

1. **Regularization** consists of different techniques and methods used to address the issue of over-fitting by reducing the generalization error without affecting the training error much.
2. There are 2 types of algorithms used in Regularization: Lasso and Ridge Regression Algorithms.
3. Linear regression most often uses **mean-square error (MSE)** to calculate the error of the model. **MSE** is calculated by:
 - measuring the distance of the observed y-values from the predicted y-values at each value of x;
 - squaring each of these distances;
 - calculating the mean of each of the squared distances.