

## Lesson 28: Class Imbalance

Data Science with Python – BSc Course

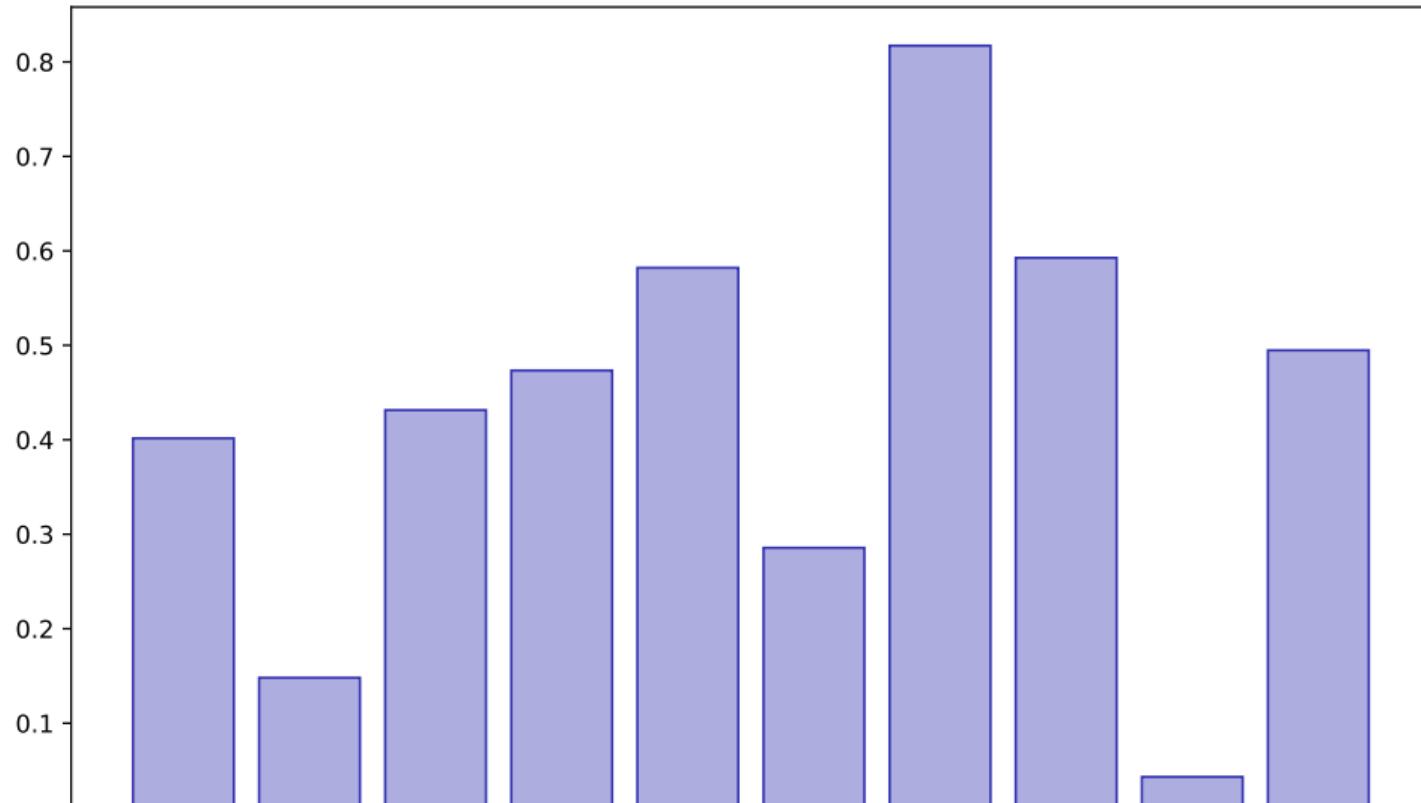
45 Minutes

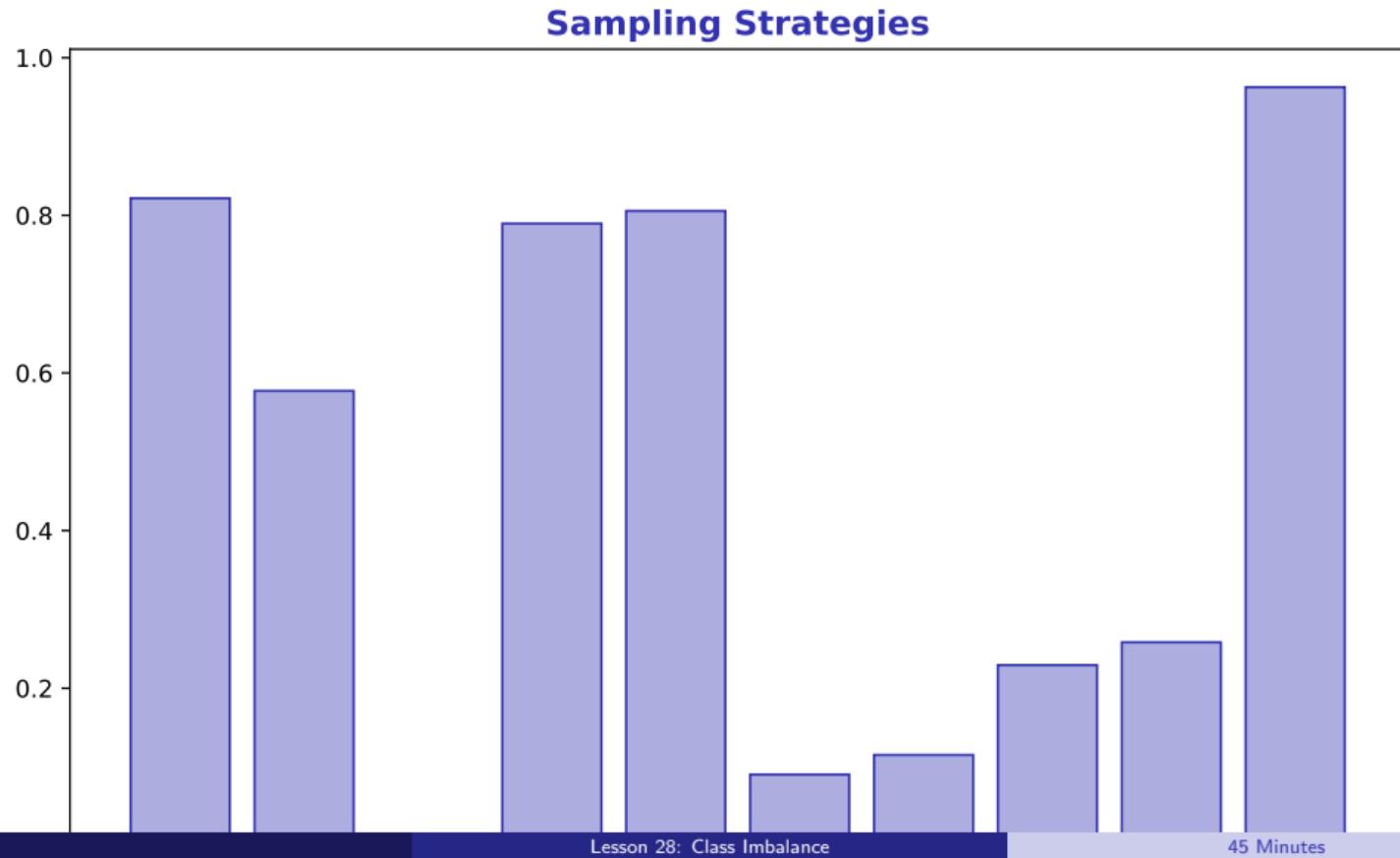
## After this lesson, you will be able to:

- Identify imbalanced datasets
- Apply SMOTE oversampling
- Use class weights
- Evaluate fairly

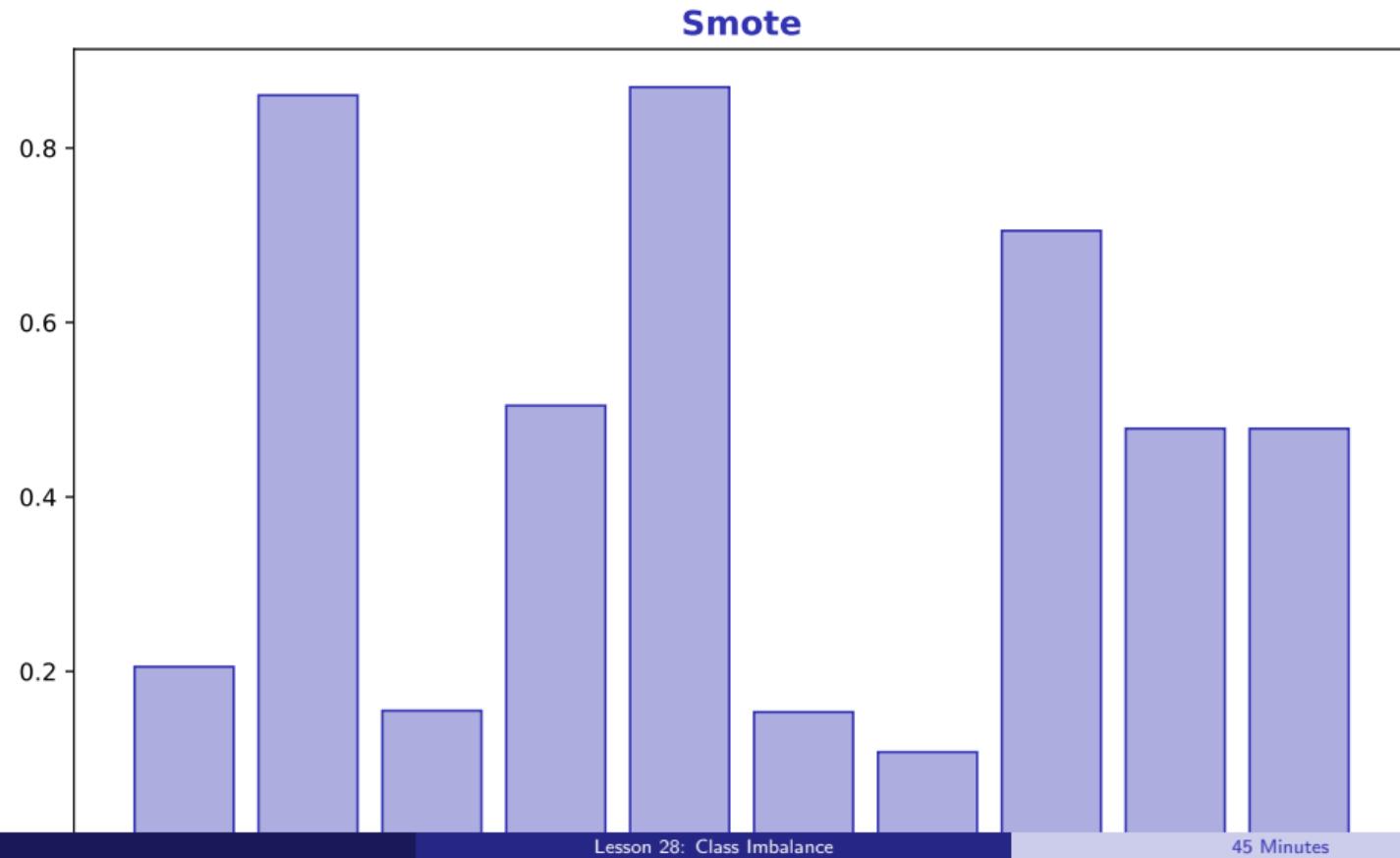
Building towards your final project

### Imbalance Problem



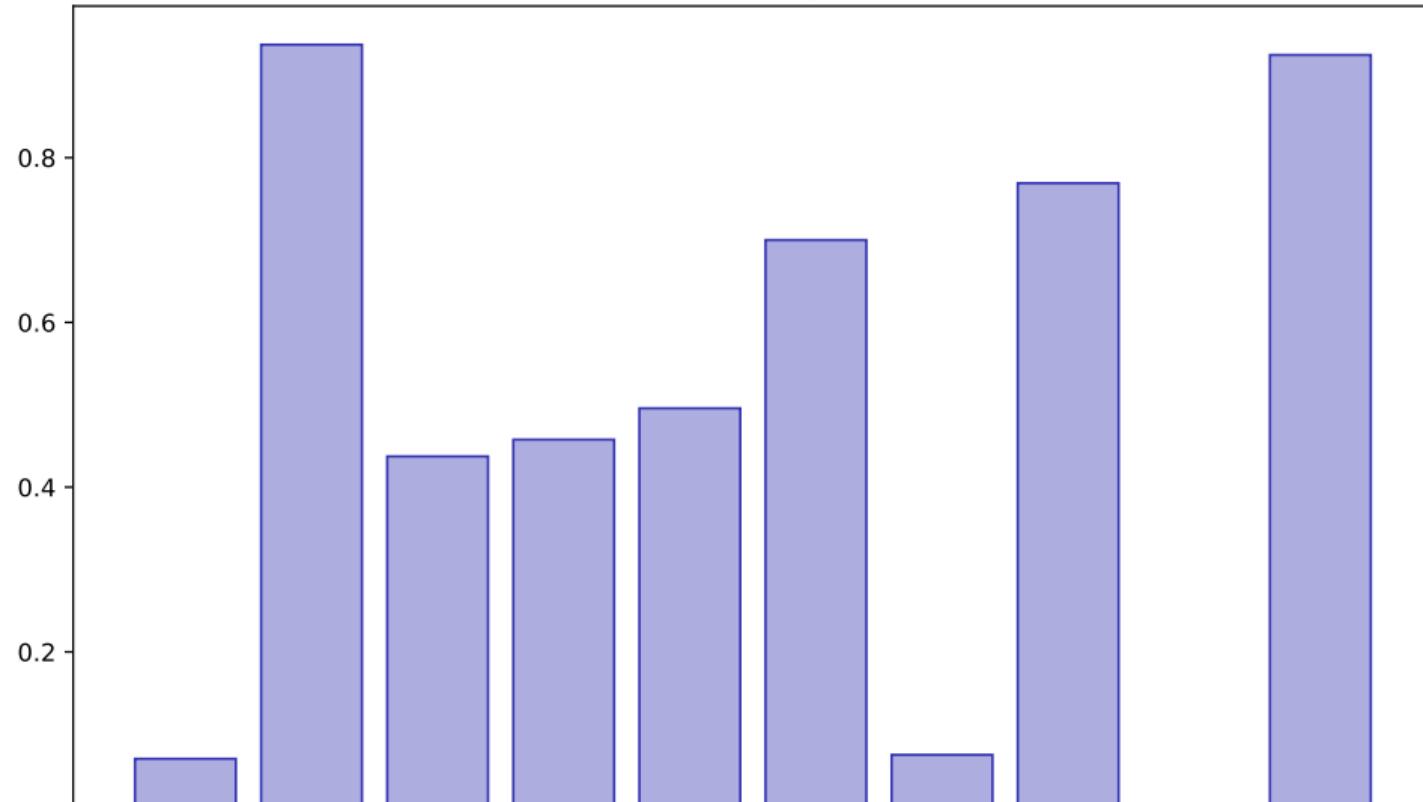


## Smote



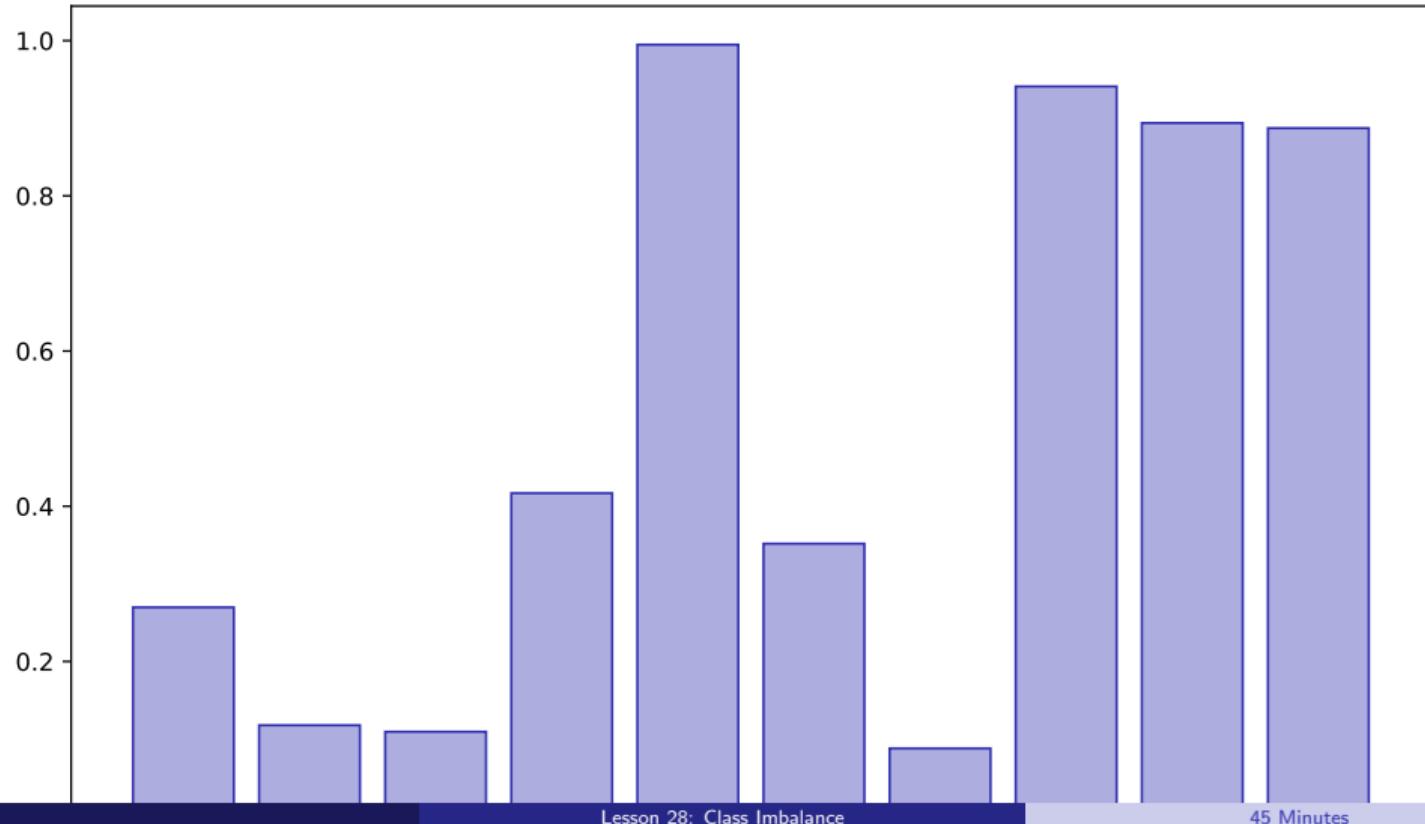
## Class Weights

Class Weights

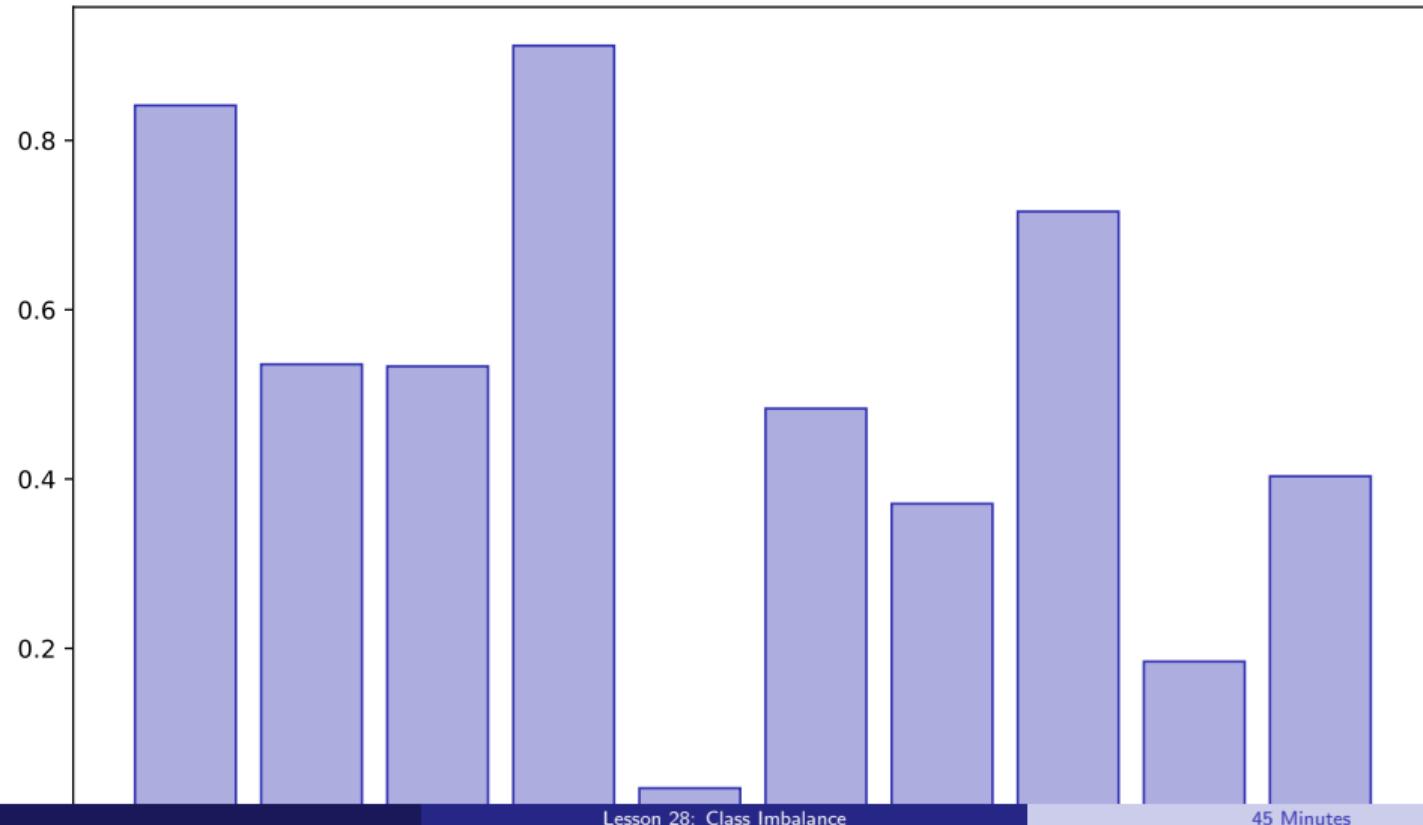


## Stratified Cv

**Stratified Cv**

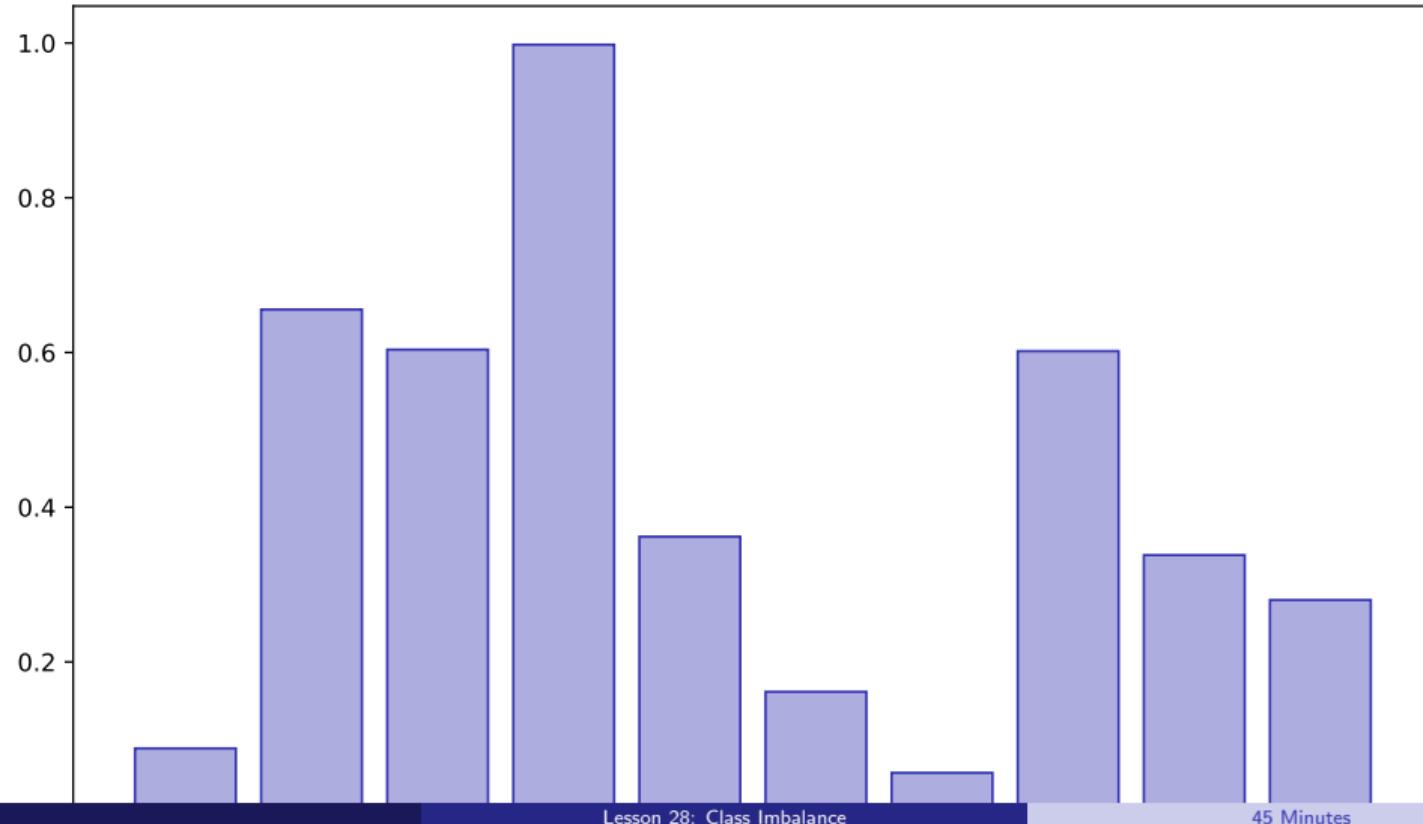


### Precision Recall Tradeoff

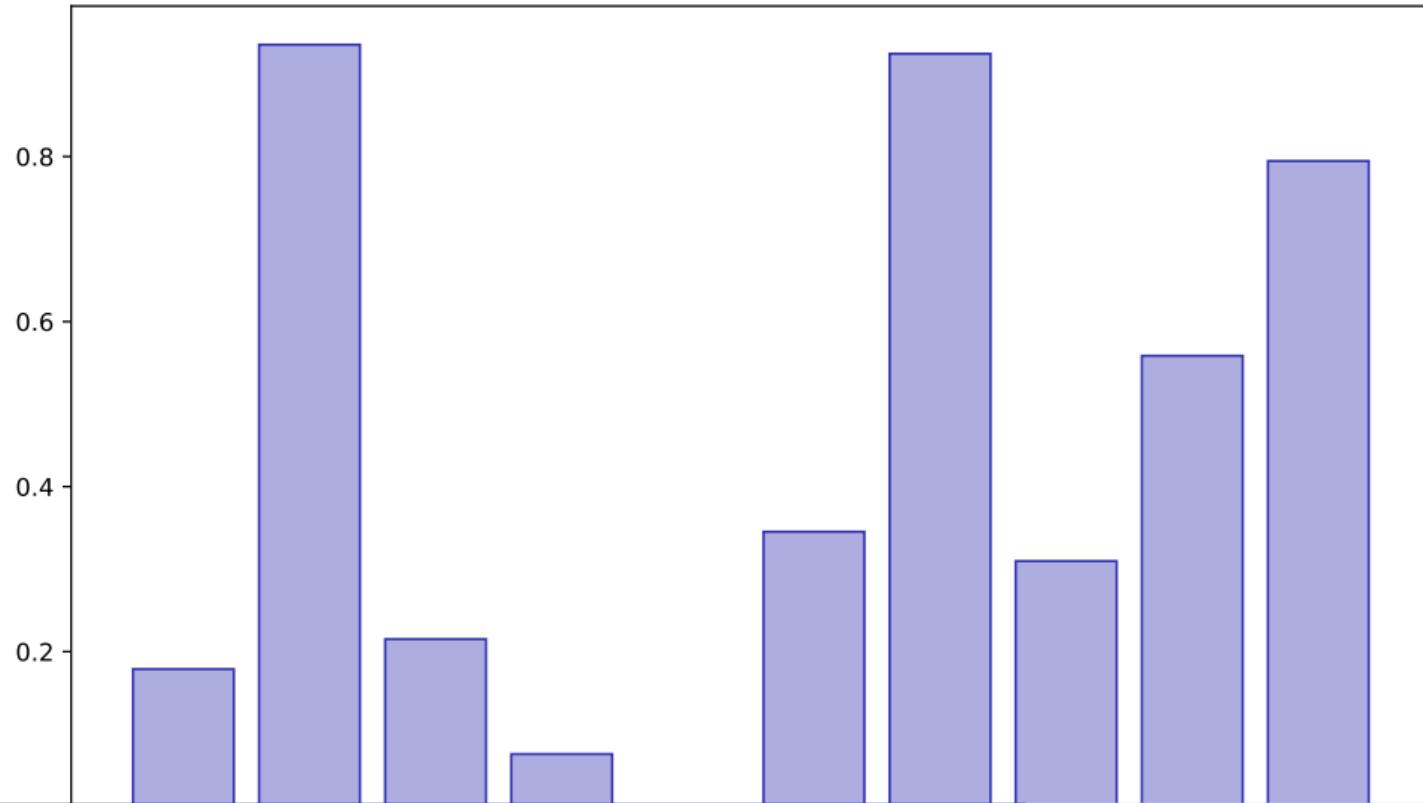


## Cost Sensitive

### Cost Sensitive



## Fraud Detection



## Lesson Summary

### Key Takeaways:

- Identify imbalanced datasets
- Apply SMOTE oversampling
- Use class weights
- Evaluate fairly

Apply these skills in your final project