

Predicting Outcomes of Asylum Cases

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Introduction

- Predicting Outcomes of Asylum Cases
- Assist immigration attorneys representing asylum cases gain better insight and change their approaches accordingly



| Data Collection



Source Data



SQL Query

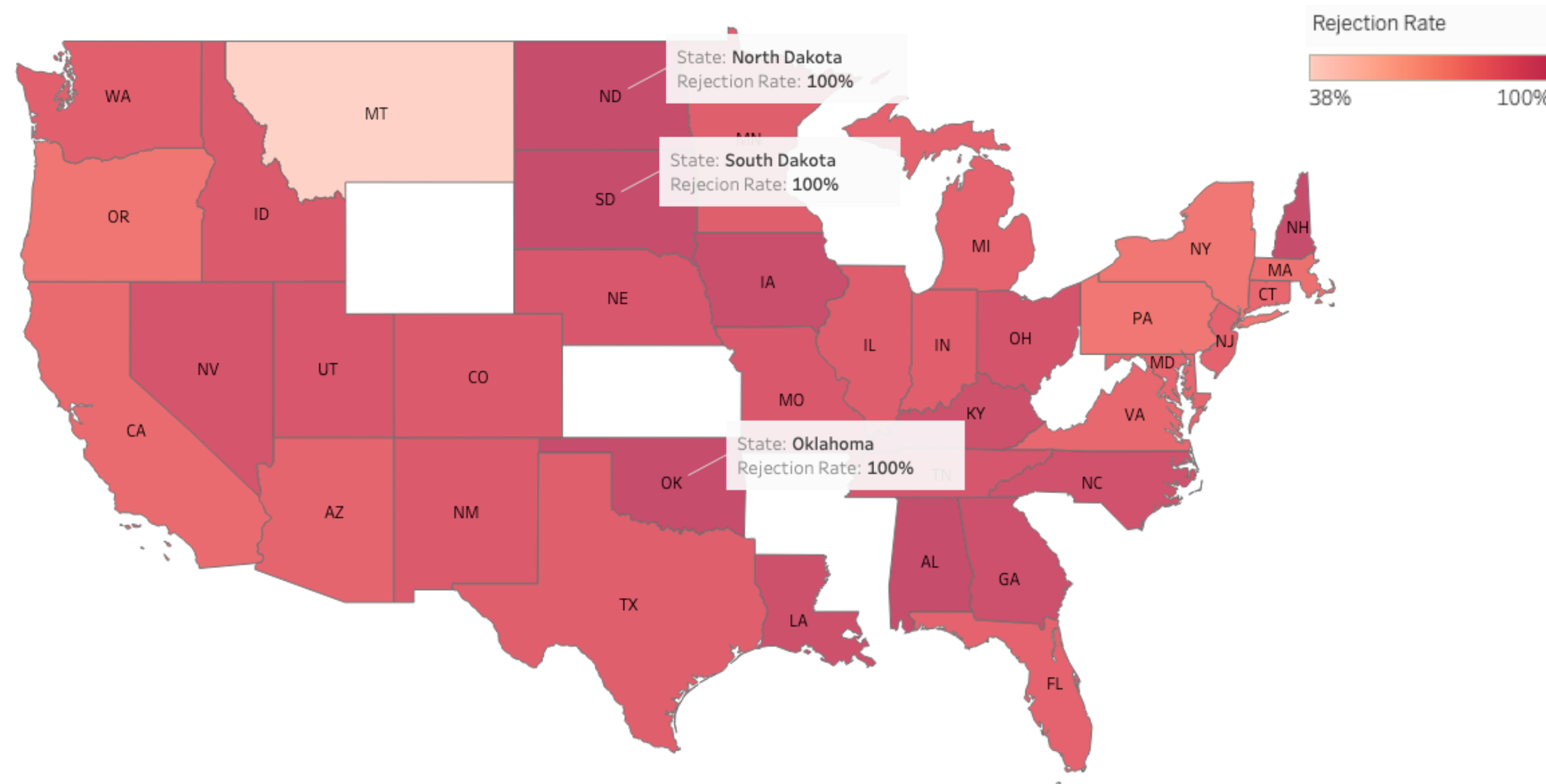


Data Cleaning



Exploratory Data Analysis

- Average **wait time** to receive a court date was **2.5 years**
- **88%** of cases were **rejected** and only **12%** were **accepted**
- Oklahoma, South Dakota, and North Dakota had the **highest rejection rate at 100%** each



Machine Learning Models

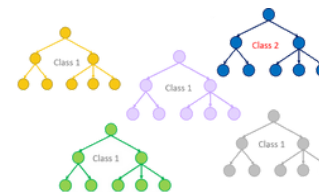


Logistic Regression

Coefficients

93.17% Accuracy

80% Precision

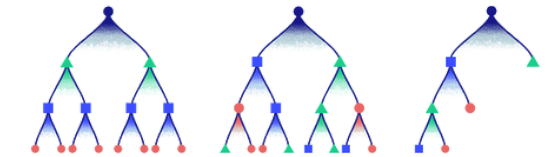


Random Forest

Feature Importance

90.59% Accuracy

97% Precision



XGBoost

SHAP Values

93.55% Accuracy

83% Precision

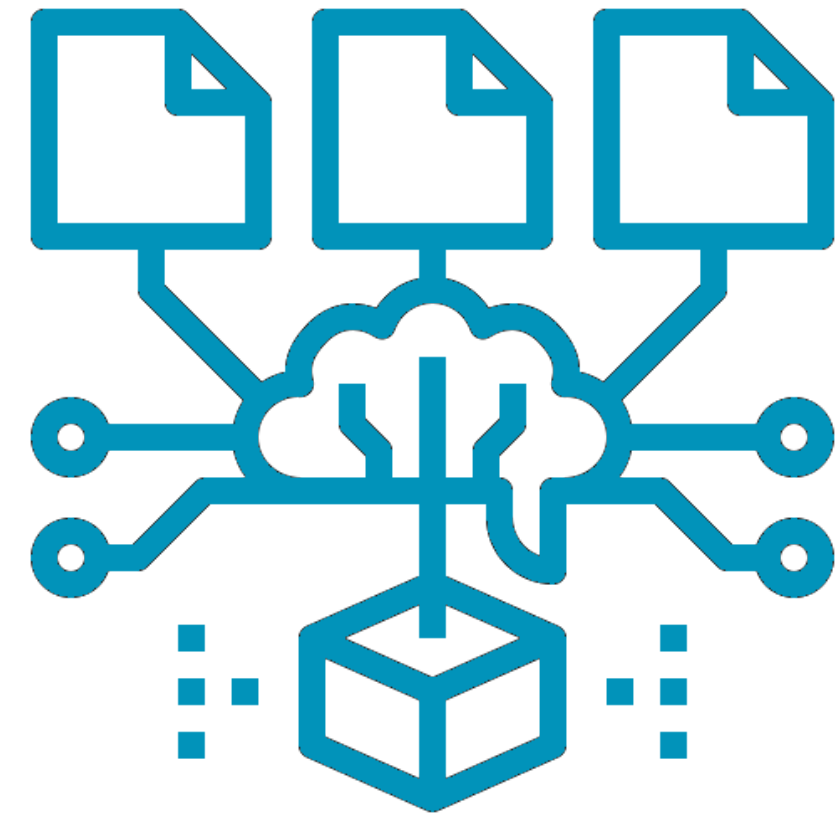
Predictor Features

- **Positive Features:**

- Credible Fear and Reasonable Fear Case
- Date of Entry
- Attorney Representation

- **Negative Features:**

- Nationality
- Absentia
- Immigration Judge



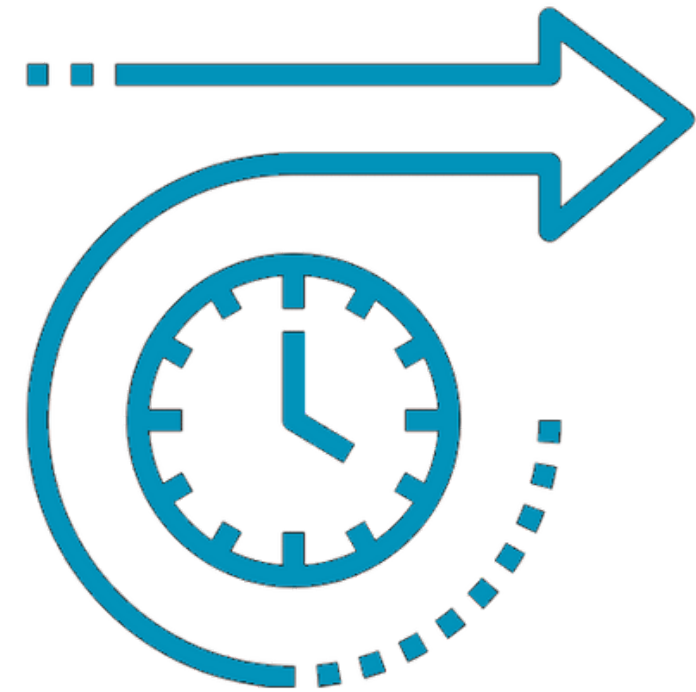
Conclusion

- **Non-Profit Organization**

- Presenting my findings
- Outreach

- **Future Work:**

- Predicting Probability
- Immigration Judge Bias



THANK YOU



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