

Corrections?

Predicting recidivism in American prisons

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RECIDIVISM

- the tendency of a convicted criminal to reoffend.

..... OxfordDictionaries.com

37% More than a third (36.8%) of all prisoners who were arrested within 5 years of release were arrested within the first 6 months after release.

57% Of this number, more than half (56.7%) are arrested by the end of the first year.

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SOURCE:

Recidivism Of Prisoners Released In 30 States In 2005:
Patterns From 2005 To 2010 - Update
BUREAU OF JUSTICE STATISTICS, www.bjs.gov

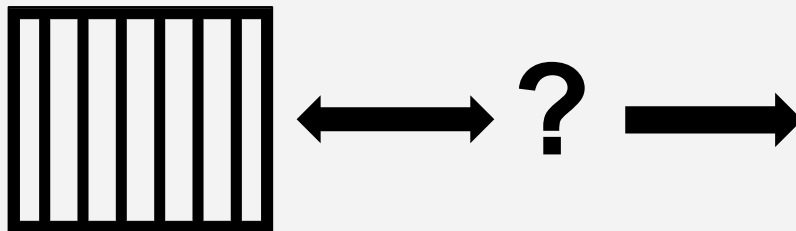
ROBERT F.
KENNEDY
HUMAN
RIGHTS

YOUNG LEADERS

**Will a released
prisoner
successfully
complete
parole?**

Data & Context

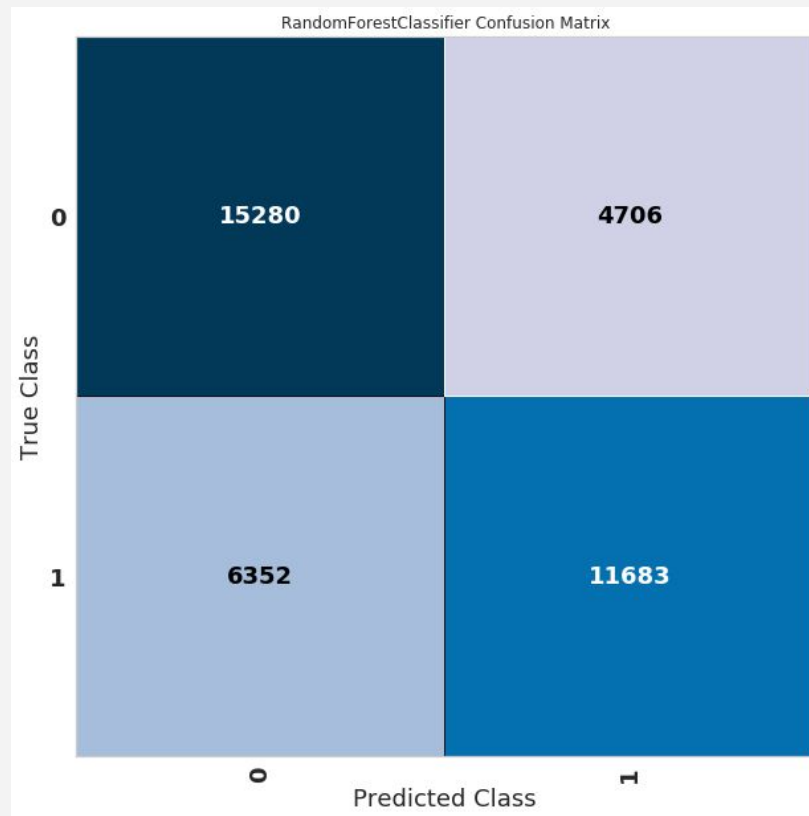
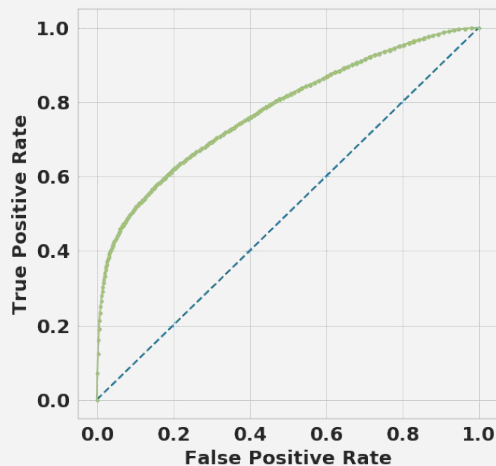
- **ISPCR National Corrections Reporting Program - Parole Releases (2004)**
 - **Questionnaire**
 - **33 State and Federal Corrections + California Youth Authority**
 - **152,083 cases**
 - **21 predictors (e.g. Age, State, Offence, Sentence Time, % Sentence Served)**



Model Results

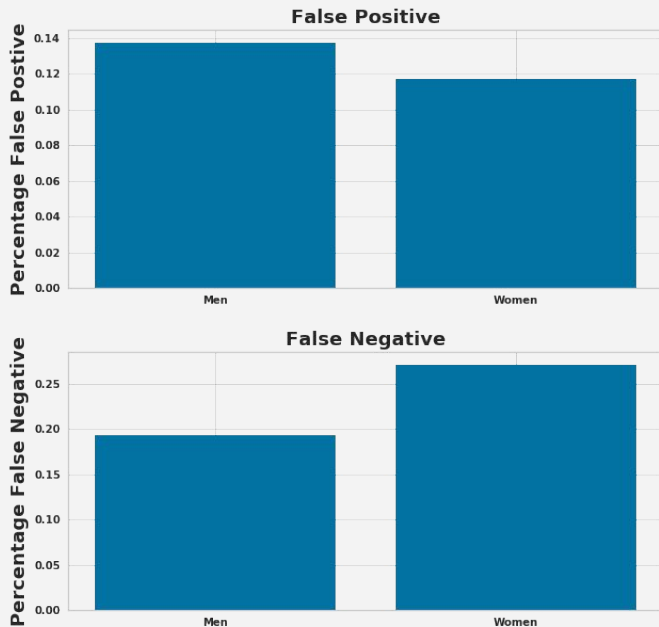
71.0%

Accuracy Rate



Model Bias

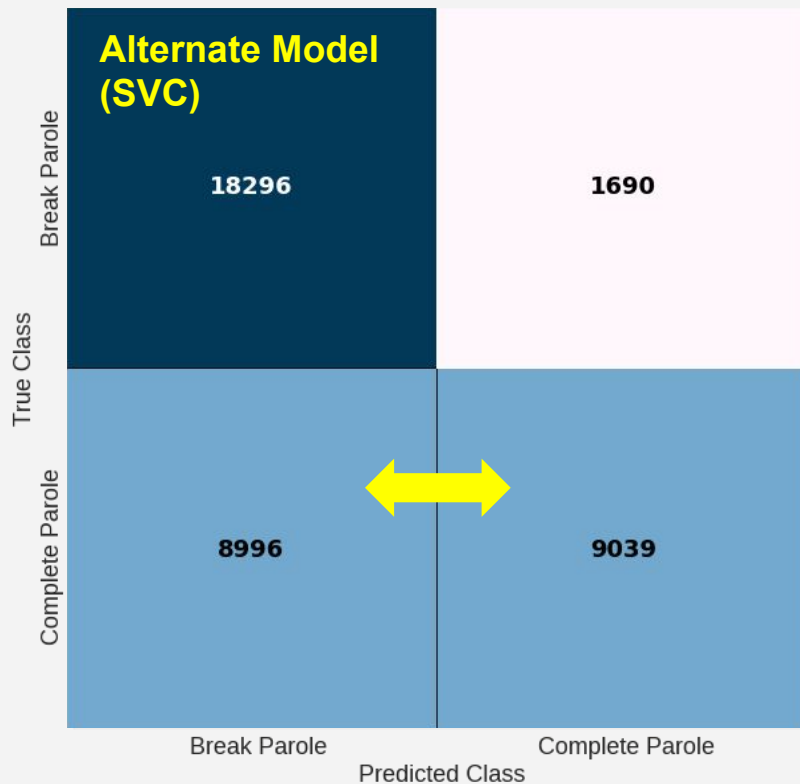
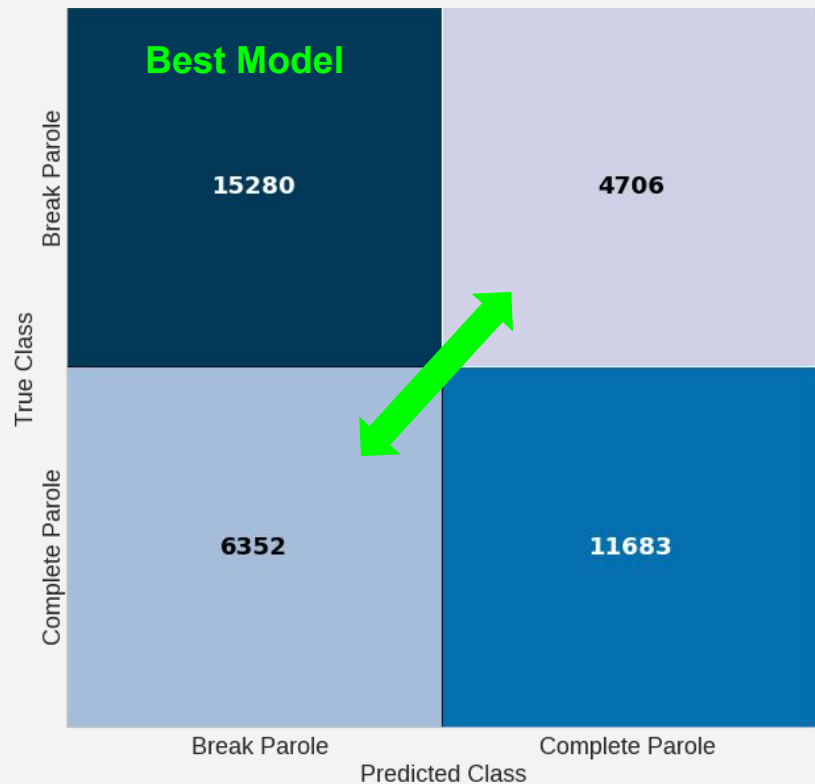
Gender



Race



Alternate Model Results



Recommendations & Limitations

- **Limitations:**
 - ◆ Outdated data
 - ◆ Measurement error
 - ◆ Racial/gender implicit bias

- **Recommendations:**
 - ◆ Replicate COMPAS study before use
 - ◆ Consulting tool for parole boards

MINORITY
REPORT



Further Research and Next Steps

- 1. Investigate driving predictors**
- 2. Optimize alternate models (SVM/Logistic Regression)**

Thank You!