

Results: Detecting Depression in Social Media Texts

I) An overview of models' performances

Dataset	Model	Features	Test accuracy	F1	Precision	Recall
Reddit	SVM	Tf-Idf only (word level n-grams (1-3))	99%	0.99	0.99	0.99
Reddit	SVM	Tf-Idf + features	99%	0.99	0.99	0.99
Reddit	RF	Tf-Idf + features	98%	0.98	0.98	0.98
Reddit	Logistic regression	Original features: LIWC	94%	0.94	0.94	0.94
Reddit	SVM/LR/RF	Features	89%	0.89	0.89	0.89
Twitter (user level)	SVM	Tf-Idf	74%	0.75	0.74	0.74
Twitter	MentalBERT		73.3%	0.75	0.70	0.82
Twitter (user level)	RF	Tf-Idf+features	73%	0.73	0.72	0.72
Twitter	RF	Features	65%	0.65	0.65	0.65
Twitter	Logistic regression	Features	61%	0.61	0.61	0.61