Bio Media Assignment 9A: Data Visualization

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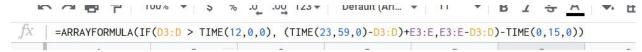
Description:

During this term I have been keeping track of a variety of body parameters. I decided to visualize some of the data I collected, specifically regarding my sleep schedule and physical activity metrics over the term.

Sleep Schedule

I measured my sleep schedule in a relatively non-rigorous way. Around 15 minutes before I would go to bed, I would record the time in my spreadsheet. Later, when I would wake up I would then additionally record the time in my spreadsheet.

I determine the total hours slept by taking the difference between both times (this was done via a quick excel formula command seen below).



One reason reason I needed that slightly complicated one-liner above is because finding the total hours slept between two am times (1:00 am and 10:00 am, time is 10-1=9 hours slept) is different from finding the difference between a pm time and an am time (e.g. 9:00 pm and 10:00 am, (12-9)+10 = 13 hours slept).

I additionally accounted for the 15 minute offset resulting in about 30 data points (I wasn't super attentive--I forgot to record the times every other day) graphed below:

Sleep Quantity During Spring Term

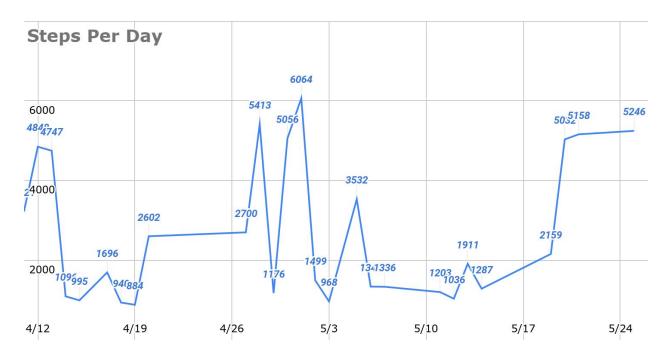


NOTES:

The blue dots, as denoted above represent the hours slept and the green line represents the average amount of sleep between that given data point and all data points left of it. Of note, I took care to make sure the y-axis does not start at 0 in order to make the variation in data more noticeable (e.g. the outliers of 7:06 and 11:53 would not have seemed as extreme in a graph with an axis starting at 0).

Physical Activity

Over the term I tracked the steps taken in a given day using a bootleg fitbit. The measurements weren't entirely accurate but they worked as a good heuristic. The major take away being that I haven't gotten a lot of movement during spring term.



Notes:

The numbers above each "joint" in the graph represent the number of steps taken on that given day. I decided to opt for a continuous line as opposed to a scatter plot as to more easily see the variation and generalized spikes/trends present in the measurements with extreme occurring at the beginning of April, the start of May and the now again nearing the end of may.