

PSTAT220A Projects: Due 12/3/2021

All work must be your own. If you have questions, talk to me.

All questions should be answered in the form of a brief report, with text explaining such things as: notation and formulae, which methods you used and why; results and interpretations; conclusions. Tables and graphs should be clearly labeled. Answers written on computer output are not acceptable.

In a good data analysis, one usually needs to go through several exploratory “iterations” before reaching at the final results. In the process, tentative models should be evaluated and reevaluated by both statistical analytical tools and by common sense. In the presentation of the final results, however, one should avoid tedious reporting, but instead focus on the important findings. When appropriate, do use plots in your exploration, and do include good ones in your presentation.

The data set *property.txt* contains a random sample of 83 properties for sale in a city. It contains 5 variables:

1. *size*: size of the property (in square meters).
2. *age*: age of the property (in years).
3. *dc*: distance (in km) from the property to the city center.
4. *dt*: distance (in km) from the property to a toxic waste disposal site.
5. *price*: the listed price of the property, in thousands of dollars.

Investigate how listed price depends on other variables. The data set is available at

<http://yuedong.faculty.pstat.ucsb.edu/classes/data/property.txt>