

## Recap

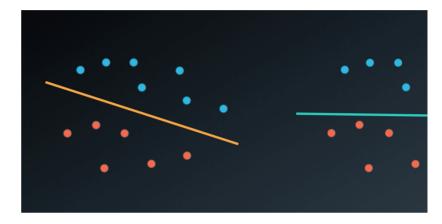
In this lesson, you learned about Support Vector Machines (or SVMs). SVMs are used for classification problems. You saw three different ways that SVMs can be

Recap & Additional Resources

- 1. Maximum Margin Classifier
- 2. Classification with Inseparable Classes
- 3. Kernel Methods

## Maximum Margin Classifier

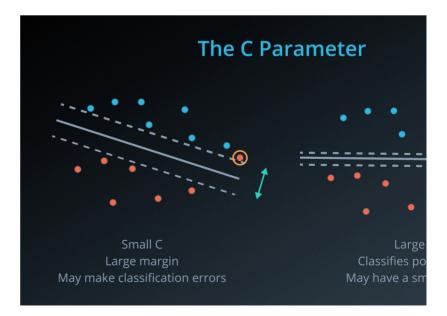
When your data can be completely separated, the linear version of SVMs attem distance from the linear boundary to the closest points (called the support vect saw that in the picture below, the boundary on the left is better than the one o



## Classification with Inseparable Classes

Unfortunately, data in the real world is rarely completely separable as shown ir this reason, we introduced a new hyper-parameter called **C**. The **C** hyper-param flexible we are willing to be with the points that fall on the wrong side of our div value of **C** ranges between 0 and infinity. When **C** is large, you are forcing your errors than when it is a small value.

Note: when C is too large for a particular set of data, you might not get co because your data cannot be separated with the small number of errors a large value of C.



Kernels