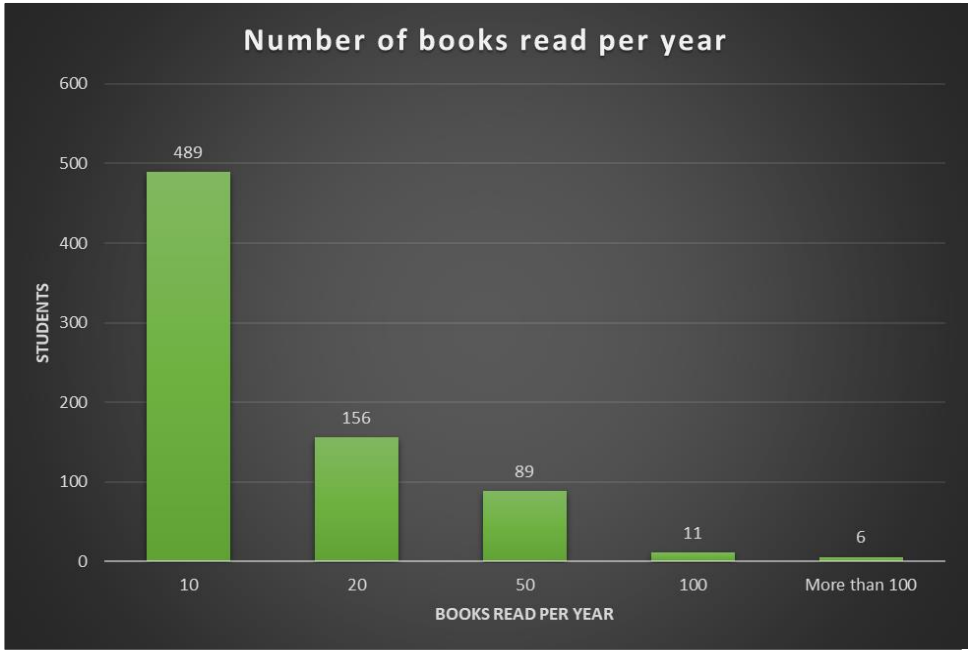
UDACITY

Project 2
Analyze Survey Data

The data used for this project is from Survey Respondents and is not from the entire Udacity Student population.

Reading Habits

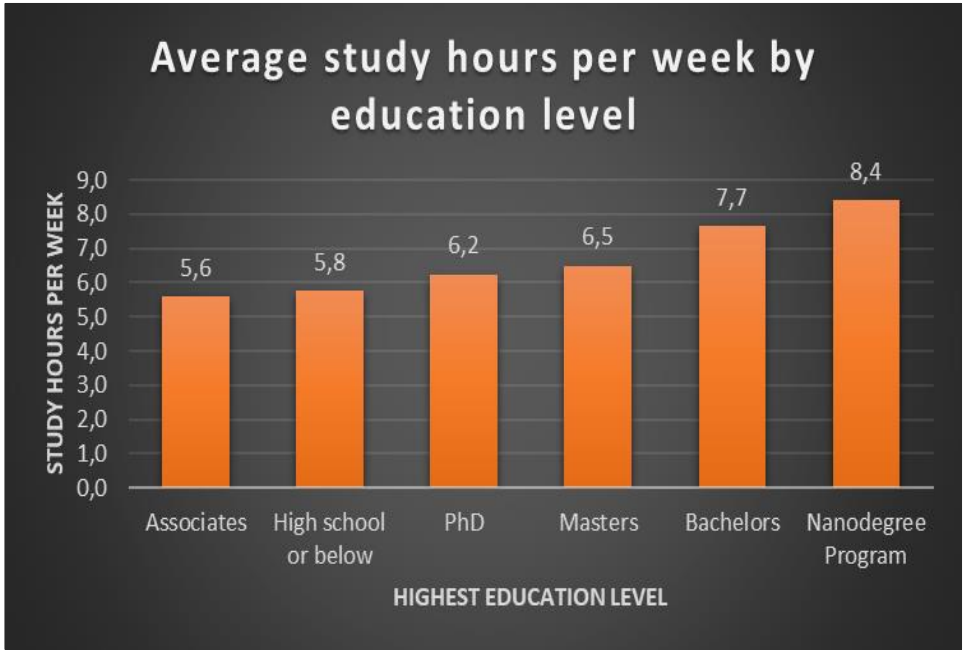


The mean of books read per year is 13.48, while the standard deviation is 28.87, which is high. According to these data, the column chart shows there are students who read a lot of books while others barely read. The distribution appears to be a right-skewed one, with a mean higher than the median, as shown also in calculations (mean was 13.48 and median 8).

The range is 500 and it would seem that there is a significant outlier, which wasn't removed for analysis because it was a posible (although weird) data. The mode was 10, that is to say, the most frequent number of books read per year was 10.

The difference between students who read a lot of books and those who don't, could be explained by summing up the sleeping, commuting and studying average time that students spend during the nanodegree, which makes quite difficult to have more time to read.

Study hours per week according to education level



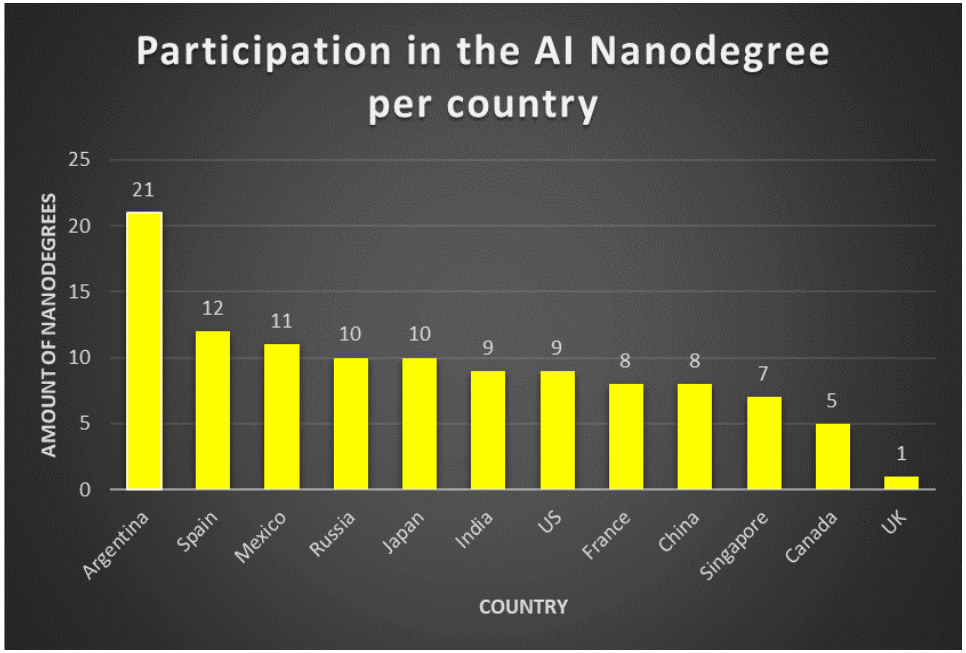
The mean (average) study time per week was 7 hours per week and the median was 6.4 hrs/week.

Students who said that an Associate degree was their highest level of education studied 5.6 hrs/week, the lowest value of the calculations, whilst those who said that their highest level was a Nanodegree program, studied 8.4 hrs/week, the highest value.

The standard deviation is 1.1, that is said, the deviation from the mean is quite irrelevant. The mode (most common amount of time) was 6 and the range was 2.8.

As a curiosity, values for students with an Associate degre and students with high school or below level of education, were extremely similar.

Which country has the most people enrolled in the Artificial Intelligence Nanodegre

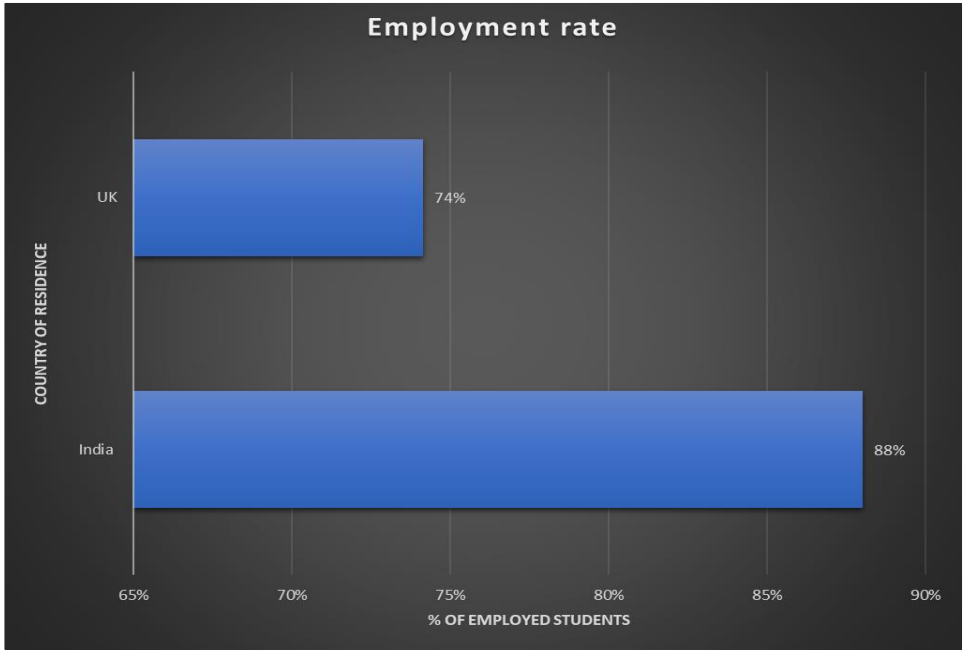


This column chart shows the participation in the AI Nanodegree per country.

Argentina, Spain and Mexico (all Spanish Speaking countries) are the countries with the biggest participation, while UK has the lowest participation with only one student. Argentina has 21 students enrolled, Spain 12 and Mexico 11. The average of people enrolled is 9, the mode is 10 and the range is 20, quite high because UK only have one student enrolled, quite below the average. The standard deviation is 4.71, which is a quite normal value, meaning there were no significant outliers.

The Spanish Speaking countries have higher participation, what could be explained by the fact that AI industry is more developed in those countries so there is a higher demand for AI experts.

Employment rate



The bar chart shows the highest and the lowest employment rate of students, in this case from the UK and India.

88% of students from India are employed, with the highest employment rate among all the students interviewed. The lowest employement rate is for British students, with a 74%, The mean is the 82% of students, that is said, the average employment rate is 82%, so UK's employment rate is below that average. The standard deviation is 4%, that it is, there are no outliers. The median is 84%, quite close to the mean, and the range is 13%.

It's difficult to draw conclusions about the reasons of these results. It could be deduce that India is quite bigger than the UK so more job opportunities could be created and also that the political process known as Brexit could be decelerating the labor market in the UK, but with the data collected these are only conjectures.