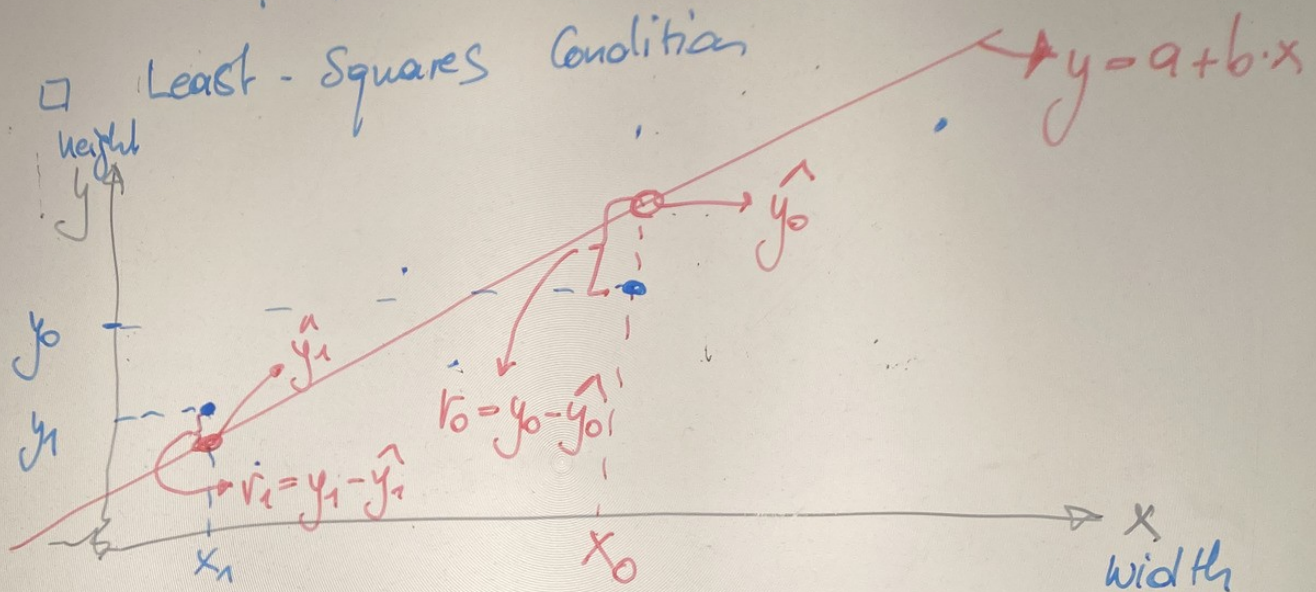


Derivation of Linear Regression Line

□ Linear regression line, is straight line that fullfills the least-squares condition

□ Least - Squares Condition



□ For a given data set y, x are observed and a and b are unknown parameters

□ Goal: Compute estimates \hat{a} and \hat{b} such that sum of squared residuals is minimal

□ Notation: y : response variable (dependent variable)
 x : predictor variable (independent variable)