Lesson 22: Regularization
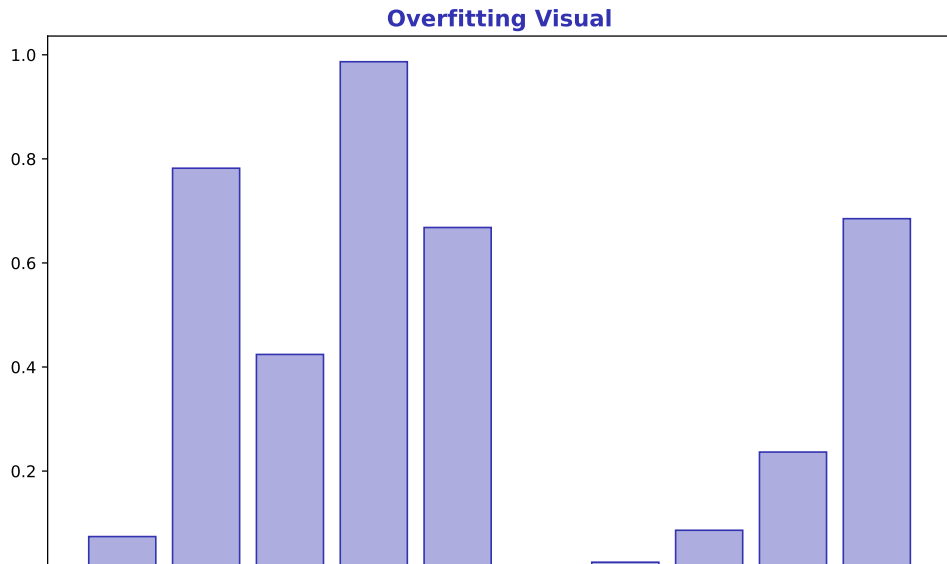Data Science with Python – BSc Course
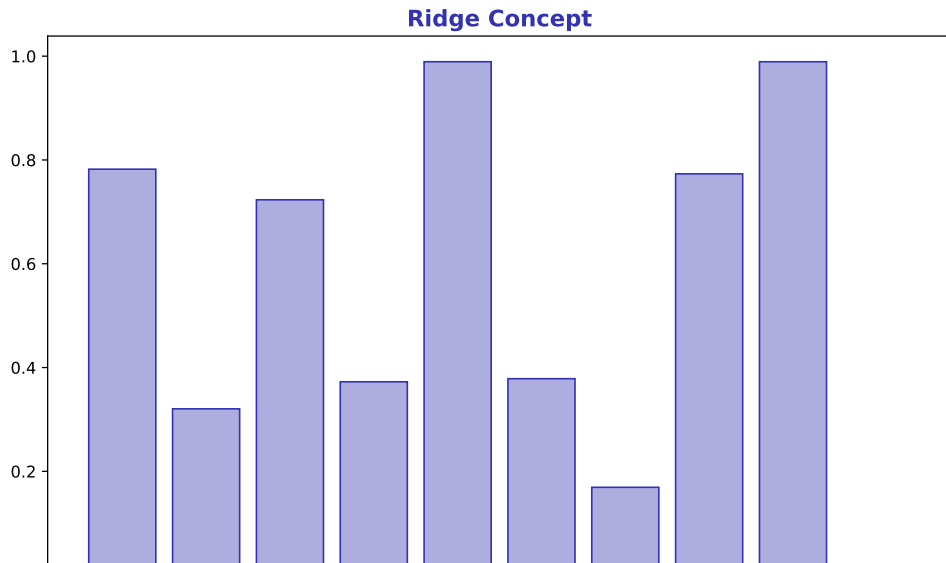
45 Minutes
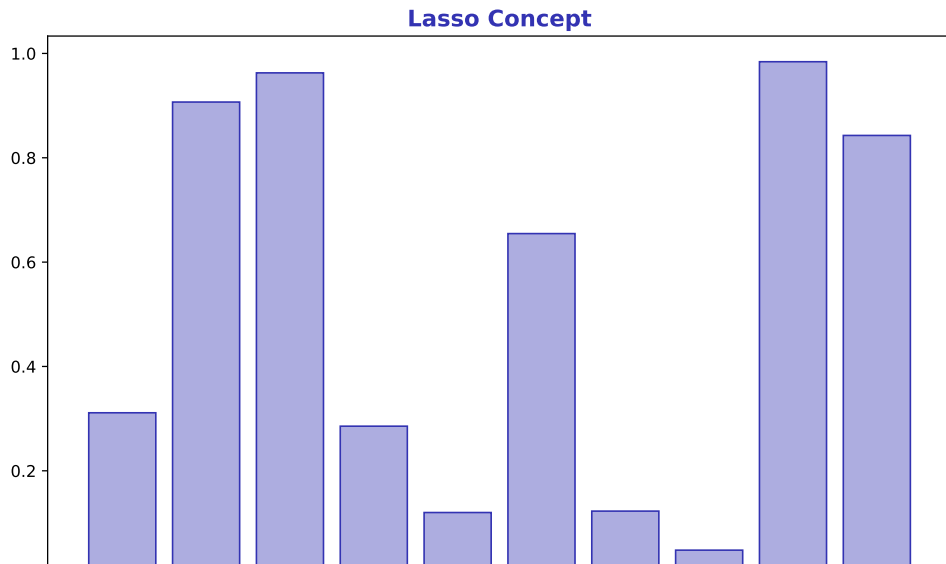
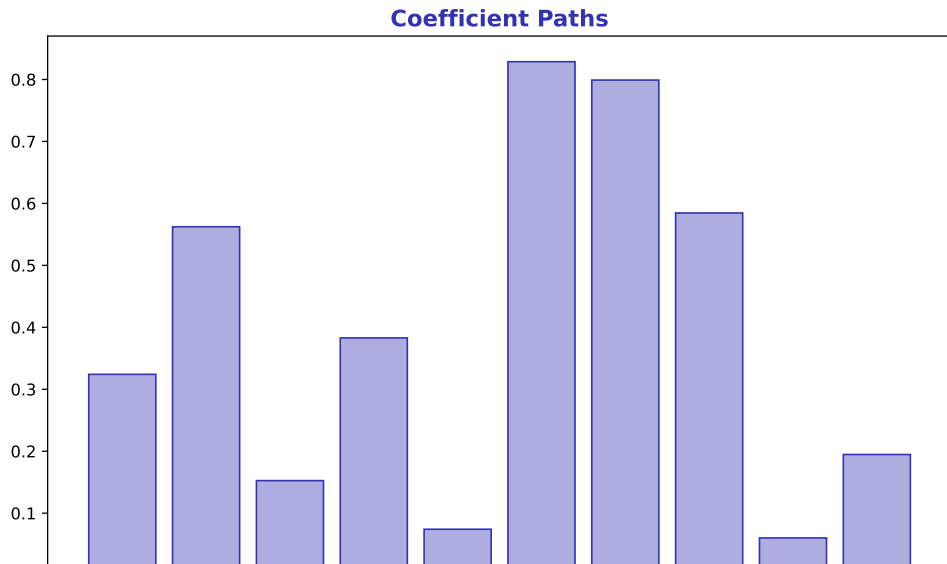## Learning Objectives

After this lesson, you will be able to:

- Apply Ridge (L2) regularization
- Apply Lasso (L1) for feature selection
- Tune lambda with cross-validation
- Handle multicollinearity

Building towards your final project

Overfitting Visual

Ridge Concept

Lasso Concept

Lasso Concept

Coefficient Paths

Lambda Tuning

Lambda Tuning

Cross Validation

Feature Selection

Finance Regularization

Lesson Summary

Key Takeaways:

- Apply Ridge (L2) regularization
- Apply Lasso (L1) for feature selection
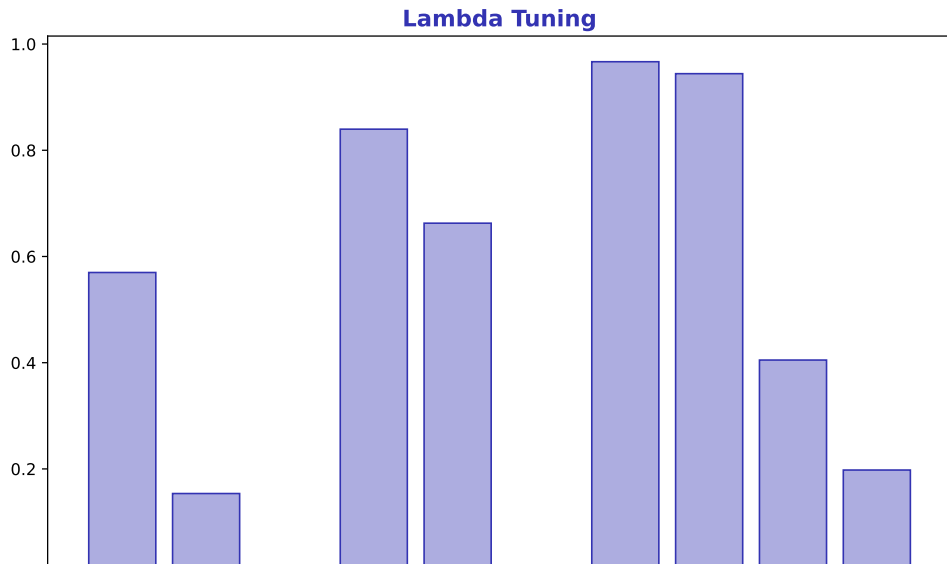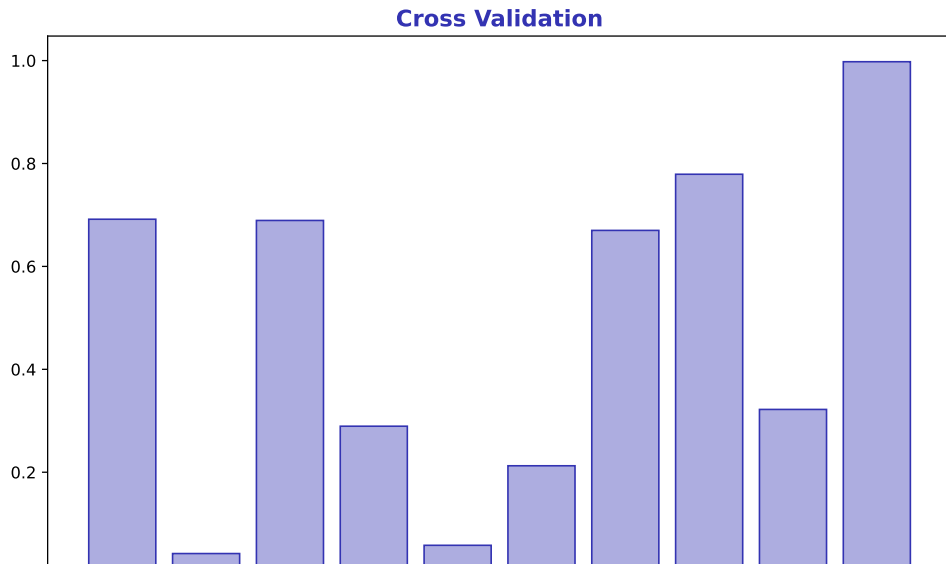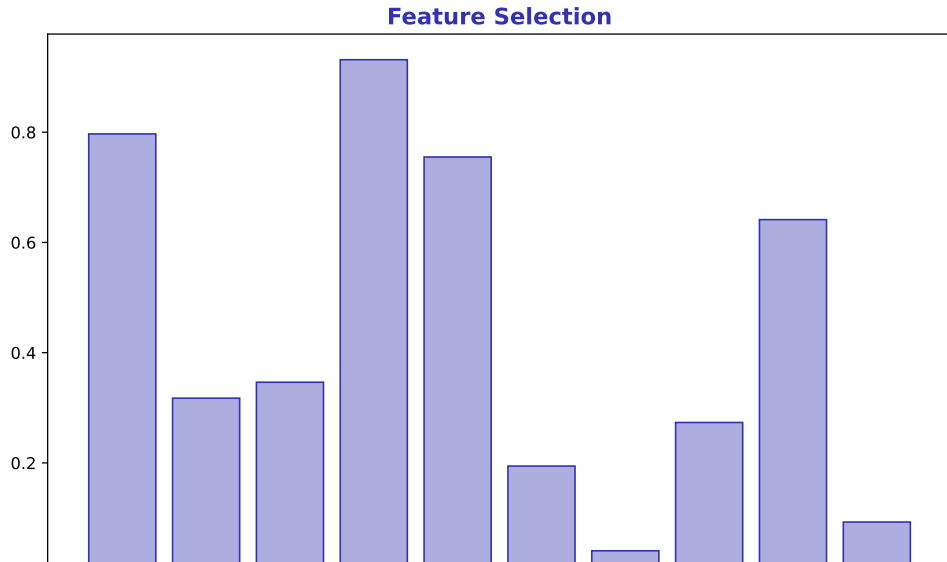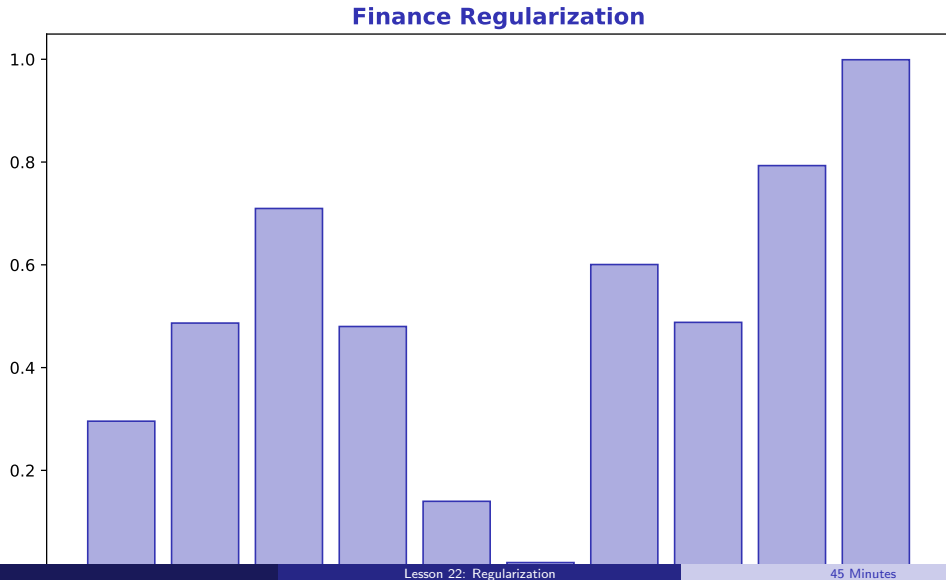- Tune lambda with cross-validation
- Handle multicollinearity

Apply these skills in your final project