200+ FINANCIAL INDICATORS OF US STOCKS IN 2018

STA9890

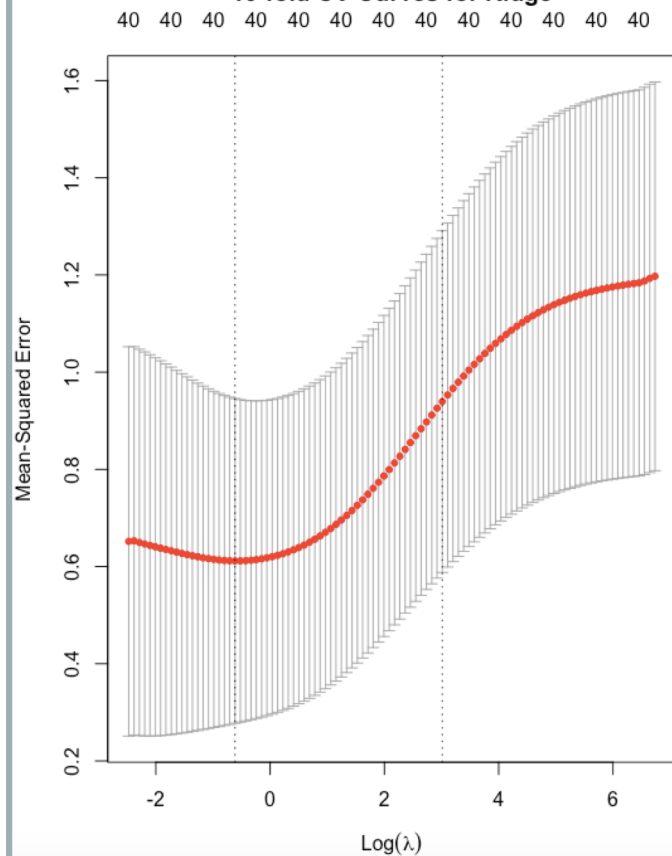Hui Zhu

DATA DESCRIPTION

- This dataset collects 200+ financial indicators for all the stocks of the US stock market.

- Shape of data: Observations = 4393; P = 40

- The response variable: Price.Variation

- The predictors variables: Financial indicators of US stocks (standardized)

- Dataset link: https://www.kaggle.com/cnic92/200-financial-indicators-of-us-stocks-20142018/data?select=2018_Financial_Data.csv

- Github link: https://github.com/zh2323/STA9890

SIDE-BY-SIDE BOXPLOT OF R^2_{TEST}, R^2_{TRAIN}
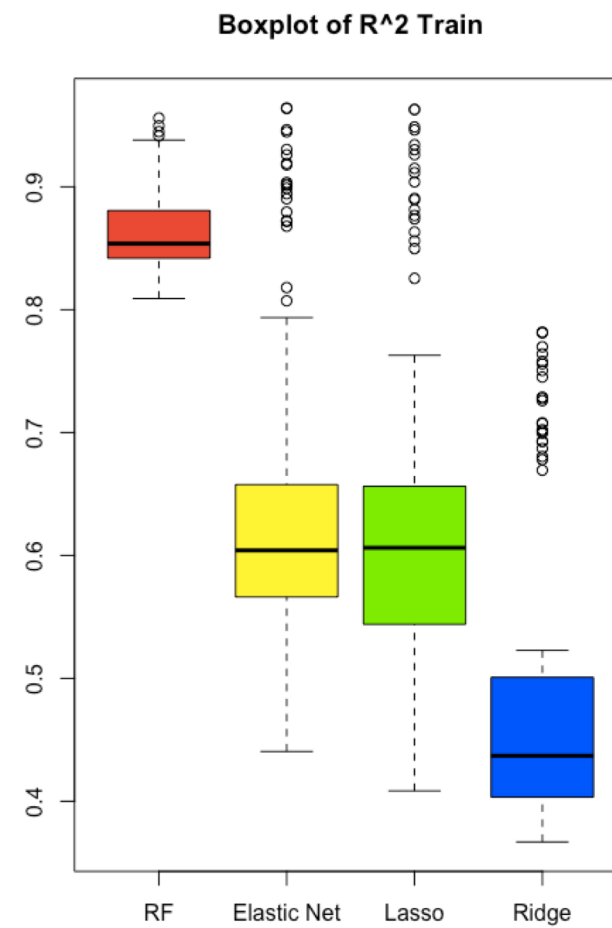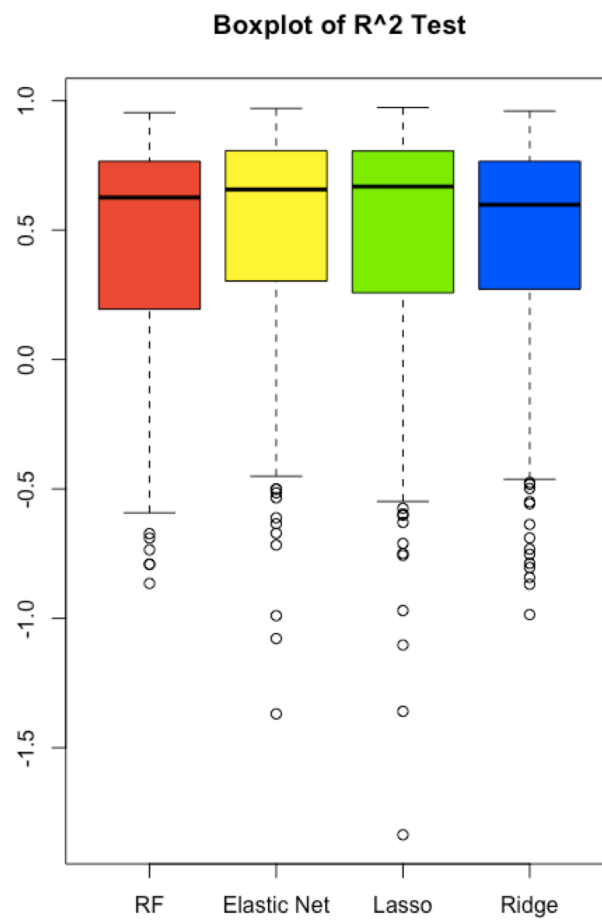
10-FOLD CV CURVES FOR LASSO, ELASTIC-NET, RIDGE
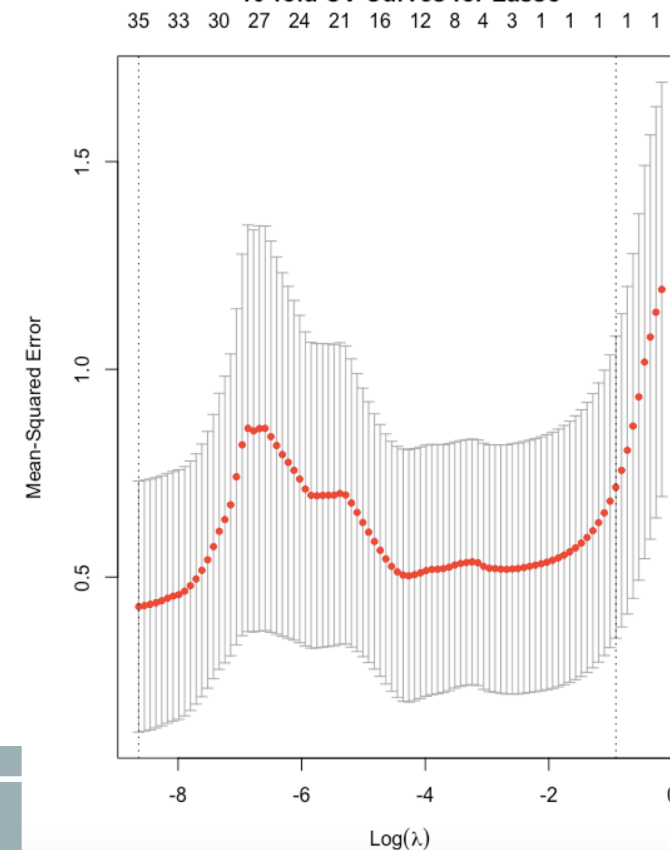
BOXPLOTS OF TRAIN AND TEST RESIDUALS

Boxplot of Test Residual
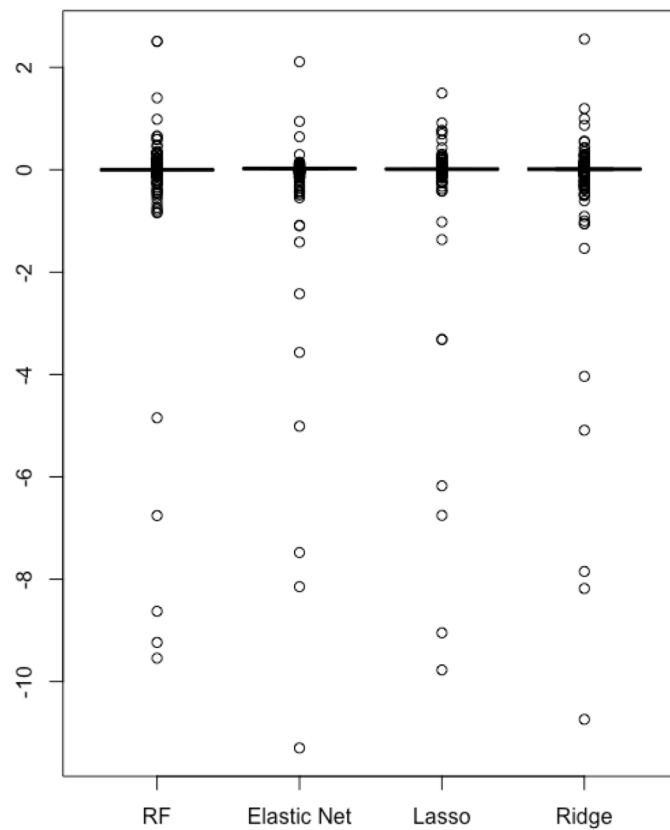
Boxplot of Train Residuals

Random Forest vs. Elastic Net Importance Parameter

Feature Importance of Random Forest
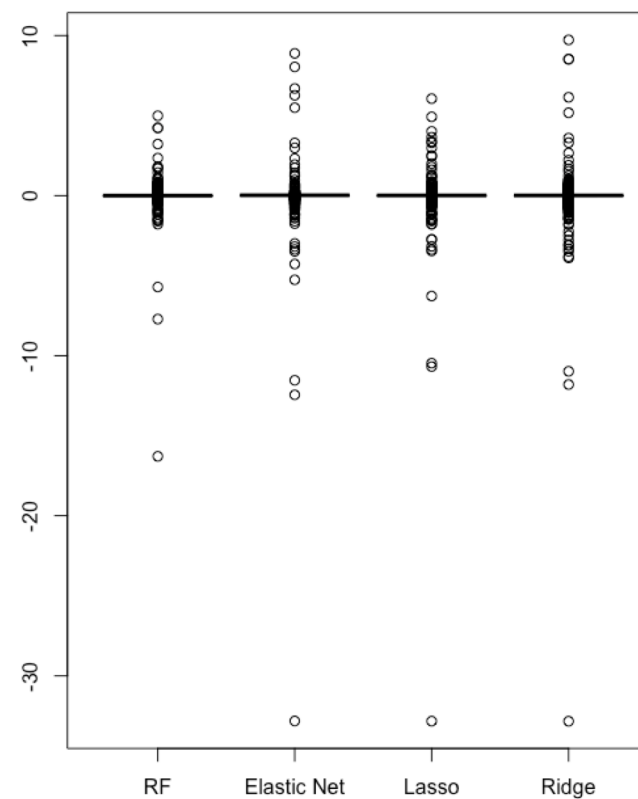
Feature Importance of Elastic Net
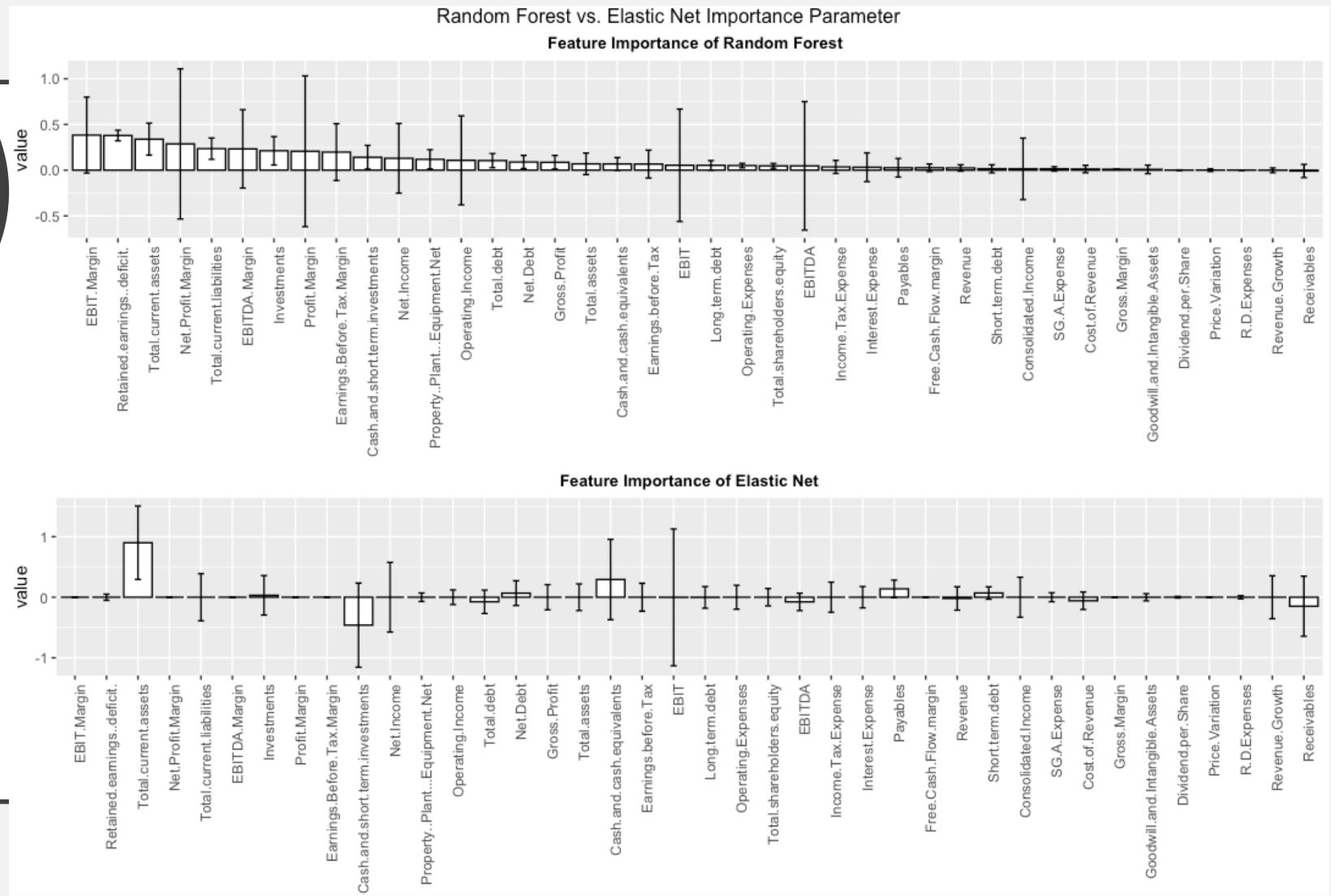
SUMMARY

- Performance: The Elastic Net model performs similar to the Lasso

- Time:

Model	Time for Training for 1 time	Time for Training for 100 times
Lasso	0.391 sec	0.67 min
Elastic Net	0.415 sec	0.42 min
Ridge	0.381 sec	0.38 min
Random Forest	0.398 sec	7.45 min