

Math 1372/D552 - Statistics & Probability - Spring 2016
Instructor: Suman Ganguli

Project #1: Commute Time Analysis
Due Date: Wednesday, May 18

For this project, you will collect and analyze data regarding how long it takes you to commute to campus. This project will count as 5% of your course grade, and will be due at the end of the semester.

Data collection: Each time you commute to (and/or from) campus for the rest of the semester, you should record how long the commute takes:

- Set up a spreadsheet with columns for “Date” and “Commute time”; you can also include a third column for “Notes.”
- Each time you begin your commute, make a note of what time you leave and what time you arrive. Subsequently enter the elapsed time in your spreadsheet.
 - If you are using Google Sheets you can record this data immediately if you install and use the Google Sheets app on your phone. Alternatively, use a piece of paper to write down your departure and arrival times, and later transfer the data to your spreadsheet.
- Use the optional “Notes” column to record information that may be useful later when you analyze your commute times. E.g., if you use different commute routes you may want to record which route you used; if your commute takes much longer than usual, you may want to record why (subway delay, stops along the way, etc).

Data analysis: Towards the end of the semester, you will create a frequency table and histogram using your data, and compute the standard summary statistics (mean, median, variance, standard deviation). Then briefly describe (in 1-2 paragraphs) the distribution and analyze the summary statistics. Further details on how to analyze and describe the distribution and statistics will be discussed in class over the course of the semester.

Project report: You should hand in two pages:

- 1) a printout of your spreadsheet with the data, frequency table/histogram, and summary statistics
- 2) your written description/analysis.