**Overfitting**

This is a modelling error which occurs when a function is too closely fit to a limited set of data points. Over-fitting the model generally takes the form of making an overly complex model to explain the behaviour in the data under study.

## In reality, the data being studied often has some degree of error or random noise within it. Thus attempting to make the model conform too closely to slightly inaccurate data can infect the model with substantial errors and reduce its predictive power. Multicollinearity

In statistics, the occurrence of several independent variables in a multiple regression model are closely correlated to one another.

Multicollinearity can cause strange results when attempting to study how well individual independent variables contribute to an understanding of the dependent variable.

In general, multicollinearity can cause wide confidence intervals and strange P values for independent variables.