Linear Regression

Regression is a form of supervised learning techniques through modelling a target set of data based on independent variables. This method is mostly used for forecasting/predictions and finding cause and effect relationship between dependent and independent variables. Regression techniques differs on the number of independent variables and the type of relationship between the variables.

Simple linear regression is a type of regression analysis where the number of independent variables is one and there is a linear relationship between the independent (x) and dependent (y) variable. The mathematical representation of the linear regression is given as:

y equals b subscript 0 plus b subscript 1 x

Its algorithm tends to solve the linear regression equation given in equation above by finding the best possible values for b subscript 0 and b subscript 1 which would provide the best fit line for the data points in x and y.