



Python ML Project 1

Linear Regression

Employee Salary Prediction

Project Description:

In this particular project, we are using a dataset that contains information like, experience, previous interview score, current salaries and using that to predict salaries of employees.

However, before you go ahead and make a prediction, it is advised that you first pre-process the data, since it may contain some irregularities and noise.

In addition, try various tricks and techniques in order to gain the best accuracy in your predictions.

Column details:

1. experience- how much experience does the employee have
2. test_score(out of 10) - test score of the employee out of 10
3. interview_score(out of 10) – interview score of the employee out of 10

Part-1: data Exploration and Pre-processing

- 1) Load the given dataset
- 2) Fill Null value of experience column with the value 0
- 3) Replace the Null values of the column test score with mean value
- 4) Display a scatter plot between experience and Salary
- 5) Display a scatter plot between test score and Salary
- 6) Display a scatter plot between interview score and Salary
- 7) Display bar plot for experience

Part-2: Working with Model

- 1) Separate feature data from target data
- 2) Create a Linear regression model between Features and target data
- 3) Display the test score and training score
- 4) Extract slope and intercept value from the model
- 5) Display Mean Squared Error
- 6) Display Mean Absolute Error
- 7) Display Root mean Squared error
- 8) Display R2 score