

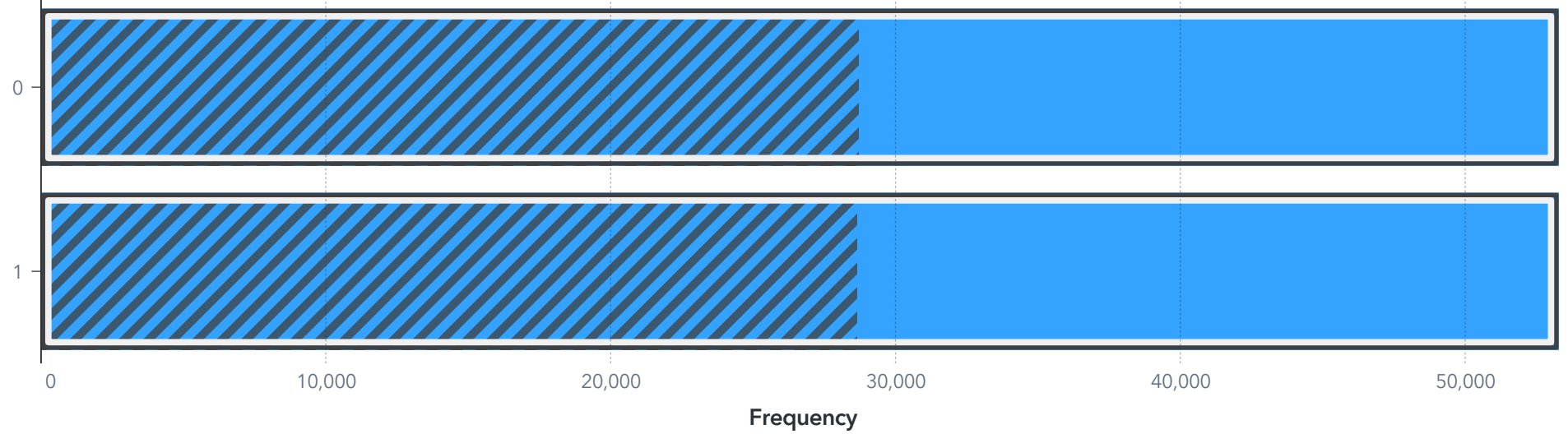
# PVA\_Machine Learning\_Vincent\_Pinneau

Creation Date: Tuesday, November 26, 2024 02:41:26 PM

Author: sasmooc0231

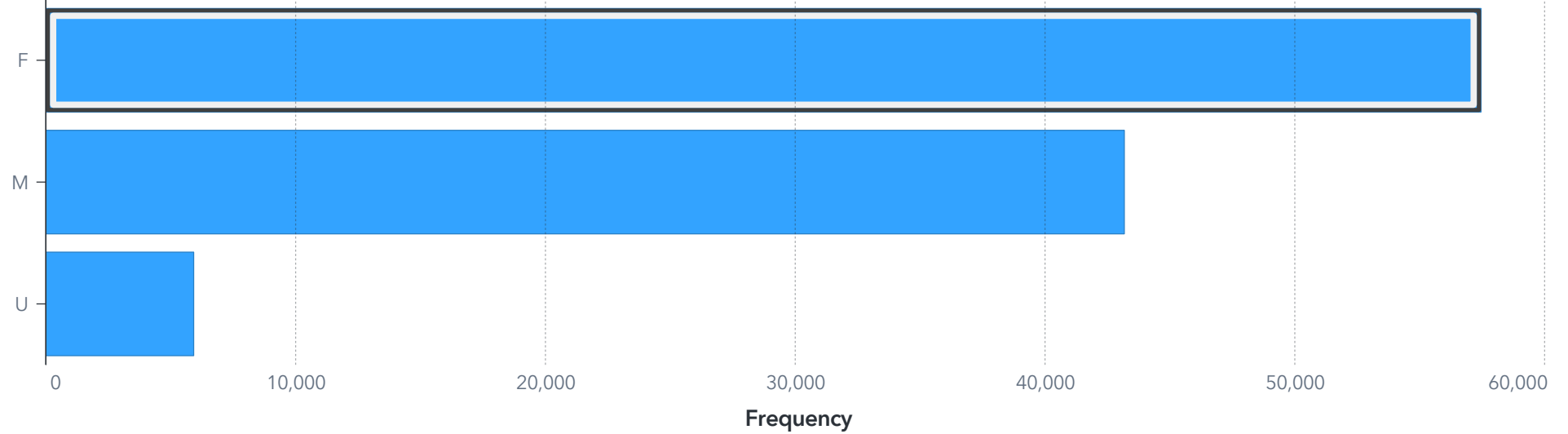
Frequency of Target Gift Flag

Target Gift Flag



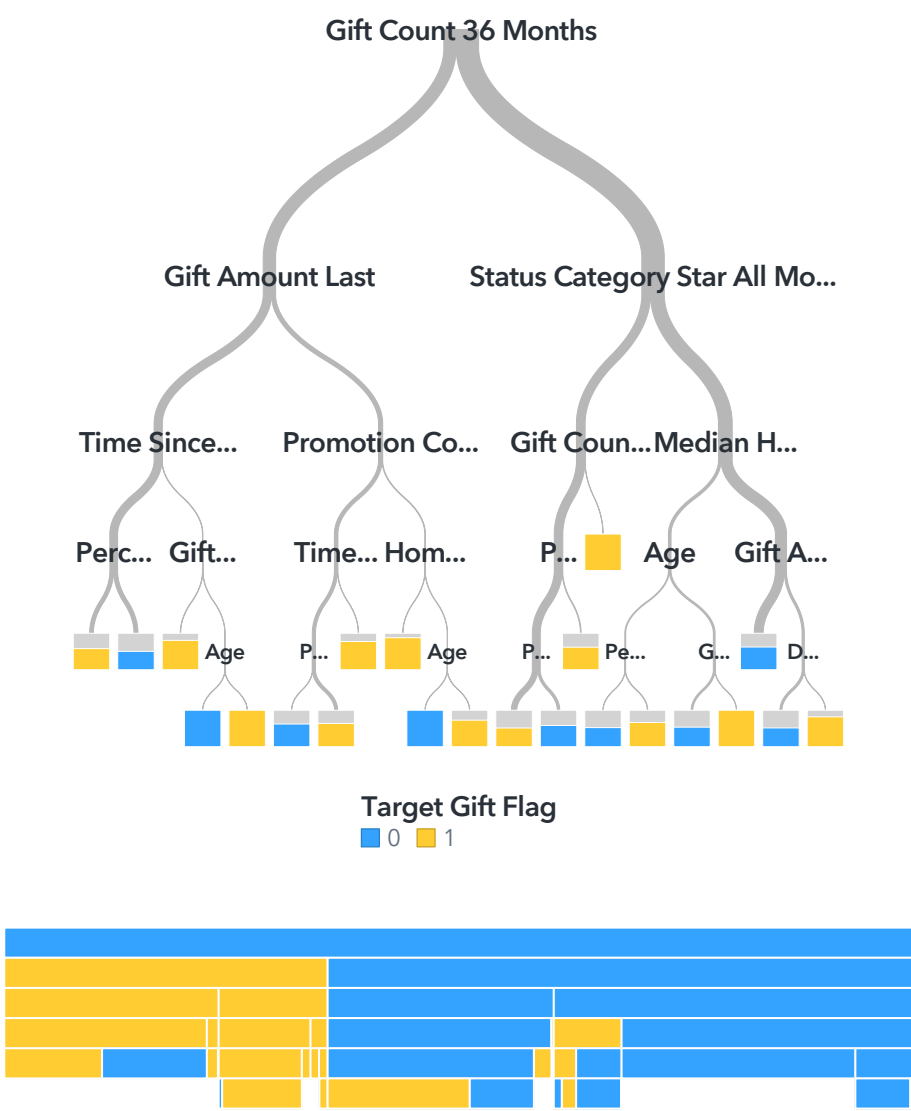
Frequency of Gender

Gender

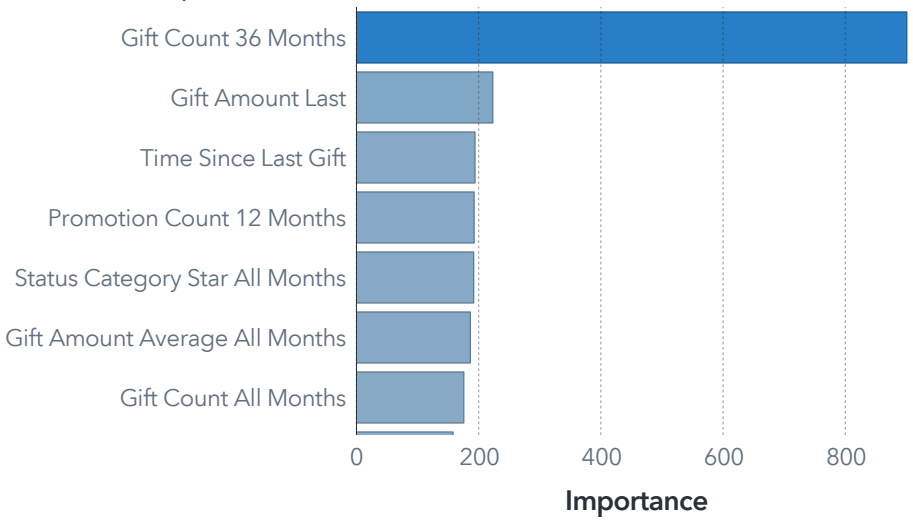


Decision Tree **Target Gift Flag** (event=1) KS (Youden) **0.1664** Observations Used **106,546**

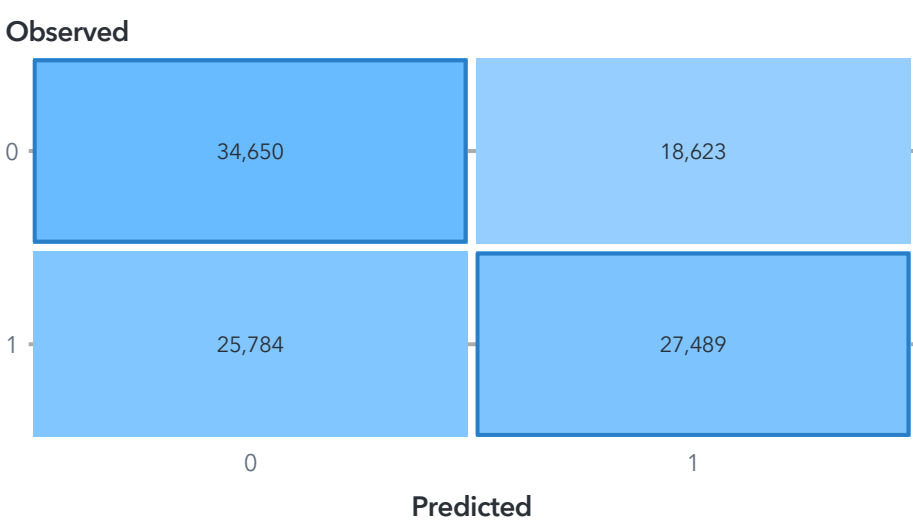
Tree



Variable Importance

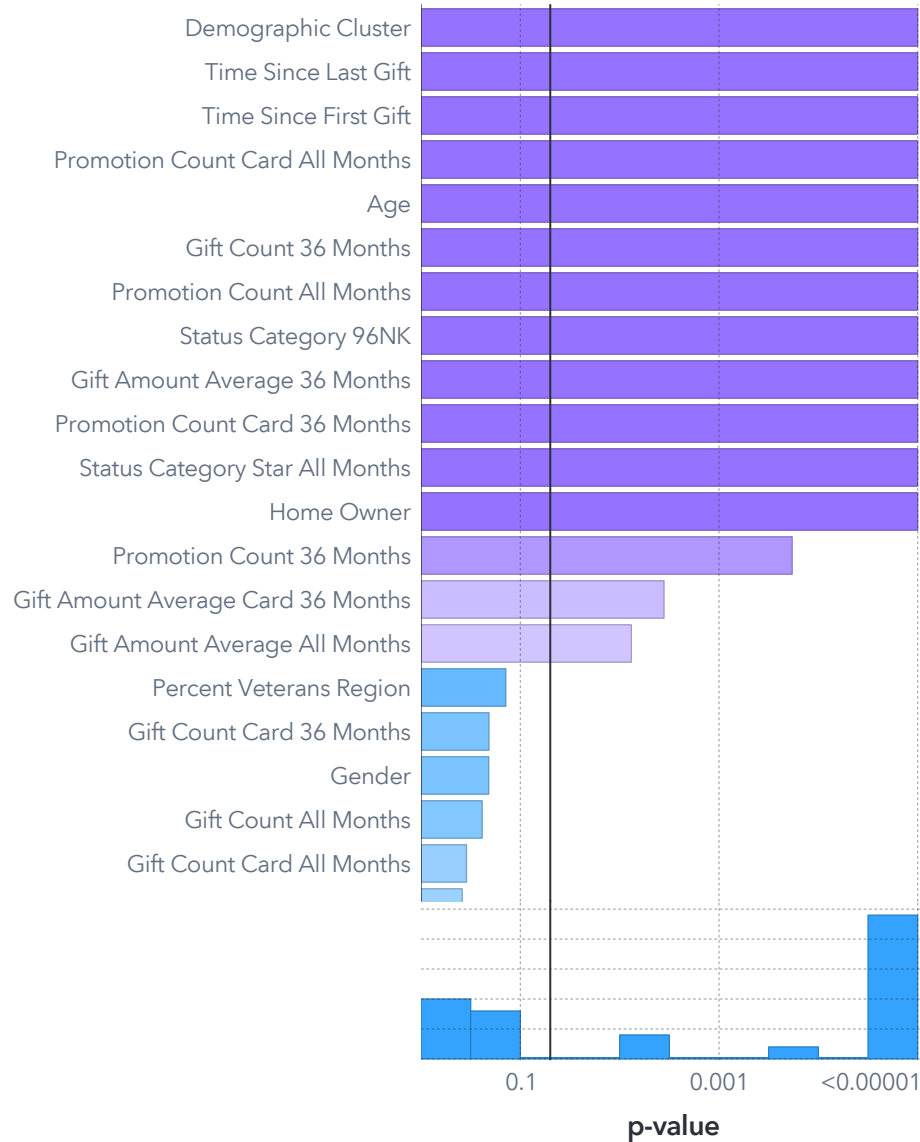


Confusion Matrix

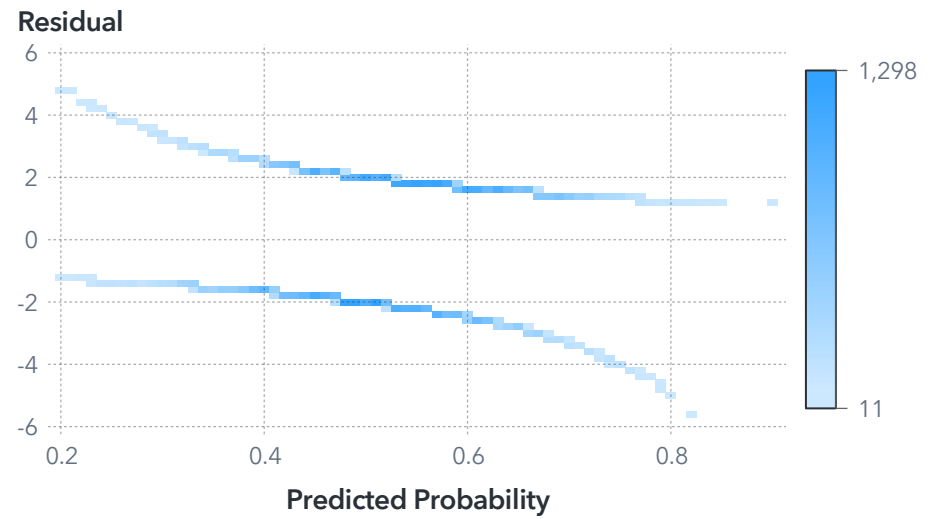


Logistic Regression **Target Gift Flag** (event=1) KS (Youden) **0.1864** Observations Used **64,988** Unused **41,558**

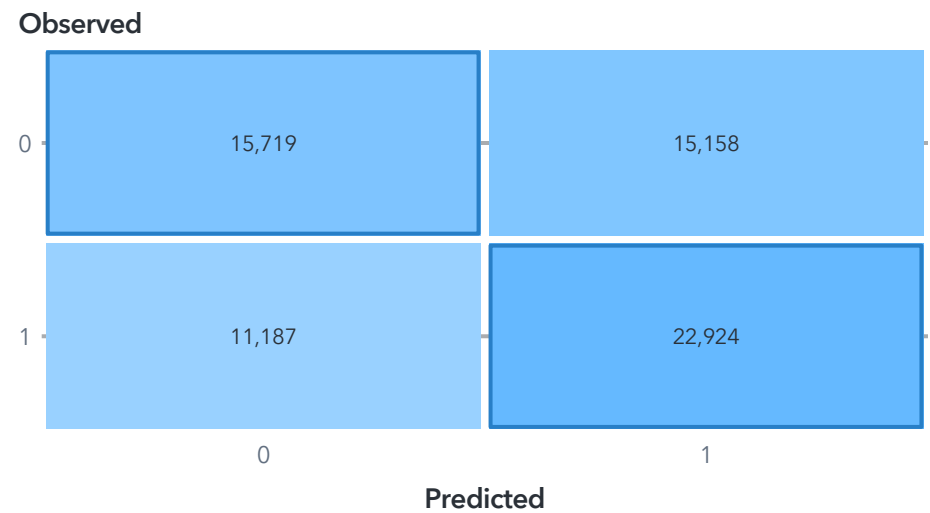
### Fit Summary



### Residual Plot

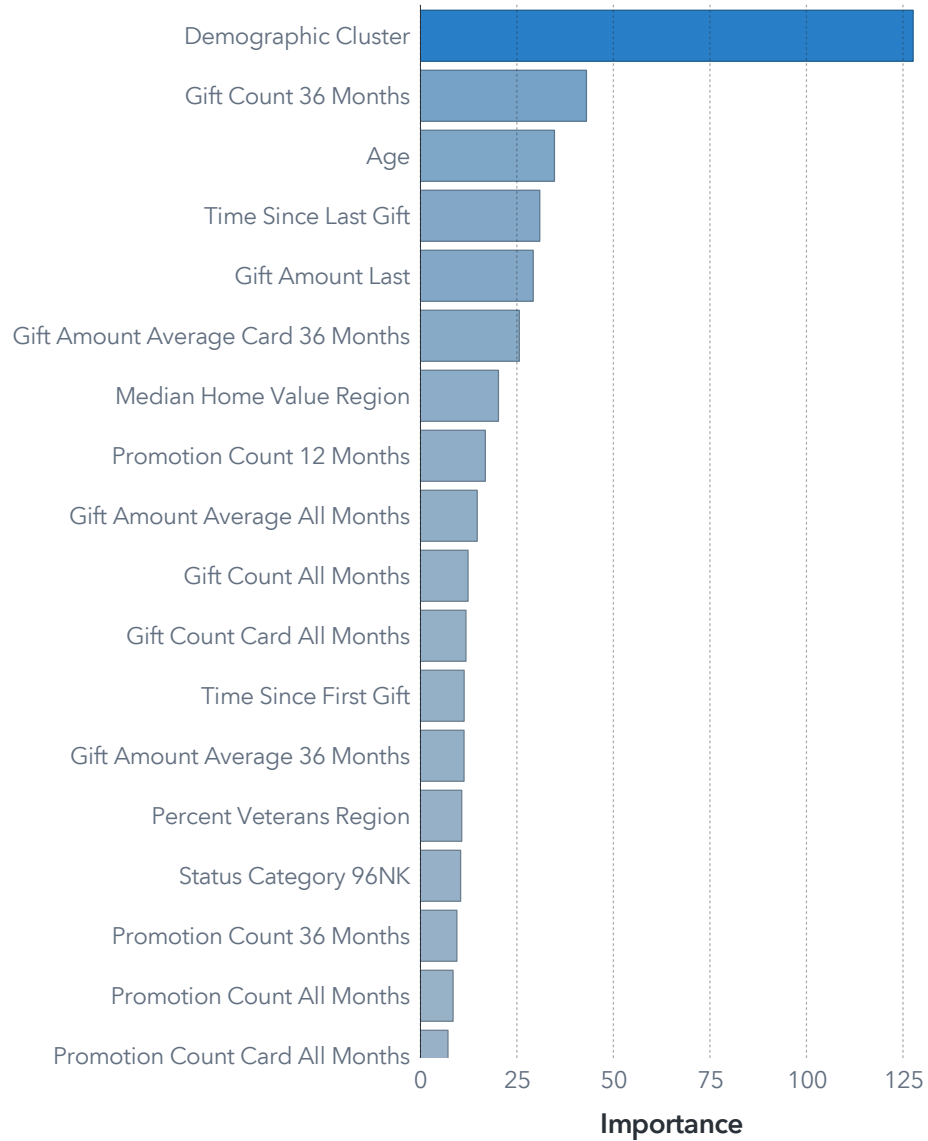


### Confusion Matrix



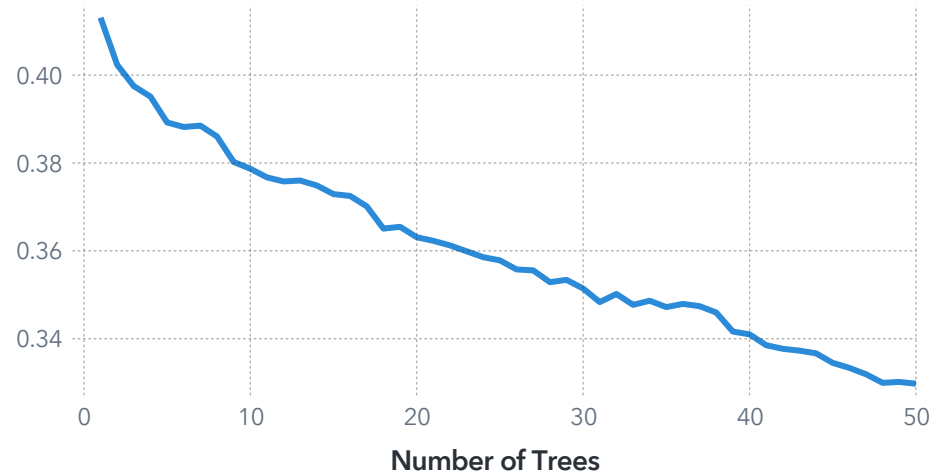
Gradient Boosting Target Gift Flag (event=1) KS (Youden) 0.3405 Observations Used 106,546

### Variable Importance



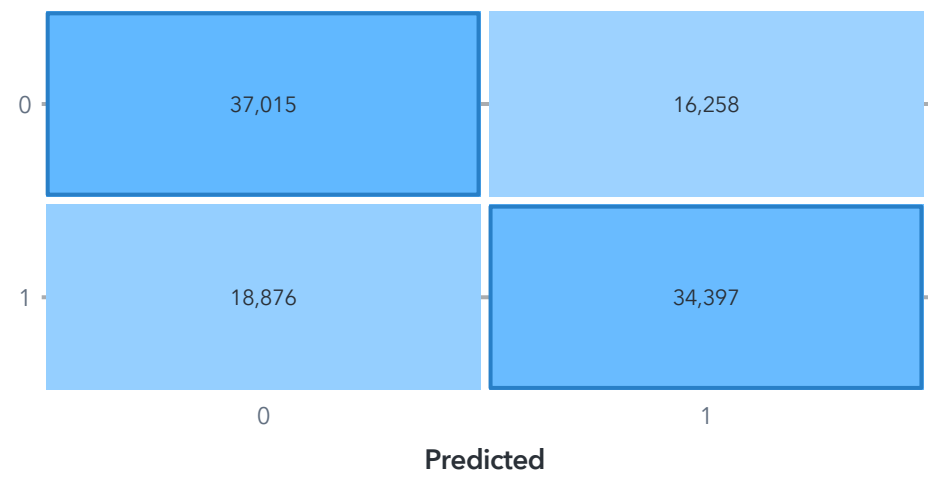
### Iteration Plot

#### Misclassification Rate



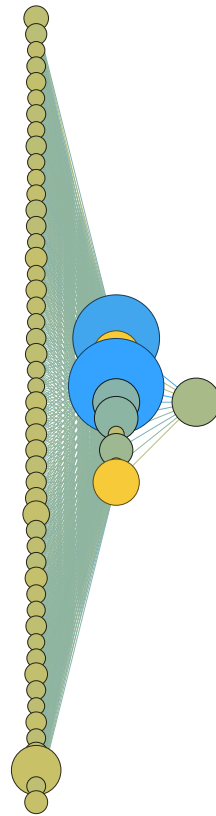
### Confusion Matrix

#### Observed

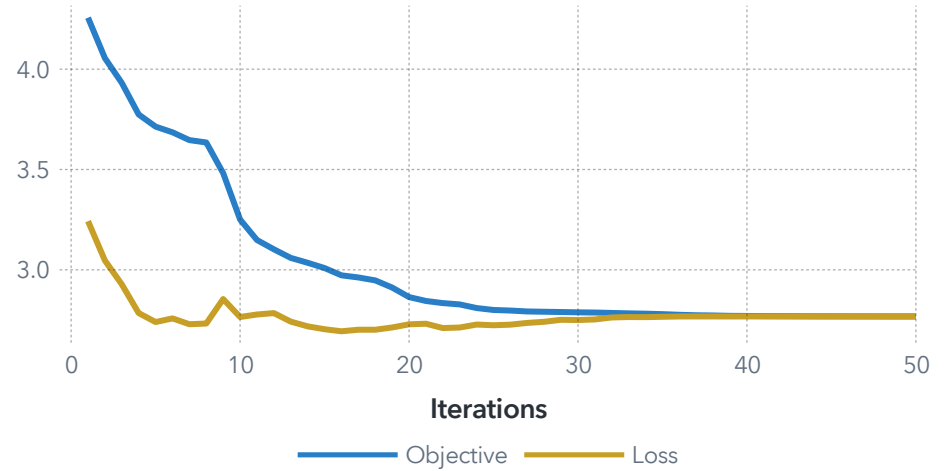


Neural Network Target Gift Flag (event=1) KS (Youden) 0.0000 Observations Used 64,988 Unused 41,558

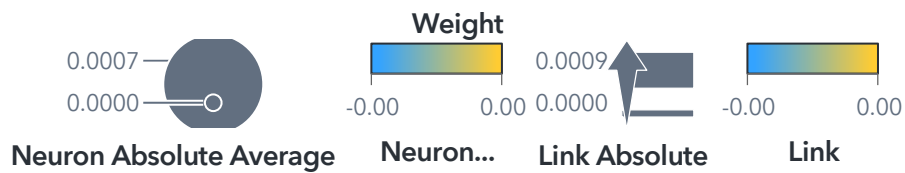
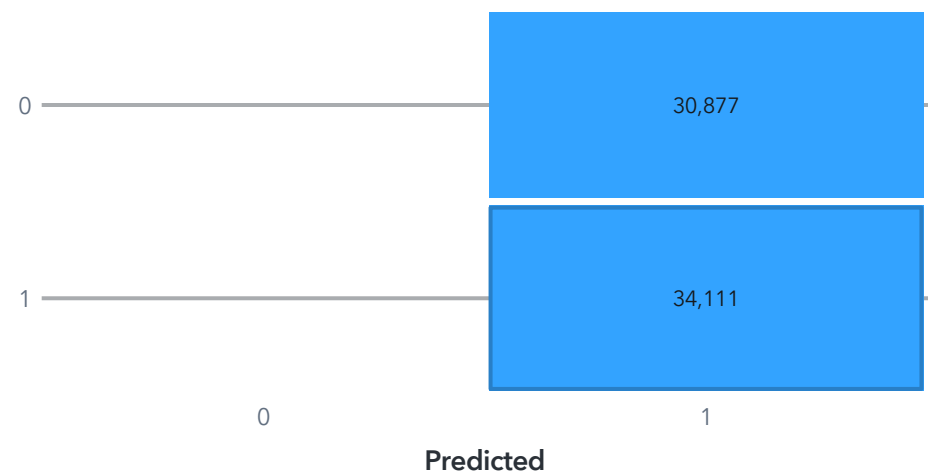
Network



Iteration Plot  
Objective / Loss

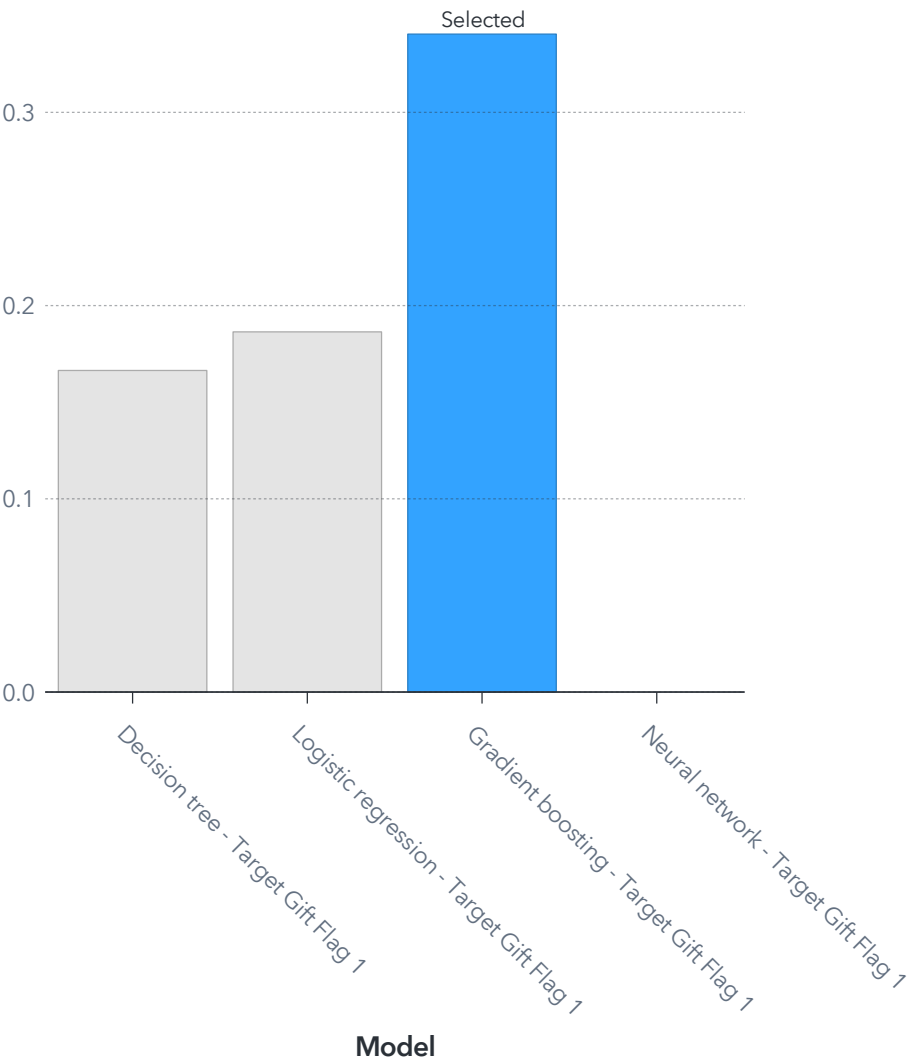


Confusion Matrix  
Observed

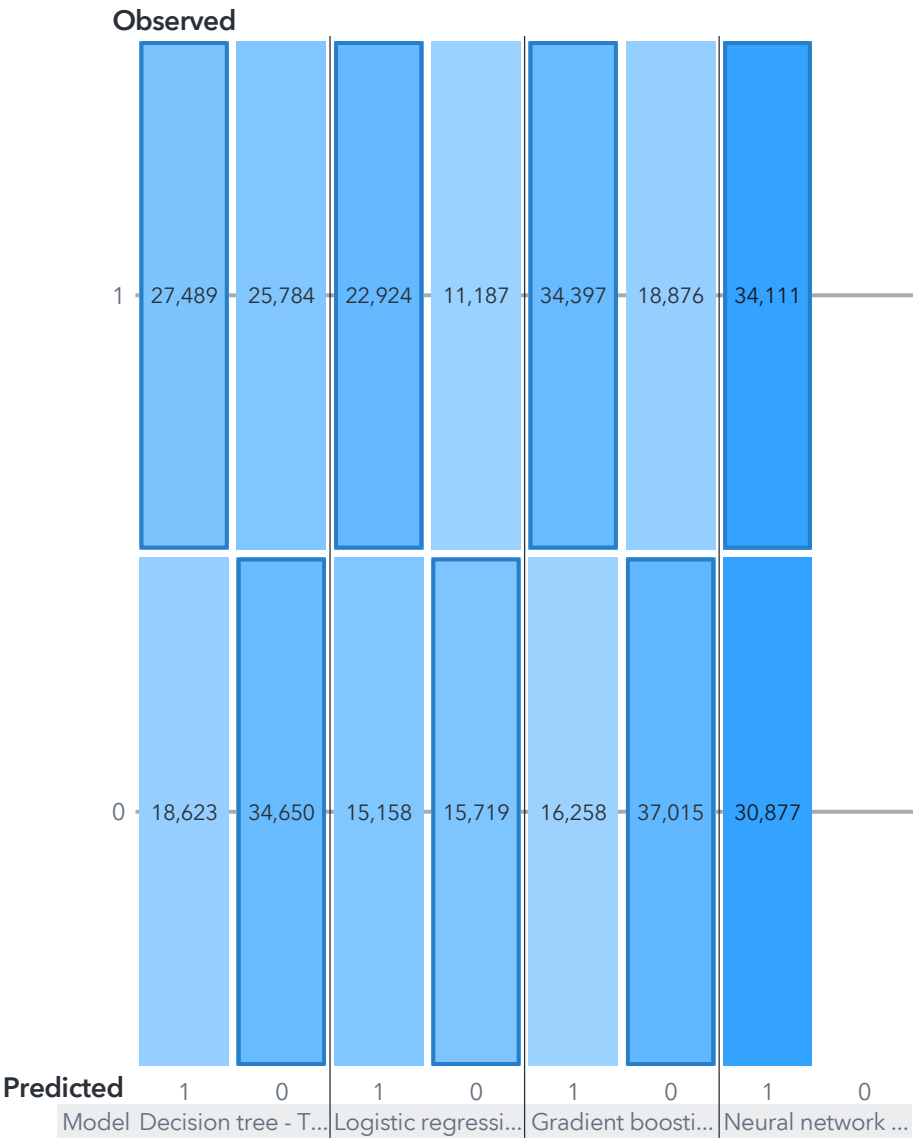


Model Comparison Target Gift Flag (event=1)

Fit Statistic  
KS (Youden)



Confusion Matrix



A1.1

## Appendix

### A1.1 Fit Statistic

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Warnings: Neural network - Target Gift Flag 1: One or more of the neuron layers has too many neurons to display and has been truncated.  
Number of observations for all models do not match.