4.3: Nonparametric Regression

Dr. Bean - Stat 5100

Suppose each observation in my dataset had completely unique X-profiles. In other words, there was one and only one observation available for any combination of X-inputs. What might be some advantages and disadvantages for making the LOESS neighborhood so small that it fits each observation exactly?

Name a potential concern of using a LOESS model on a dataset with a very large number of explanatory variables.

Name an example where the discrete predictions of a regression tree could be problematic.