

## 1.1. Problem: Fitting kNN to the Cars Data

Get the susedcars.csv data set from the webpage.

[http://chicagoboothml.github.io/MachineLearning\\_Fall2015/DataSets/](http://chicagoboothml.github.io/MachineLearning_Fall2015/DataSets/)

Plot  $x$ =mileage versus  $y$ =price. (price is the price of a used car.)

Does the relationship between mileage and price make sense?

Add the fit from a linear regression to the plot.

Add the fit from kNN for various values of  $k$  to the plot.

For what value of  $k$  does the plot look nice?

Using your “nice” value of  $k$ , what is the predicted price of a car with 100,000 miles on it?

What is the prediction from a linear fit?

## Fitting kNN to the Cars Data

What should you turn in?

One plot with data points, the linear fit and kNN fit for the value of  $k$  that you chose.

On the same plot, mark the prediction from the linear fit and the prediction from the kNN fit.

Put labels on axis. Add legend to the plot.