Model Comparison Report

Fit and error measures

Model	Accuracy	F1	AUC	Accuracy_Creditworthy	Accuracy_Non-Creditworthy
Log_creditworthy	0.7800	0.8520	0.7314	0.9048	0.4889
DT_creditworthy	0.7467	0.8273	0.7054	0.8667	0.4667
DF_creditworthy	0.8067	0.8755	0.7455	0.9714	0.4222
Boost_creditworthy	0.7867	0.8632	0.7524	0.9619	0.3778

Model: model names in the current comparison.

Accuracy: overall accuracy, number of correct predictions of all classes divided by total sample number.

Accuracy_[class name]: accuracy of Class [class name] is defined as the number of cases that are **correctly** predicted to be Class [class name] divided by the total number of cases that actually belong to Class [class name], this measure is also known as ***recall***.

AUC: area under the ROC curve, only available for two-class classification.

F1: F1 score, 2 * precision * recall / (precision + recall). The ***precision*** measure is the percentage of actual members of a class that were predicted to be in that class divided by the total number of cases predicted to be in that class. In situations where there are three or more classes, average precision and average recall values across classes are used to calculate the F1 score.

Confusion matrix of Boost_creditworthy

	Actual_Creditworthy	Actual_Non-Creditworthy
Predicted_Creditworthy	101	28
Predicted_Non-Creditworthy	4	17

Confusion matrix of DF_creditworthy

	Actual_Creditworthy	Actual_Non-Creditworthy
Predicted_Creditworthy	102	26
Predicted_Non-Creditworthy	3	19

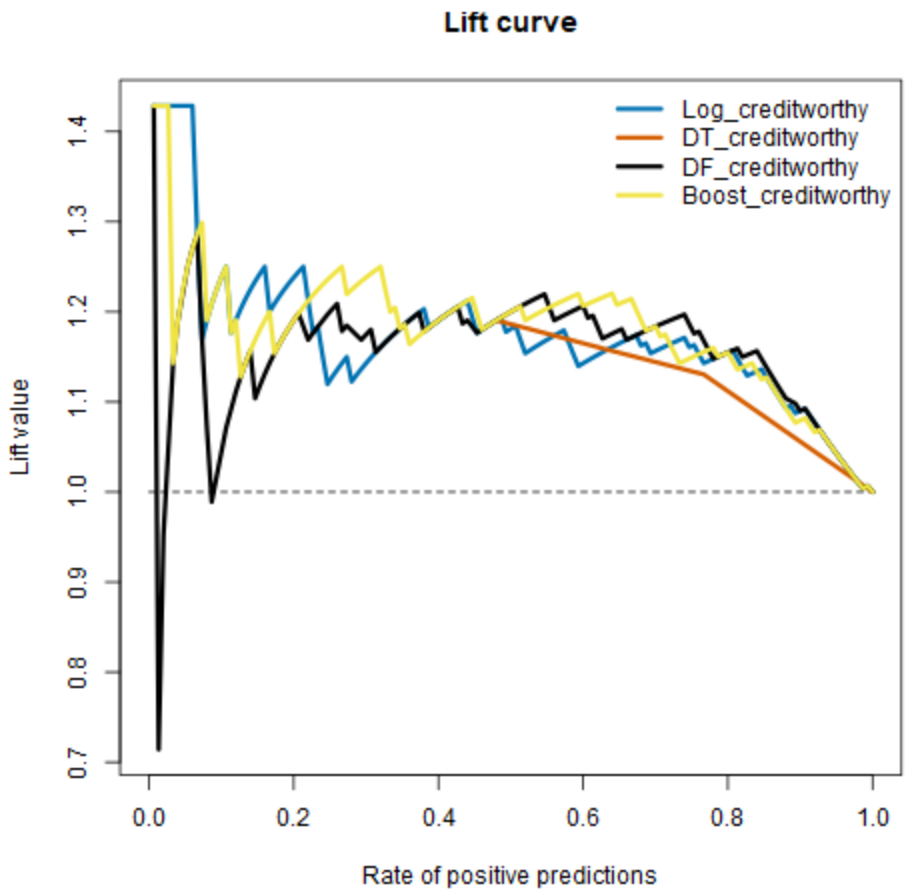
Confusion matrix of DT_creditworthy

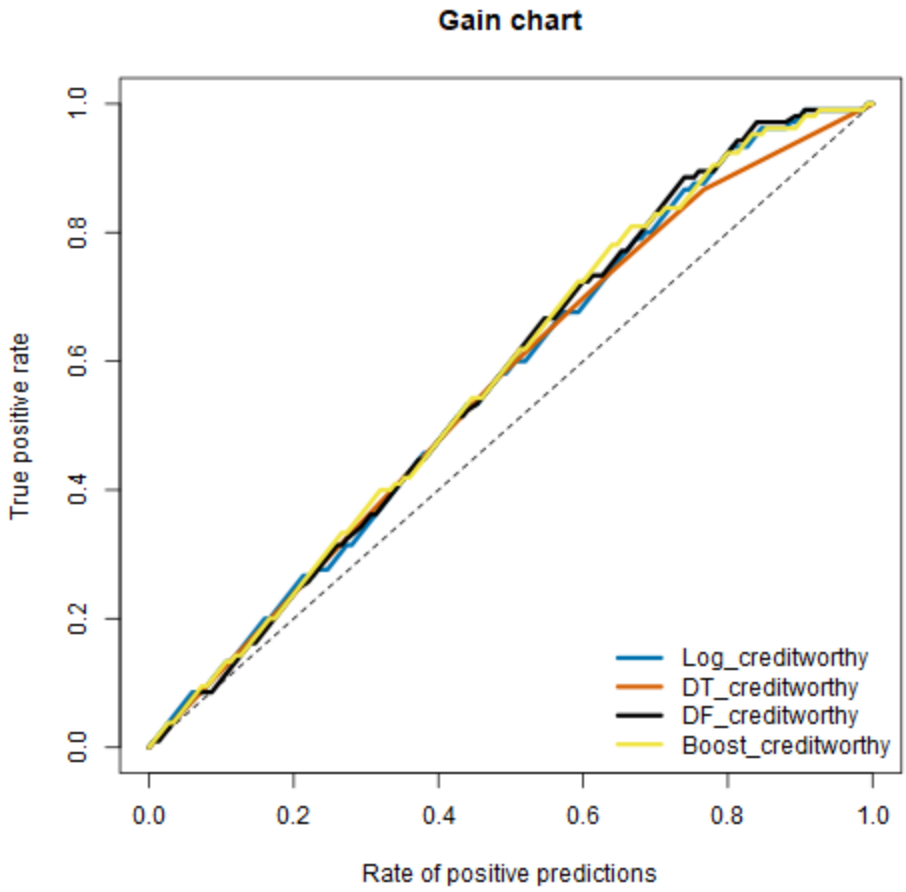
	Actual_Creditworthy	Actual_Non-Creditworthy
Predicted_Creditworthy	91	24
Predicted_Non-Creditworthy	14	21

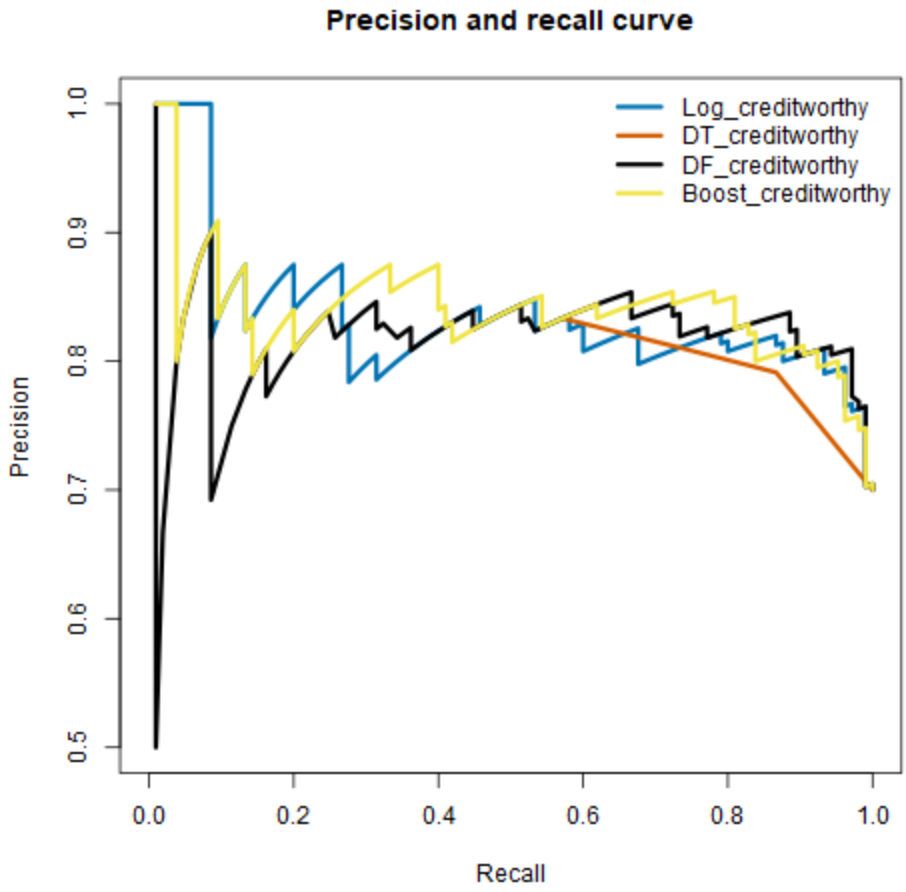
Confusion matrix of Log_creditworthy

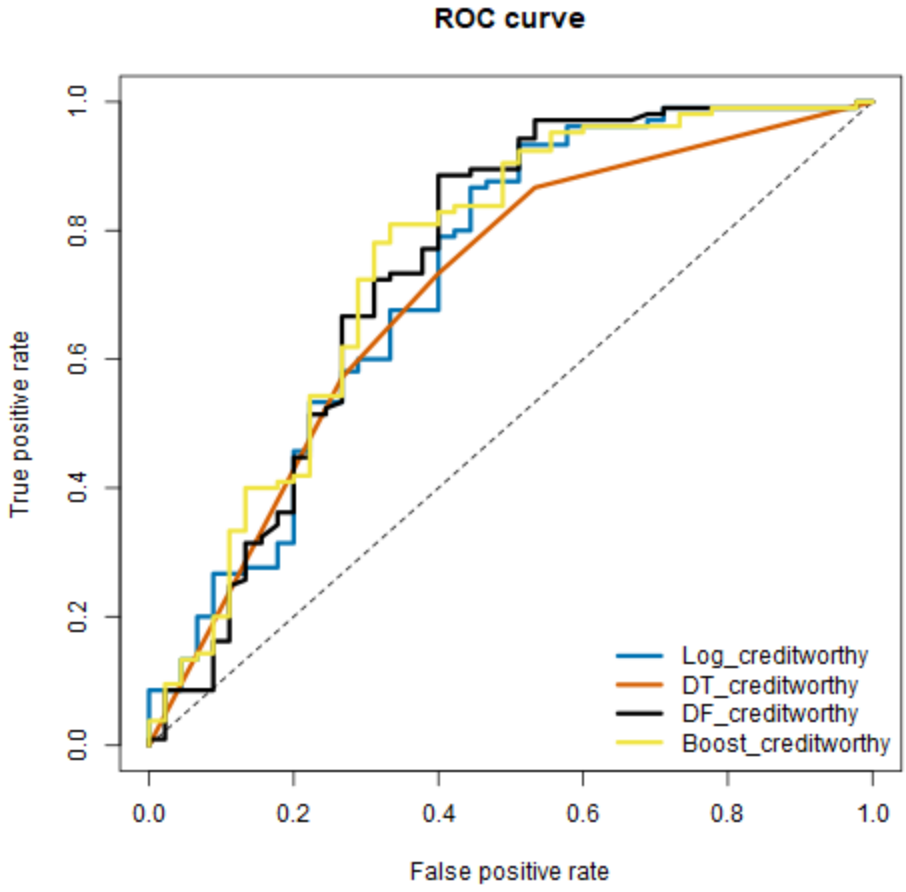
	Actual_Creditworthy	Actual_Non-Creditworthy
Predicted_Creditworthy	95	23
Predicted_Non-Creditworthy	10	22

Performance Diagnostic Plots


Lift curve
Log_creditworthy
DT_creditworthy
DF_creditworthy
Boost_creditworthy
Lift value
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
0.0
0.2
0.4
0.6
0.8
1.0
Rate of positive predictions


Gain chart
True positive rate
Rate of positive predictions
0.0
0.2
0.4
0.6
0.8
1.0
Log_creditworthy
DT_creditworthy
DF_creditworthy
Boost_creditworthy


Precision and recall curve
Log_creditworthy
DT_creditworthy
DF_creditworthy
Boost_creditworthy
Precision
Recall
0.5
0.6
0.7
0.8
0.9
1.0
0.0
0.2
0.4
0.6
0.8
1.0


ROC curve
True positive rate
False positive rate
0.0
0.2
0.4
0.6
0.8
1.0
Log_creditworthy
DT_creditworthy
DF_creditworthy
Boost_creditworthy