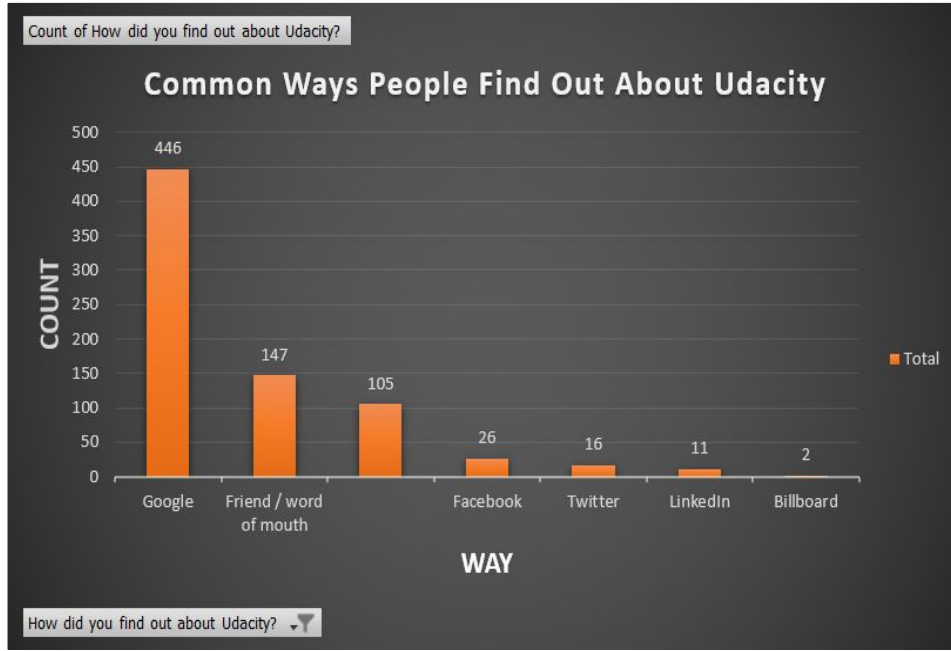


Common Ways People Find Out About Udacity

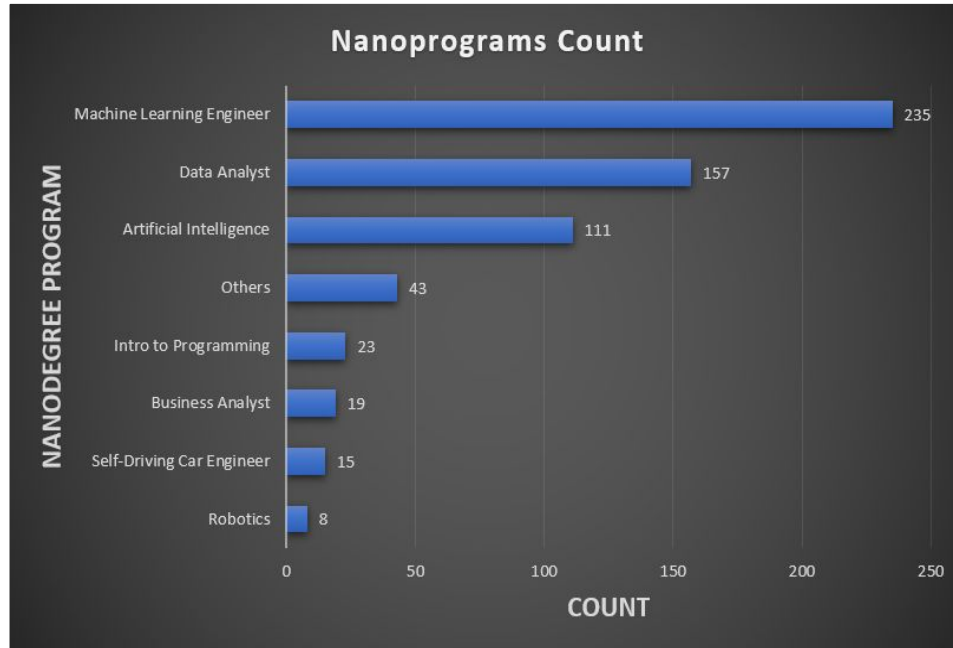


The opposite visualization shows different ways people find out about udacity:

- The most common way is through "Google" (representing 59% (446/753) of udacity students who filled the survey).
- Then comes "Friends/ Word of mouth" (representing about 20% (147/753)).

Limitation : This data is from Survey Respondents and is not from the entire Udacity Student population.

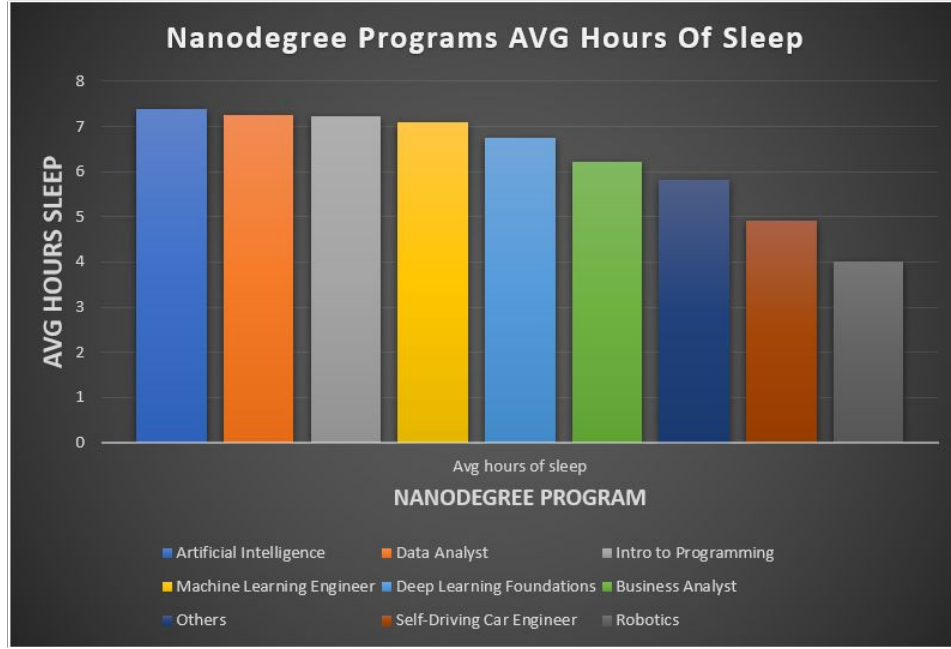
Popular Nanodegree Programs



The opposite visualization presents the number of students took each nanodegree program.

Most popular nanodegree is "Machine Learning Engineer".

Who Sleeps The Least?



The opposite diagram shows the average hours of sleep for each nanodegree program students.

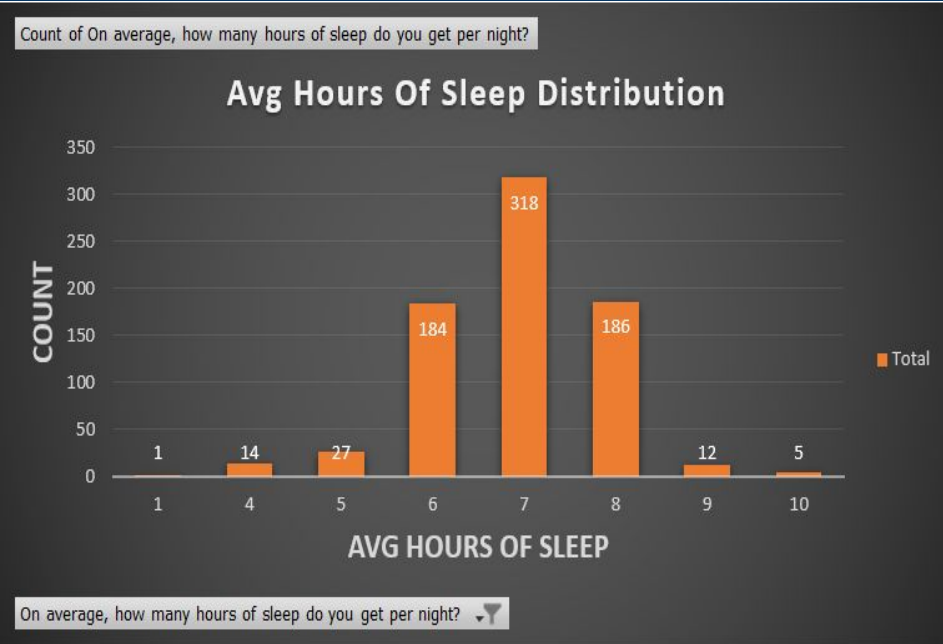
The number of students took each program was taken into consideration while calculating the average.

An outlier was filtered from the data to avoid misleading results.

Students of "Robotics" program have the least average of sleeping hours.

Limitation : This data is from Survey Respondents and is not from the entire Udacity Student population.

Average Hours Of Sleep Distribution



It is appeared to be a perfect normal distribution.

Range = $(10 - 1) = 9$ hours.

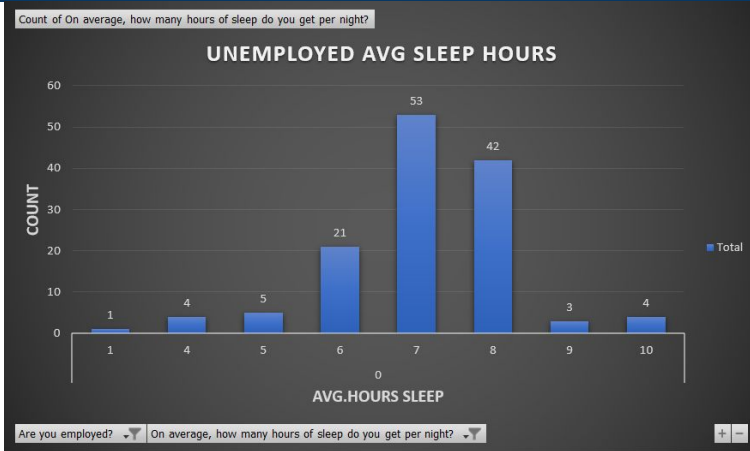
Mean =

$$[(1*1)+(14*4)+(27*5)+(184*6)+(318*7)+(186*8)+(12*9)+(5*10)]/747 = 6.9 \text{ hours/day.}$$

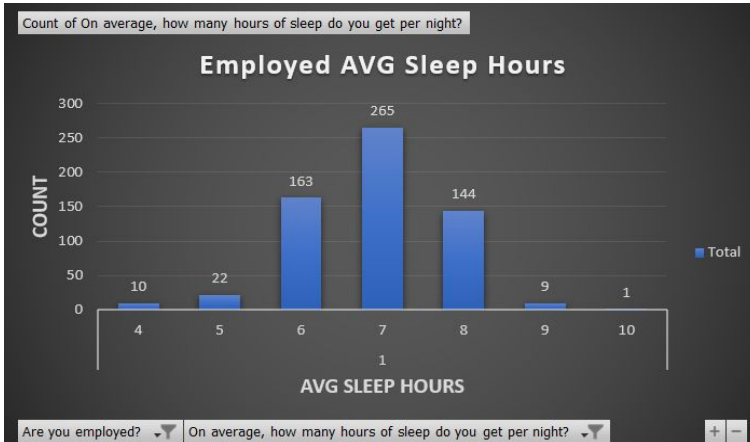
It appears that the mode and the median are equal: mode = median = 7 hours / day, which is equal to the mean, this shows that most survey students sleeps on average 7 hours daily, which considered very good from biological perspective.

Standard deviation = 2.49 hours which is not a big value, this means most results are clustered around the mean, and there is no big variation in the the average sleep hours among students

Employed VS Unemployed Average Sleep Hours

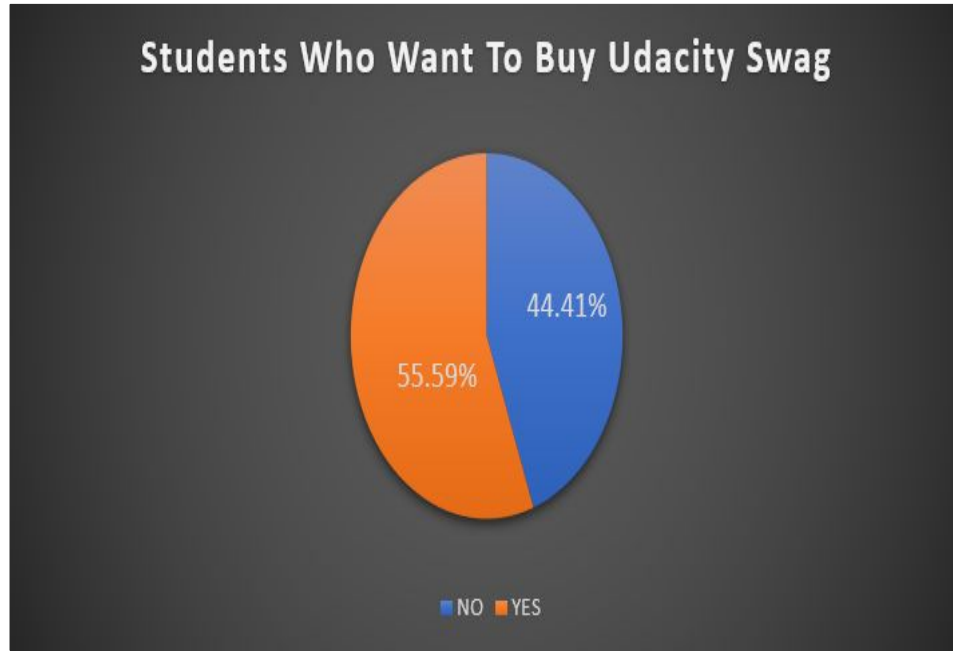


The median number of hours slept by survey respondents who were employed was 7 hours, which is equal to the median number of hours slept by unemployed survey respondents. It looks like employment state does not affect the average sleep hours based on the median of this dataset.



The standard deviation for unemployed approximately equals 3 hours, while standard deviation for employed approximately equals 1 hour. Therefore the variability in average sleeping hours for unemployed is larger. This is may be due to the outlier in the unemployed whose value equals 1 hour average sleep.

Students Who Want To Buy Udacity Swag



The opposite pie chart shows that 55.59% of students want to buy udacity swag.