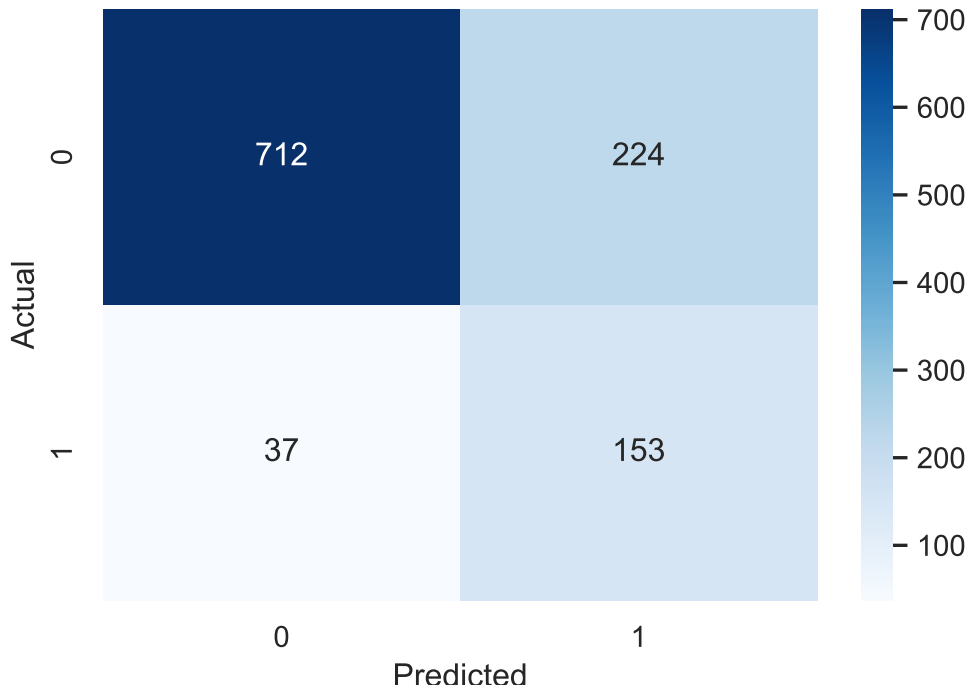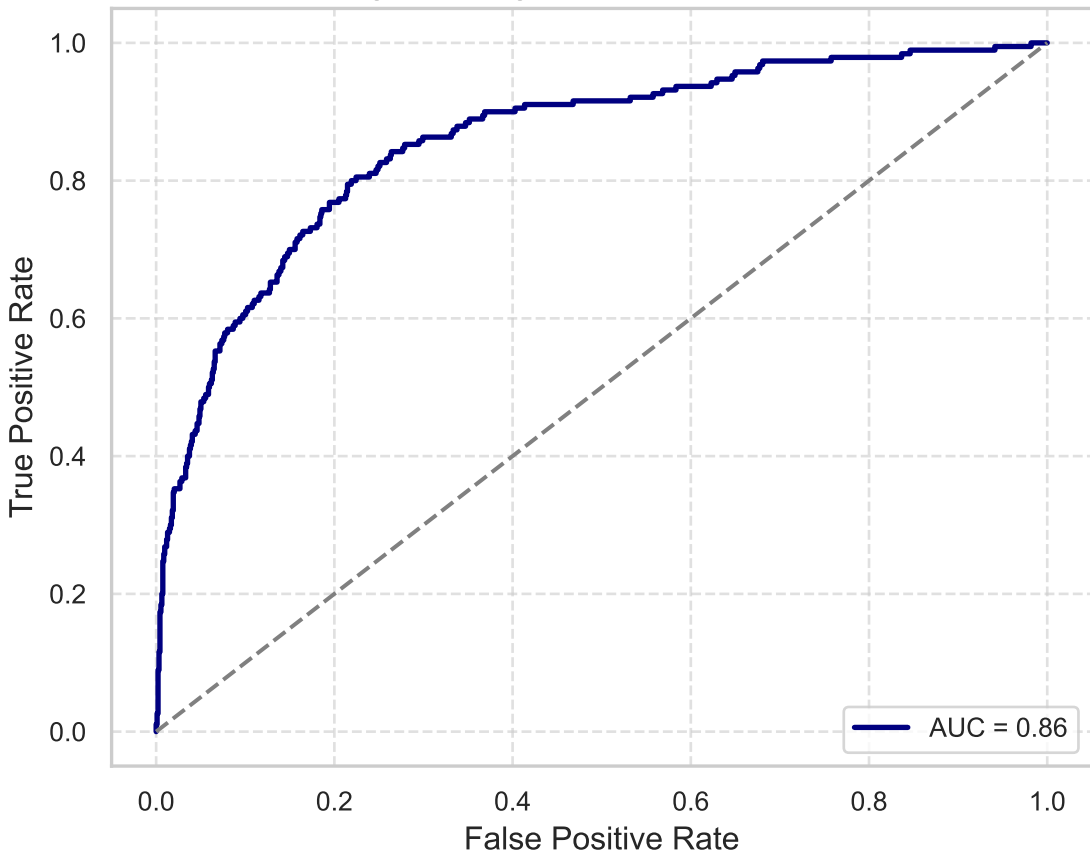Logistic Regression - Confusion Matrix
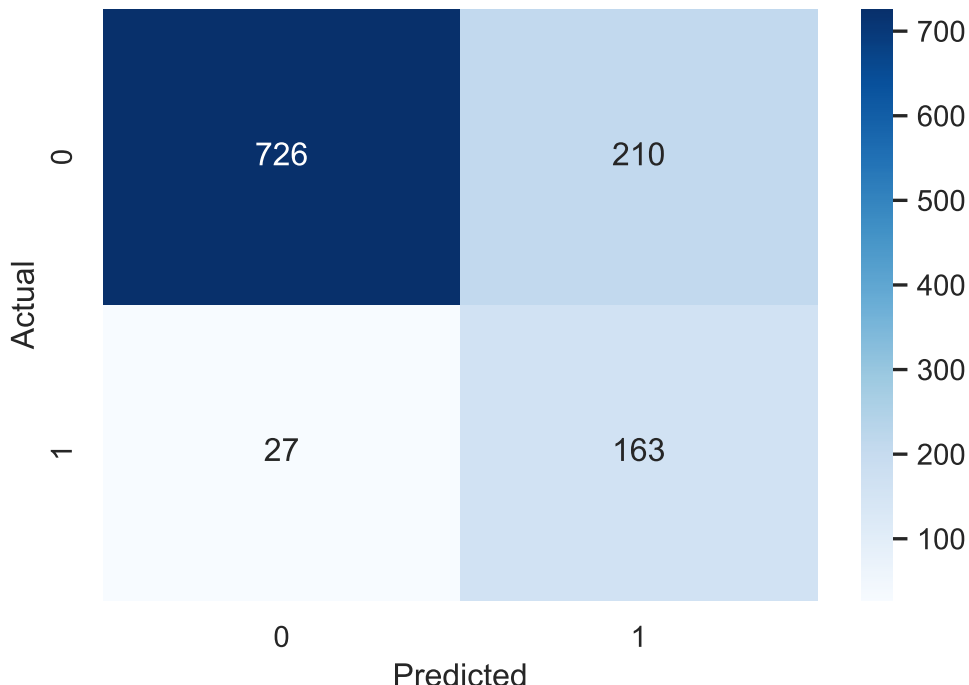
Logistic Regression - ROC Curve

AUC = 0.86

```
Logistic Regression - Classification Report

              precision    recall  f1-score   support

           0       0.95      0.76      0.85       936
           1       0.41      0.81      0.54       190

    accuracy                           0.77      1126
   macro avg       0.68      0.78      0.69      1126
weighted avg       0.86      0.77      0.79      1126
```
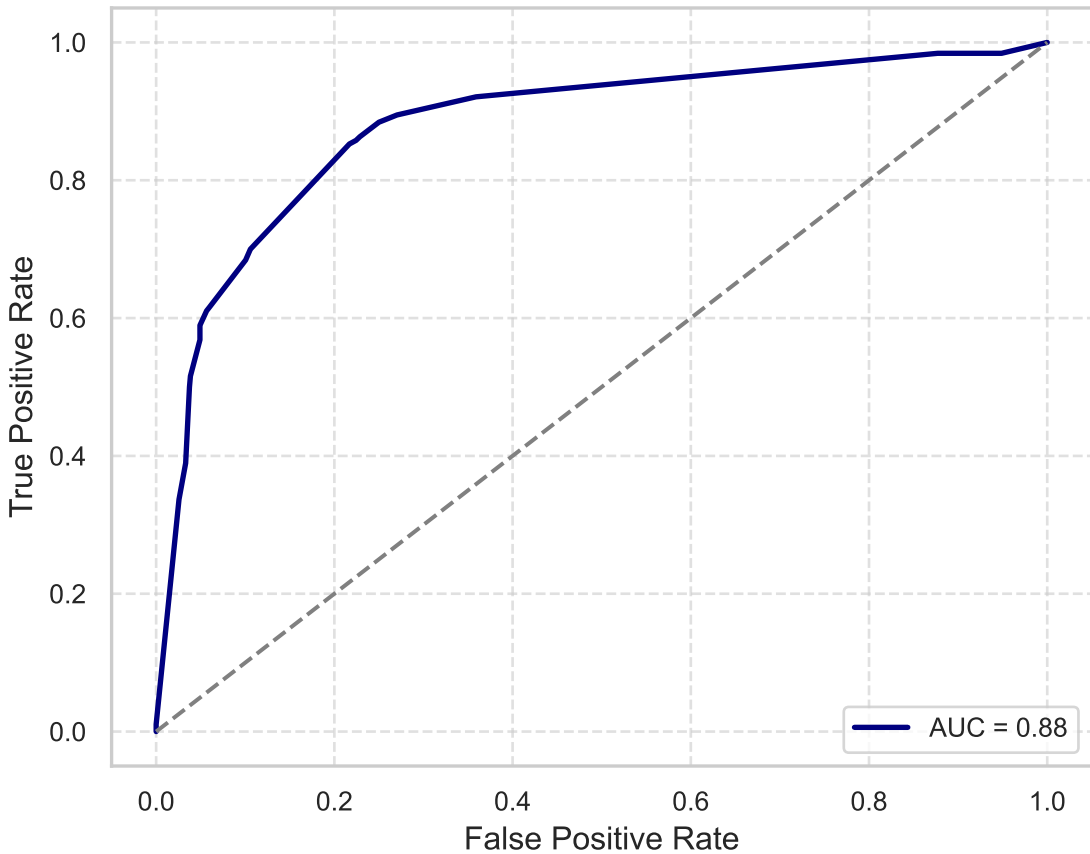
Decision Tree - Confusion Matrix

Decision Tree - ROC Curve

AUC = 0.88

```
Decision Tree - Classification Report

              precision    recall  f1-score   support

           0       0.96      0.78      0.86       936
           1       0.44      0.86      0.58       190

    accuracy                           0.79      1126
   macro avg       0.70      0.82      0.72      1126
weighted avg       0.88      0.79      0.81      1126
```
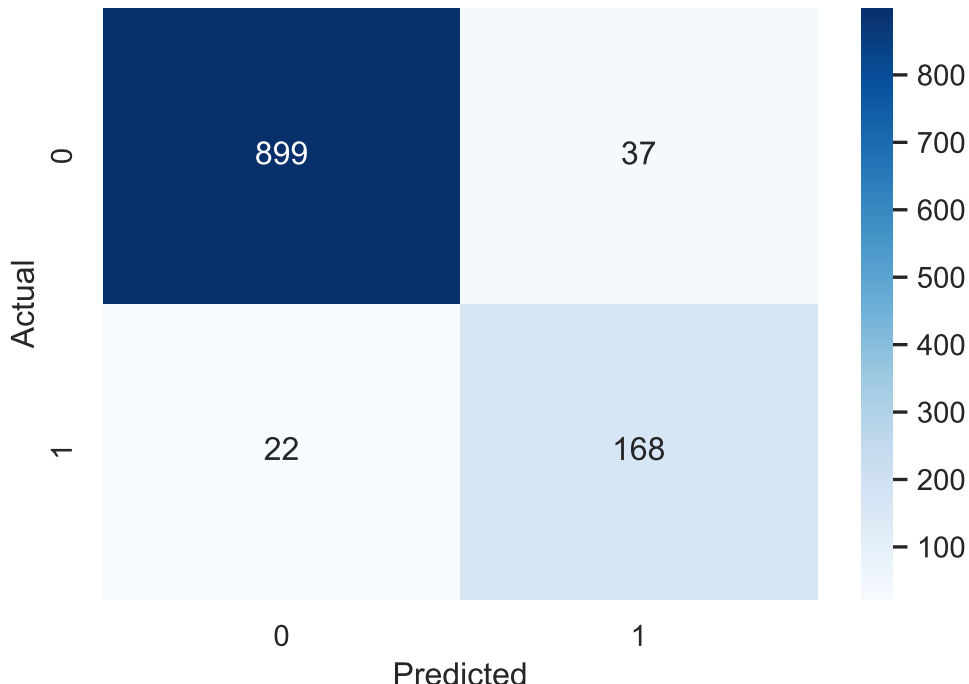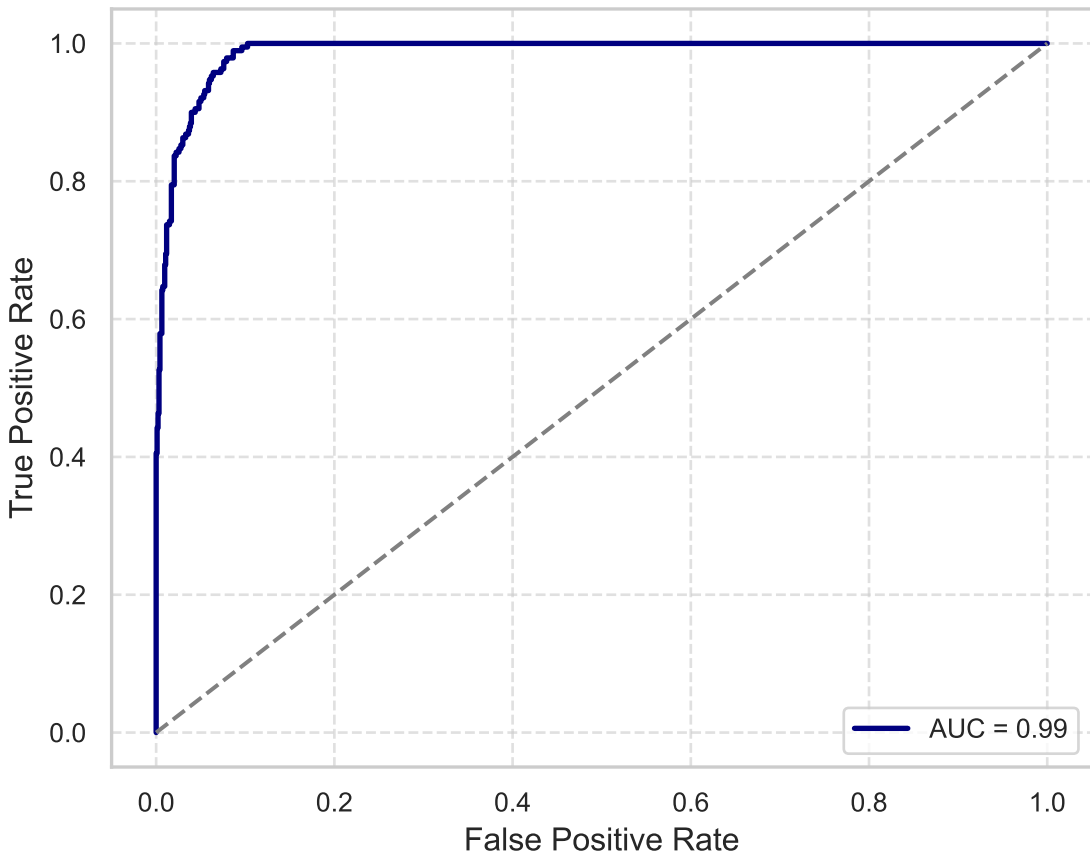
Random Forest - Confusion Matrix

Random Forest - ROC Curve

AUC = 0.99

```
Random Forest - Classification Report

              precision    recall  f1-score   support

           0       0.98      0.96      0.97       936
           1       0.82      0.88      0.85       190

    accuracy                           0.95      1126
   macro avg       0.90      0.92      0.91      1126
weighted avg       0.95      0.95      0.95      1126
```
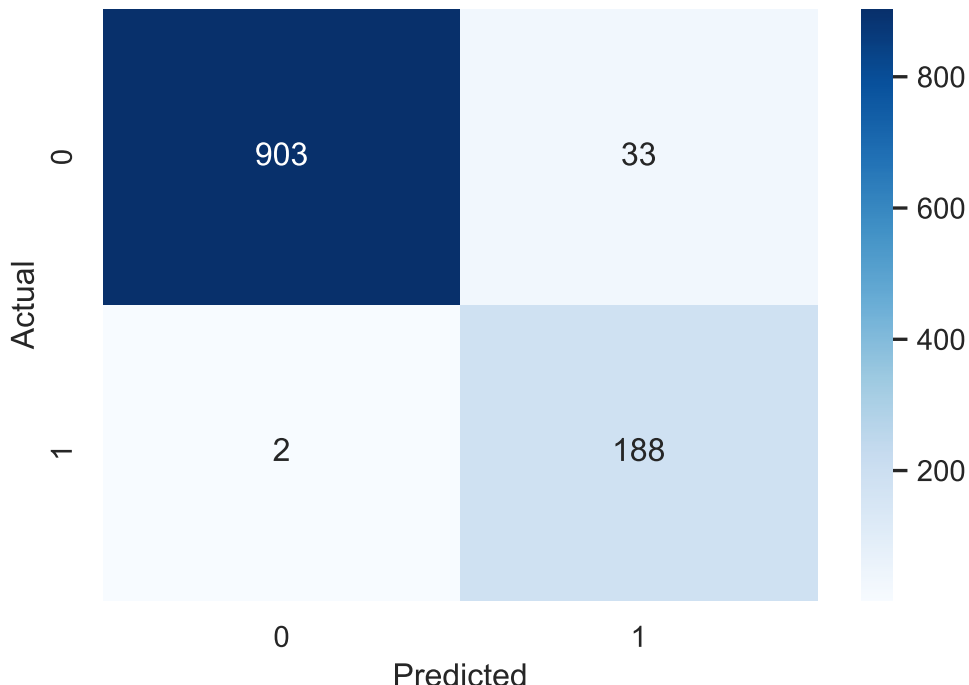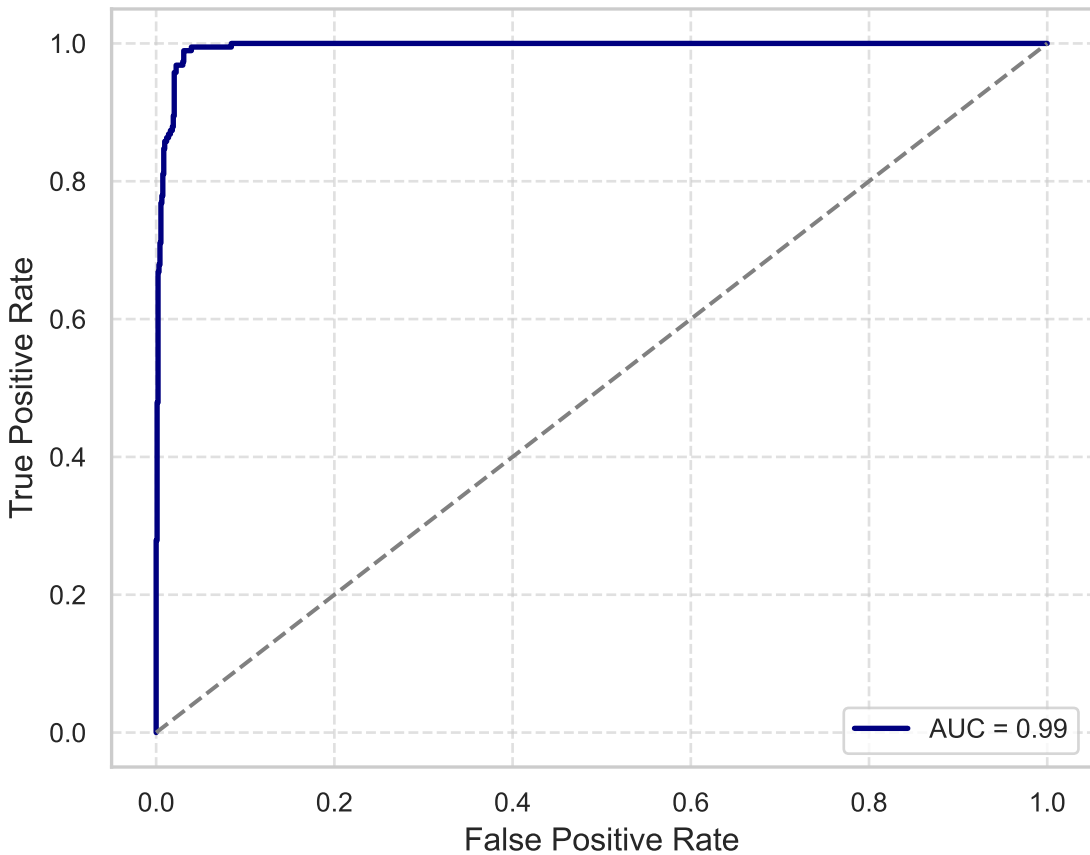
XGBoost - Confusion Matrix

XGBoost - ROC Curve

AUC = 0.99

```
XGBoost - Classification Report

              precision    recall  f1-score   support

           0       1.00      0.96      0.98       936
           1       0.85      0.99      0.91       190

    accuracy                           0.97      1126
   macro avg       0.92      0.98      0.95      1126
weighted avg       0.97      0.97      0.97      1126
```
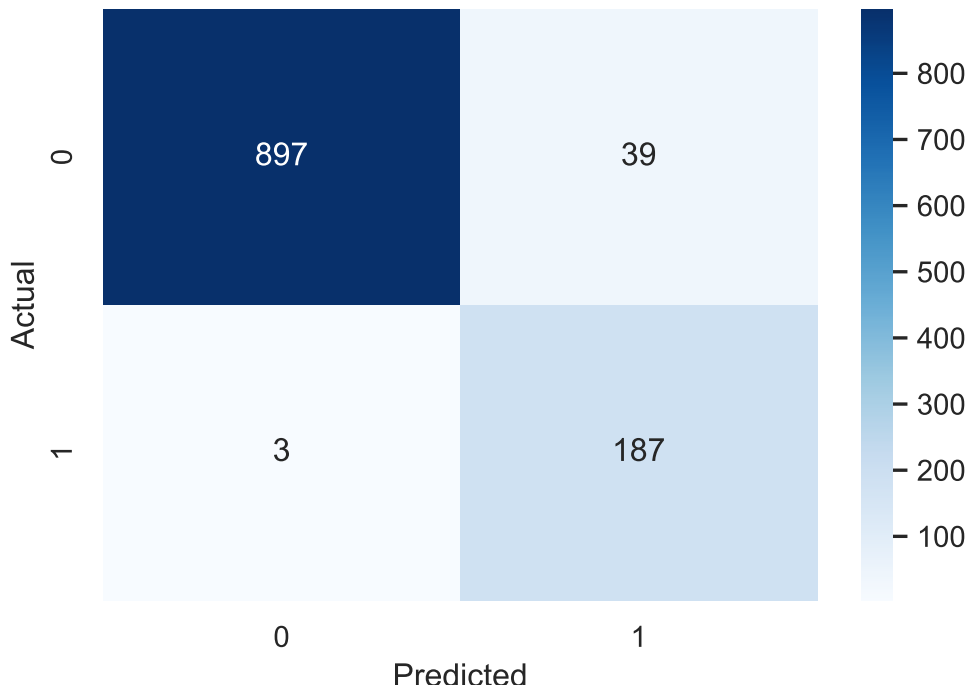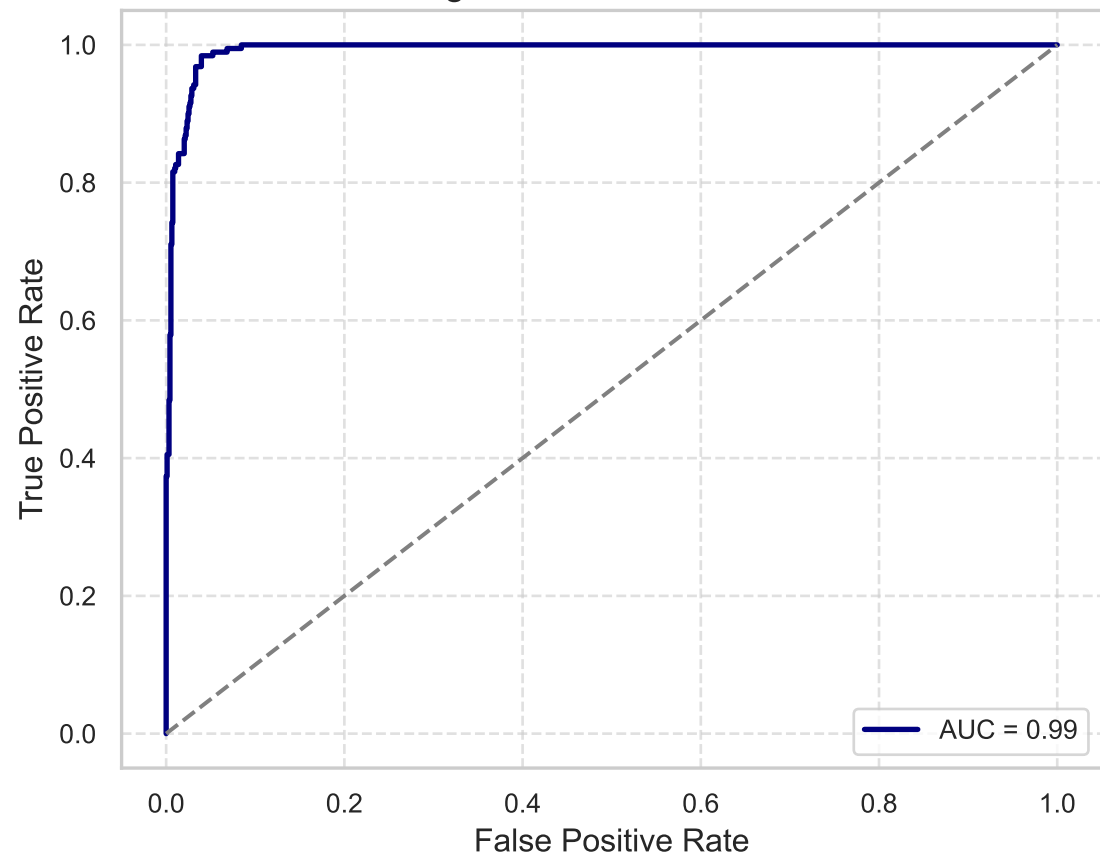
LightGBM - Confusion Matrix

LightGBM - ROC Curve

AUC = 0.99

```
LightGBM - Classification Report

              precision    recall  f1-score   support

           0       1.00      0.96      0.98       936
           1       0.83      0.98      0.90       190

    accuracy                           0.96      1126
   macro avg       0.91      0.97      0.94      1126
weighted avg       0.97      0.96      0.96      1126
```
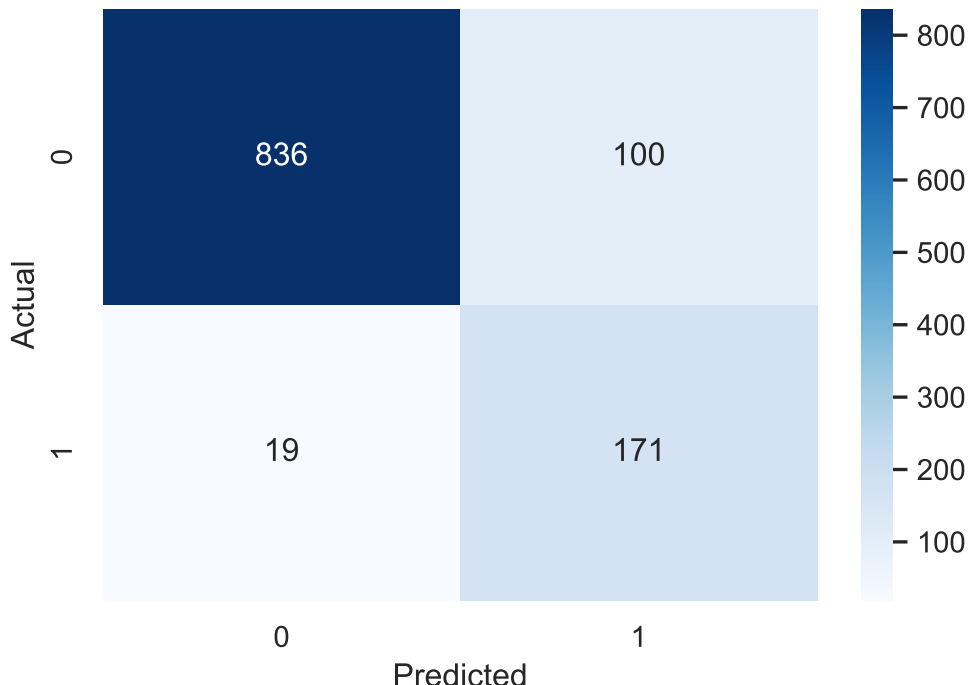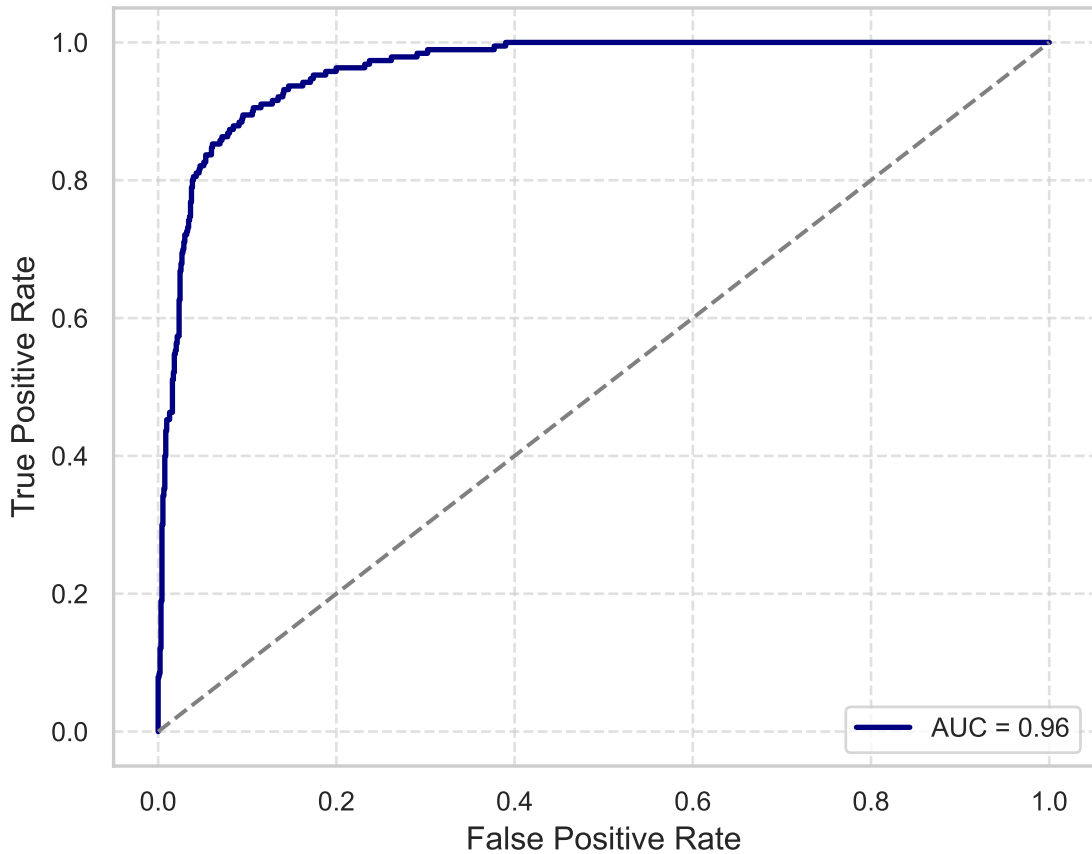
CatBoost - Confusion Matrix

CatBoost - ROC Curve

AUC = 0.96

```
CatBoost - Classification Report

              precision    recall  f1-score   support

           0       0.98      0.89      0.93       936
           1       0.63      0.90      0.74       190

    accuracy                           0.89      1126
   macro avg       0.80      0.90      0.84      1126
weighted avg       0.92      0.89      0.90      1126
```
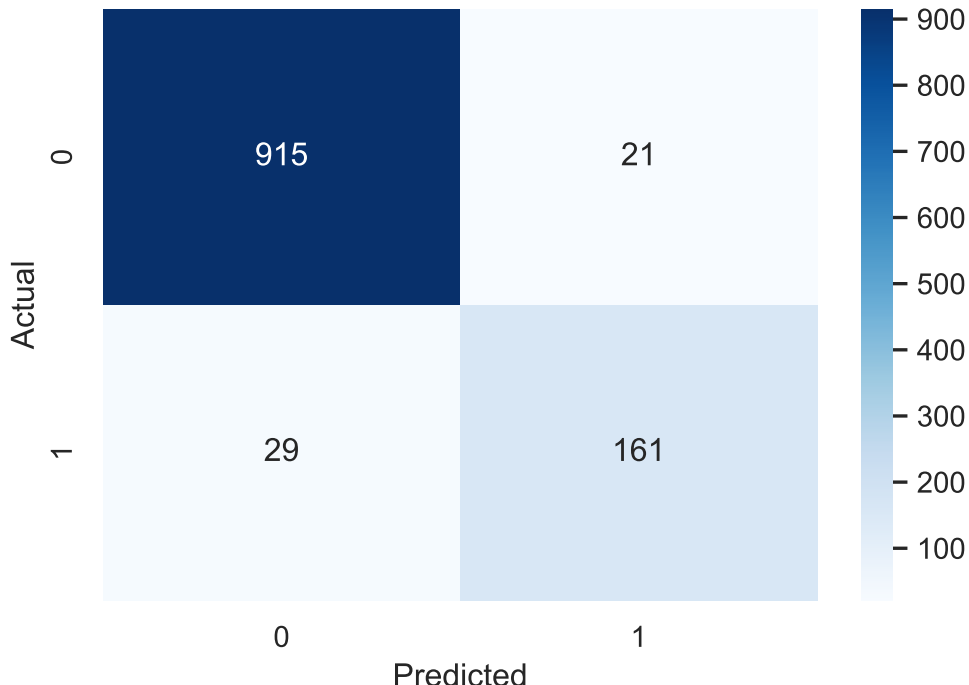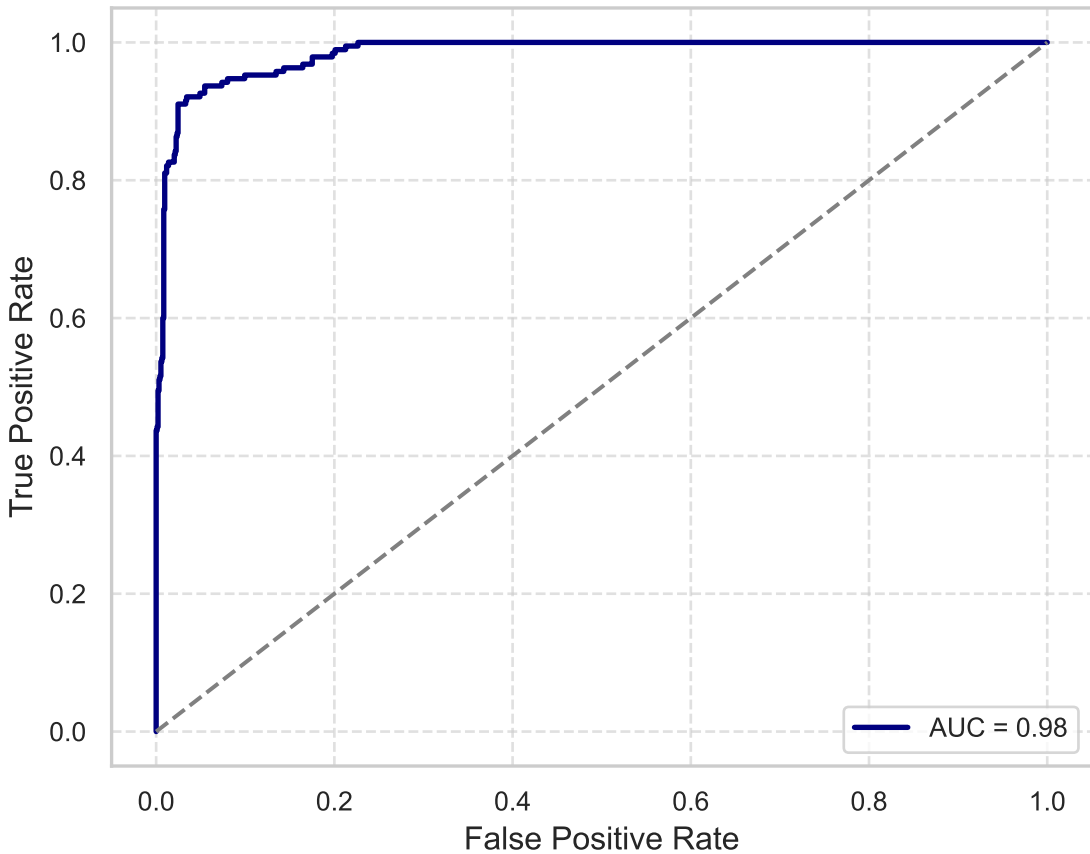
MLP Classifier - Confusion Matrix

MLP Classifier - ROC Curve

AUC = 0.98

```
MLP Classifier - Classification Report

              precision    recall  f1-score   support

           0       0.97      0.98      0.97       936
           1       0.88      0.85      0.87       190

    accuracy                           0.96      1126
   macro avg       0.93      0.91      0.92      1126
weighted avg       0.95      0.96      0.96      1126
```
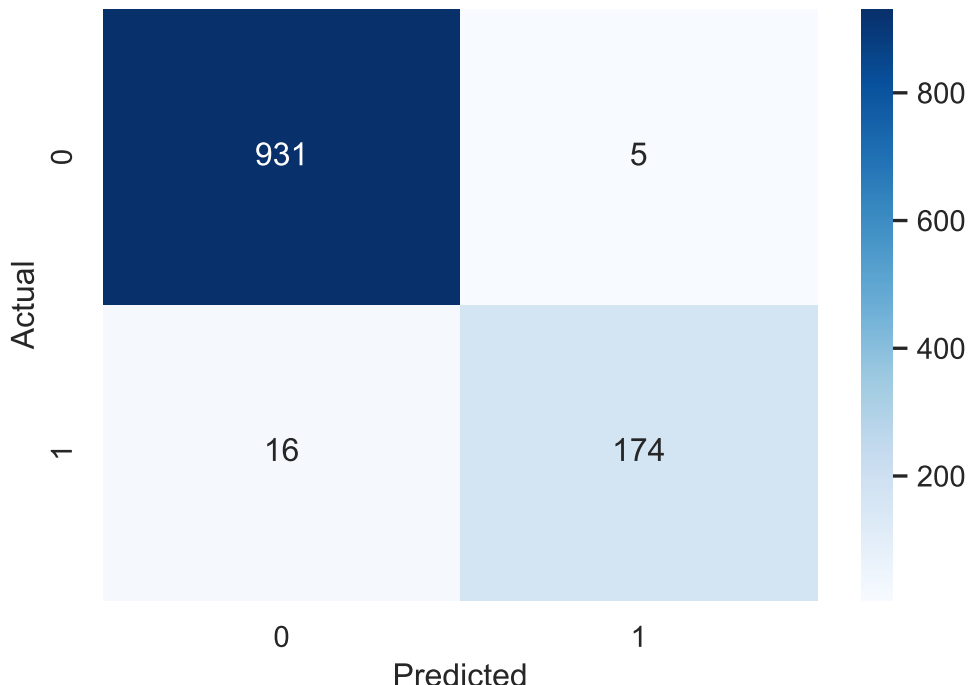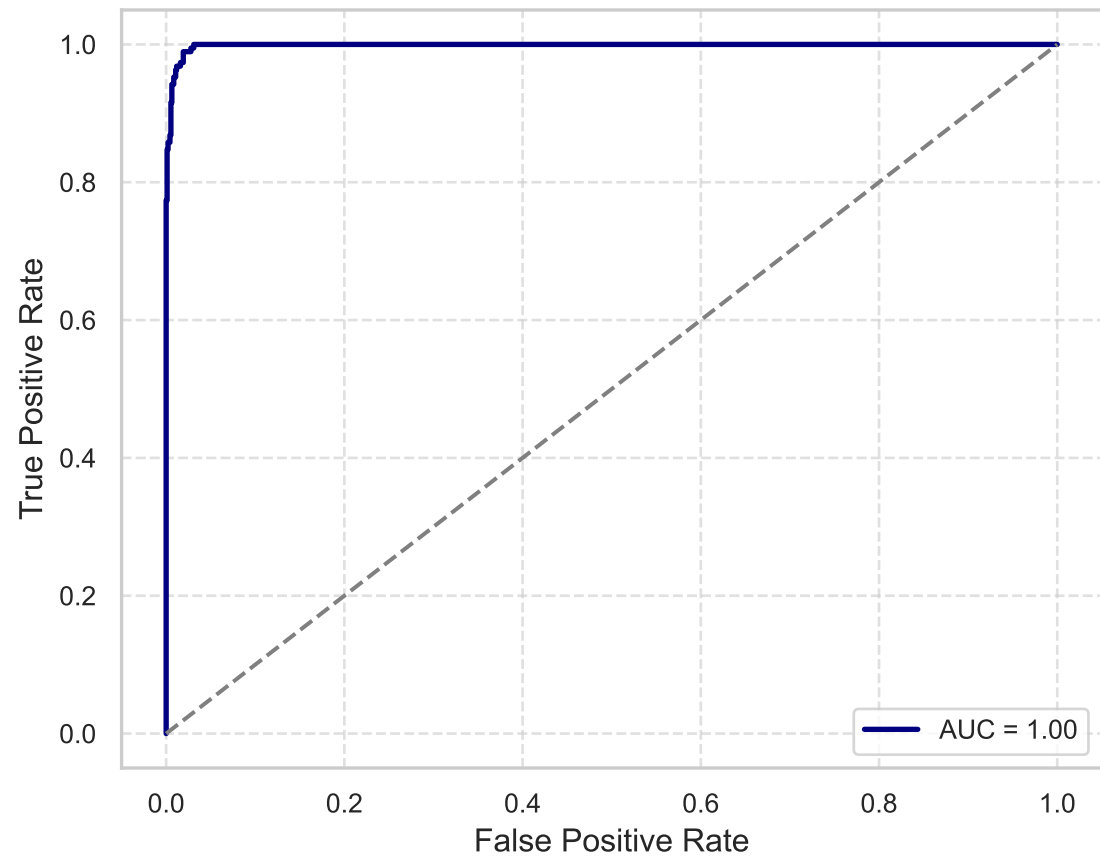
Stacked Ensemble - Confusion Matrix

Stacked Ensemble - ROC Curve

```
Stacked Ensemble - Classification Report

              precision    recall  f1-score   support

           0       0.98      0.99      0.99       936
           1       0.97      0.92      0.94       190

    accuracy                           0.98      1126
   macro avg       0.98      0.96      0.97      1126
weighted avg       0.98      0.98      0.98      1126
```