2 0 0 4 0 0 3 0 0 0
 1 14 0 14 664 0 214 5 0 0 0 2 1 2]
[ 3 2 3 2 4 1 0 0 1 10 6 1 0 0
 7 1 0 0 0 0 136 3 0 0 0 0 6 1]
[ 277 195 120 81 51 32 44 70 22 20 139 27 2 8
 23 70 0 81 122 0 9424 95 0 6 0 32 72 54]
[ 54 9 4 3 10 13 3 2 16 3 10 0 0 0
 0 11 0 12 15 0 444 296 0 0 0 0 6 3]
[ 30 1 0 1 3 0 0 0 0 2 0 1 0 0
 0 3 0 9 1 0 101 2 0 0 0 0 2 1]
[ 24 18 9 6 14 1 6 1 2 6 8 3 0 0
 6 8 0 3 8 0 797 9 0 8 0 3 10 22]
[ 14 3 0 0 2 0 1 0 0 0 0 0 0 0
 1 11 0 15 5 0 97 3 0 0 0 0 4 0]
[ 1 9 5 0 2 4 2 0 3 3 3 3 0 0
 0 5 0 0 0 0 74 2 0 0 0 128 28 0]
[ 8 11 9 5 9 4 0 0 4 8 4 7 0 0
 6 5 0 4 4 0 444 9 0 1 0 78 173 2]
[ 56 8 11 2 8 0 1 21 2 2 1 5 1 1
 1 2 0 6 4 0 405 5 0 0 0 1 3 145]]

```

# Classssification Report:

View formatted classification report at:

[./precision/classification\\_reports/top\\_MLP\\_0.txt](#)

	precision	recall	f1-score	support
admiration	0.51	0.53	0.52	2134
amusement	0.52	0.56	0.54	1233
anger	0.36	0.24	0.29	1062
annoyance	0.21	0.04	0.07	1688
approval	0.37	0.05	0.09	2226
caring	0.23	0.05	0.08	669
confusion	0.37	0.07	0.11	965
curiosity	0.41	0.11	0.17	1143
desire	0.45	0.15	0.23	439
disappointment	0.26	0.04	0.06	970
disapproval	0.17	0.04	0.07	1537
disgust	0.43	0.17	0.24	585

embarrassment	0.44	0.03	0.05	303
excitement	0.62	0.04	0.07	597
fear	0.47	0.24	0.32	317
gratitude	0.79	0.77	0.78	1409
grief	0.00	0.00	0.00	58
joy	0.36	0.25	0.29	814
love	0.58	0.66	0.62	1004
nervousness	0.00	0.00	0.00	187
neutral	0.41	0.85	0.56	11067
optimism	0.45	0.32	0.38	914
pride	0.00	0.00	0.00	157
realization	0.30	0.01	0.02	972
relief	0.00	0.00	0.00	156
remorse	0.39	0.47	0.42	272
sadness	0.37	0.22	0.27	795
surprise	0.39	0.21	0.27	691
accuracy		0.44		34364
macro avg	0.35	0.22	0.23	34364
weighted avg	0.40	0.44	0.36	34364

Classifications: Emotions

Confusion Matrix:

View Visual matrix at:

[./precision/confusion\\_matrix\\_figures/top\\_MLP\\_sentiments\\_0.png](#)

```
[[ 999 610 1563 599]
 [ 297 4425 2165 887]
 [ 725 2048 6156 2138]
 [ 320 964 2516 7952]]
```

Classsification Report:

View formatted classification report at:

[./precision/classification\\_reports/top\\_MLP\\_1.txt](#)

	precision	recall	f1-score	support
ambiguous	0.43	0.26	0.33	3771
negative	0.55	0.57	0.56	7774
neutral	0.50	0.56	0.52	11067
positive	0.69	0.68	0.68	11752
accuracy		0.57		34364
macro avg	0.54	0.52	0.52	34364
weighted avg	0.57	0.57	0.56	34364