**catboost all**

Confusion Matrix:

[[20141 184]

[ 1388 3116]]

Classification report:

precision recall f1-score support

NORMAL 0.94 0.99 0.96 20325

TOXIC 0.94 0.69 0.80 4504

accuracy 0.94 24829

macro avg 0.94 0.84 0.88 24829

weighted avg 0.94 0.94 0.93 24829

**rfm emoticons**

Confusion Matrix:

[[20325 0]

[ 4499 5]]

Classification report:

precision recall f1-score support

NORMAL 0.82 1.00 0.90 20325

TOXIC 1.00 0.00 0.00 4504

accuracy 0.82 24829

macro avg 0.91 0.50 0.45 24829

weighted avg 0.85 0.82 0.74 24829

**rfm idf**

Confusion Matrix:

[[20325 0]

[ 4447 57]]

Classification report:

precision recall f1-score support

NORMAL 0.82 1.00 0.90 20325

TOXIC 1.00 0.01 0.02 4504

accuracy 0.82 24829

macro avg 0.91 0.51 0.46 24829

weighted avg 0.85 0.82 0.74 24829

**rfm all**

Confusion Matrix:

[[19941 384]

[ 1284 3220]]

Classification report:

precision recall f1-score support

NORMAL 0.94 0.98 0.96 20325

TOXIC 0.89 0.71 0.79 4504

accuracy 0.93 24829

macro avg 0.92 0.85 0.88 24829

weighted avg 0.93 0.93 0.93 24829

**logreg emoticons**

Confusion Matrix:

[[20274 51]

[ 4435 69]]

Classification report:

precision recall f1-score support

NORMAL 0.82 1.00 0.90 20325

TOXIC 0.57 0.02 0.03 4504

accuracy 0.82 24829

macro avg 0.70 0.51 0.47 24829

weighted avg 0.78 0.82 0.74 24829

**logreg idf**

Confusion Matrix:

[[20124 201]

[ 1413 3091]]

Classification report:

precision recall f1-score support

NORMAL 0.93 0.99 0.96 20325

TOXIC 0.94 0.69 0.79 4504

accuracy 0.93 24829

macro avg 0.94 0.84 0.88 24829

weighted avg 0.94 0.93 0.93 24829

**logreg all**

Confusion Matrix:

[[20129 196]

[ 1410 3094]]

Classification report:

precision recall f1-score support

NORMAL 0.93 0.99 0.96 20325

TOXIC 0.94 0.69 0.79 4504

accuracy 0.94 24829

macro avg 0.94 0.84 0.88 24829

weighted avg 0.94 0.94 0.93 24829