Tutorial 03

Linear Regression and Multiple Linear Regression

Submit your Linear Regression assignment, run the code and create the plots as desired along with performance measure evaluation.

Data set: Realestate.csv

URL: https://www.kaggle.com/quantbruce/real-estate-price-prediction

Attributes:

1. transaction date
2. house age
3. distance to the nearest MRT station
4. number of convenience stores
5. latitude
6. longitude

Output: house price of unit area

Simple linear regression

Exercise 1:

House age and house price: Fit a model and predict house price based on “age of house” and “distance to the nearest MRT station” in separate LR files. Include the model output in your response as well as writing out the linear model. Interpret the slope according to “house age” and “distance to the nearest MRT station” and determine which one is more significant predictor of house price.

Give performance measure outcome in form of MSE, MAE and RMSE error

Exercise 2:

Independent Variable: House age, Longitude, Latitude, distance to the nearest MRT station, number of convenience stores

Dependent Variable: House Price.

Ques1: Fit Multiple Linear Regression Model and predict house price based on all Independent Variables.
Ques2: Try exercise 1 using Polynomial Regression for same dataset

Ques3: Give performance measure outcome in form of MSE, MAE and RMSE error