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Machine Learning

ML Reading WK 8

2/25/23

* What is a kernel function for SVM?

A kernel function is a way to classify a normally non-linear dataset with a linear classifier.

* How are slack variables used?

It is a variable that is added to the inequality constrain to transform it into an equality.

* What is the margin in a support vector machine?

The margin is the distance between the hyperplane and the closest observation to the hyperplane.

* What are the constraint that should be satisfied for SVM? Write it in English. If you can, write the equation.

The margins should be large enough so as to avoid overfitting.

* What questions do you have about the reading?