

# Assignment 4

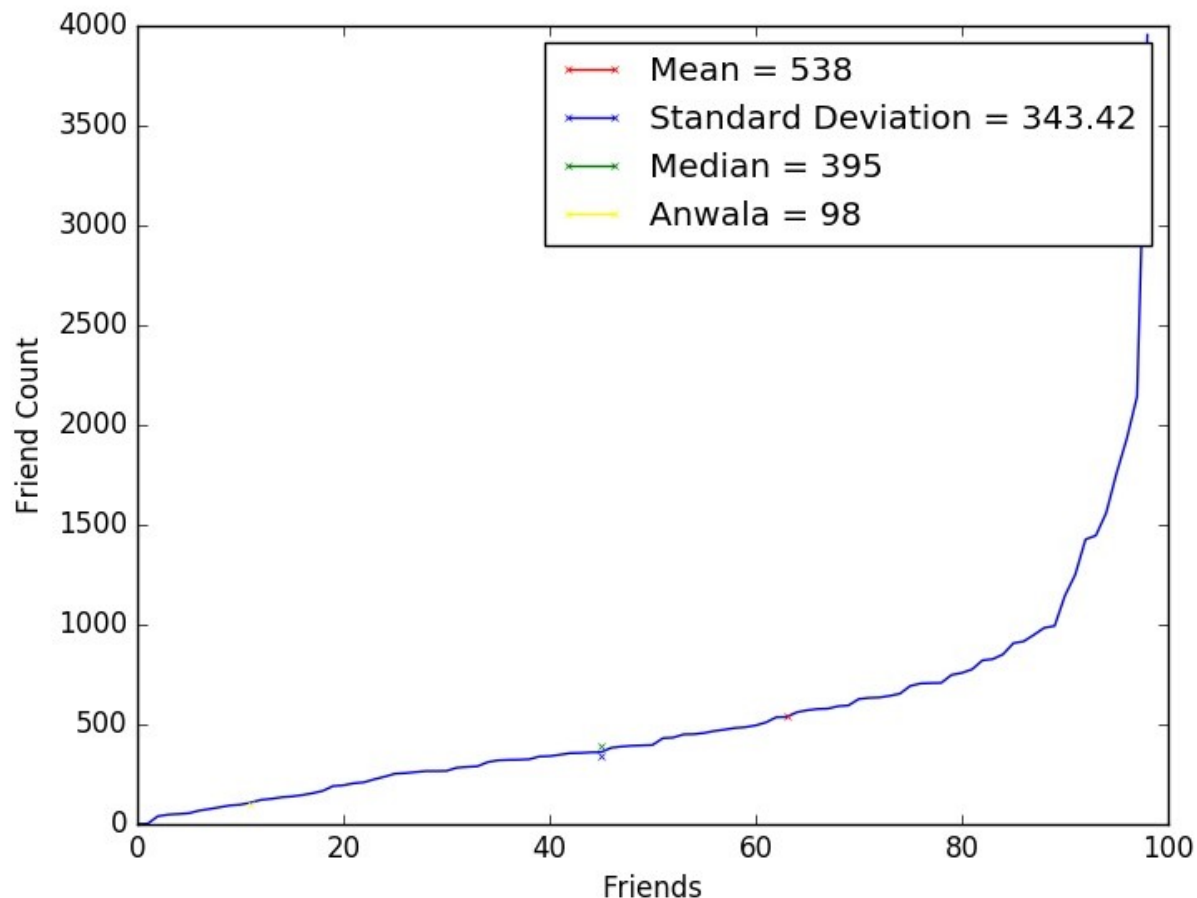
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1. Determine if the friendship paradox holds for my Facebook account.\* Compute the mean, standard deviation, and median of the number of friends that my friends have. Create a graph of the number of friends (y-axis) and the friends themselves, sorted by number of friends (y-axis). (The friends don't need to be labeled on the x-axis: just f1, f2, f3, ... fn.) Do include me in the graph and label me accordingly.

\* = This used to be more interesting when you could more easily download your friend's friends data from Facebook. Facebook now requires each friend to approve this operation, effectively making it impossible.

I will upload a csv file of my 2014 friends list on the #assignment-4 slack channel

For this problem I used assignment4\_1.py to graph the data I had extracted from the .csv file provided by Prof Anwala since I don't use Facebook.



2. Determine if the friendship paradox holds for your Twitter account. Since Twitter is a directed graph, use "followers" as value you measure (i.e., "do your followers have more followers than you?").

Generate the same graph as in question #1, and calculate the same mean, standard deviation, and median values.

For the Twitter 1.1 API to help gather this data, see:

<https://developer.twitter.com/en/docs/accounts-and-users/follow-search-get-users/api-reference/get-followers-list>

If you do not have followers on Twitter (or don't have more than 50), then use my twitter account "acnwala".

For this problem I did approximately the same thing as previously, however I used assignment4\_3.py to extract the necessary data from Prof Anwala's twitter account since I also do not use twitter. I tend to avoid social media in most all forms. I used assignment4\_2.py to create the graph.

