

## Lesson 24: Factor Models

Data Science with Python – BSc Course

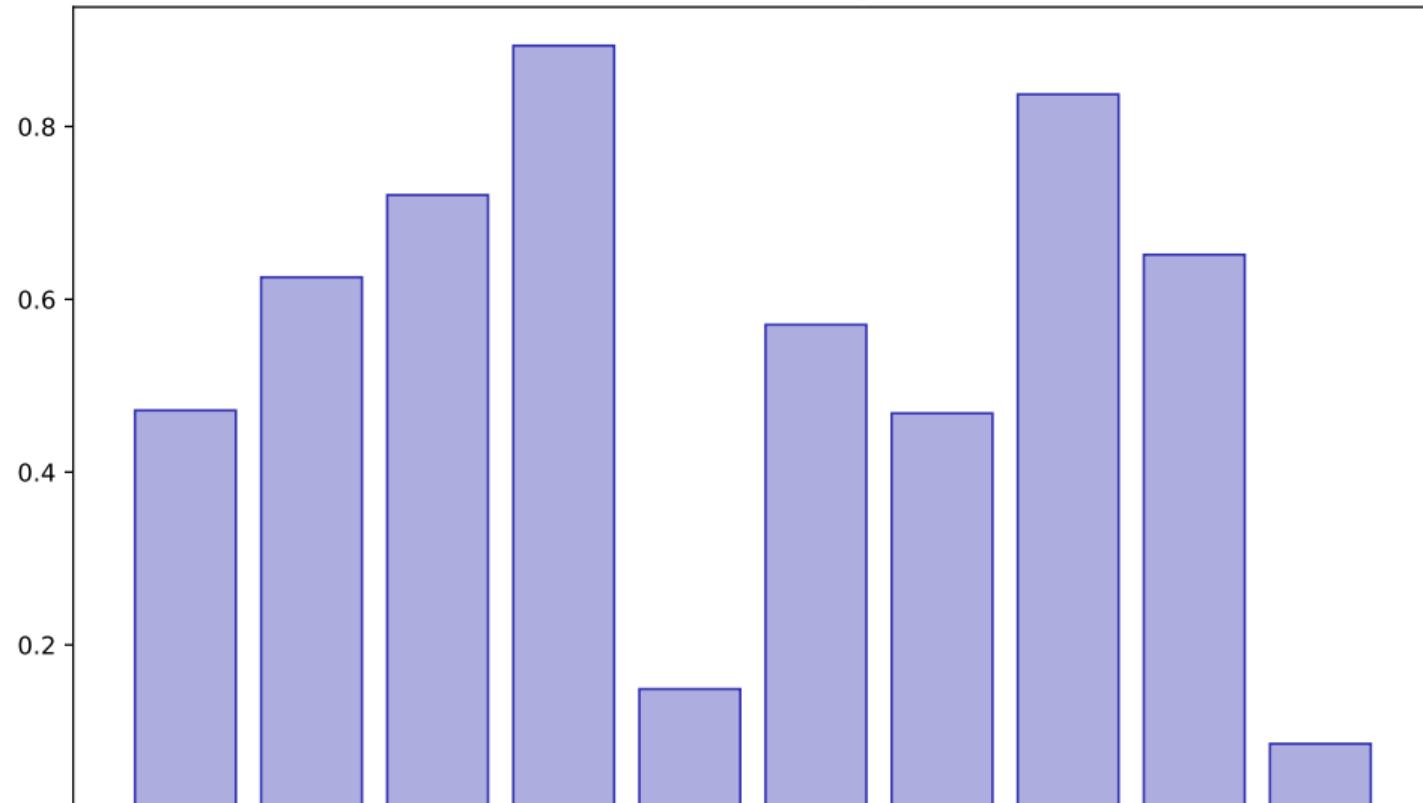
45 Minutes

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

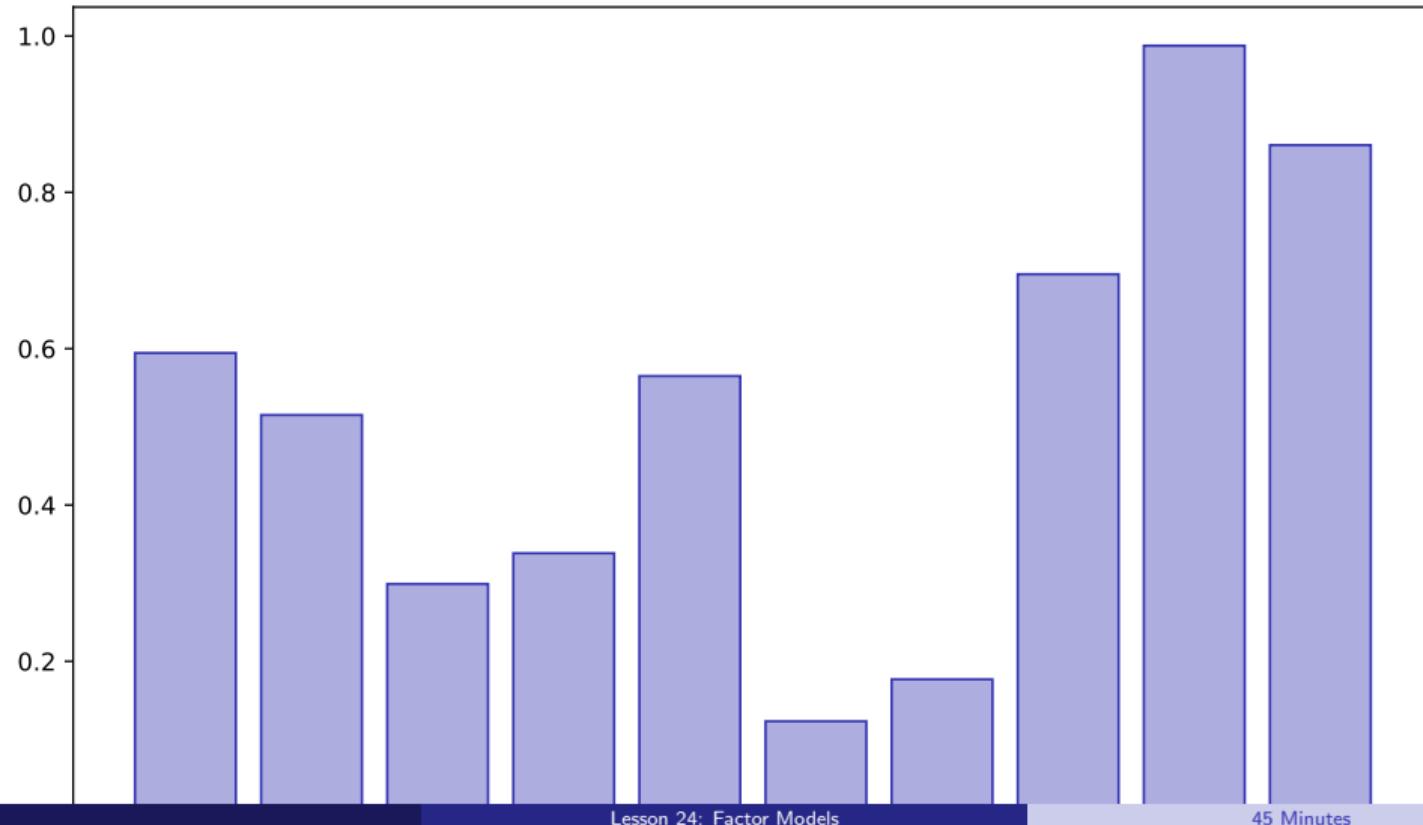
- Build multi-factor regression
- Understand Fama-French factors
- Interpret factor loadings
- Create complete ML pipelines

Building towards your final project

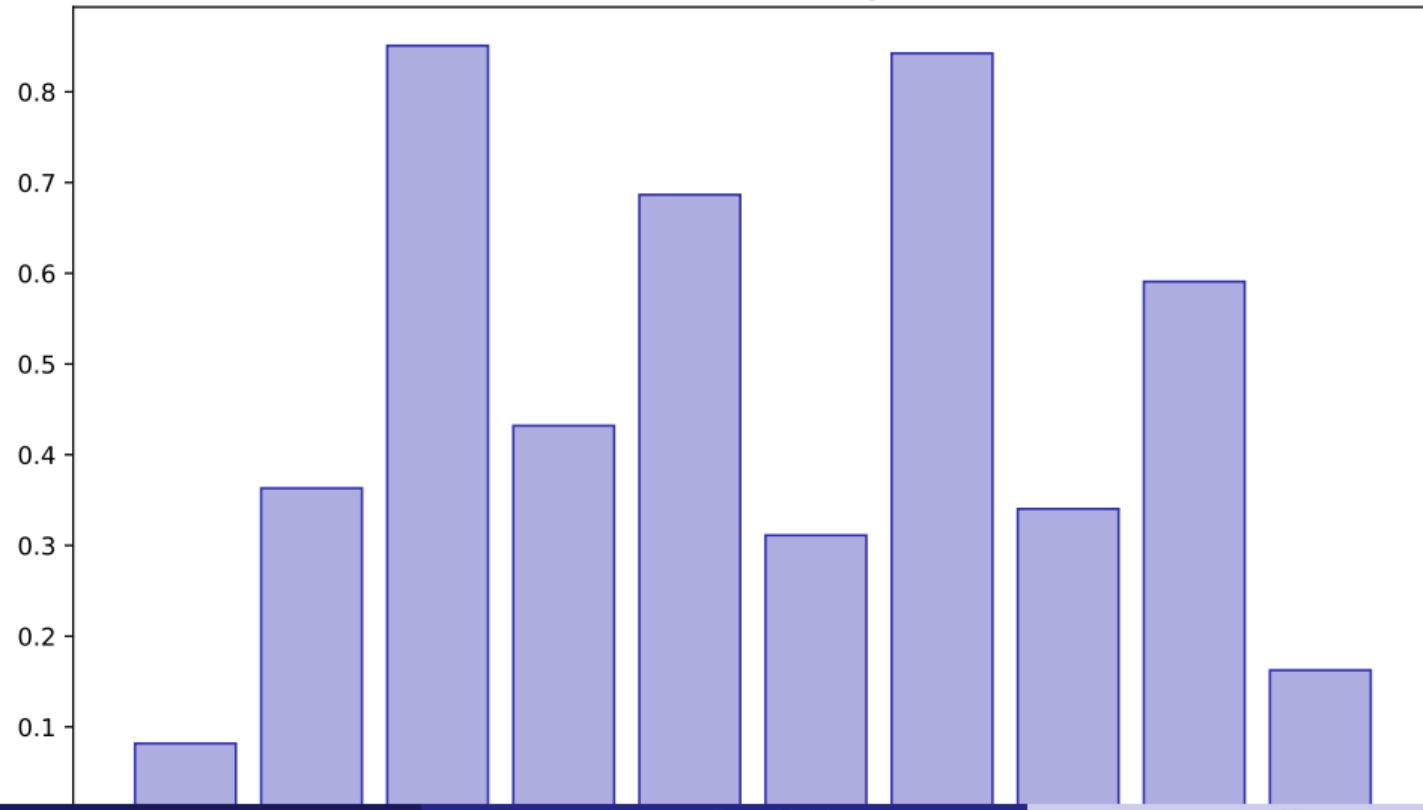
### Factor Concept



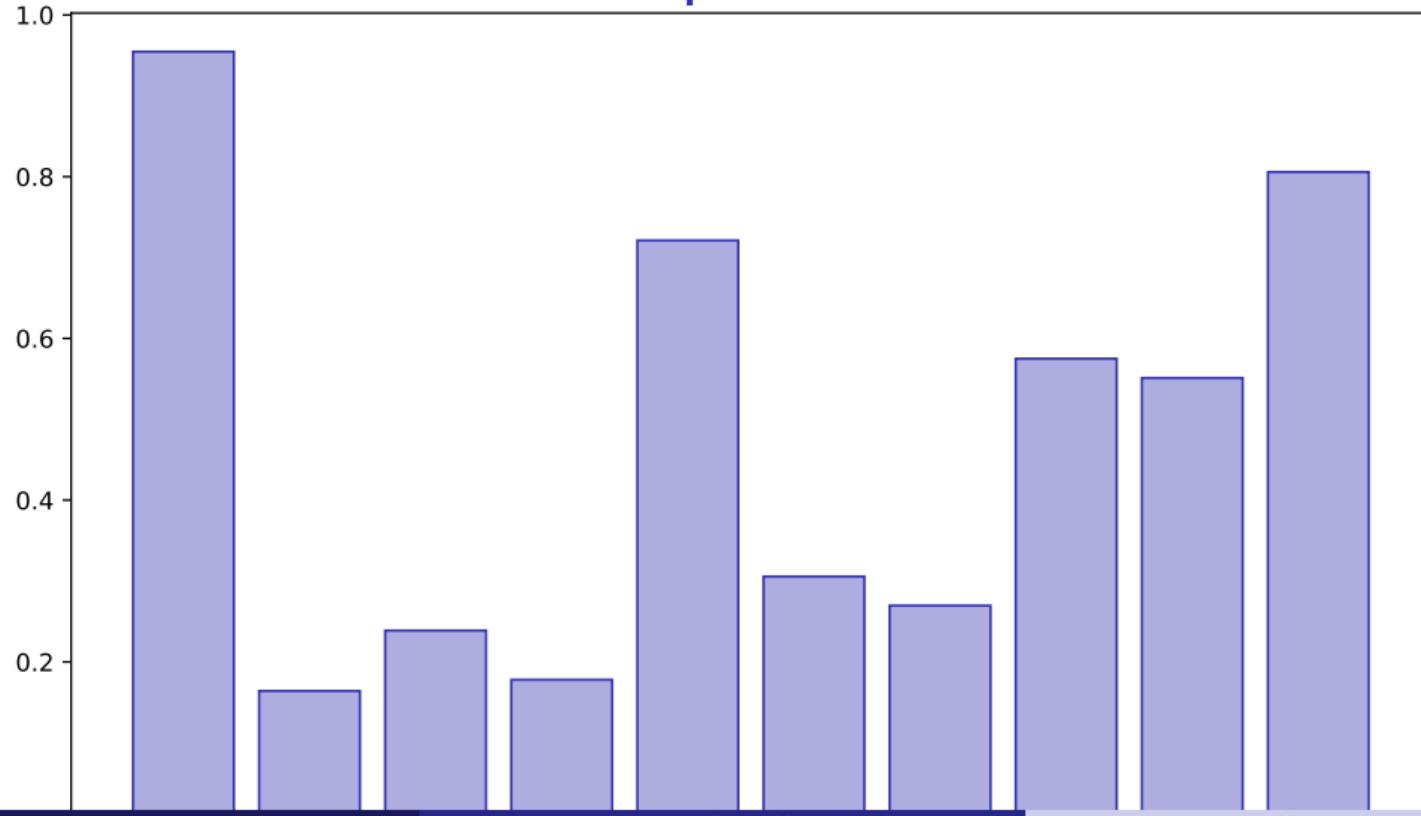
## Fama French



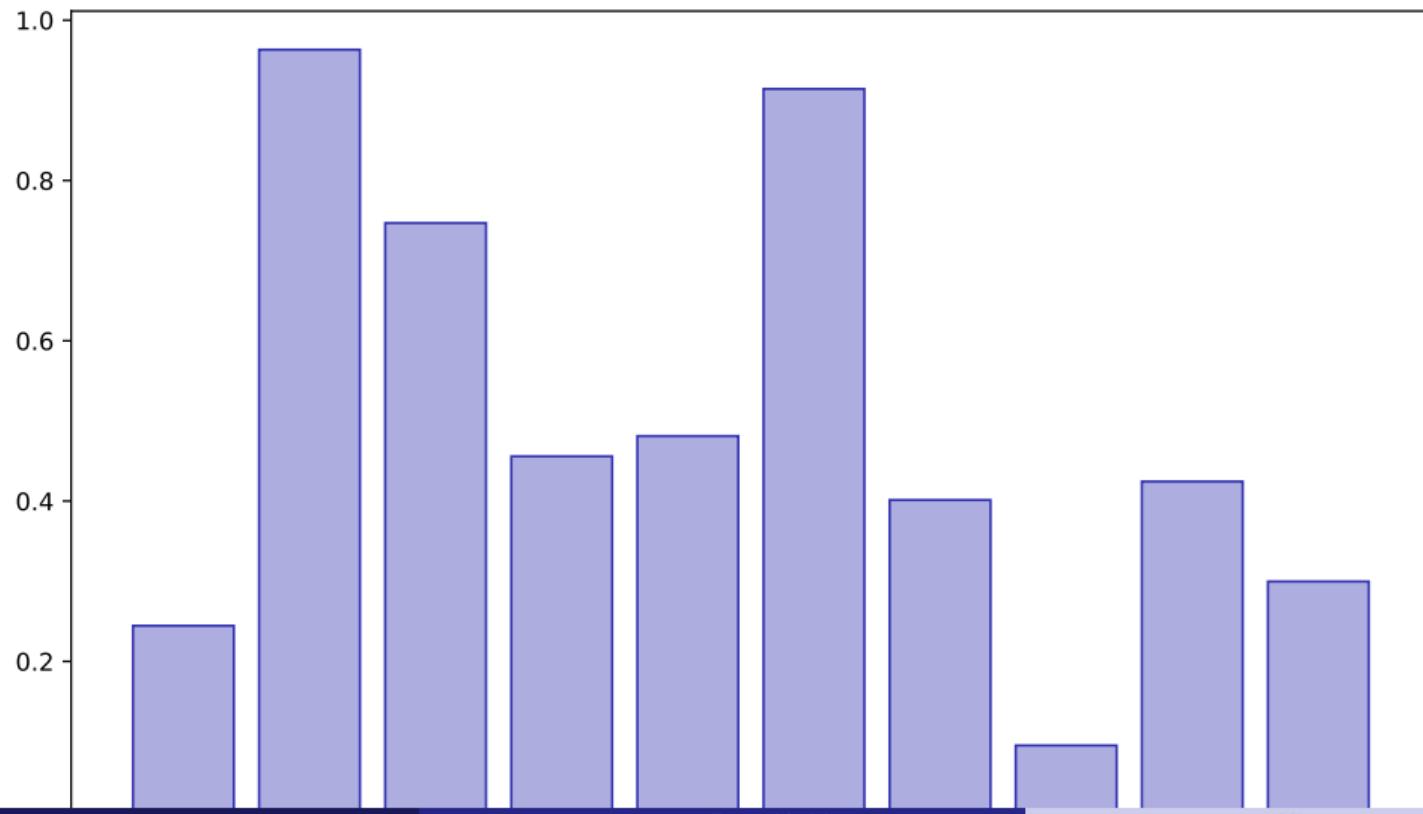
## Factor Loadings



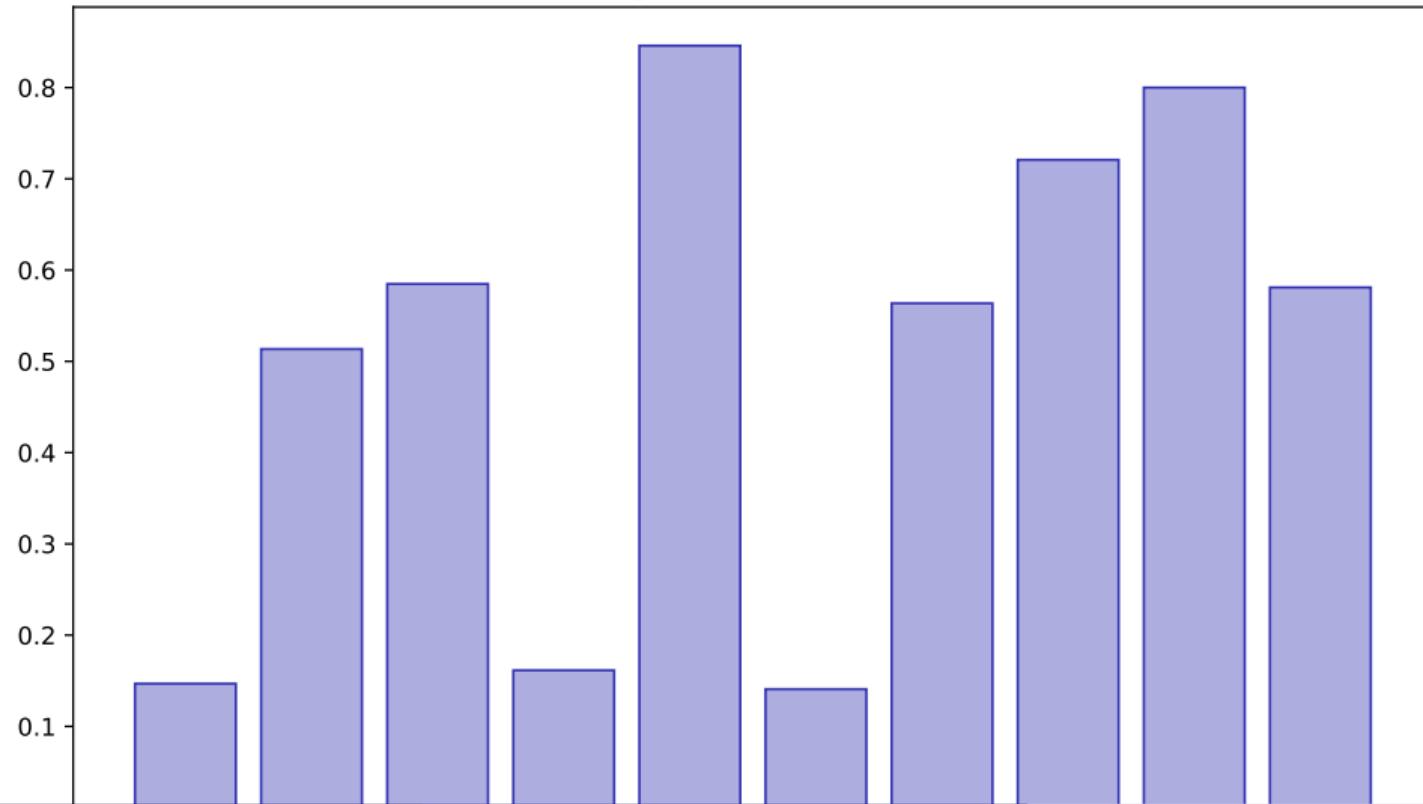
## Alpha Beta



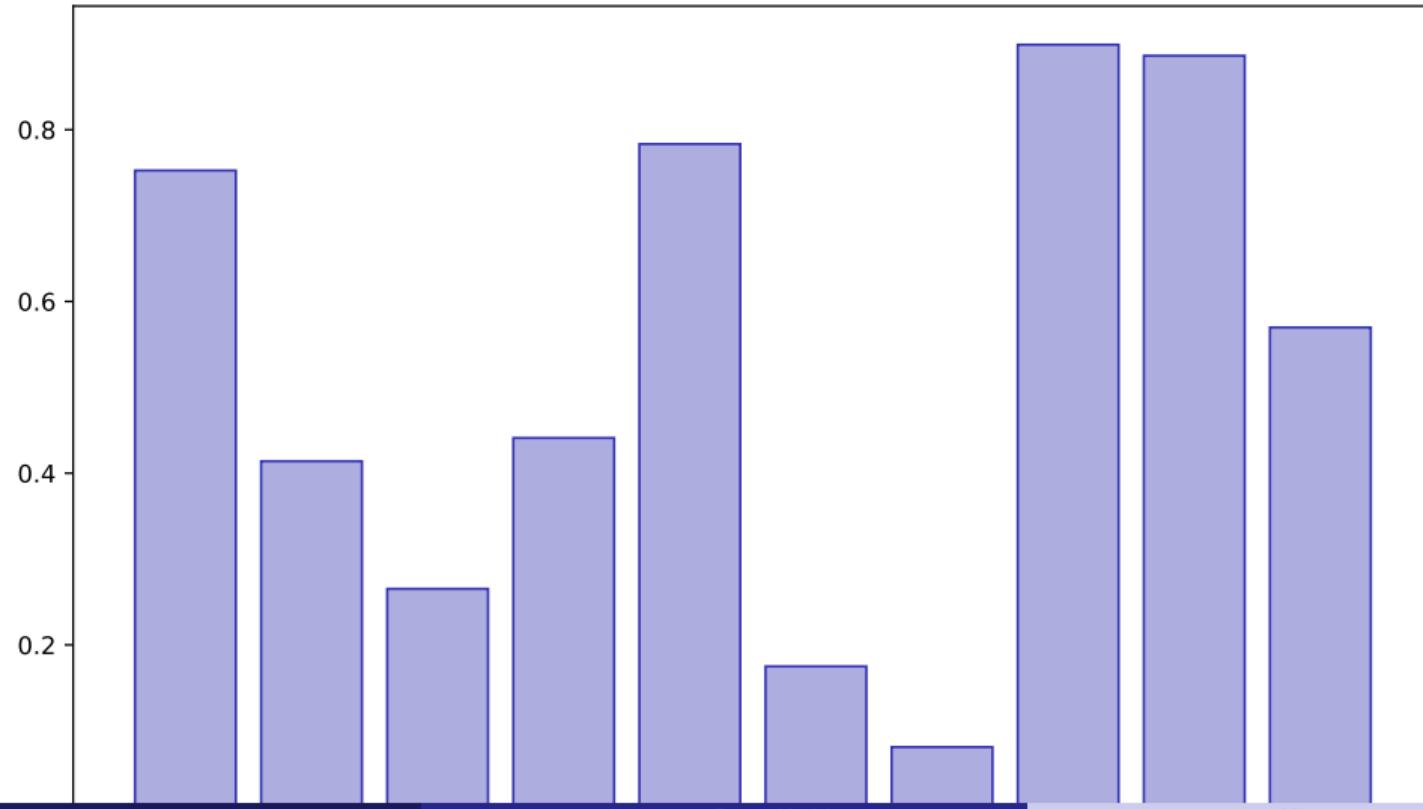
## Multi Factor



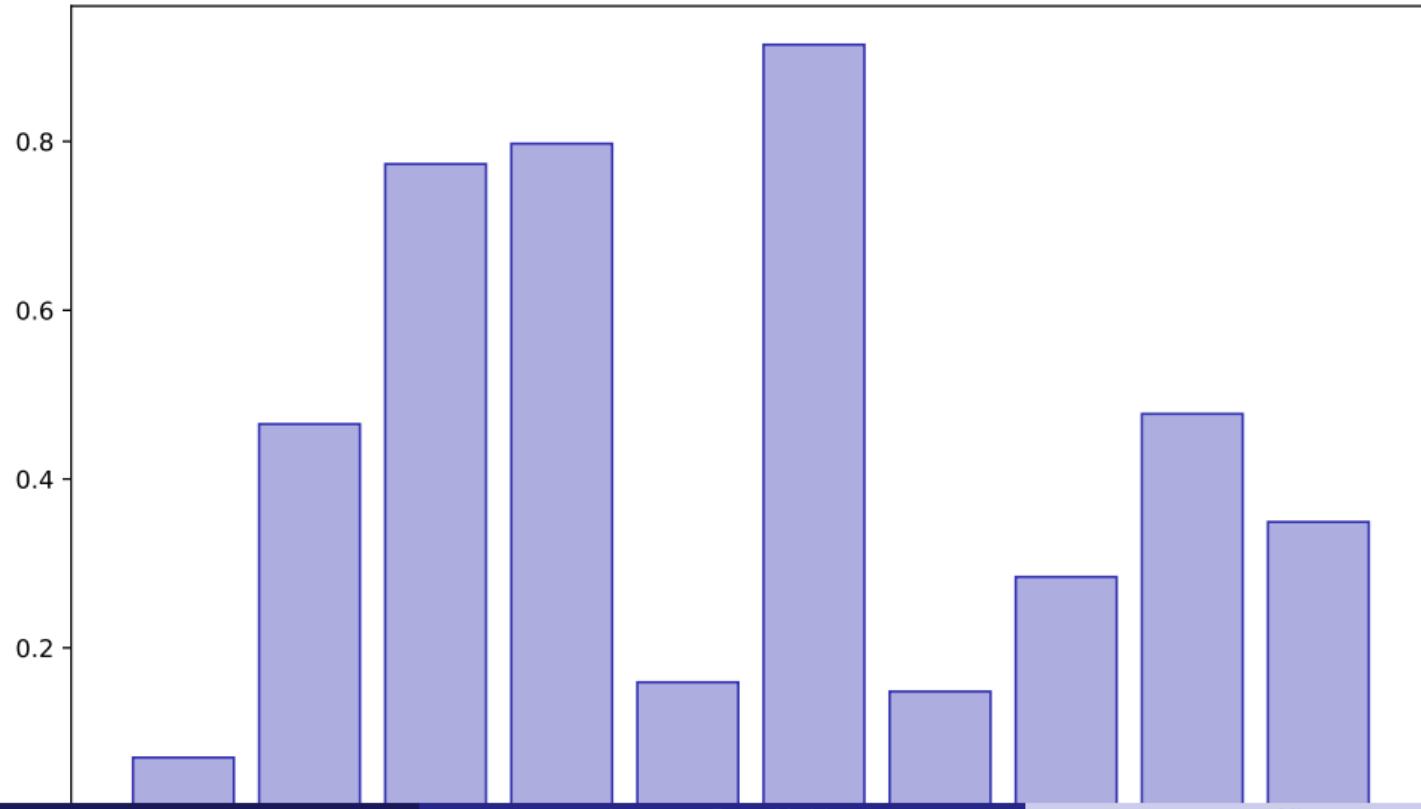
## Pipeline Sklearn



## Model Persistence



### Portfolio Factors



## Lesson Summary

### Key Takeaways:

- Build multi-factor regression
- Understand Fama-French factors
- Interpret factor loadings
- Create complete ML pipelines

Apply these skills in your final project