

# COMPAS Analysis using Defendant Risk Assessment Dataset

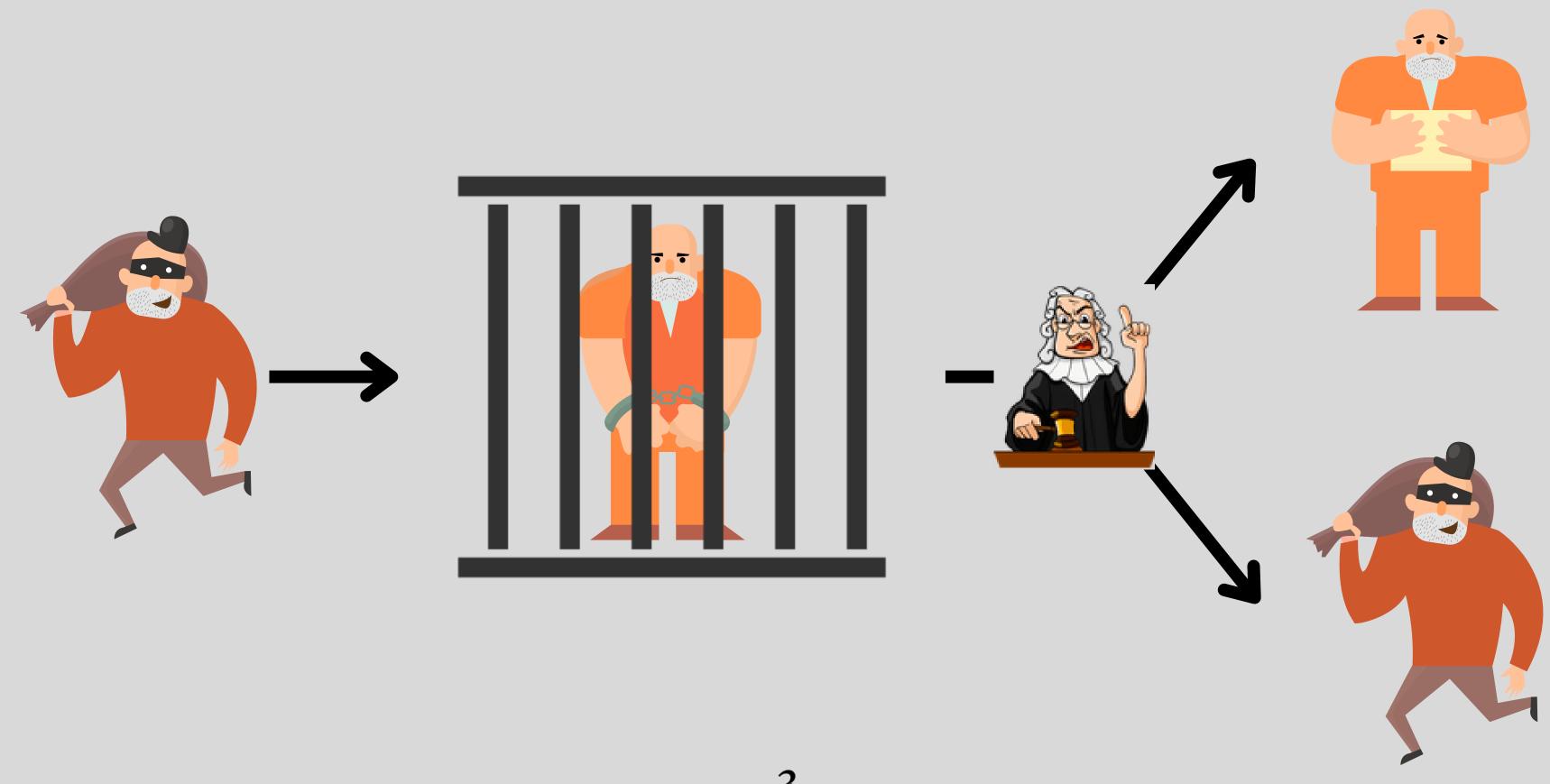
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#### What is COMPAS?



#### COMPAS Dataset



[♣≡] • Personal Information: name, age, sex, race, and ...



• Criminal History: juvenile felony count, priors count, and ...



• Crime Information: charge description, violent or not, and ...

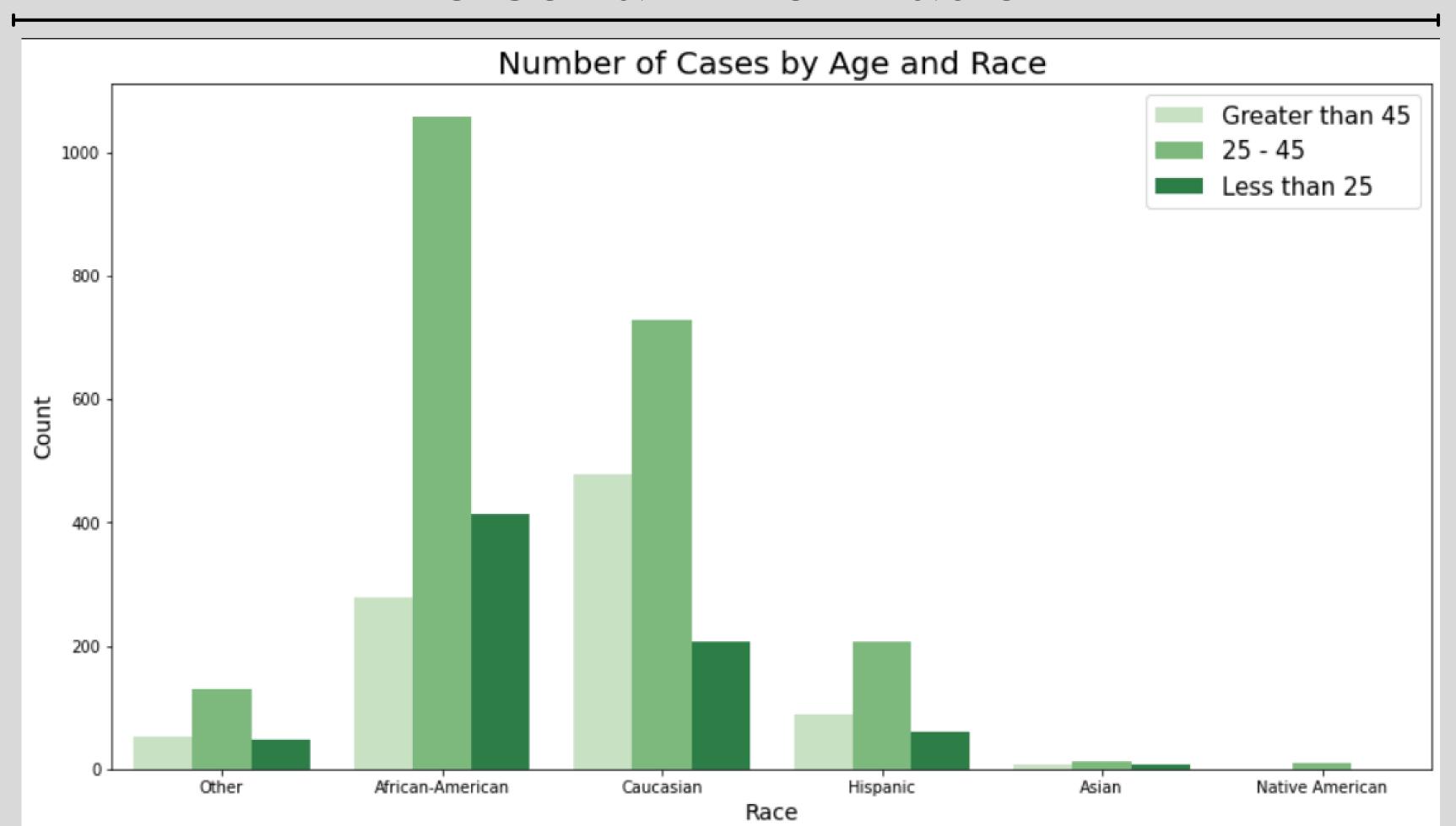


• COMPAS Result: decile score, violent decile score

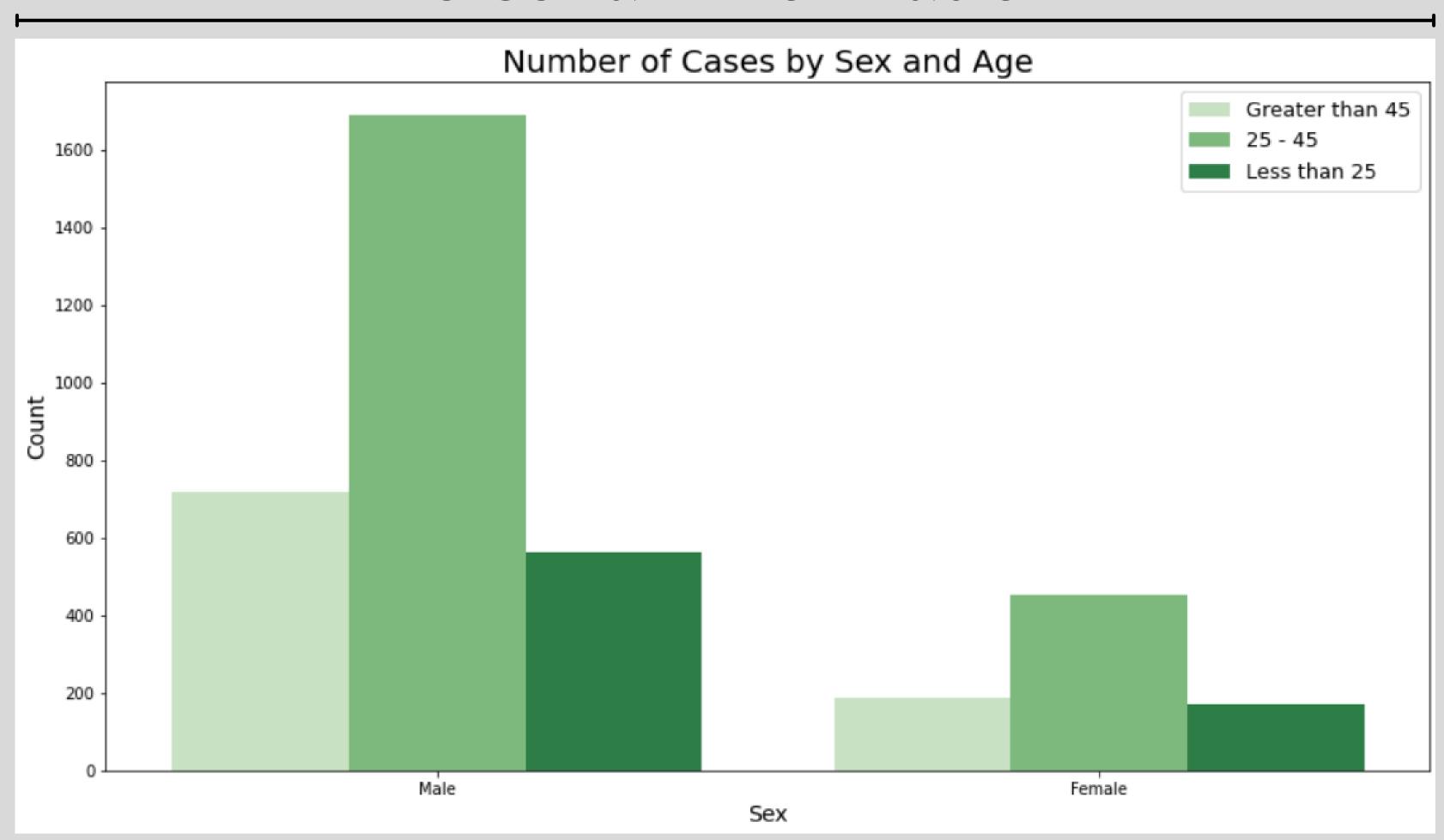


• Target Features: two year recidivism, recidivism

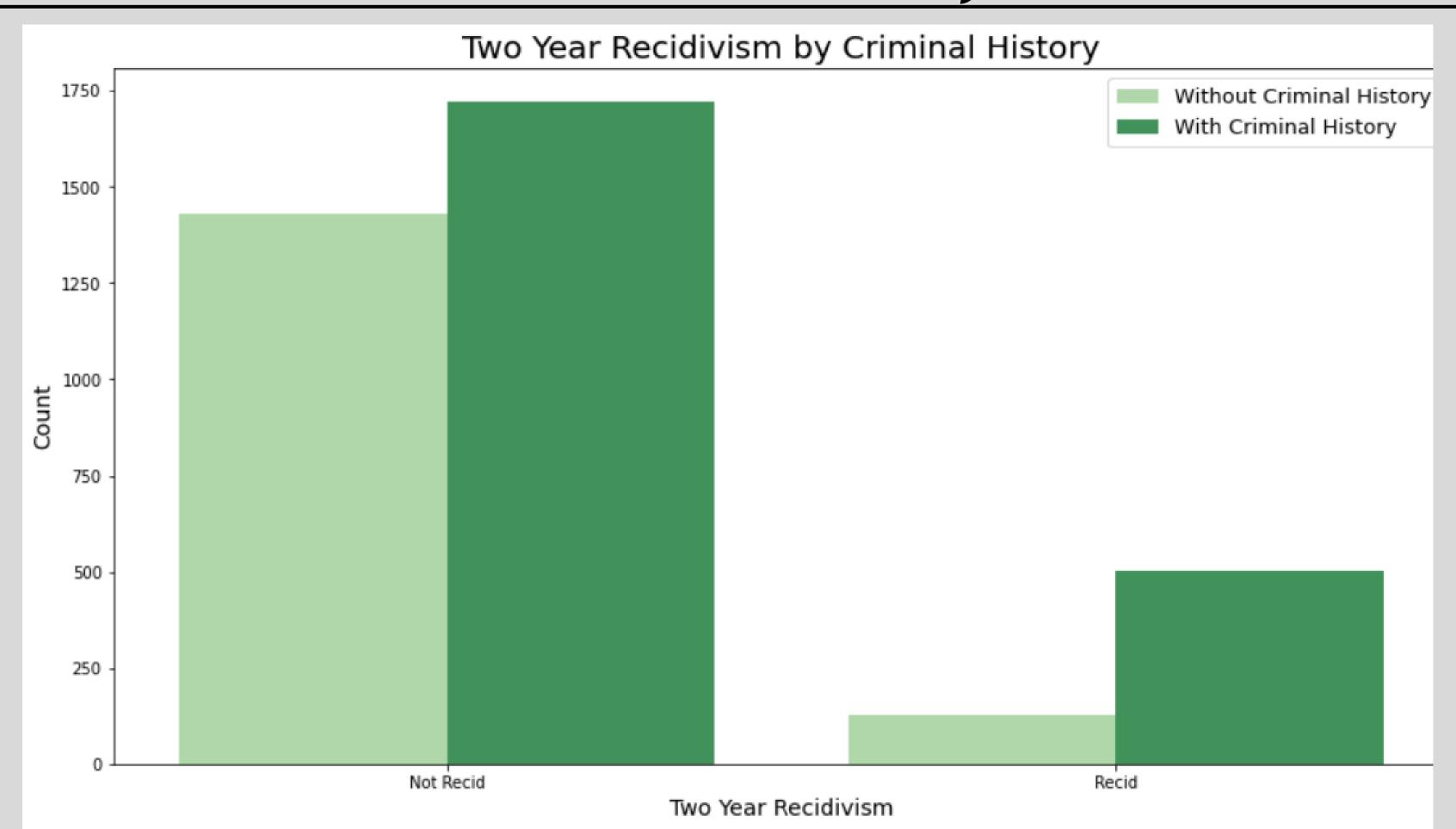
#### Personal Information



#### Personal Information



### Criminal History

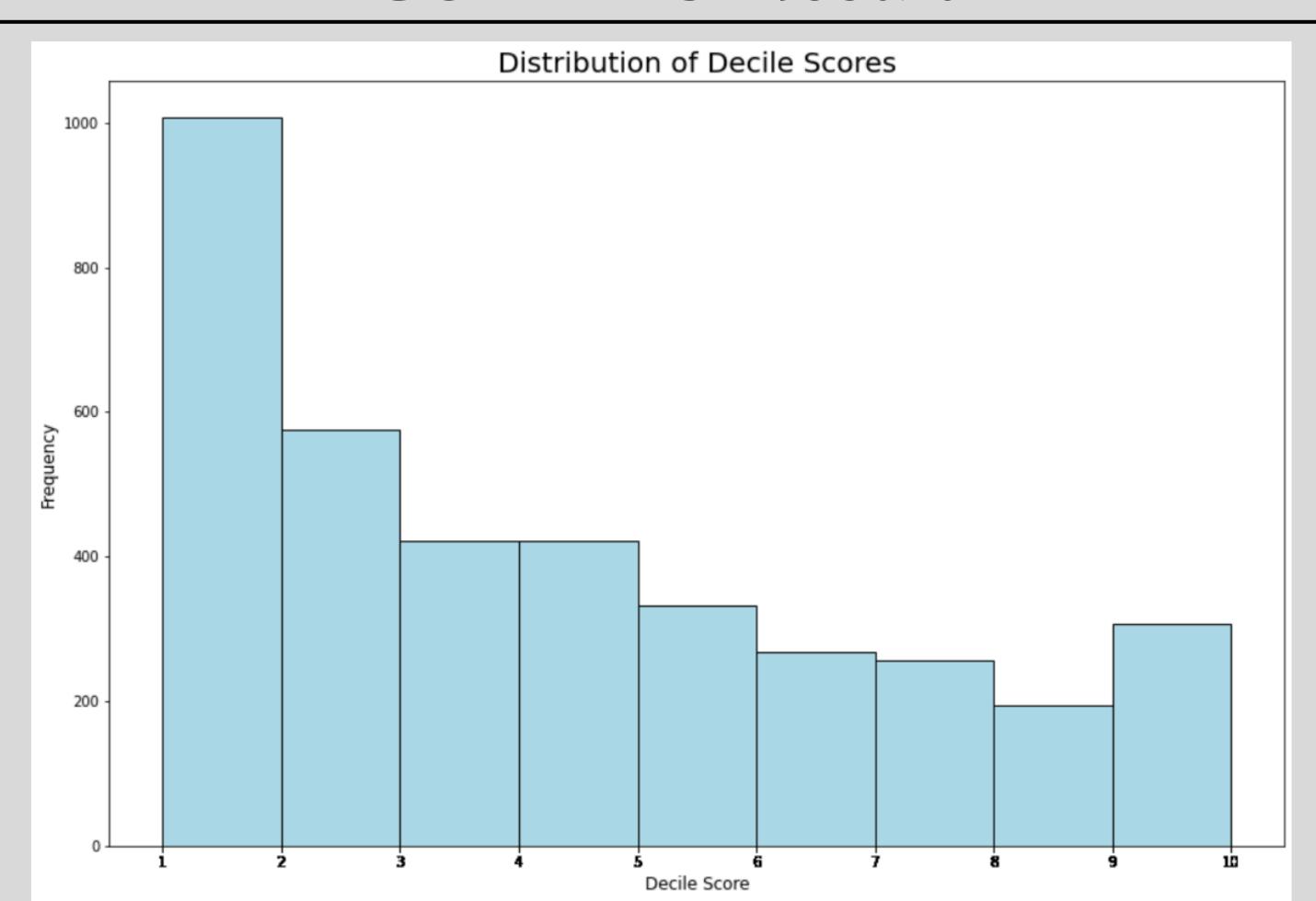


#### Crime Information

Charge Description	Count
Battery	858
Grand Theft in the 3rd Degree	246
Possession of Cocaine	234
Driving While License Revoked	102
Driving Under The Influence	98
Felony Battery (Dom Strang)	72
DUI Property Damage/Injury	63
Possess Cannabis/20 Grams Or Less	56
Grand Theft (Motor Vehicle)	55
Aggrav Battery w/Deadly Weapon	54

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#### COMPAS Result



### Target Features

#### **Correlation with Target**

decile_score	0.33
v_decile_score	0.31
priors_count	0.24
juv_criminal_history	0.19
criminal_history	0.18
juv_misd_count	0.15
days_in_custody	0.13
days_in_jail	0.13
juv_other_count	0.11
juv_fel_count	0.11
sex	0.08

## Racial Bias?!

#### References

• <a href="https://huggingface.co/datasets/mstz/compas">https://huggingface.co/datasets/mstz/compas</a>



# Thank you!

