

Conclusion

In conclusion, it seems that GLM (logistic regression) does the best, as we can see that it has the highest AUC in comparison to other AUC's computed by other ROC methods...

GLM -> 0.7461

GAM -> 0.7442

randomForest -> 0.6993

rpart -> 0.6867

tree -> I was not able to compute.

AUC is the metric for model comparison. Based on the data collected and the AUC's computed, we can see that the best working method is GLM. This once again is strictly based on its AUC, which is the highest out of all methods used in this assignment.