

Evaluate testing data (binary-class) - XGBoost

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Labels: 0: Basal 1: Luma

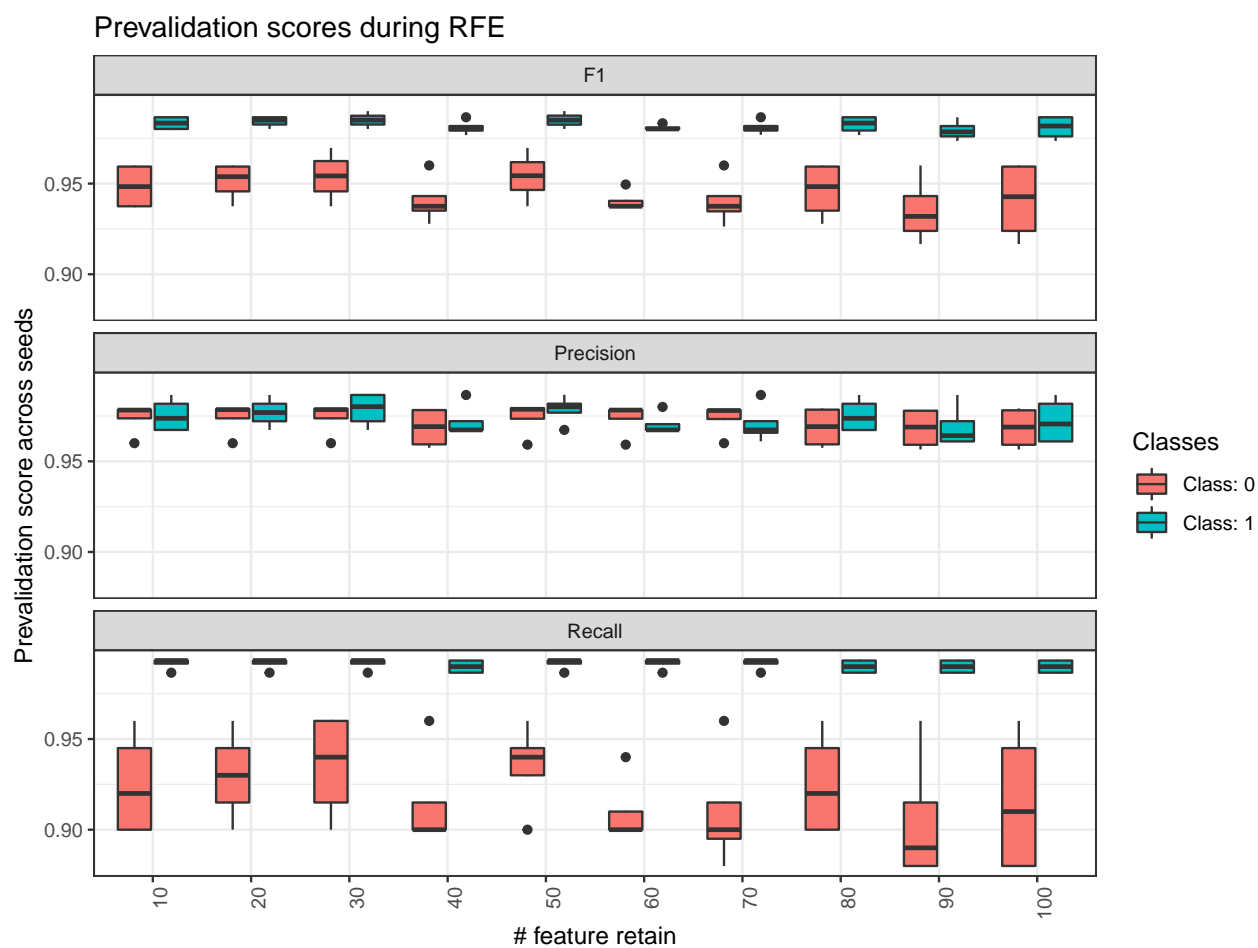
```
## user input
project_home <- "~/EVE/examples"
project_name <- "xgboost_binary_outCV_test"
```

0. Load Data

```
## 199 of samples were used
## 100 of full features
## 4 runs, each run contains 3 CVs.
## Labels:
##
##    0    1
## 50 149
```

1. Scores

1.1 Scores per Class



Confusion Matrix

```
## confusion matrix at feature size = 100
```

```
## sum across 4 seeds
```

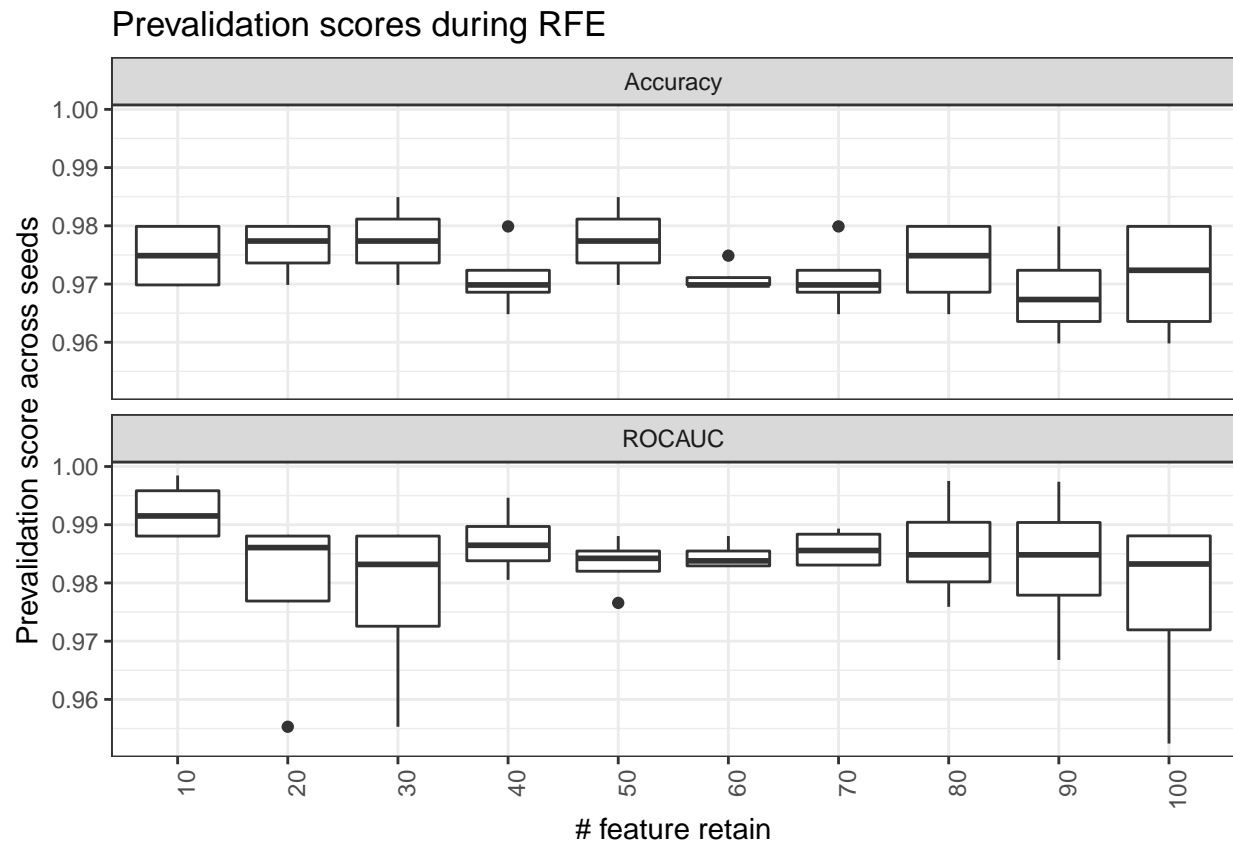
```
##           Reference
```

```
## Prediction  0   1
```

```
##           0 183   6
```

```
##           1   17 590
```

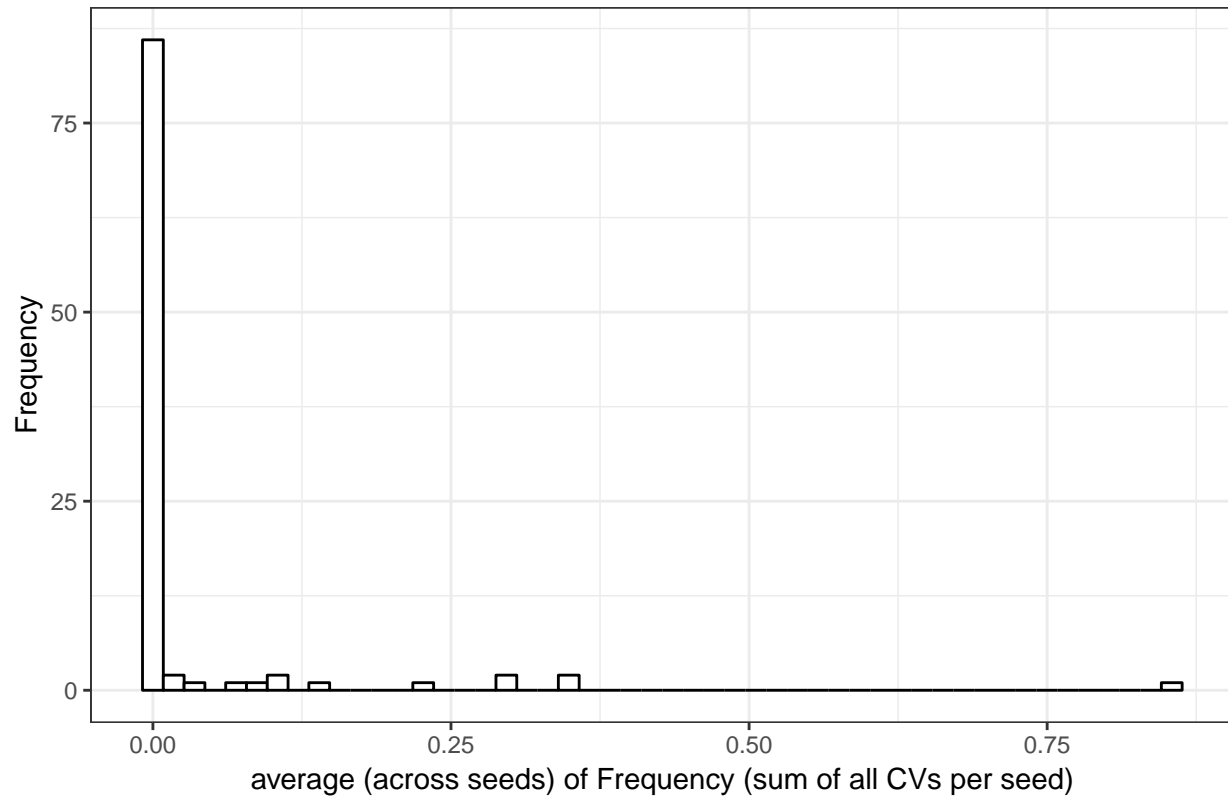
1.2 Average score



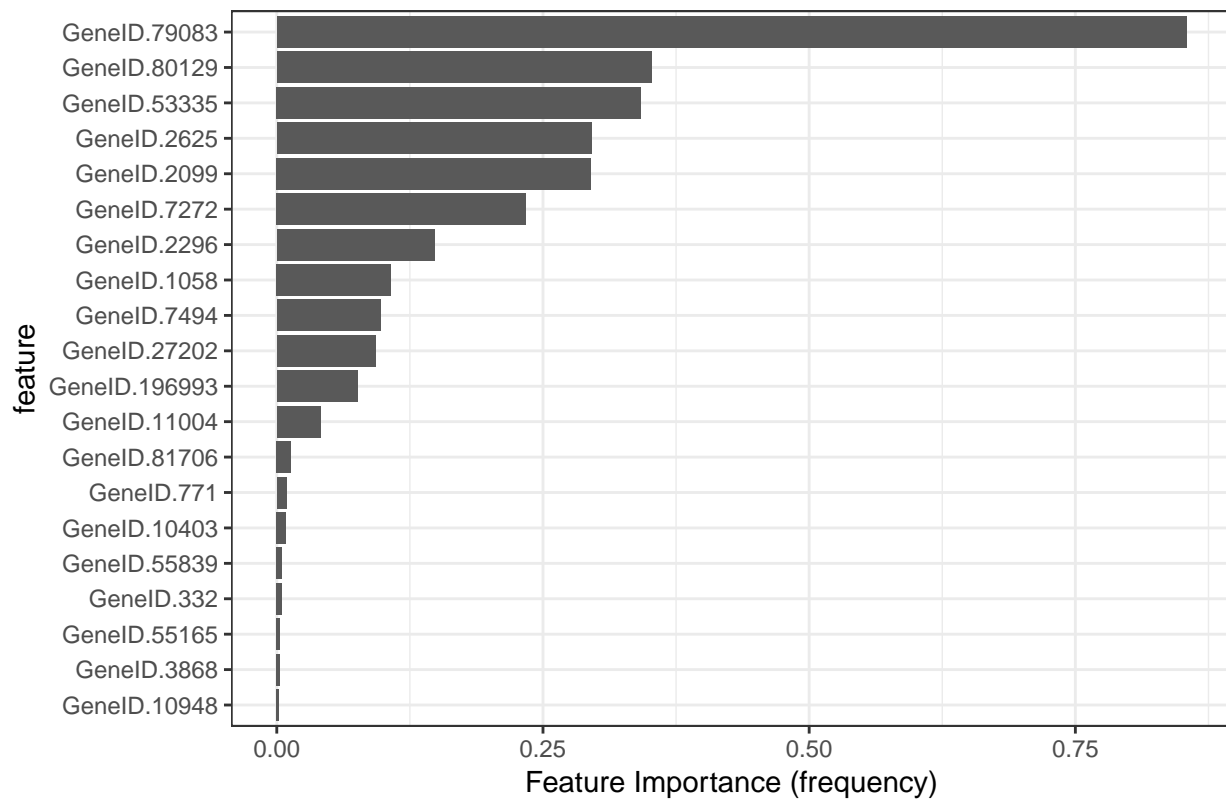
metrics	size.max	median.max	size.min	median.min
Accuracy	20	0.977	90	0.967
F1	30	0.970	90	0.955
Precision	50	0.976	90	0.971
Recall	30	0.965	90	0.942
ROCAUC	10	0.992	30	0.983

2. Important Features

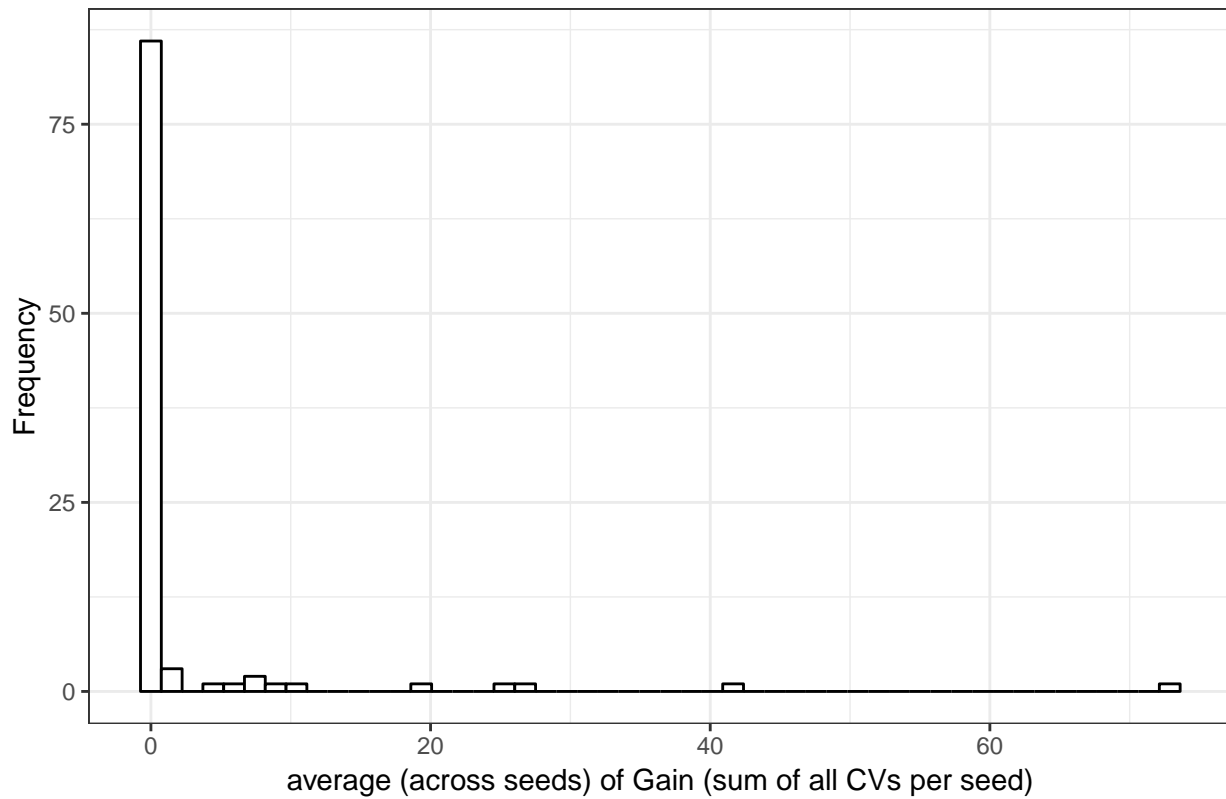
with 100 features based on Frequency



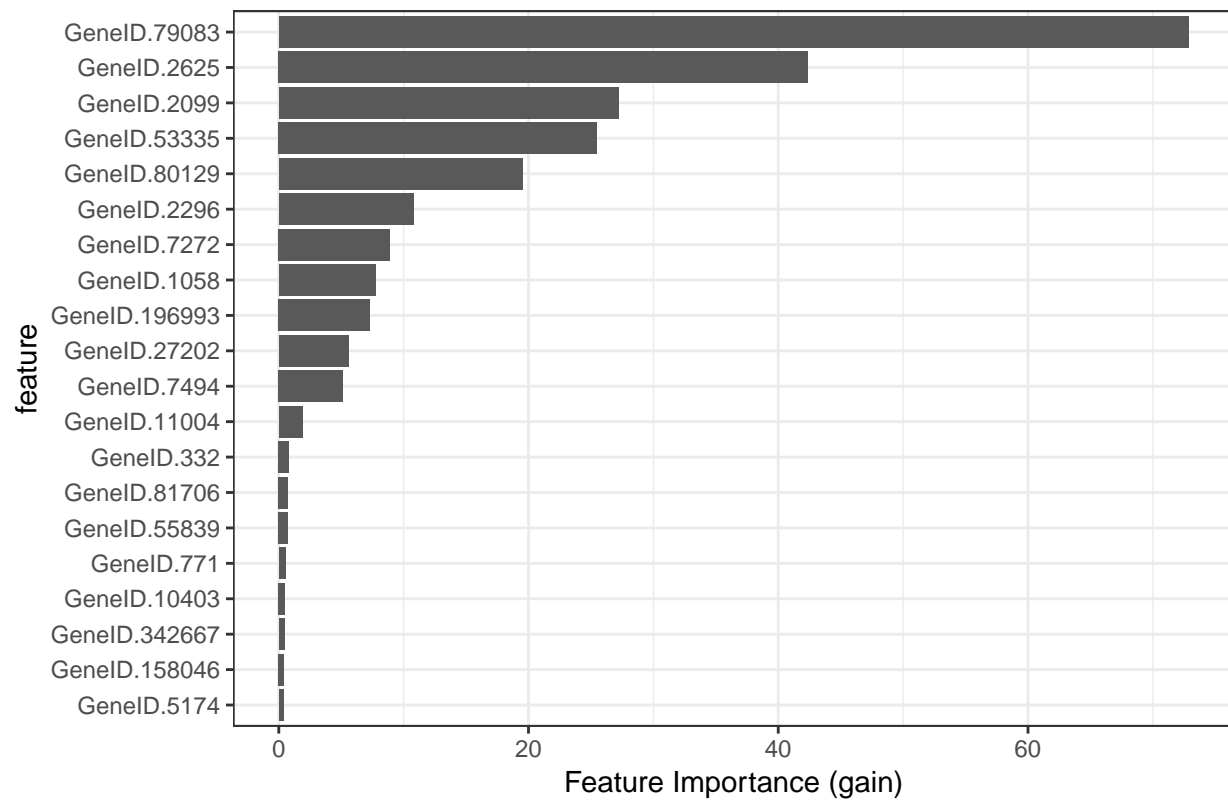
Top 20 features at 100 feature set based on Frequency



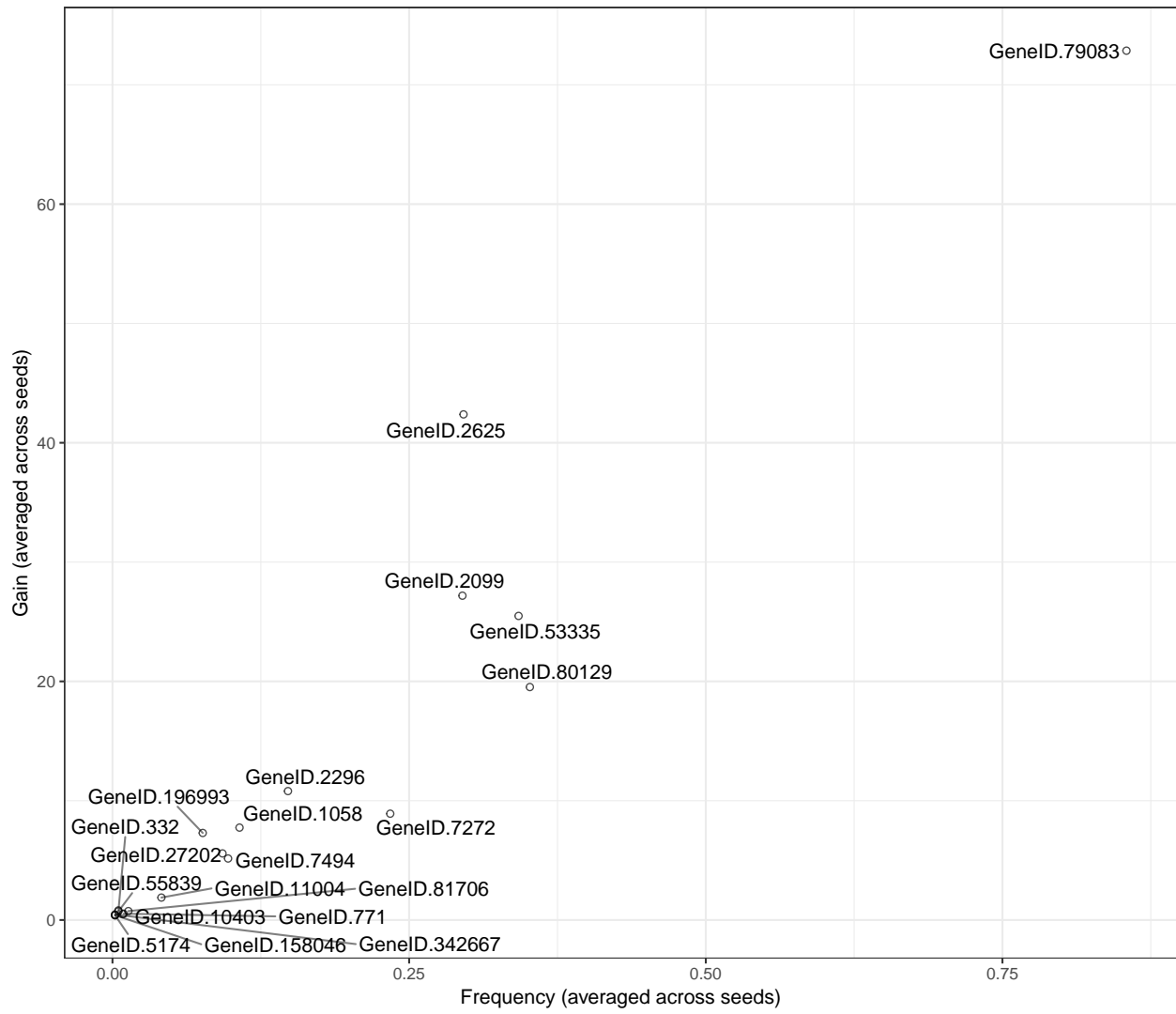
with 100 features based on Gain

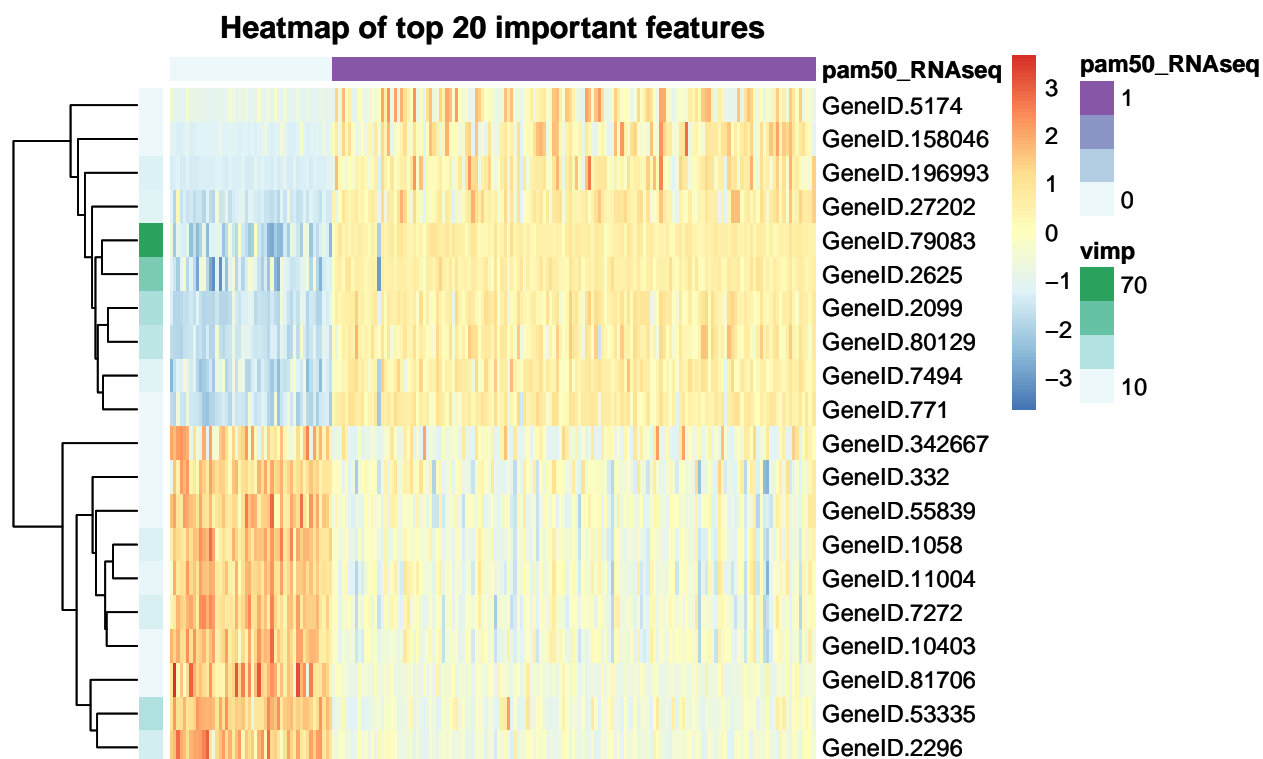


Top 20 features at 100 feature set based on Gain



Top 20 features at 100 feature set





3. Hyper-parameters

Hyperparameter Tuning in each CV

each box represents different seed (maximum 5 seeds are shown)

