

# Clustering **UNIVERSITIES** Groups

North America

European Union

Non EU/US

Top 30 All

Internationalization

Academic Reputation

Faculty Analysis

+ Clusters

- Clusters

## CS 3300 Project 2

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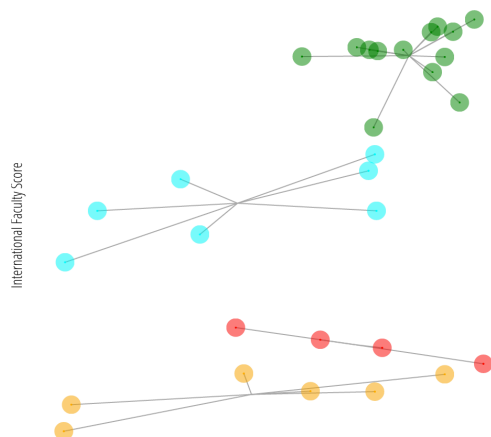
### The QS Universities Ranking Clusters (2014)

#### A. Data Selection:

We got our data from QS Universities Ranking review from the entire top 500 Universities following their criteria. We downloaded the excel file and then decided which part of the data was useful and then cleaned it to fit in .csv format, so we would be able to interact via D3.

#### B. Mapping from data to visual elements:

The QS Universities Ranking provides scores for different categories. International Students Score, International Faculty Score, Academic Reputation Score, Employer Reputation Score, Faculty Student Score and Citations Per Faculty Score. Therefore, we decided to plot: Internationalization, Reputation and Faculty Analysis using pairs of the information provided as x and y points. Then, we added an animation that shows the different interactions by moving the means related to the centroid. There are 30 circles for each of the values and, after the animation, they are related to a specific centroid and therefore to a specific cluster. The colors of each circle change depending on which cluster it is in now. Also, there are .onclick functions for each of the circles that show specific information about each university. Moreover, there are two buttons to increase or decrease the number of clusters, showing the different ways the data is organized.



#### World Rank 2014

##### YALE UNIVERSITY (10)

Academic Reputation Score: 100

Employer Reputation Score: 100

Faculty Student Score: 100

Citations Per Faculty Score: 92.2

International Students Score: 62.7

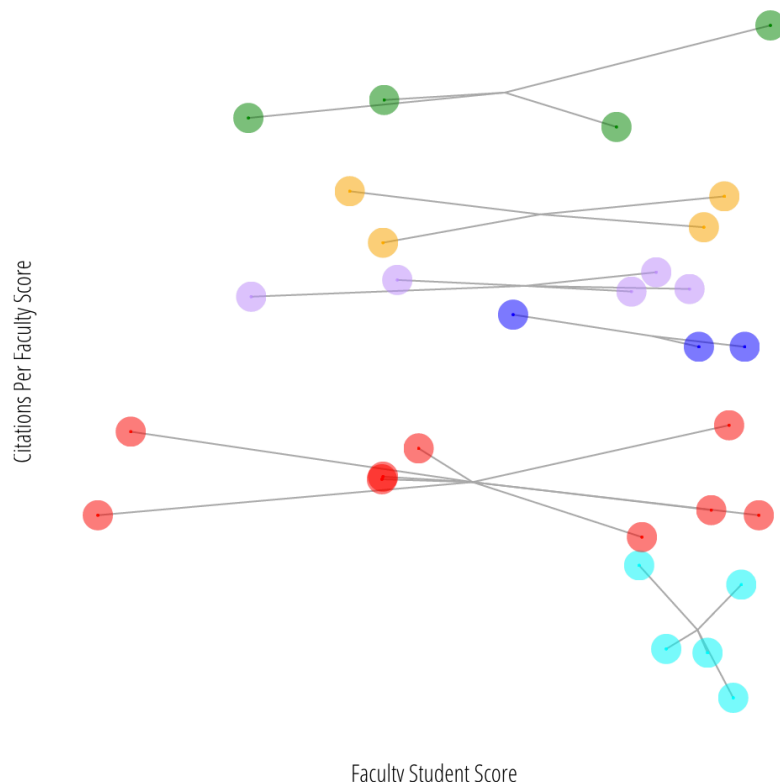
International Faculty Score: 93.2

Overall Rank: 96.5

### C. Story of visualization:

There is a lot of controversy related to university ranking, although usually the same combination of universities are always on the top. Our main idea here was to truly understand the scores behind a ranking methodology. We've decided to show these criteria in different groups. First of all, we divided by groups of countries. Certainly, each region has its own characteristics so it's interesting to understand how the scores from European Union differs from the ones in North America, although the university culture is not that distant. Also, showing some Asian and Latin universities data is an interesting way to understand the geopolitical distribution of education nowadays.

After the division by region, there is the division about the QS criterias itself and I believe this is the most interesting part. Some examples: New York University has a high rate of Faculty Student Score, but a way worse Citations Per Faculty in comparison to other universities. The level of internationalization of the University of Hong Kong is very high and close to EPFL and the Australian National University and at the same time Columbia and Duke are very close to each other on the bottom of the plot in relation to the same perspective. It gives a more precise understanding of how each university actually stand in the selected criteria.



The image on the left is the cover photo of our visualization. The middle part represents the images when you query the name of the country for Spotify Tracks. And on the right there is a playlist that is the best available online to represent the country

**NOTE – Website - Tablets:**

1. We hosted in a free service: <http://clusterqs.site90.net/> . It's not the best hosting service, but we could test on Ipad and it works.

2. Safari seems to work better than chrome for overlaid circles .onclick function on local host. However, when using the website link, both of them interact in the same way and work well.