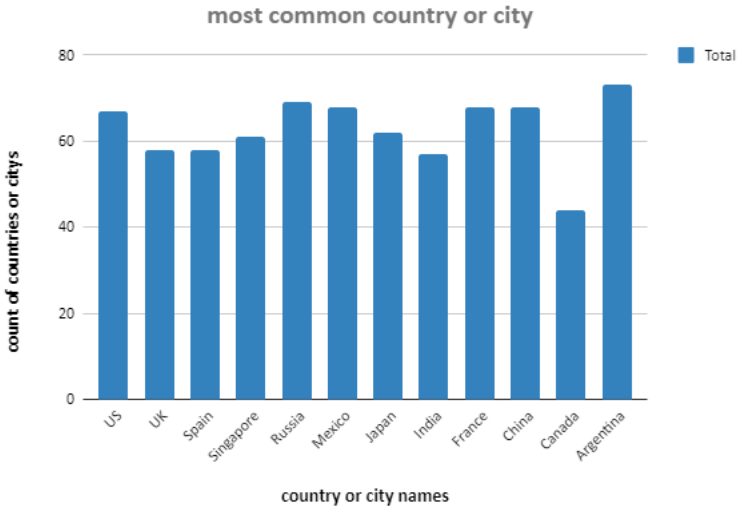
Project 2: Analyze Survey Data

- Common countries/cities students live
- Common way tofind out Udacity
- The sleep time connection between employed and unemployed
- The connection between job and program learning

common countries/cities students live

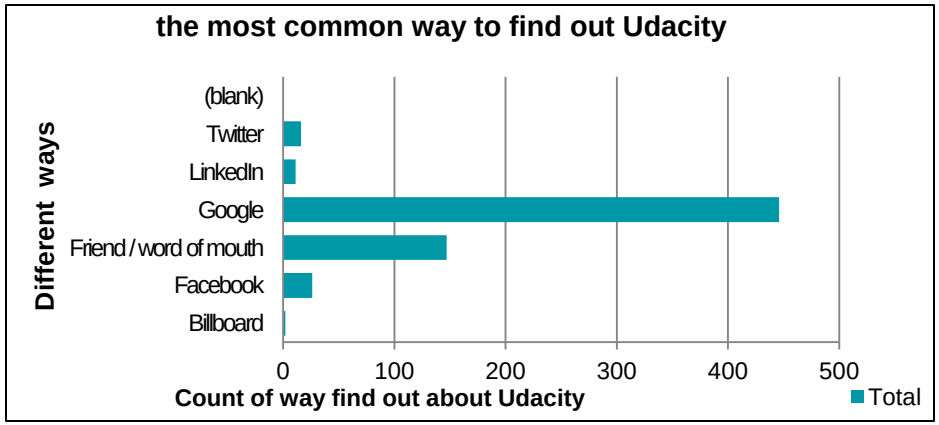


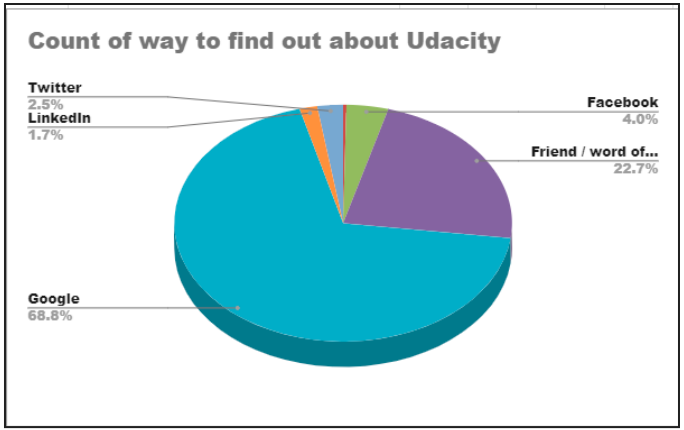
Here is a column chart about the most commn countries the students from.

The chart shows the most students from Argentina. Canada is least country where students from. By chart, Students are from 12 different countries. But there are not big difference between each countries.

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

common way to find out Udacity





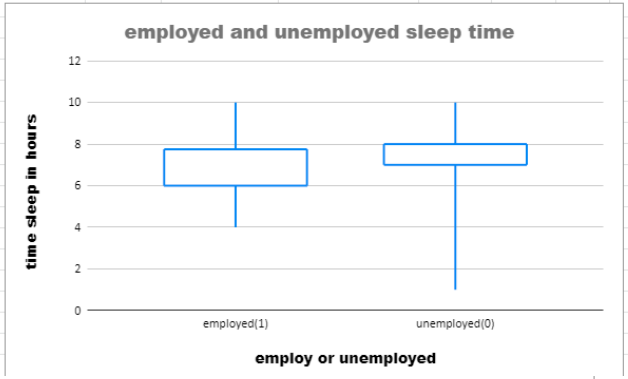
Those are charts for the way people found out Udacity.

From the bar chart above it shows the most common way to find Udacity is by Goolge, the least way is by billboard.

By the pie chart below there are more than 68% people chose Google.

The sleep time connection between employed and unemployed

	Maximun	Upper Quartile (Q3)	Lower quartile (Q1)	Minimun	Median	mean	mode	standard deviation
employed(1)	10	7.75	6	4	7	7	7	0.92
unemployed(0)	10	8	7	1	7	7	7	1.24

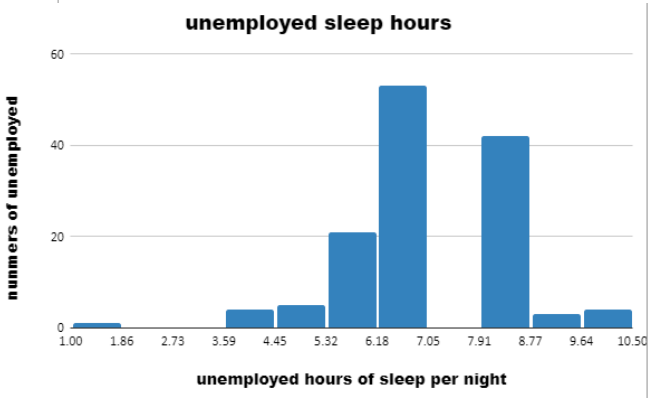


Here are three charts for students employ or unemployed sleep times from servey data.

The top chart shows the distribution of two groups. It shows unemployed survey has longer string. It represent unemployed survey has larger maximum to minimum rang than employed survey . The standard deviation of unemployed survey is 1.24. The standard deviation of employed survey is 0.92. It represent an abnormally high number of employed survey get sleep close to the mean.

By the two histograms at bottom, those shows both distribution appear to be symmetric. Therefore each group has same mean, median and mode.

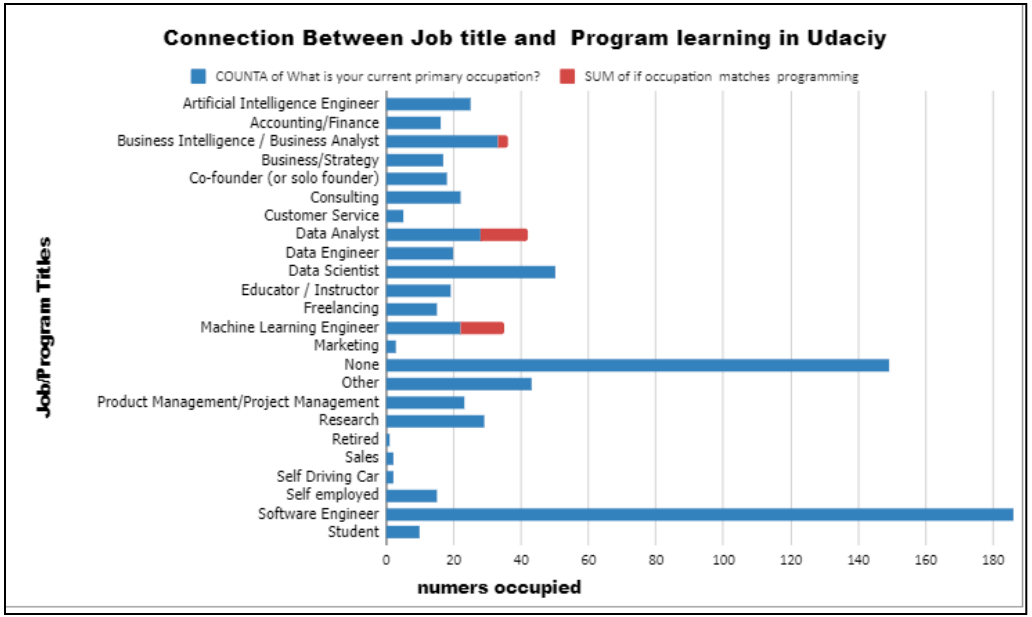
Employed and unemployed survey had same mean 7 hours, it shows the two groups are have same average sleep time based on mean.



And the median number of hours slept by survey respondents who were employed was 7 hours. Same as unemployed survey respondents was 7. It looks like both employed and unemployed are have same middle sleep time based on the median.

Also the two survey of employed and unemployed sleep time had same mode 7 hours, it represent both employed and unemployed survey most likely slept 7 hours per day.

The connection between job and program learning



Here is a bar chart shows about if job title influence what program to choose, and what jobs are more likely choose same program as they are.

The blue bar are different job titles from Udacity's students. It shows most people's jobs are software engineer, but they won't choose same program as they are.

The red bar are if their learning programs matches their job titles. People choose same program as their job are business intelligence/business analyst, data analyst and machine learning engineer. But not very big amount of business intelligence/business analyst choose same program as their job.

Generally there are not many influences between their jobs and the program they choose.