

**Math 1372/D556 - Statistics & Probability - Fall 2019**  
**Instructor: Suman Ganguli**

**Project #1: Commute Time Statistics**

**Due Date: Wednesday, Dec 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.

**Data collection:**

Each time you commute to campus this semester, **record how long your 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 commute to campus, make a note of what time you start your commute and what time you arrive (or just use a stopwatch on your phone). Subsequently enter the data in your spreadsheet.
  - If you are using Google Sheets you can record this data immediately if you install the Google Sheets app on your phone. Alternatively, write down the data, and later transfer it 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:**

At the end of the semester:

- use your spreadsheet to create a frequency table and histogram using your data, and compute the standard summary statistics (mean, median, variance, standard deviation)
- briefly describe (in 1-2 paragraphs) the distribution and analyze the summary statistics.

Further details on how to analyze and describe the distribution and summary statistics will be discussed in class over the course of the semester.

**Project deliverables:**

You should hand in two items (either hardcopies or electronically):

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