

# Results

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# SVR Joy

```
MSE: 0.9964795758847595
Mean Absolute Error 0.8209001542496819
R2: -0.0969678363700448
Pearson correlation: (0.1630455970822213, 3.789529650766423e-23)0 values were squeezed into
the score range
0 values were squeezed into the score range          precision    recall  f1-score
support
          1  0.00000000 0.00000000 0.00000000          288          2  0.32646048 0.21517554
0.25938567          883
          3  0.32398754 0.64148034 0.43053040          1297          4  0.40041494 0.19108911
0.25871314          1010
          5  0.00000000 0.00000000 0.00000000          169
accuracy          0.33315053          3647 macro avg  0.21017259 0.20954900
0.18972584          3647
weighted avg 0.30515370 0.33315053 0.28756121          3647
[[ 0  36 234  18  0]
 [ 5 190 640  48  0]
 [ 2 251 832 208  4]
 [ 0  93 720 193  4]
 [ 0  12 142  15  0]]
ROC - AUC : 0.5053219775610537
```

# SVM Joy

```
MSE: 0.6431352807865082
Mean Absolute Error 0.6158711064947314
R2: 0.2920088534366445
Pearson correlation: (0.5917811508024919, 0.0)
0 values were squeezed into the score range0 values were squeezed into the score
range

      precision    recall  f1-score   support

     1   0.38461538  0.06944444  0.11764706      288         2   0.47463360  0.47678369
0.47570621         883

     3   0.49695122  0.62837317  0.55498808     1297         4   0.52855760  0.54059406
0.53450808        1010

     5   0.37142857  0.07692308  0.12745098      169

 accuracy                   0.49766932     3647  macro avg  0.45123727  0.35842369
0.36206008        3647

weighted avg  0.48561312  0.49766932  0.47577265     3647

[[ 20 172  80  16   0]
 [ 25 421 346  91   0]
 [  6 229 815 246   1]
 [  1  62 380 546  21]
 [  0   3  19 134  13]]

ROC - AUC : 0.6071926695107926
```

# Lasso Joy

MSE: 1.0281566480572382

Mean Absolute Error 0.8358763189438444

R2: -0.1318393281341672

Pearson correlation: (0.14760188286173698, 3.252804550962394e-19)3 values were squeezed into the score range

0 values were squeezed into the score range

precision recall f1-score

support

1	0.10000000	0.00347222	0.00671141	288	2	0.30782030	0.20951302
0.24932615	883						

3	0.32254244	0.62991519	0.42663185	1297	4	0.42738589	0.20396040
0.27613941	1010						

5	0.04761905	0.00591716	0.01052632	169			
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accuracy	0.33177954	3647	macro avg	0.24107354	0.21055560		
0.19386703	3647						

weighted avg	0.31769954	0.33177954	0.28958298	3647			
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[[ 1 26 247 14 0]

[ 4 185 641 52 1]

[ 5 270 817 196 9]

[ 0 105 689 206 10]

[ 0 15 139 14 1]]

ROC - AUC : 0.5058964520950757

# Lasso Sadness

SE: 0.9307384965022848

Mean Absolute Error 0.7960851914177507

R2: -0.04084814009093862

Pearson correlation: (0.23080343775556006, 3.2202046350021302e-46)20 values were squeezed into the score range

0 values were squeezed into the score range

precision recall f1-score

support

1	0.00000000	0.00000000	0.00000000	146	2	0.06217617	0.01826484
0.02823529	657						

3	0.33868243	0.64677419	0.44456763	1240	4	0.46069470	0.38858905
0.42158093	1297						

5	0.00000000	0.00000000	0.00000000	384			
---	------------	------------	------------	-----	--	--	--

accuracy	0.35392052	3724	macro avg	0.17231066	0.21072562		
0.17887677	3724						

weighted avg	0.28419360	0.35392052	0.29984020	3724			
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[[ 0 2 125 19 0]

[ 1 12 551 92 1]

[ 3 136 802 281 18]

[ 1 41 706 504 45]

[ 0 2 184 198 0]]

ROC - AUC : 0.5100520397496775

.....

# SVR Sadness

```
SE: 0.9454209231533085
Mean Absolute Error 0.8007222131105772
R2: -0.05726754954823532
Pearson correlation: (0.191833119260266, 3.3651319183614605e-32)1 values were squeezed into
the score range0 values were squeezed into the score range
/home/kenneth/venvs/crfsuite/lib/python3.8/site-
packages/sklearn/metrics/_classification.py:1272: UndefinedMetricWarning: Precision and F-
score are ill-defined and being set to 0.0 in labels with no predicted samples. Use
`zero_division` parameter to control this behavior.  _warn_prf(average, modifier, msg_start,
len(result))

      precision    recall  f1-score   support

     1   0.00000000   0.00000000   0.00000000         146         2   0.06111111   0.01674277
0.02628435         657

     3   0.32739130   0.60725806   0.42542373        1240         4   0.41384996   0.38704703
0.40000000        1297

     5   0.00000000   0.00000000   0.00000000         384

 accuracy                   0.33995704        3724  macro avg   0.16047047   0.20220957
0.17034162        3724
weighted avg   0.26393088   0.33995704   0.28560533        3724

[[ 0  4 111  31  0]
 [ 0 11 497 148  1]
 [ 0 136 753 342  9]
 [ 0  27 747 502 21]
 [ 0  2 192 190  0]]

ROC - AUC : 0.5030923629109962
```

# SVM Sadness

```
MSE: 0.6640974977269949
Mean Absolute Error 0.6386105570026086
R2: 0.2573374283476926
Pearson correlation: (0.5643611440598052, 2.75759376237e-312)0 values were squeezed into the
score range
0 values were squeezed into the score range          precision    recall  f1-score
support
      1  0.14285714 0.00684932 0.01307190      146          2  0.42553191 0.30441400
0.35492458      657
      3  0.43119266 0.53064516 0.47577730     1240          4  0.48706625 0.59521974
0.53573907     1297
      5  0.41176471 0.14583333 0.21538462      384
accuracy          0.45300752    3724  macro avg  0.37968253 0.31659231
0.31897949    3724
weighted avg 0.43634615 0.45300752 0.43034883    3724
[[ 1  56  73  16   0]
 [ 5 200 365  86   1]
 [ 1 162 658 414   5]
 [ 0  45 406 772  74]
 [ 0   7  24 297 56]]
ROC - AUC : 0.578488077944395
```