Task 1 Write Up

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Task 1: Binary Classification

Abstract Task 1

• abstract/overview of task

Task 1.1 Data Description

- summary statistics
- plots

Task 1.2 Summary Table without PCA

- short intro (1-2 sentences what every classifier does)
- after showing summary table, add explanation to specific occurances like the QDA or kNN or SVM

w/o PCA	Accuracy	Bal. Accuracy	AUC	F1
LDA				
Logistic				
QDA				
k-NN				
GDBT				
RF				
SVM				

Task 1.2 Summary Table with PCA

• explanation of what PCA does and how it is essentially applied for all classifiers

with PCA	Accuracy	Bal. Accuracy	AUC	F1
LDA				
Logistic				
QDA				
k-NN				
GDBT				
RF				
SVM				

Task 1.3 Improved Classifiers

• Summary Table: of F1 before and F1 after improvement

	F1 Score before	F1 Score after
QDA/LDA??		
Logistic (with Ridge)		
RF (with AdaBoost)		

• explanation how each classifier was improved and why this improvement method was chosen

Task 1.4 Final predict function

• summary and discussion of the results

	Accuracy	Bal. Accuracy	AUC	F1 Score
mypredict()				

• present in one row all performance metrics of chosen prediction function