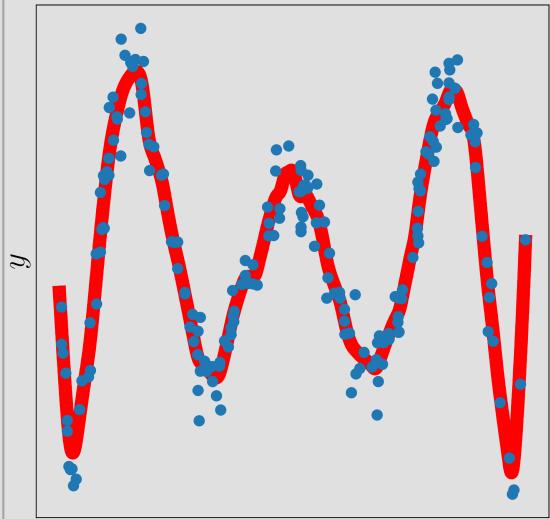
## Non-parametric methods

## Nadaraya-Watson



## K-nearest neighbors:

$$y = \frac{1}{5} \sum_{i=1}^{5} y_{(i)}$$

## Nadaraya-Watson:

$$y(x) = \sum_{i=1}^{N} w_i(x)y_i$$

$$w_i(x) = \frac{K(x, x_i)}{\sum_{i=1}^{N} K(x_i, x_i)}$$

 $\sum_{j=1}^{\infty} K(x, x_j)$ 

R

 $\mathcal{X}$