# **TFIDF**

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## LogisticRegression

## **TRAIN DATA**

0.9025

precision recall f1-score support

0 0.92 0.78 0.84 3220

1 0.90 0.97 0.93 6380

accuracy 0.90 9600

macro avg 0.91 0.87 0.89 9600

weighted avg 0.90 0.90 0.90 9600

#### **TEST DATA**

0.837916666666666

precision recall f1-score support

0 0.82 0.65 0.72 780

1 0.85 0.93 0.89 1620

accuracy 0.84 2400

macro avg 0.83 0.79 0.80 2400

weighted avg 0.84 0.84 0.83 2400

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## MultinomialNB

## TRAIN DATA

0.72864583333333333

precision recall f1-score support

0 1.00 0.19 0.32 3220

1 0.71 1.00 0.83 6380

accuracy 0.73 9600

macro avg	0.85	0.60	0.58	9600
weighted avg	0.81	0.73	0.66	9600

#### **TEST DATA**

0.7045833333333333

precision recall f1-score support

0 0.96 0.09 0.17 780 1 0.70 1.00 0.82 1620

accuracy 0.70 2400 macro avg 0.83 0.55 0.50 2400 weighted avg 0.78 0.70 0.61 2400

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## LinearSVC

## TRAIN DATA

0.984375

precision recall f1-score support

0 0.98 0.97 0.98 3220 1 0.99 0.99 0.99 6380

accuracy 0.98 9600 macro avg 0.98 0.98 0.98 9600 weighted avg 0.98 0.98 0.98 9600

## **TEST DATA**

0.834166666666666

precision recall f1-score support

0 0.76 0.72 0.74 780 1 0.87 0.89 0.88 1620

accuracy 0.83 2400 macro avg 0.81 0.80 0.81 2400 weighted avg 0.83 0.83 0.83 2400 \_\_\_\_\_\_

## RandomForestClassifier

## TRAIN DATA

1.0

precision recall f1-score support

0 1.00 1.00 1.00 3220 1 1.00 1.00 1.00 6380

accuracy 1.00 9600 macro avg 1.00 1.00 1.00 9600 weighted avg 1.00 1.00 1.00 9600

#### **TEST DATA**

0.79583333333333333

precision recall f1-score support

0 0.86 0.45 0.59 780 1 0.78 0.96 0.86 1620

accuracy 0.80 2400 macro avg 0.82 0.71 0.73 2400 weighted avg 0.81 0.80 0.77 2400

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#### **XGBClassifier**

#### **TRAIN DATA**

0.9428125

precision recall f1-score support

0 0.96 0.87 0.91 3220 1 0.94 0.98 0.96 6380

accuracy 0.94 9600 macro avg 0.95 0.92 0.93 9600 weighted avg 0.94 0.94 0.94 9600

## **TEST DATA**

0.8270833333333333

precision recall f1-score support

0 0.78 0.65 0.71 780

1 0.84 0.91 0.88 1620

accuracy 0.83 2400

macro avg 0.81 0.78 0.79 2400

weighted avg 0.82 0.83 0.82 2400

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## **KNeighborsClassifier**

## TRAIN DATA

0.84645833333333333

precision recall f1-score support

0 0.87 0.64 0.74 3220

1 0.84 0.95 0.89 6380

accuracy 0.85 9600

macro avg 0.85 0.80 0.81 9600

weighted avg 0.85 0.85 0.84 9600

#### **TEST DATA**

precision recall f1-score support

0 0.73 0.50 0.59 780

1 0.79 0.91 0.85 1620

accuracy 0.78 2400

macro avg 0.76 0.70 0.72 2400

weighted avg 0.77 0.78 0.76 2400

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