

Harvard Extension Data Science
Dynamic Modeling and Forecasting in Big Data

Instructor: William Yu

Assignment 0

This assignment serves as a self-assessment tool to help you determine if you are ready and comfortable to take this course. Submission is not needed. This course requires students to understand basic statistics, linear regression and some programming skills in R or Python. If you experience significant difficulty completing this assignment, you might not be ready for this course. And you might want to consider dropping this course. The course will be available again next semester.

Linear Regression: What Predicts the Long-term Home Price Appreciation of a City?

- Read my article: “R02_What Predicts the Long-term Home Price Appreciation of a City?” in the assignment folder to understand the context of the data.
- In the assignment folder, download W02b_homeprice.xlsx and save it into your computer.
- Check with H01_dgp_regression.R or j01_ols.ipynp and j02_linear.ipynb, and write a R or Python script to do the following:
 - Replicate the linear regression in Table 2.
 - Make in-sample prediction of the linear regression model.