FUNDRAISING USING SAS AND PYTHON

Data preprocessing

Data used for the models:
'Age, Salary, Contact, TotalGift, MinGift, GaveLastYear, AmtLastYear, Woman, NbActivities

Filled NaN values with zeros for columns:
TotalGift, MinGift

Round 1

Models tried:
- Lineal Regression
- KMeans + Lineal Regression
- Bayesian Ridge Regression

Best models

Best MAE: Lineal Regression
Best MSE: Bayesian Ridge Regression
Best RMSE: Bayesian Ridge Regression

Chosen Model

Bayesian Ridge Regression

Round 2: Amount

Models tried to predict:
- Lineal Regression
- Regression Tree
- **Bayesian Ridge Regression**

Round 2: Probability

Models tried to predict:
- Logistic Regression
- **Decision Tree**
- Stochastic gradient descent (SGD)

Total rased

$7,602,655.00

Scores

MAE: 63.972
MSE: 54373.267
RMSE: 233.181

Receiver operating characteristic — Decision tree (area = 0.55)