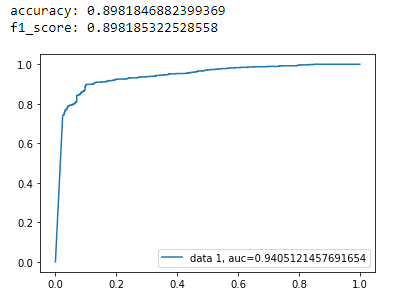
With Removing title from the data

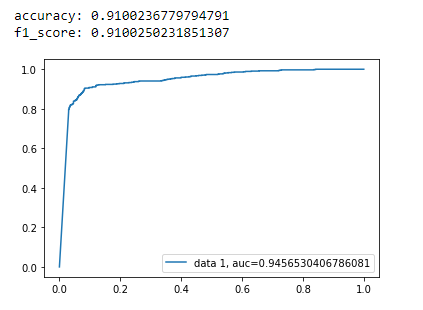
Naïve Bayes :

CountVectorizer -> max features = 25000

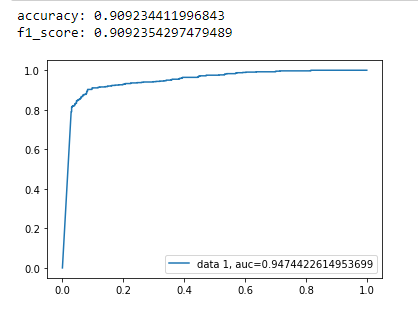
ngram = 1



ngram = 1,2

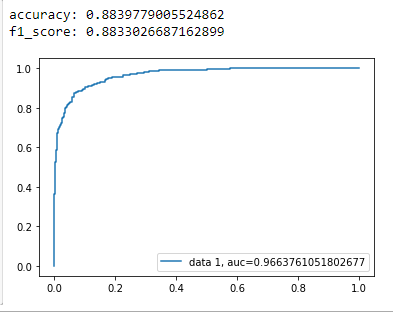


Ngram = 1,3

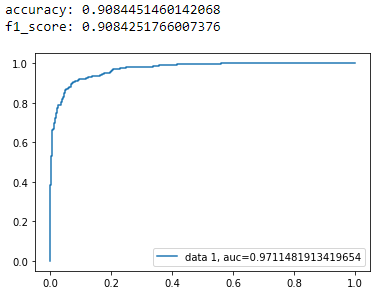


Tf-idf max-features = 25000

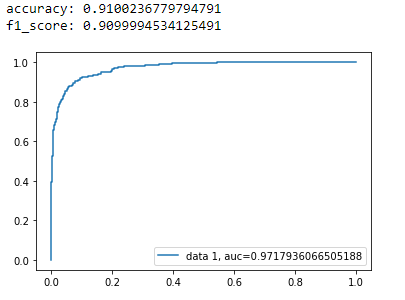
Ngram =1



Ngram = 1,2



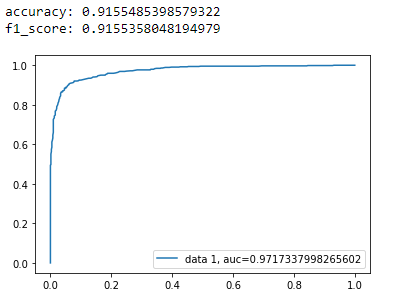
Ngram = 1,3



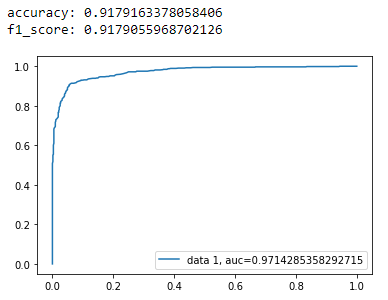
Random Forest n\_estimators = 300

CountVectorizer -> max features = 25000

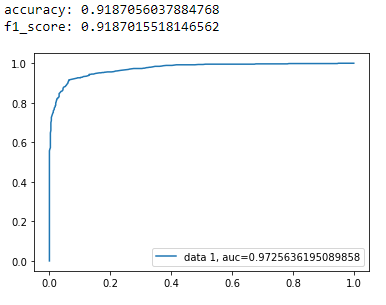
Ngram =1



Ngram = 1,2

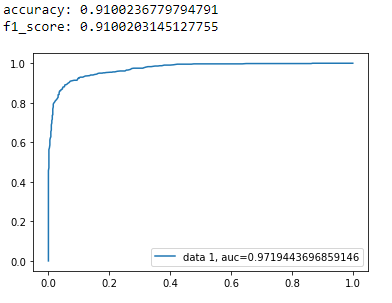


Ngram = 1,3

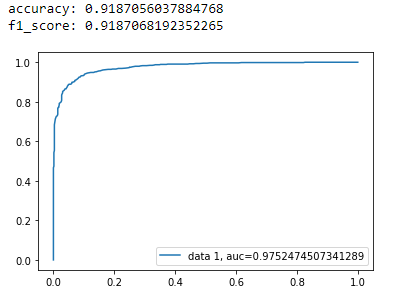


Tf-idf max-features = 25000

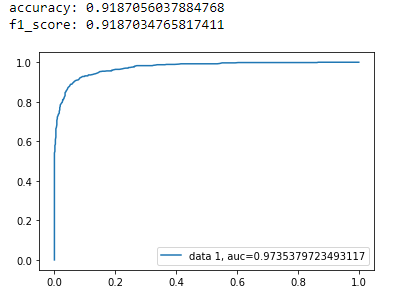
Ngram =1



Ngram = 1,2



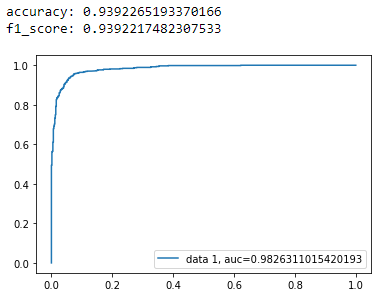
Ngram = 1,3



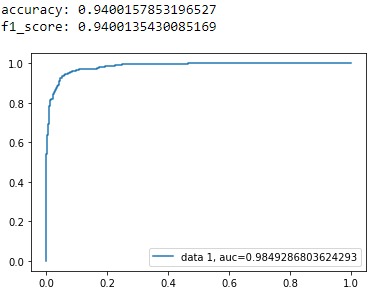
Xtreme Gradient Boosting n\_estimators = 200

CountVectorizer -> max features = 25000

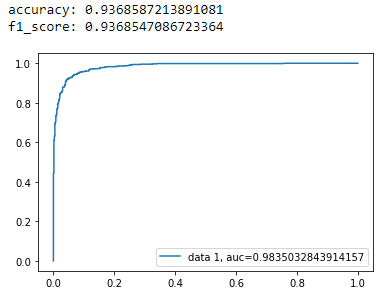
Ngram =1



Ngram =2

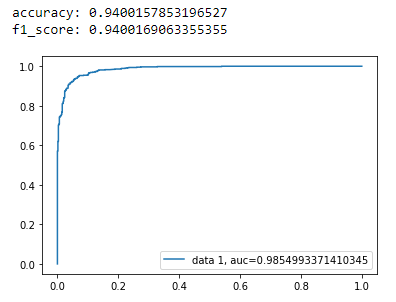


Ngram = 3

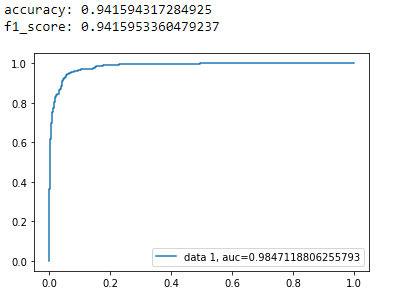


Tf-idf max features = 25000

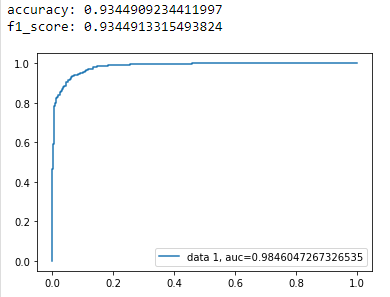
Ngram =1



Ngram =1,2



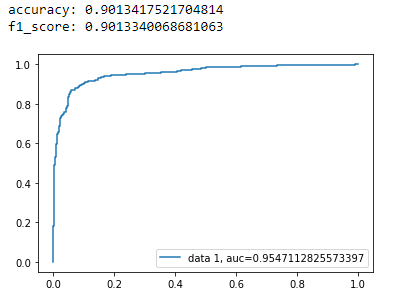
Ngram= 1,3



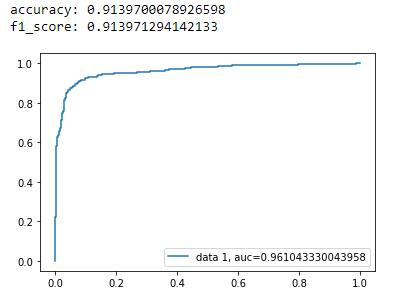
Passive Aggressive Classifier iter = 50

CountVectorizer -> max features = 25000

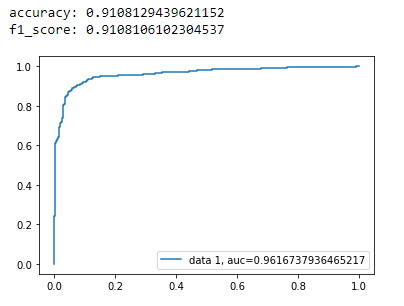
Ngram =1



Ngram =2

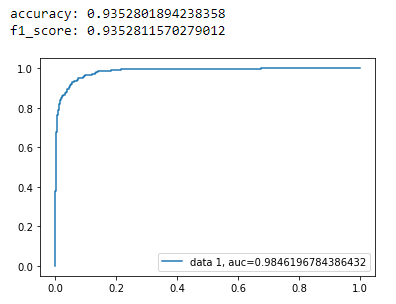


Ngram = 3

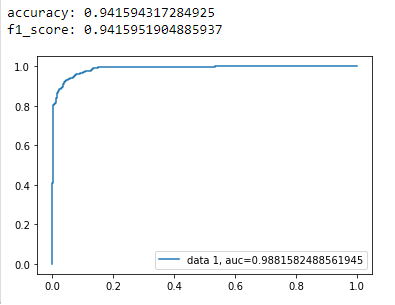


Tf-idf max features = 25000

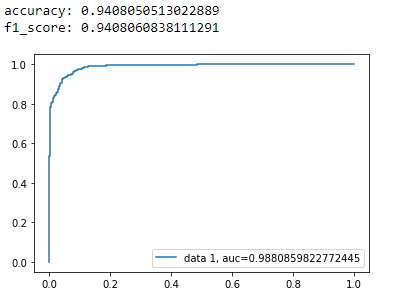
Ngram =1



Ngram =1,2



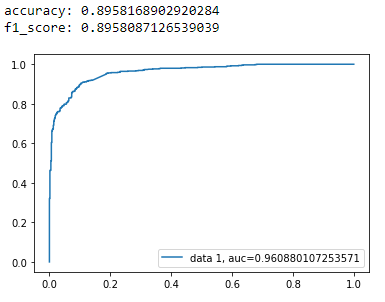
Ngram= 1,3



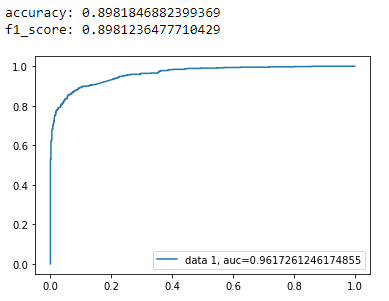
AdaBoostClassifier n\_estimators = 100

CountVectorizer -> max features = 25000

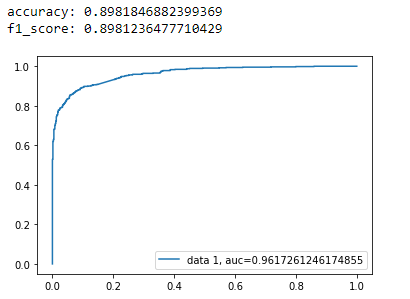
Ngram =1



Ngram =2

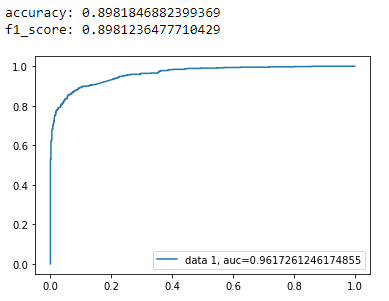


Ngram = 3

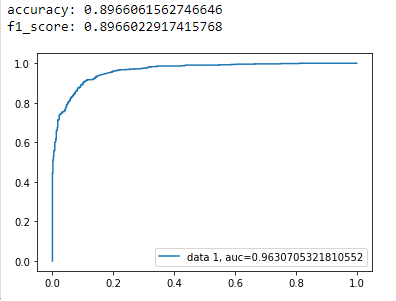


Tf-idf max features = 25000

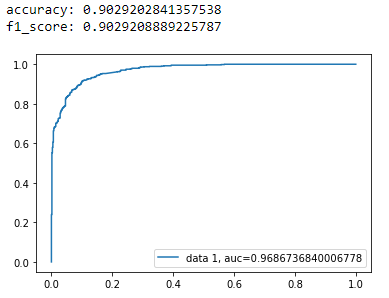
Ngram =1



Ngram =1,2



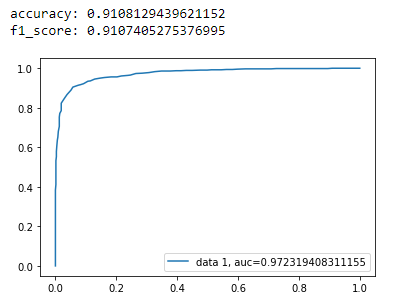
Ngram= 1,3



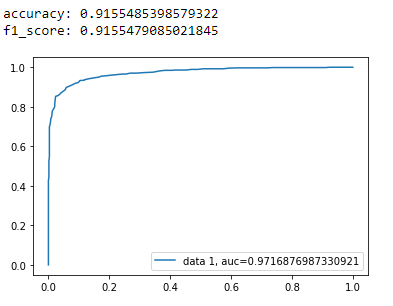
ExtraTreesClassifier n\_estimators = 100

CountVectorizer -> max features = 25000

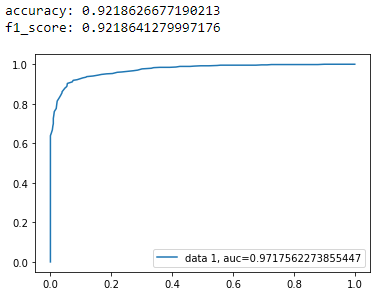
Ngram =1



Ngram =2

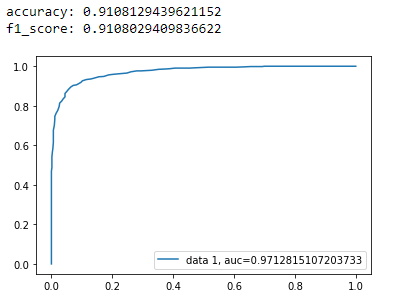


Ngram = 3

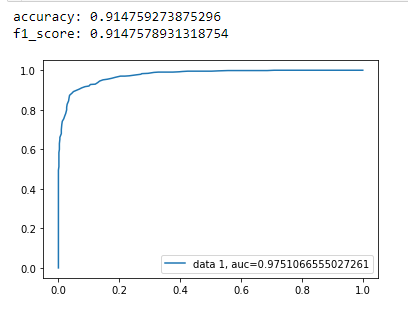


Tf-idf max features = 25000

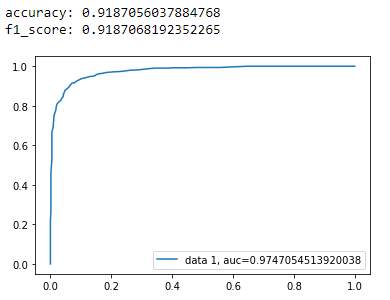
Ngram =1



Ngram =1,2



Ngram= 1,3

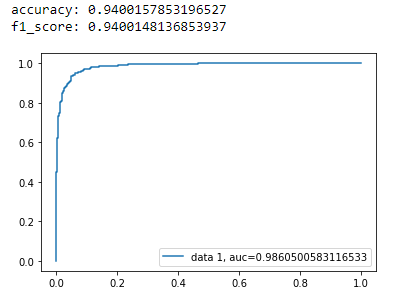


With incorporating the title we selected the best models from the above to use as our ML models

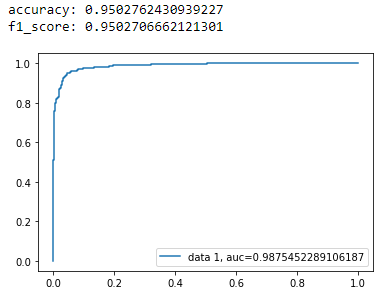
Xtreme Gradient Boosting n\_estimators = 200

CountVectorizer -> max features = 25000

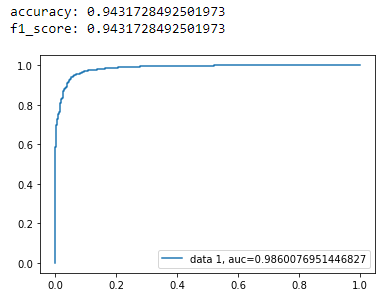
Ngram =1



Ngram = 2

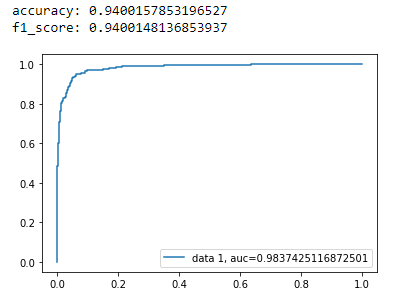


Ngram =3

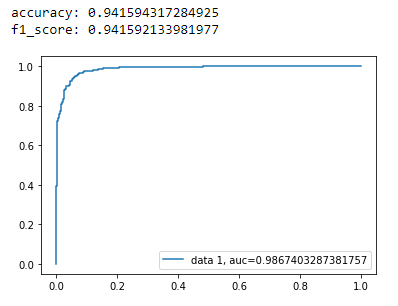


Tf-idf

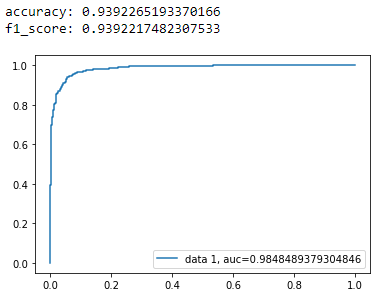
Ngram = 1



Ngram = 2



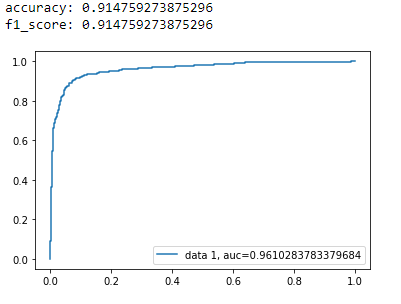
Ngram =3



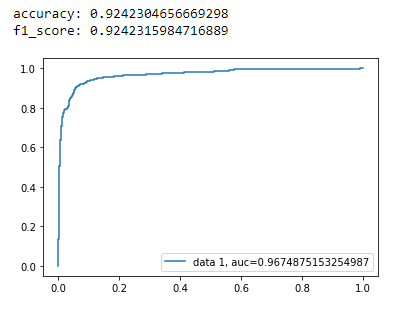
Passive Aggressive Classifier iter = 50

CountVectorizer -> max features = 25000

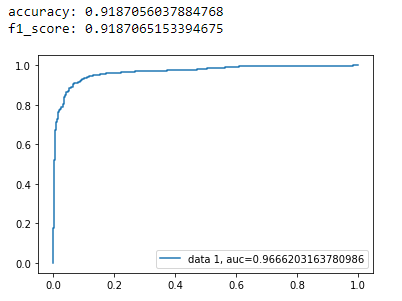
Ngram =1



Ngram =1,2

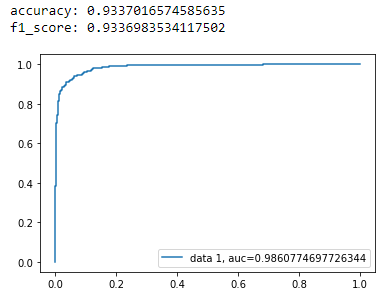


Ngram =1,3

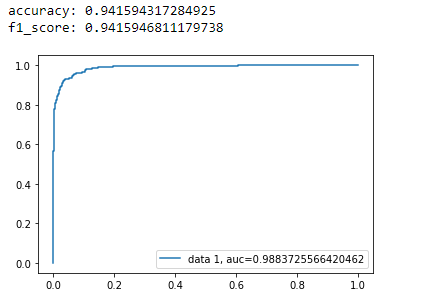


Tf-idf

Ngram =1



Ngram =1,2



Ngram =1,3

