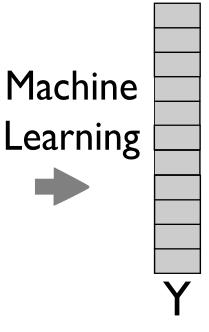
## **Descriptors**

(i.e. covariates, independent variables)



## Point prediction

model to predict the dependent variable

(i.e. dependent variable)

## New datapoint pair (x<sub>new</sub>)

$$lpha_{80\%} = rac{|y_{new} - \widetilde{y}_{new}|}{\widetilde{
ho}_{y_{new}}}$$



lpha list for the training set

0.01 0.2 0.31 .... 0.7 0.9 1.1

80% of the list

 $lpha_{80\%}$ 

## Get CV residuals

Train **error prediction** model on X and using the absolute value of the CV residuals as dependent variable. Predicts error in prediction  $(\widehat{\rho})$ 



Calculate and sort conformity scores ( $\alpha$ ):

$$\alpha = \frac{|y - \widetilde{y}|}{\sqrt{\widetilde{\rho}_y}}$$

Determine  $\alpha$  value for a given confidence:

