Lesson 25: Logistic Regression

Data Science with Python – BSc Course

45 Minutes

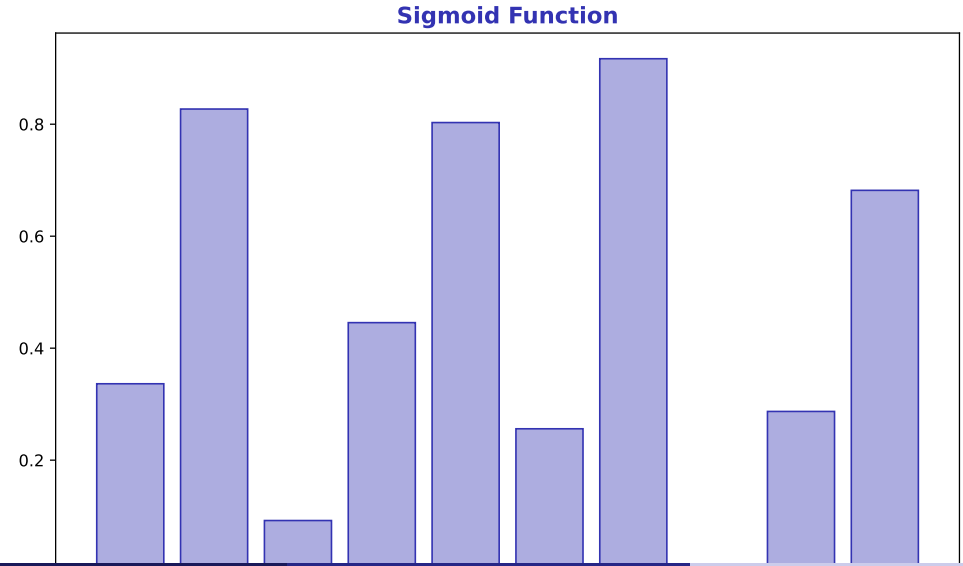
Learning Objectives

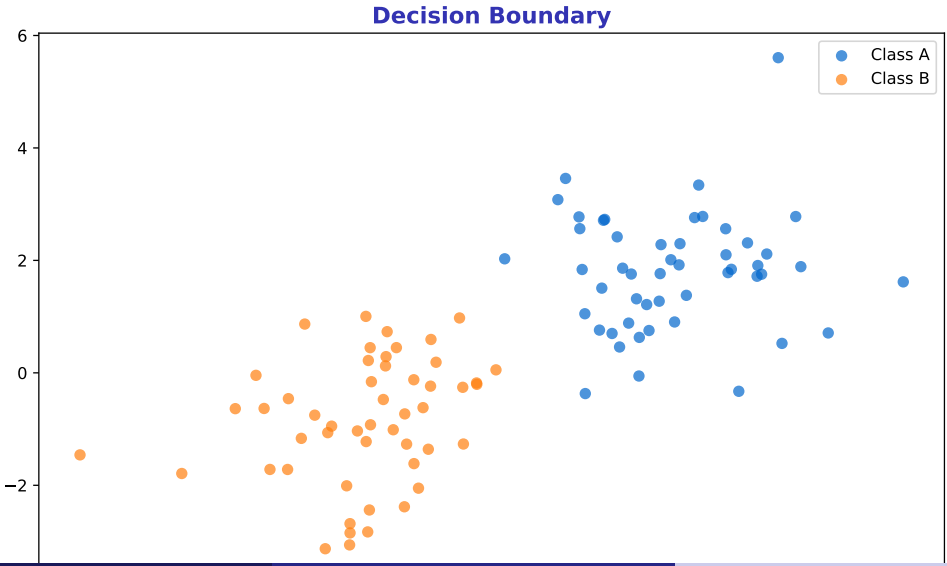
After this lesson, you will be able to:

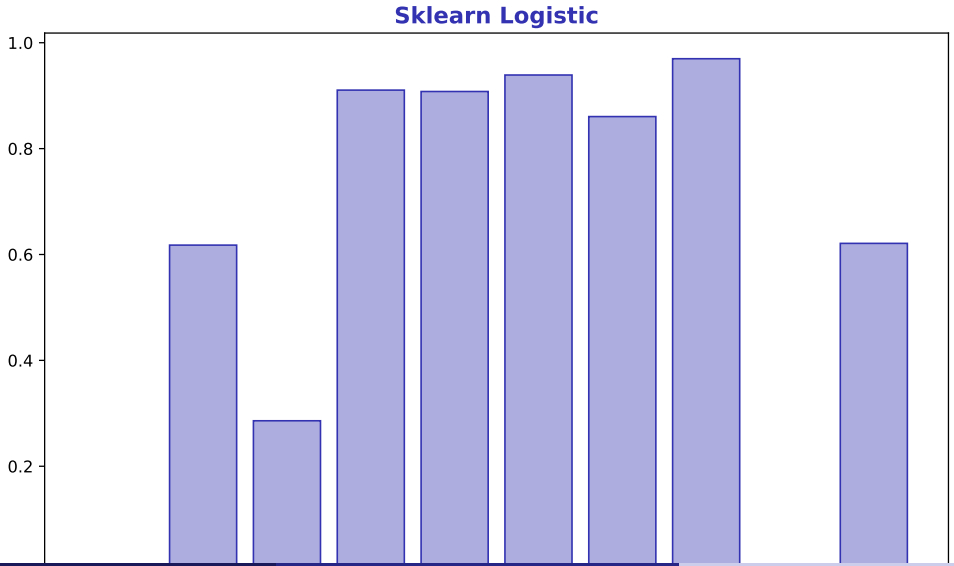
- Understand sigmoid function
- Build binary classifiers
- Interpret odds ratios
- Predict market direction

Building towards your final project

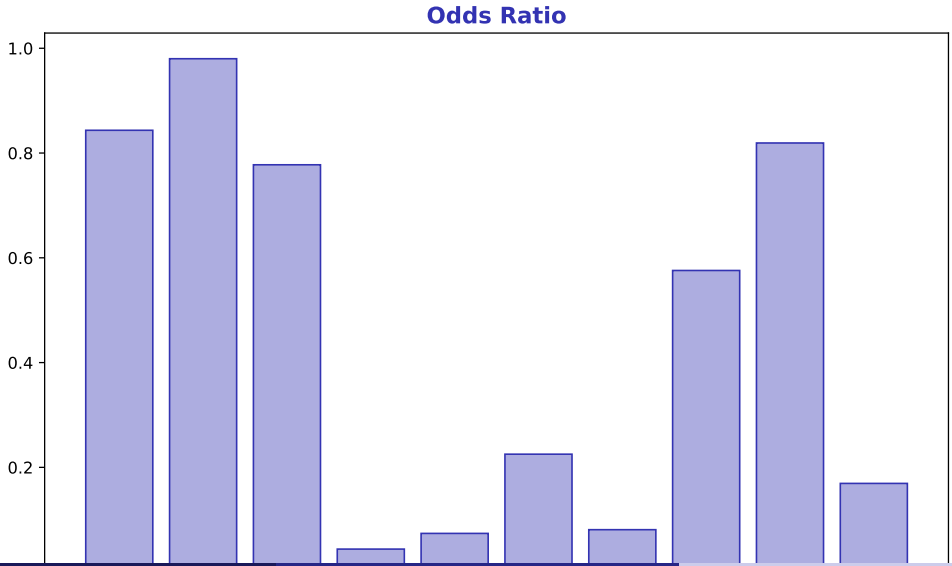
Sigmoid Function

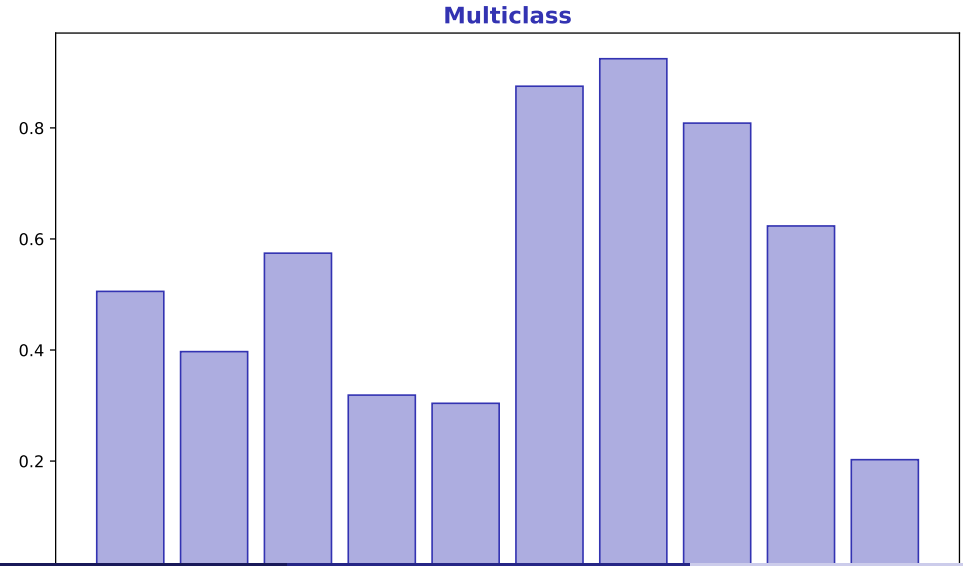


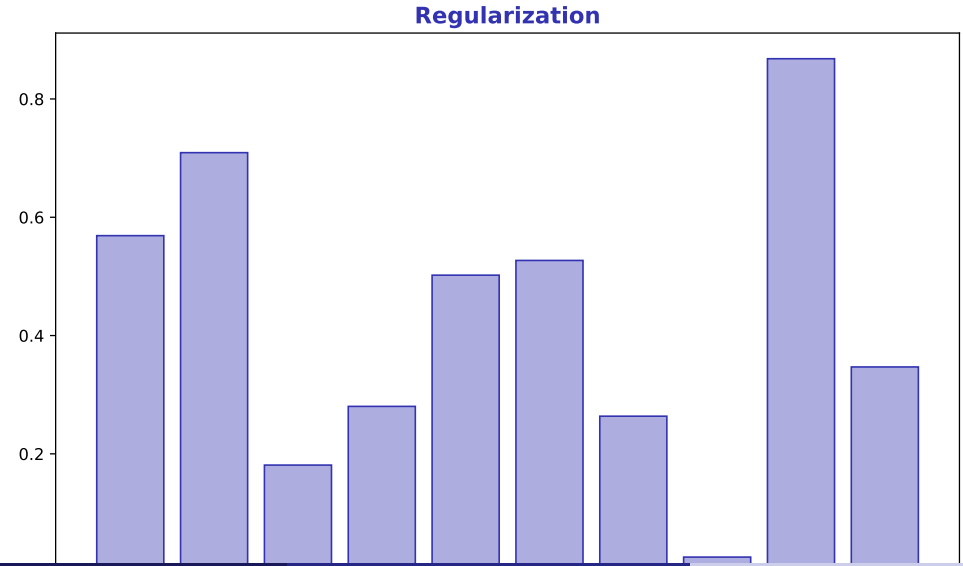

Decision Boundary
Class A
Class B
6
4
2
0
−2

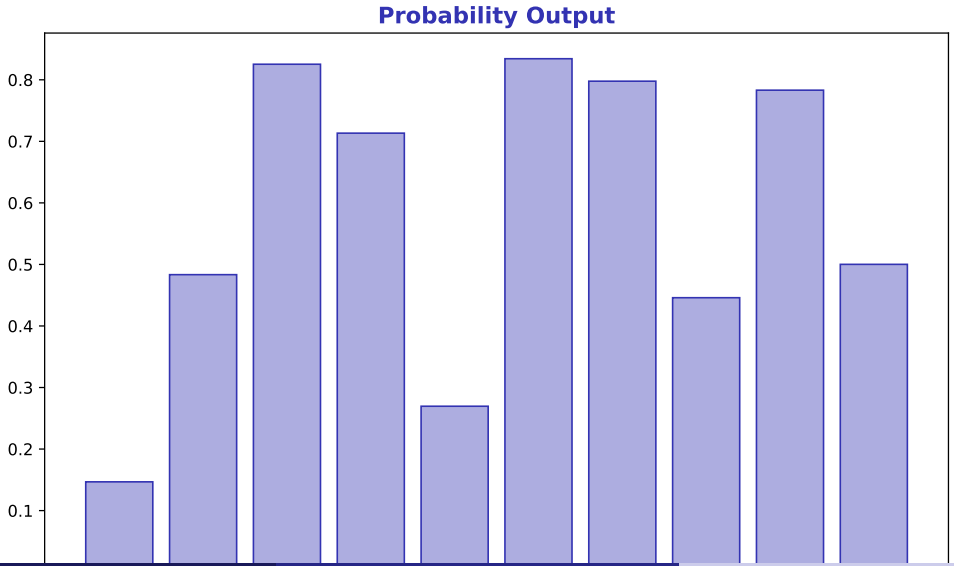

Sklearn Logistic
1.0
0.8
0.6
0.4
0.2

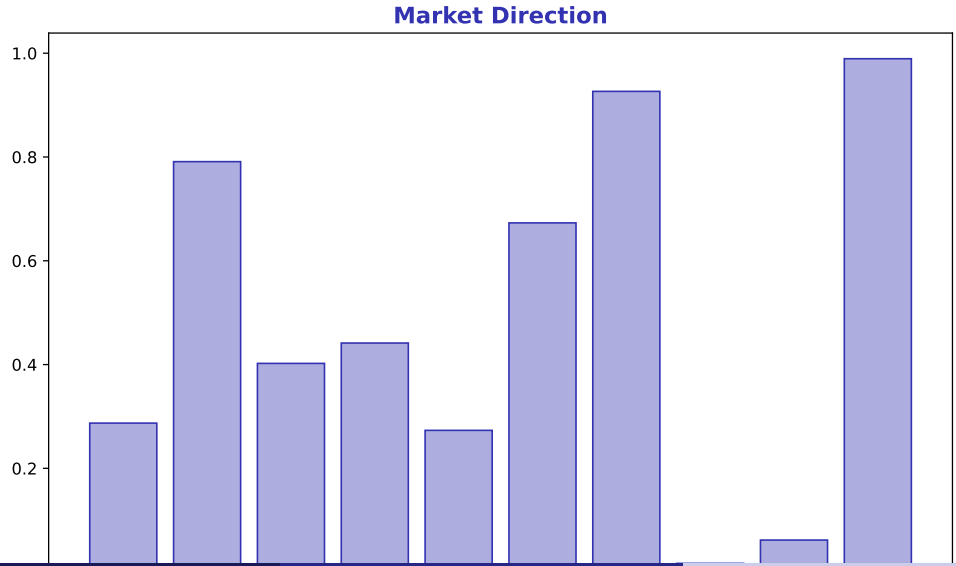
Odds Ratio




Multiclass
0.8
0.6
0.4
0.2


Regularization
0.8
0.6
0.4
0.2


Probability Output
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1


Market Direction
1.0
0.8
0.6
0.4
0.2

Lesson Summary

Key Takeaways:

- Understand sigmoid function
- Build binary classifiers
- Interpret odds ratios
- Predict market direction

Apply these skills in your final project