1 Overfitting

Overfitting describes the error which occurs when a fitted model is too closely fit to a limited set of observations. Overfitting the model generally takes the form of making an overly complex model (i.e. using an excessive amount of independent variables) 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 sample data can undermine the model and reduce its predictive power.