Prediction Seed Germination Using Machine Learning Models

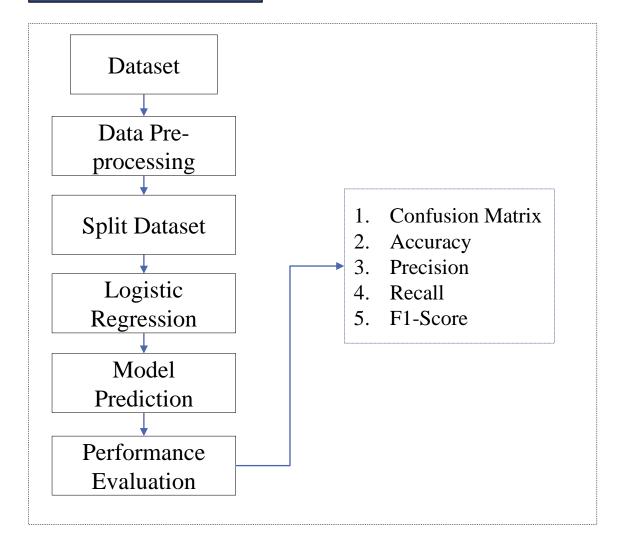
PERFORMANCE COMPARISON

Information of Dataset

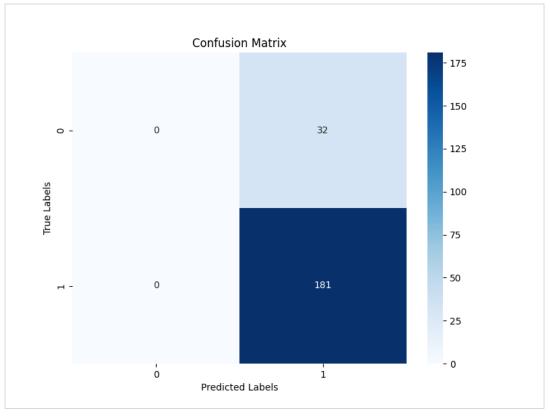
Experiments are conducted on the Hyperspectral dataset only.

Explain more about the dataset

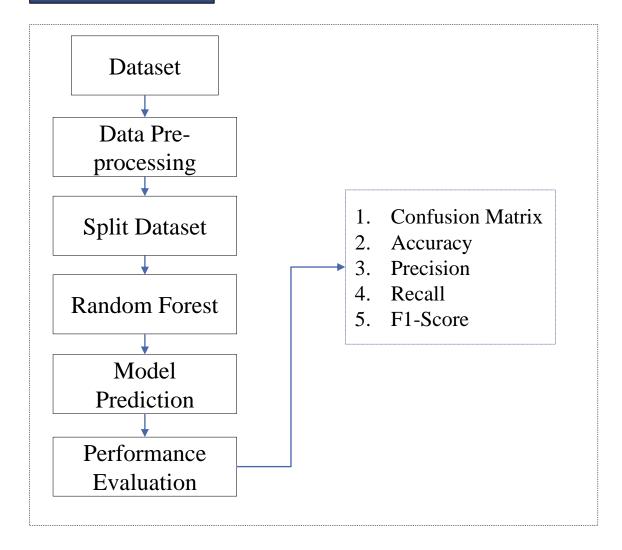
Logistic Regression



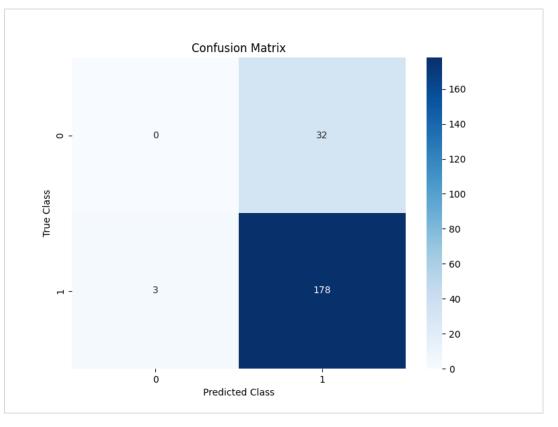
Accuracy	85%
Precision	85%
Recall	1.0
F1-Score	0.9188



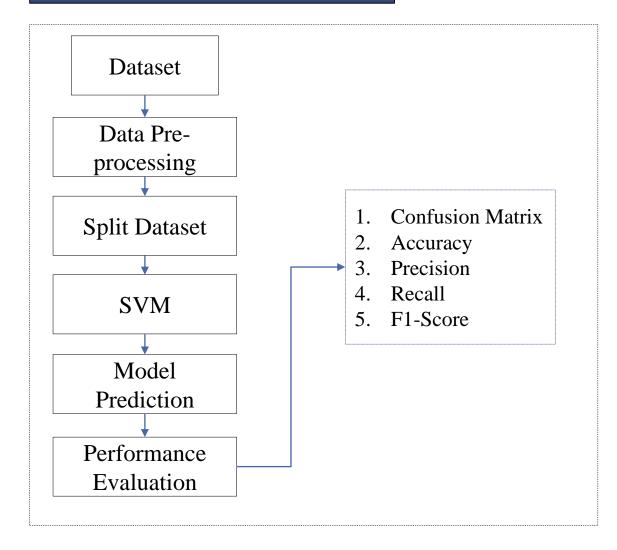
Random Forest



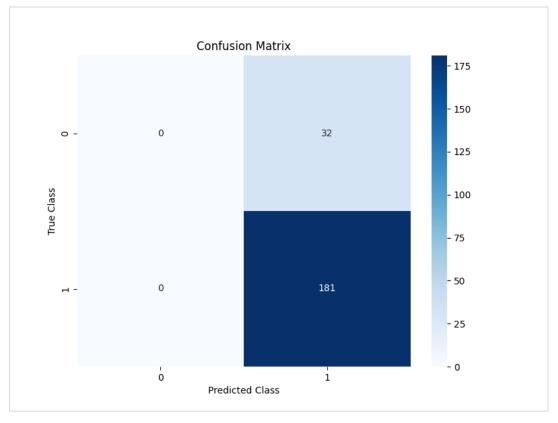
Accuracy	84%
Precision	85%
Recall	0.9834
F1-Score	0.9105



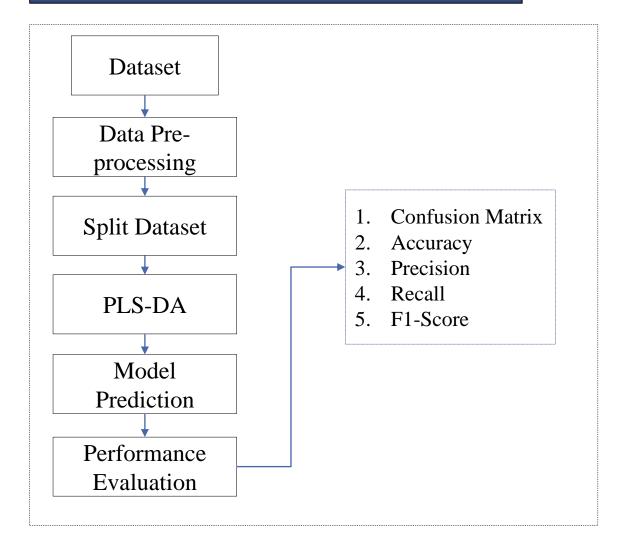
Support Vector Machine (SVM)



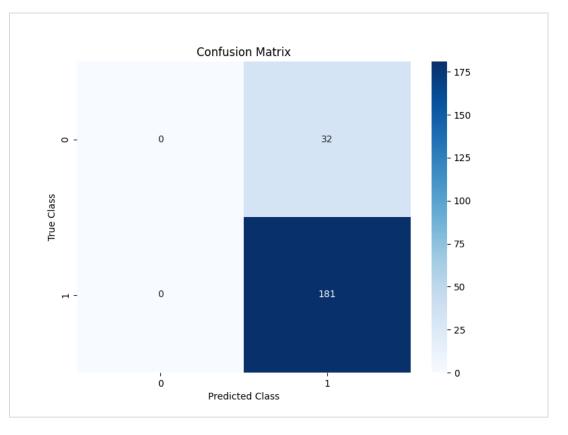
Accuracy	85%
Precision	85%
Recall	1.0
F1-Score	0.9188



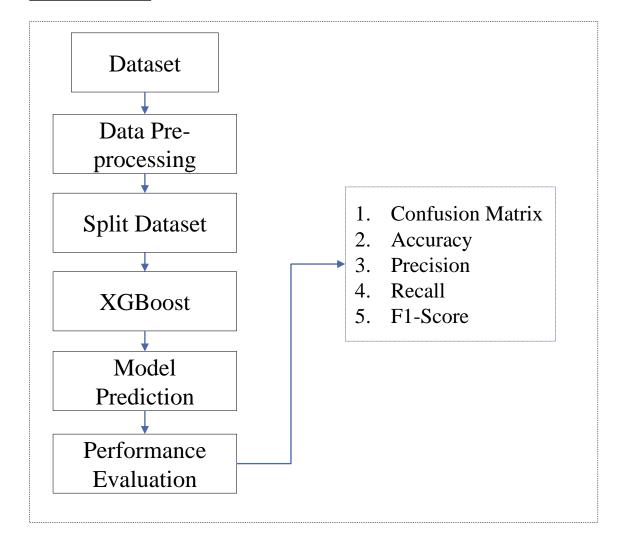
Partial Least Squares Discriminant Analysis



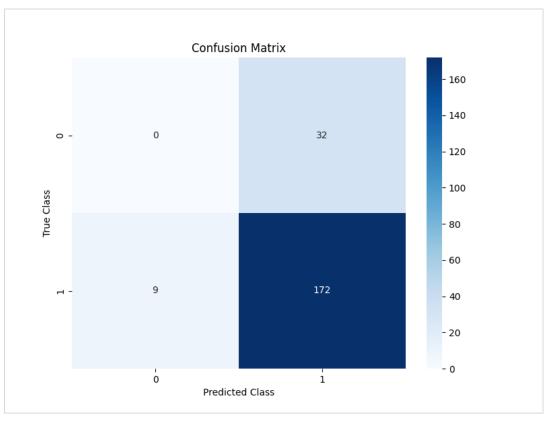
Accuracy	85%
Precision	85%
Recall	1.0
F1-Score	0.9188



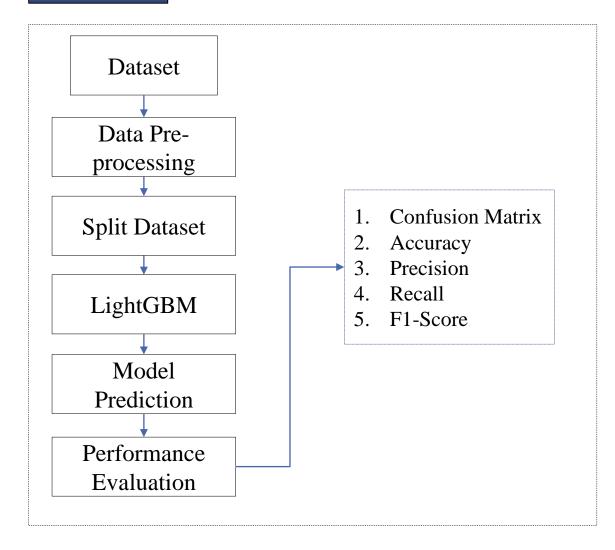
XGBoost



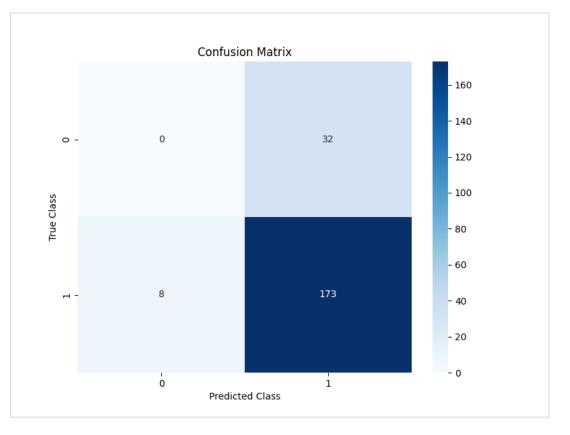
Accuracy	80%
Precision	84%
Recall	0.9503
F1-Score	0.8935



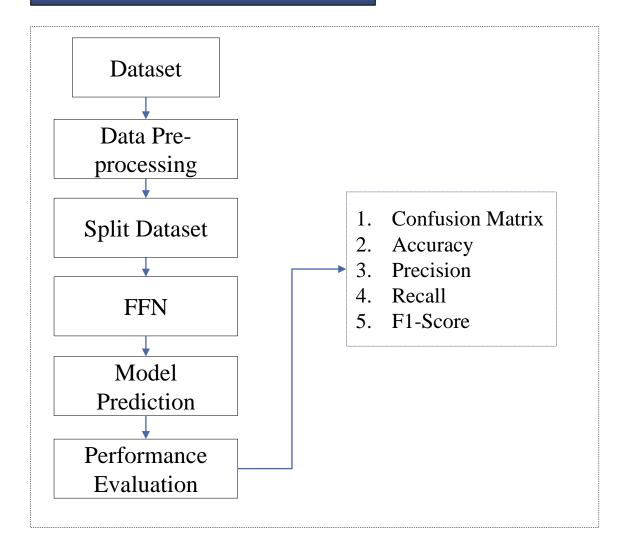
LightGBM



Accuracy	81%
Precision	84%
Recall	0.9558
F1-Score	0.8964



Feed Forward Network (FFN)



Labels	0	1	
Accuracy	85%		
Precision	0.67	0.85	
Recall	0.06	0.99	
F1-Score	0.11	0.92	

