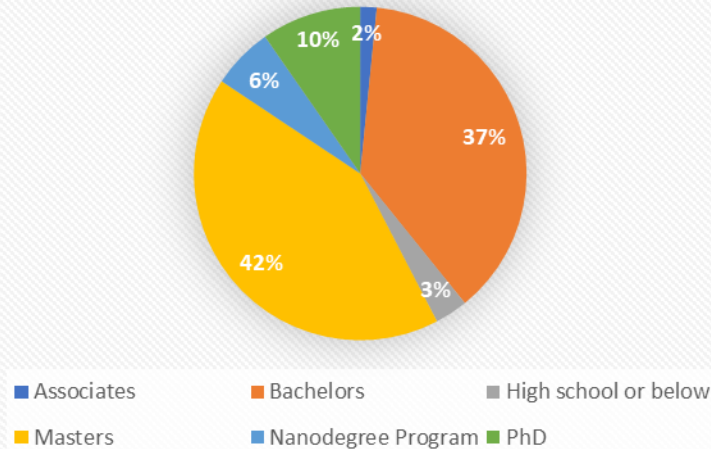# INTRODUCTION

This presentation will address the following four questions:

1. What is the most common highest level of education for survey participants?

2. Is there any difference between survey participants holding Associates/Bachelors' Degree or higher and the rest in terms of sleeping hours?

3. What are the most popular Nanodegree programs (among the eight programs mentioned in the survey) and are there any interesting findings associated with that?

4. What are the differences between the country distribution of surveyed Deep Learning Foundations students and overall surveyed students?

HIGHEST LEVEL OF EDUCATION

HIGHEST LEVEL OF EDUCATION

Pie chart segments: 2%, 37%, 3%, 42%, 6%, 10%

Legend:
- ■ Associates
- ■ Bachelors
- ■ High school or below
- ■ Masters
- ■ Nanodegree Program
- ■ PhD

Here is the pie chart illustrating the proportion of each degree as the highest level of education for our surveyees.

The highest percentage of education level is Master, with 42% surveyed students claiming to obtain it, followed by Bachelors' Degree (37%). These two degrees account for more than three quarters of education levels. Significantly fewer surveyed Udacity learners have a PhD (10%) and the lowest proportion holds an Associate Degree (2%).

Even though this graph may closely reflect the education level of the sample, the survey wording might remain a problem. Since there is no correct definition of how Nanodegree program compares to other degrees, such as High school or below, the answers of participants holding both a Nanodegree and a High school Degree will be based on subjective judgement.

SLEEP TIME AND HIGHEST LEVEL OF EDUCATION

SLEEP TIME FOR NON-ASSOCIATES/BACHELORS
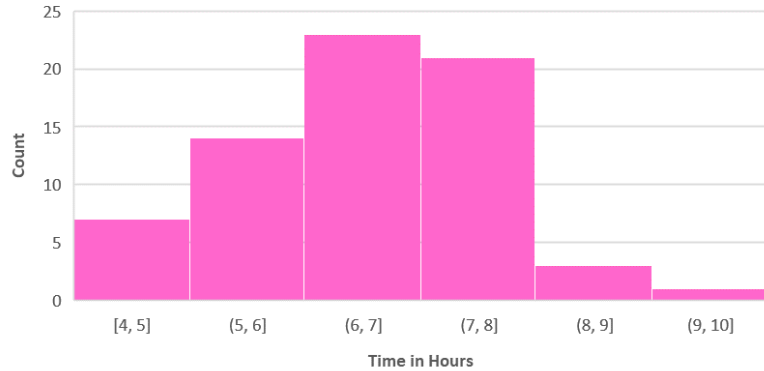
SLEEP TIME FOR ASSOCIATES/BACHELORS OR HIGHER
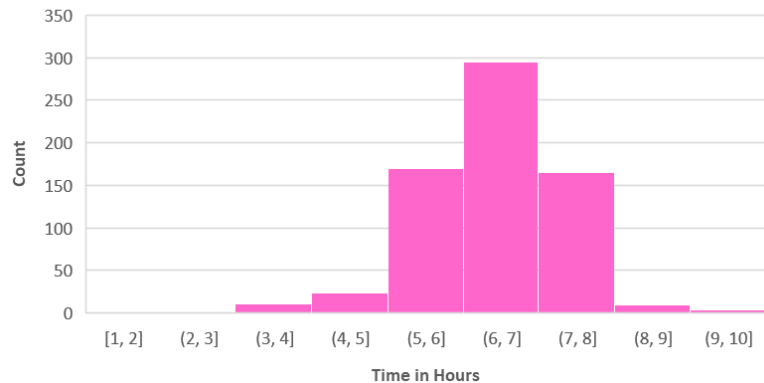
The top histogram shows sleeping hours for non-Associates/Bachelors holders (among survey participants), those holding Highschool or lower degree or Nanodegree as their highest education level, while the bottom one shows sleeping hours for the rest.

Both distributions seem to be normal distribution as they both have medians and modes equal to 7 hours of sleeping and means approximately that amount. It appears that for the survey respondents, the amount of sleep they have is not highly affected by their degrees.

Besides, despite the fact that non-Associates/Bachelors' Degree group has a narrower range than the higher education group (6 hours compared to 9 hours), the standard deviation for the former is actually higher than the latter's (1.21 hour compared to 0.96 hour). Initially, this finding might be surprising, considering that the higher education group has an outlier sleeping 1 hour per day. However, the higher standard variation for the non-Associates/Bachelors' Degree group might be due to the high number of people sleeping 8 hours per day and another significant proportion sleeping 6 hours.

Note that incorrect answers such as sleeping 45, 65, 85 or 9141984 hours per day have been eliminated during the data cleaning phase.

NANODEGREE PROGRAMS BY POPULARITY

STUDENTS JOINING NANODEGREE PROGRAMS
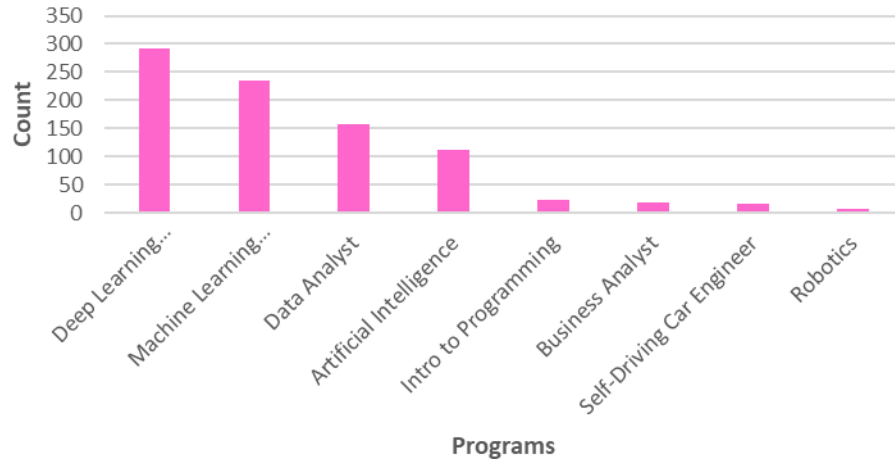
This bar chart compares the popularity of eight Nanodegrees among survey participants. Deep Learning Foundations is the most popular choice (291 students), followed by Machine Learning Engineer (235 students).

Meanwhile, the four bottom courses, namely Intro to Programming, Business Analyst, Self-Driving Car Engineer and Robotics are significantly less popular than the top four, with fewer than 25 respondents participating in each course.

Difficulty level does not seem to contribute greatly to these results. A look at Udacity website reveals that the top four courses are from Intermediate to Advanced Level and the least popular courses are either Beginner or Advanced.

Although the survey sample may be far from being representative of the whole Udacity students population, a few factors can still be considered, such as individual programs' newness, quality, marketing or different industry demands for different areas.
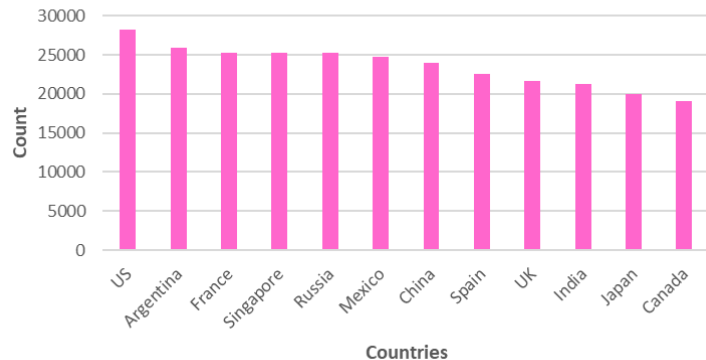
DEEP LEARNING FOUNDATION COURSE AND COUNTRIES

COUNTRIES OF DEEP LEARNING FOUNDATIONS STUDENTS

COUNTRIES OF ALL STUDENTS
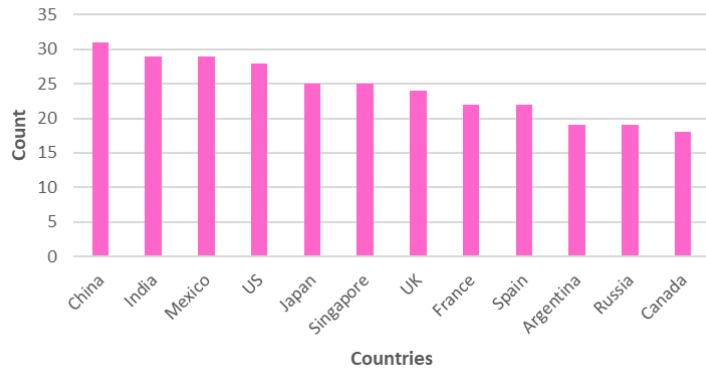
The first bar chart shows the number of surveyed Udacity Deep Learning Foundations (DLF) students coming from each country and the second chart shows the number of surveyed Udacity students in general coming from each country.

The only two obvious similarities between two graphs are the lowest enrolment level from survey respondents living in Canada, and Spain remaining in the 8th or 9th position. Meanwhile, there is a stark difference between the country distribution of surveyed DLF students and overall surveyed students.

The top countries having surveyed DLF students are China, India and Mexico respectively while India stays in the bottom three nations in terms of overall Udacity enrolment among surveyees. Besides, regardless of being the second top country for overall Udacity enrolment, Argentina stays in the bottom three for DLF enrolment.

The survey results suggest a higher chance of survey respondents from China, India and Mexico to enroll in Deep Learning Foundations than survey respondents from other countries.