Model Performance Table

Log Loss Table

Model Name	Train Error	Cross Validation Error	Test Error	Missclassified Points
Random Model	Nill	2.42	2.50	Nill
Naive Bayes	0.857	1.24	1.22	0.402
KNN	0.668	2.421.011	1.00	0.370
Logistic Regression with Balancing	**0.583**	**1.080**	**1.059**	**0.3496**
Logistic Regresion without balancing	0.625	1.252	1.130	0.3721
Linear Support Vector Machine	0.667	1.126	1.088	0.360
Random Forest with tfidf	0.708	1.160	1.152	0.368
Random Forest with Respose coding	0.058	1.240	1.237	0.432
Stack Models	0.637	1.113	1.124	0.3518
Maximum Voting Classifier	0.85	1.67	1.56	0.36
Logistic Regression with Bi-Grams with Class balancing	0.66	1.27	1.21	0.43
Logistic Regression with Bi-Grams without Class balancing	0.808	1.248	1.217	0.417
Logistic Regression with Four-Grams with Class balancing	0.700	1.277	1.231	0.430
Logistic Regression with Four-Grams without Class balancing	0.705	1.253	1.220	0.421