Davis Adams

Machine Learning

ML Reading WK 7

2/25/23

What is a constrained optimization problem?

It is when an objective function which is the sum of cost functions each that has a soft constraint that is violated

What is a support vector?

Support vectors are made up of datapoints in each class that lie closest to the classification line.

What is the margin in a support vector machine?

The margin is the radius of no mans land before data points start entering it.

What is the constraint that should be satisfied? Write it in English. If you can, write the equation.

Each data point will be checked to see if its equal to or greater than 1.

Ti(wTxi + b) >= 1 for all i = 1,..n

What questions do you have about the reading?

I’m still a little confused on how this is implemented.