

COS 511: Theoretical Machine Learning

Hint on HW#3, problem 1b

Spring, 2018

First, come up with an algorithm that can learn this class in the batch version when s is known. Then consider what would happen if this algorithm were run using a guess for s . How could you detect from the available data if your guess turned out to be incorrect? How would you know if it is safe to stop and output a hypothesis output by that algorithm?

Another hint: There is no need to give the kind of detailed, ad hoc, interval-by-interval argument that you might have used on homework #1. By this point in the course, we have much cleaner and more powerful techniques for analyzing learning algorithms.