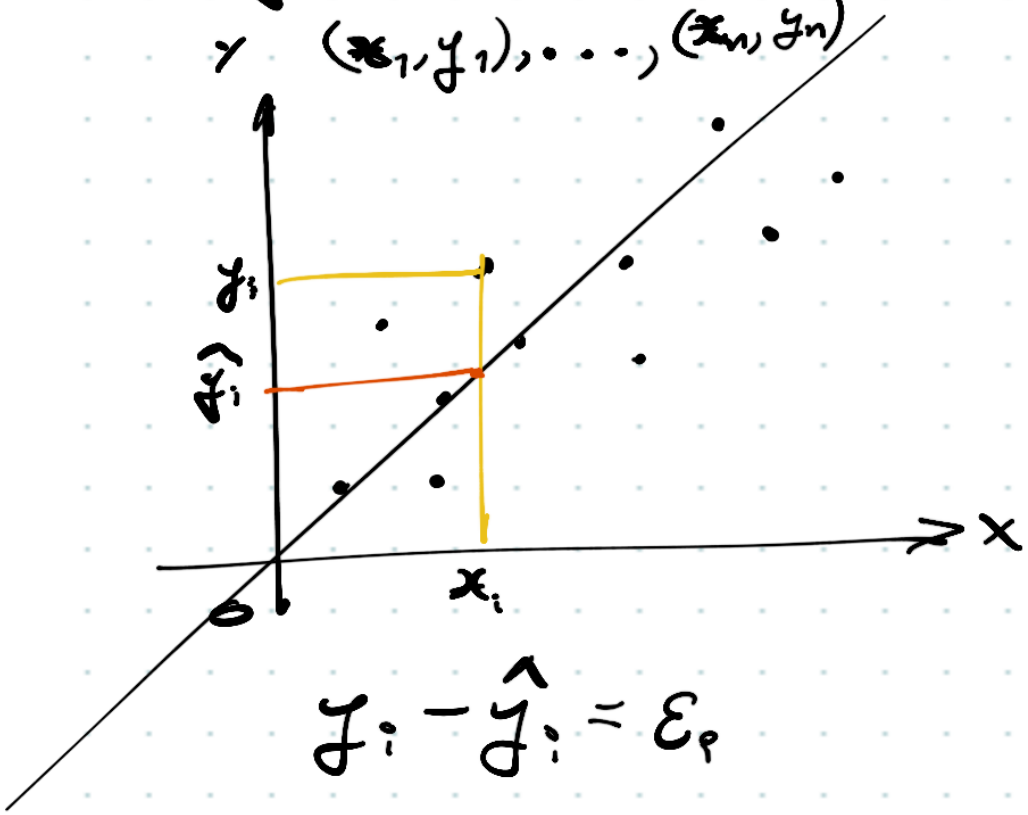
Lab 12

Regresie - simplă / multiplă

- liniară / neliniară

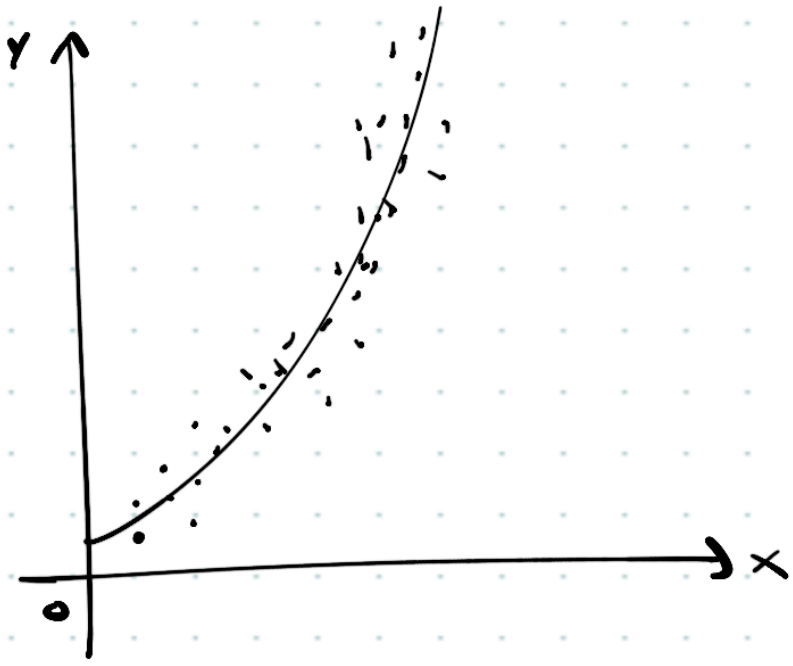
Regresie liniară simplă



$$y \simeq f(x) = ax + b$$

$$y = ax + b + \varepsilon$$

$$y_i - \hat{y}_i = \varepsilon_i$$



$$\sum_{i=1}^{n} |y_i - \hat{y}_i| = \sum_{i=1}^{n} |y_i - ax_i - b|$$

$$H(x,y) = \begin{pmatrix} \frac{\partial^2 S}{\partial^2 a} & \frac{\partial^2 S}{\partial a \partial b} \\ \frac{\partial^2 S}{\partial a \partial b} & \frac{\partial^2 S}{\partial^2 b} \end{pmatrix}$$

$$\begin{cases} \frac{\partial S}{\partial a} = 0 \\ \frac{\partial S}{\partial b} = 0 \end{cases} \Rightarrow P_{(}(x_k, y_k)$$