

Anomaly Detection Model Performance

Isolation Forest

ROC AUC: 0.639

F1: 0.301

Recall: 0.342

Local Outlier Factor (LOF)

ROC AUC: 0.522

F1: 0.107

Recall: 0.112

One-Class SVM

ROC AUC: 0.566

F1: 0.184

Recall: 0.195

- All models have low F1 and recall: they miss many churners and/or make many false alarms.
- Isolation Forest is the best anomaly detector for our churn data, but its performance is still limited (as expected for unsupervised methods).
- LOF and One-Class SVM perform poorly, close to random guessing and miss most churners.