

Logistic Regression Model Metrics

All stages are measured with SMOTE dataset unless specified otherwise.

Stage	Accuracy	Precision	Specificity	Recall	F1-Score
Research Paper Model	85.48%	85.15%		85.48%	85.31%
Base Model	70.27%				
Manual Feature Selection	72.16%				
Filter Feature Selection Method	81.35%				
Hyperparameter Tuning (GridSearchCV)	83.51%	83.38%	83.29%	83.83%	83.60%
Hyperparameter Tuning (GridSearchCV) w/ Scaling	83.51%	83.38%	83.29%	83.83%	83.60%
Hyperparameter Tuning (GridSearchCV) w/ Scaling, Original Dataset	0.8685	0.5556	0.9684	0.2459	

Scaling the data seems to improve the speed of LogisticRegression, but we've yet to see any improvements in accuracy through scaling.