Feature Set ∨
- ☐ idur
- ☐ idur_oef
- ☐ iraw
- ☐ iraw_idur
- ☐ iraw_idur_oef
- ■ iraw_oef

Model ∨
- ☐ Select all
- ■ Decision Tree
- ☐ Discriminant Analysis
- ☐ Gradient Boosting
- ☐ Logistic Regression
- ☐ Naive Bayes
- ☐ Neural Network
- ☐ Random Forest
- ☐ Support Vector Machine

threshold ● 0.5 ● 0.7 ● 0.97

ROC AUC vs Resampling bar chart

- No resampling: 0.6116 0.6116 0.6116
- Undersampling only (cheaters/noncheaters = 1:2): 0.7224 0.7224 0.7224
- Undersampling only (cheaters/noncheaters = 1:1): 0.6632 0.6632 0.6632
- SMOTE only (cheaters/noncheaters = 1:2): 0.6333 0.6333 0.6333
- SMOTE only (cheaters/noncheaters = 1:1): 0.6448 0.6448 0.6448
- Both (cheaters/noncheaters = 1:2): 0.6107 0.6107 0.6107
- Both (cheaters/noncheaters = 1:1) smoterate=0.4: 0.6396 0.6396 0.6396
- Both (cheaters/noncheaters = 1:1) smoterate=0.8: 0.5977 0.5977 0.5977

Feature Set ⌄
- ☐ idur
- ☐ idur_oef
- ☐ iraw
- ☐ iraw_idur
- ☐ iraw_idur_oef
- ☑ iraw_oef

Model ⌄
- ☑ Select all
- ☑ Decision Tree
- ☐ Discriminant Analysis
- ☐ Gradient Boosting
- ☐ Logistic Regression
- ☐ Naive Bayes
- ☐ Neural Network
- ☐ Random Forest
- ☐ Support Vector Machine
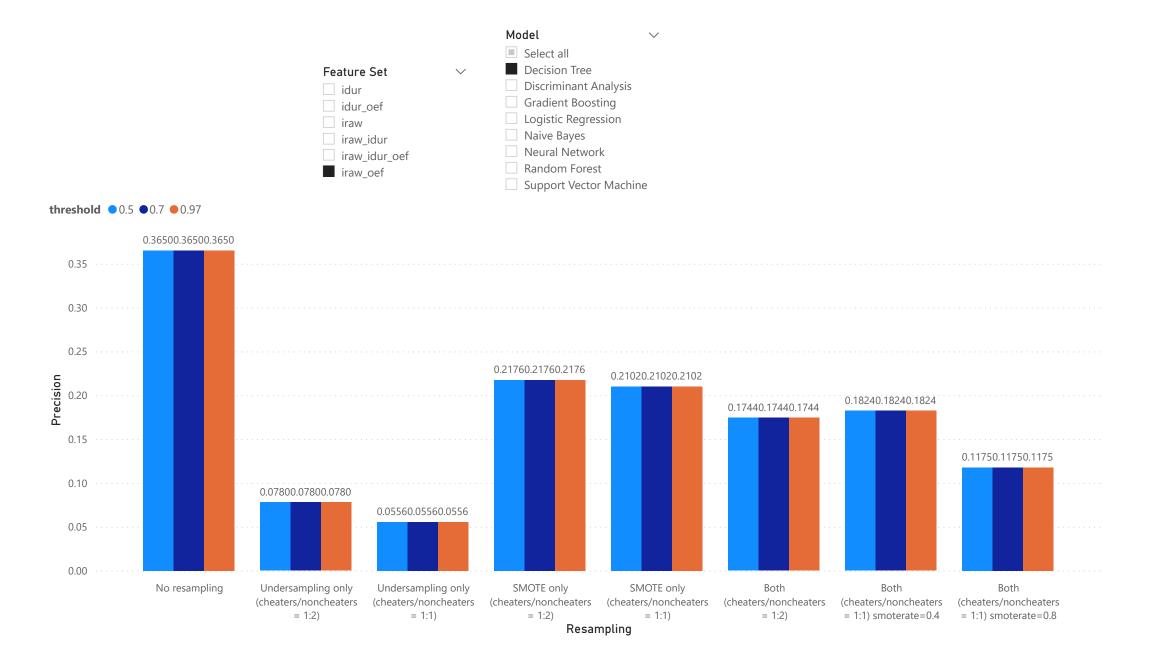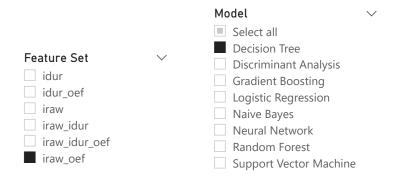
threshold ● 0.5 ● 0.7 ● 0.97

Recall

Resampling	threshold 0.5/0.7/0.97
No resampling	0.2377 0.2377 0.2377
Undersampling only (cheaters/noncheaters = 1:2)	0.6748 0.6748 0.6748
Undersampling only (cheaters/noncheaters = 1:1)	0.6395 0.6395 0.6395
SMOTE only (cheaters/noncheaters = 1:2)	0.3006 0.3006 0.3006
SMOTE only (cheaters/noncheaters = 1:1)	0.3230 0.3230 0.3230
Both (cheaters/noncheaters = 1:2)	0.2622 0.2622 0.2622
Both (cheaters/noncheaters = 1:1) smoterate=0.4	0.3314 0.3314 0.3314
Both (cheaters/noncheaters = 1:1) smoterate=0.8	0.2453 0.2453 0.2453