

SEARCH



RESOURCES

CONCEPTS

- ✓ 1. Types of Errors
- ✓ 2. Model Complexity Graph
- ✓ 3. Cross Validation
- ✓ 4. K-Fold Cross Validation
- ✓ 5. Learning Curves
- ✓ 6. Detecting Overfitting and Under...

7. Solution: Detecting Overfitting an...

8. Grid Search

9. Grid Search in sklearn

10. Grid Search Lab

11. [Solution] Grid Search Lab

12. Putting It All Together

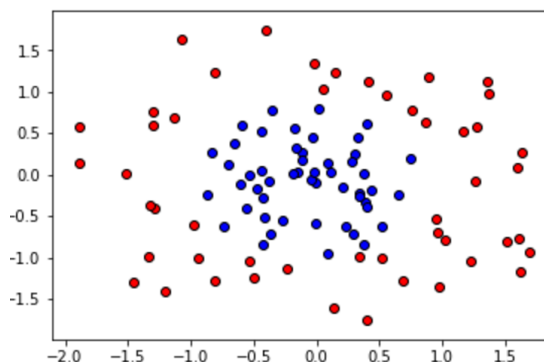
13. Outro

[SEND FEEDBACK](#)

Detect Overfitting and Underfitting with Learning Curves

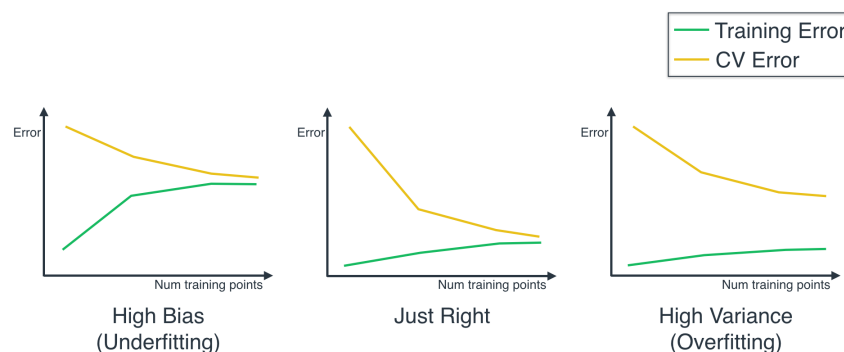
For this quiz, we'll be using three models to train the circular dataset below.

- A Decision Tree model,
- a Logistic Regression model, and
- a Support Vector Machine model.



One of the models overfits, one underfits, and the other one is just right. First, we'll write some code to draw the learning curves for each model, and finally we'll look at the learning curves to decide which model is which.

First, let's remember that the way the curves look for the three models, is as follows:



For the first part of the quiz, all you need is to uncomment one of the classifiers, and hit 'Test Run' to see the graph of the Learning Curve. But if you like coding, here are some details. We'll be using the function called `learning_curve`:

```
train_sizes, train_scores, test_scores = learning_curve(
    estimator, X, y, cv=None, n_jobs=1, train_sizes=np.linspace(.1, 1.0, num_t
```



Mentor Help

Ask a mentor on our Q&A platform



Peer Chat

Chat with peers and alumni