

- Building functions in C++ was a fun experience. I hadn't touched C++ in a few years, so it was a bit of a struggle to get back to writing C++ code. I can say with absolute certainty that I appreciate all of R's quick method calls instead of crafting my own functions due to the ease of use and efficiency, though this assignment did help me get a better handle of the math behind covariance and variance in particular.
- The statistical measure is to calculate the average of a set of data, by adding up all values in a certain list and dividing it by the total number of entries on the list. Statistical median is the middle value that separates the top half and lower half of a data set. Range is simply the highest value of a data set subtracted by the lowest value in a data set. These are measures of central tendency which gives us a value approximation of where the data is trending to.
- Correlation is the measure to see how closely two sets of data are linearly related. Covariance tells us how the two sets vary. We can use correlation in machine learning when doing an analysis of our data. We can see if there are any big problems in the two data sets before corrupting the model by referencing correlation. We can also check the extent of a relationship between two continuous sets by using covariance.