

Model: top_MLP

HyperParams:

```
{
  "activation": [
    "logistic",
    "tanh",
    "relu",
    "identity"
  ],
  "hidden_layer_sizes": [
    [
      10,
      30
    ],
    [
      8,
      8,
      8
    ]
  ],
  "solver": [
    "adam",
    "sgd"
  ],
  "max_iter": [
    2
  ]
}
```

Classifications: Emotions

Confusion Matrix:

View Visual matrix at: [./precision/confusion_matrix_figures/top_MLP_emotions_0.png](https://precision/confusion_matrix_figures/top_MLP_emotions_0.png)

```
[[1148 23 6 5 5 6 3 9 7 0 3 5 0 0
  4 42 0 38 85 0 682 18 0 0 0 0 9 36]
 [ 41 740 10 6 2 0 0 3 0 0 4 1 0 0
  1 10 0 27 10 0 350 5 0 0 0 0 6 17]
 [ 11 18 278 46 1 1 2 3 0 2 22 13 0 0
  1 5 0 1 4 0 629 2 0 0 0 2 14 7]
 [ 27 51 140 69 3 2 3 7 4 2 40 15 0 1
  5 11 0 5 15 0 1226 8 0 0 0 3 30 21]
 [ 130 35 13 14 81 17 5 7 7 0 28 5 0 0
  4 18 0 32 38 0 1729 24 0 0 0 4 26 9]
 [ 28 6 5 3 0 43 0 4 4 0 9 1 0 0
  3 13 0 11 11 0 468 33 0 0 0 13 13 1]
 [ 14 22 8 7 3 0 73 23 1 0 19 4 0 2
  3 8 0 7 14 0 740 0 0 0 0 3 3 11]
 [ 20 14 11 5 0 0 12 123 1 0 3 2 0 0
  3 8 0 7 14 0 888 3 0 0 0 2 7 20]
 [ 8 9 0 2 2 5 2 2 74 0 0 1 0 1
  2 1 0 4 23 0 274 26 0 0 0 1 2 0]
 [ 19 19 16 23 5 3 3 3 2 2 26 12 0 0
  4 7 0 1 7 0 699 5 0 0 0 9 95 10]
 [ 21 31 21 24 11 4 12 0 1 3 87 10 0 0
```

```

3 12 0 4 9 0 1225 6 0 0 0 12 34 7]
[ 12 10 58 35 0 0 2 2 0 3 32 111 0 0
3 2 0 1 1 0 282 2 0 0 0 1 21 7]
[ 6 8 9 26 1 3 7 2 0 3 8 4 0 0
5 3 0 1 5 0 192 4 0 0 0 6 4 6]
[ 57 12 9 1 2 0 2 14 2 1 3 0 0 22
4 14 0 46 24 0 346 8 0 0 0 0 3 27]
[ 2 7 3 11 0 3 0 4 0 0 1 5 0 0
85 0 0 2 1 0 178 3 0 0 0 0 8 4]
[ 100 8 2 1 1 10 0 3 1 0 0 0 0 2
0 1089 0 29 10 0 114 15 0 0 0 17 6 1]
[ 1 0 0 0 0 1 0 0 0 0 2 0 0 0
5 1 0 0 0 0 35 0 0 0 0 4 8 1]
[ 90 104 4 2 8 6 1 6 0 0 1 0 0 2
2 35 0 195 59 0 278 6 0 0 0 1 9 5]
[ 59 12 5 0 1 2 0 0 1 0 5 0 0 0
0 7 0 15 660 0 227 5 0 0 0 2 1 2]
[ 3 3 3 4 1 7 0 1 1 1 1 1 0 0
14 1 0 0 0 0 129 2 0 0 0 0 14 1]
[ 305 231 146 79 24 55 38 76 27 5 160 33 0 4
37 64 0 67 121 0 9325 65 0 3 0 22 114 66]
[ 48 14 2 3 3 12 2 4 20 1 7 0 0 0
1 29 0 17 16 0 474 248 0 0 0 0 9 4]
[ 29 2 0 2 2 0 0 0 0 0 0 0 0 2
0 4 0 7 0 0 101 2 0 0 0 0 6 0]
[ 17 20 5 10 4 3 8 2 2 0 9 3 0 0
7 6 0 5 9 0 810 3 0 0 0 5 15 29]
[ 20 3 0 0 1 2 1 1 0 0 0 0 0 0
1 16 0 9 1 0 91 0 0 0 0 0 9 1]
[ 3 3 4 3 0 7 1 1 3 1 2 0 0 0
7 1 0 0 1 0 69 1 0 0 0 129 36 0]
[ 18 10 9 11 0 11 1 2 3 1 19 7 0 0
7 3 0 2 6 0 397 7 0 0 0 70 209 2]
[ 32 9 12 6 0 1 1 14 2 0 1 3 0 0
1 2 0 6 3 0 405 1 0 0 0 1 7 184]]

```

Classification Report:

View formatted classification report at:

[./precision/classification_reports/top_MLP_0.txt](#)

	precision	recall	f1-score	support
admiration	0.51	0.54	0.52	2134
amusement	0.52	0.60	0.56	1233
anger	0.36	0.26	0.30	1062
annoyance	0.17	0.04	0.07	1688
approval	0.50	0.04	0.07	2226
caring	0.21	0.06	0.10	669
confusion	0.41	0.08	0.13	965
curiosity	0.39	0.11	0.17	1143
desire	0.45	0.17	0.25	439
disappointment	0.08	0.00	0.00	970
disapproval	0.18	0.06	0.09	1537
disgust	0.47	0.19	0.27	585
embarrassment	0.00	0.00	0.00	303

excitement	0.61	0.04	0.07	597
fear	0.40	0.27	0.32	317
gratitude	0.77	0.77	0.77	1409
grief	0.00	0.00	0.00	58
joy	0.36	0.24	0.29	814
love	0.58	0.66	0.61	1004
nervousness	0.00	0.00	0.00	187
neutral	0.42	0.84	0.56	11067
optimism	0.49	0.27	0.35	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	0.42	0.47	0.45	272
sadness	0.29	0.26	0.28	795
surprise	0.38	0.27	0.31	691
accuracy		0.44		34364
macro avg	0.32	0.22	0.23	34364
weighted avg	0.39	0.44	0.36	34364

Classifications: Emotions

Confusion Matrix:

View Visual matrix at:

[./precision/confusion_matrix_figures/top_MLP_sentiments_0.png](#)

```
[[1138 526 1455 652]
```

```
[ 390 4214 2238 932]
```

```
[ 819 1890 5981 2377]
```

```
[ 358 888 2355 8151]]
```

Classsification Report:

View formatted classification report at:

[./precision/classification_reports/top_MLP_1.txt](#)

	precision	recall	f1-score	support
ambiguous	0.42	0.30	0.35	3771
negative	0.56	0.54	0.55	7774
neutral	0.50	0.54	0.52	11067
positive	0.67	0.69	0.68	11752
accuracy		0.57		34364
macro avg	0.54	0.52	0.53	34364
weighted avg	0.56	0.57	0.56	34364