

Twitter Data Set:

Data Type: Text

Source: Twitter

Total Data: 9119

Suicidal Ideation Data: 3998

Non-Suicidal Ideation Data: 5121

S: No	Model	Accuracy	Precision	Recall Score	F-1 Score
1	C-LSTM	90.73	95.96	81.88	88.36
2	Naïve Bais	82.83	98.35	61.09	75.37
3	KNN	82.15	84.03	66.45	74.21
4	Logistic Regression	84.15	96.43	65.56	78.05
5	Random Forest	87.00	91.75	76.65	83.53
6	Decision Tree	82.56	79.71	79.71	79.71
7	Gradient Boosting Classifier	86.67	92.46	75.12	82.89
8	SVM	84.04	91.42	69.38	78.89
9	RNN	76.80	100	45.41	62.46

Reddit Data Set:

Data Type: Text

Source: Reddit

Total Data: 35221

Suicidal Ideation Data: 24255

Non-Suicidal Ideation Data: 10966

S: No	Model	Accuracy	Precision	Recall Score	F-1 Score
1	C-LSTM	91.07	92.58	94.52	93.54
2	Naïve Bais	70.50	76.91	81.28	79.03
3	KNN	77.55	81.68	86.61	84.08
4	Logistic Regression	71.99	72.89	94.02	82.12
5	Random Forest	78.94	82.30	88.19	85.14
6	Decision Tree	72	79.90	77.21	78.53
7	Gradient Boosting Classifier	83.47	85.85	90.80	88.26
8	SVM	80.58	82.78	90.41	86.43
9	RNN	74.9	74.03	97.63	84.21

Combined Data Set:

Data Type: Text

Source: Twitter + Reddit

Total Data: 44300

Suicidal Ideation Data: 28229

Non-Suicidal Ideation Data: 16071

S: No	Model	Accuracy	Precision	Recall Score	F-1 Score
1	C-LSTM	89.55	89.84	94.21	91.98
2	Naïve Bais	59.93	82.19	47.25	60.01
3	KNN	76.99	80.89	83.59	82.21
4	Logistic Regression	72.12	72.36	90.88	80.57
5	Random Forest	71.33	82.09	86.35	84.17
6	Decision Tree	71.50	78.97	75.23	77.06
7	Gradient Boosting Classifier	81.98	85.28	86.64	85.59
8	SVM	79.11	84.91	81.63	83.26
9	RNN	73.80	79.35	79.05	79.20