

Training loading

Preprocessing start

making Score matrix

25

Testing loading

Preprocessing start

making Score matrix

Converting to numpy.....

Predict Model Using only ngram (1,2)

SVR Model

Results of sklearn.metrics:

MAE: 0.15420231425785522

MSE: 0.03564448169602555

RMSE: 0.18879746210165418

R-Squared: 0.24403539128098206

pearson corr. , p value = (0.5213387096617955, 5.2398190078086253e-51)

SpearmanrResult(correlation=0.5180978734362142, pvalue=2.7262163258271837e-50)

MLP Model

Results of sklearn.metrics:

MAE: 0.1491808847131856

MSE: 0.034485458147149914

RMSE: 0.18570260673224248

R-Squared: 0.2686164973016536

pearson corr. , p value = (0.5423762096602273, 7.5268301320991715e-56)

SpearmanrResult(correlation=0.543807341000414, pvalue=3.424538806360882e-56)

Decision Tree Model

Results of sklearn.metrics:

MAE: 0.16977000903849643

MSE: 0.043638633474434356

RMSE: 0.20889862008743465

R-Squared: 0.07449173308608392

pearson corr. , p value = (0.31763165999596876, 3.355452417780279e-18)

SpearmanrResult(correlation=0.318635224628867, pvalue=2.5976275917146976e-18)

Predicting Model using 25 features

SVR Model

Results of sklearn.metrics:

MAE: 0.17742412622348674

MSE: 0.04607960844879681

RMSE: 0.21466161382230595

R-Squared: 0.022722409937458

pearson corr. , p value = (0.19697552733607196, 1.1194175741189455e-07)

SpearmanrResult(correlation=0.1865694541856673, pvalue=5.148519142730844e-07)

MLP Model

Results of sklearn.metrics:

MAE: 0.18284210313120092
MSE: 0.04741797267967832
RMSE: 0.2177566822847885
R-Squared: -0.005662235987543118
pearson corr. , p valve = (nan, nan)
SpearmanrResult(correlation=nan, pvalue=nan)

Decision Tree Model

Results of sklearn.metrics:

MAE: 0.15968567512203988
MSE: 0.040883207394900395
RMSE: 0.20219596285509855
R-Squared: 0.13293008031281117
pearson corr. , p valve = (0.4383043152720539, 7.05531524620142e-35)
SpearmanrResult(correlation=0.45110600756632996, pvalue=4.382397244566772e-37)

Predicting Model using N Gram + 25 features

Concating all features....

SVR Model

Results of sklearn.metrics:

MAE: 0.17757793924585455
MSE: 0.04611337337708508
RMSE: 0.21474024629092023
R-Squared: 0.022006307764349087
pearson corr. , p valve = (0.19550195025328704, 1.3965230496978573e-07)
SpearmanrResult(correlation=0.18433647020678848, pvalue=7.06583659363074e-07)

Decision Tree Model

Results of sklearn.metrics:

MAE: 0.15420582475287037
MSE: 0.038273718657372065
RMSE: 0.1956367006912866
R-Squared: 0.18827332107712413
pearson corr. , p valve = (0.4703478462738523, 1.3908144994156254e-40)
SpearmanrResult(correlation=0.46313359681322297, pvalue=3.027723298545886e-39)

MLP Model

Results of sklearn.metrics:

MAE: 0.18284197804835808
MSE: 0.04741786415841712
RMSE: 0.21775643310455173
R-Squared: -0.00565993441858037
pearson corr. , p valve = (-0.01639175516424645, 0.6619210534168055)
SpearmanrResult(correlation=-0.017898403885253412, pvalue=0.6330349056852493)

