

Data set Overview

	Capacity	Modality
Dataset-Reddit	12000	Single
Dataset- Twitter	900	Single
DS- Reddit + Twitter	12900	Single

Result without Hyperparameter Tuning

Reddit + Twitter			Precision	Recall	F1-Score	Support	Accuracy
	SVM	Anxiety	0.70	0.70	0.70	416	70.75 %
		Bipolar	0.65	0.81	0.72	412	
		Depression	0.72	0.67	0.69	443	
		Neutral	0.19	0.18	0.18	17	
		Normal	0.62	0.25	0.36	32	
		PTSD	0.81	0.71	0.76	427	
	KNN	Anxiety	0.60	0.36	0.45	416	39.61 %
		Bipolar	0.31	0.83	0.45	412	
		Depression	0.46	0.35	0.40	443	
		Neutral	0.00	0.00	0.00	17	
		Normal	0.29	0.06	0.10	32	
		PTSD	0.81	0.11	0.20	427	

Reddit + Twitter			Precision	Recall	F1-Score	Support	Accuracy
	Logistic Regression	Anxiety	0.78	0.73	0.75	416	73.78 %
		Bipolar	0.66	0.84	0.74	412	
		Depression	0.74	0.72	0.73	443	
		Neutral	0.08	0.06	0.07	17	
		Normal	0.78	0.22	0.34	32	
		PTSD	0.83	0.74	0.78	427	
	Naive Bayes	Anxiety	0.69	0.72	0.70	416	68.92 %
		Bipolar	0.79	0.56	0.65	412	
		Depression	0.65	0.82	0.72	443	
		Neutral	0.17	0.29	0.21	17	
		Normal	0.14	0.03	0.05	32	
		PTSD	0.73	0.72	0.72	427	
	Random Forest	Anxiety	0.76	0.77	0.76	416	74.87 %
		Bipolar	0.70	0.77	0.74	412	
		Depression	0.69	0.80	0.74	443	
		Neutral	0.20	0.06	0.09	17	
		Normal	0.83	0.16	0.26	32	
		PTSD	0.88	0.73	0.80	427	

Result with Hyperparameter Tuning

Reddit + Twitter			Precision	Recall	F1-Score	Support	Accuracy
	Logistic Regression	Anxiety	0.80	0.75	0.77	416	75.27 %
		Bipolar	0.66	0.85	0.74	412	
		Depression	0.75	0.74	0.75	443	
		Neutral	0.14	0.12	0.13	17	
		Normal	0.78	0.22	0.34	32	
		PTSD	0.86	0.75	0.80	427	
	KNN	Anxiety	0.65	0.34	0.45	416	41.27 %
		Bipolar	0.32	0.82	0.46	416	
		Depression	0.47	0.39	0.43	443	
		Neutral	0.00	0.00	0.00	17	
		Normal	0.26	0.19	0.22	32	
		PTSD	0.73	0.15	0.24	427	

Reddit + Twitter			Precision	Recall	F1-Score	Support	Accuracy
	SVM	Anxiety	0.78	0.71	0.74	416	72.07 %
		Bipolar	0.61	0.83	0.70	412	
		Depression	0.75	0.70	0.72	443	
		Neutral	0.13	0.12	0.12	17	
		Normal	0.57	0.12	0.21	32	
		PTSD	0.84	0.71	0.77	427	
	Naive Bayes	Anxiety	0.68	0.74	0.71	277	70.16 %
		Bipolar	0.77	0.63	0.69	283	
		Depression	0.69	0.81	0.74	316	
		Neutral	0.20	0.43	0.27	14	
		Normal	0.17	0.04	0.07	23	
		PTSD	0.75	0.69	0.72	304	
	Random Forest	Anxiety	NA	NA	NA	NA	NA
		Bipolar	NA	NA	NA	NA	
		Depression	NA	NA	NA	NA	
		Neutral	NA	NA	NA	NA	
		Normal	NA	NA	NA	NA	
		PTSD	NA	NA	NA	NA	