6372: Project 2

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# Introduction

Summary

# Data Description

Short description of our data

# Exploratory Data Analysis

Walkthrough of key findings in EDA

PCA discussion

Graphs

# Objective 1:

## Restatement of Problem

Restatement of Problem and the overall approach to solve

Model Selection

**Any or all**: LASSO, RIDGE, ELASTIC NET,

Stepwise, Forward, Backward

Manual / Intuition

## Checking Assumptions

Lack of fit test

Influential point analysis (Cook’s D and Leverage)

**Optional** Residual Plots

## Model Interpretation

Interpretation **Required**

Confidence Intervals **Required**

# Objective 2:

Make sure it is clear how many models were created to compete against the one in Objective 1. Make note of any tuning parameters that were used and how you came up with them (knn and random forest logistics) **Required**

* Brief summary of analysis and tuning parameters for complex model, LDA/QDA, and random forest

## Metrics & Model Comparison

Table of accuracy, sensitivity, specificity for each model

ROC curve for all our models

# Conclusion & Final Recommendations

# Appendix

Figures referred to in report

R markdown/code