Top 100 World University Rankings Visualization

Jiao Wang
Yuanyuan Zhang

Motivation

Investigate best 100 universities in the world

Provide a powerful tool to compare universities at a glance

- Visualized geographical information

- Combined ranking list in multiple aspects

- Historical information for trend analysis

- Institutions compare table based on different indicators
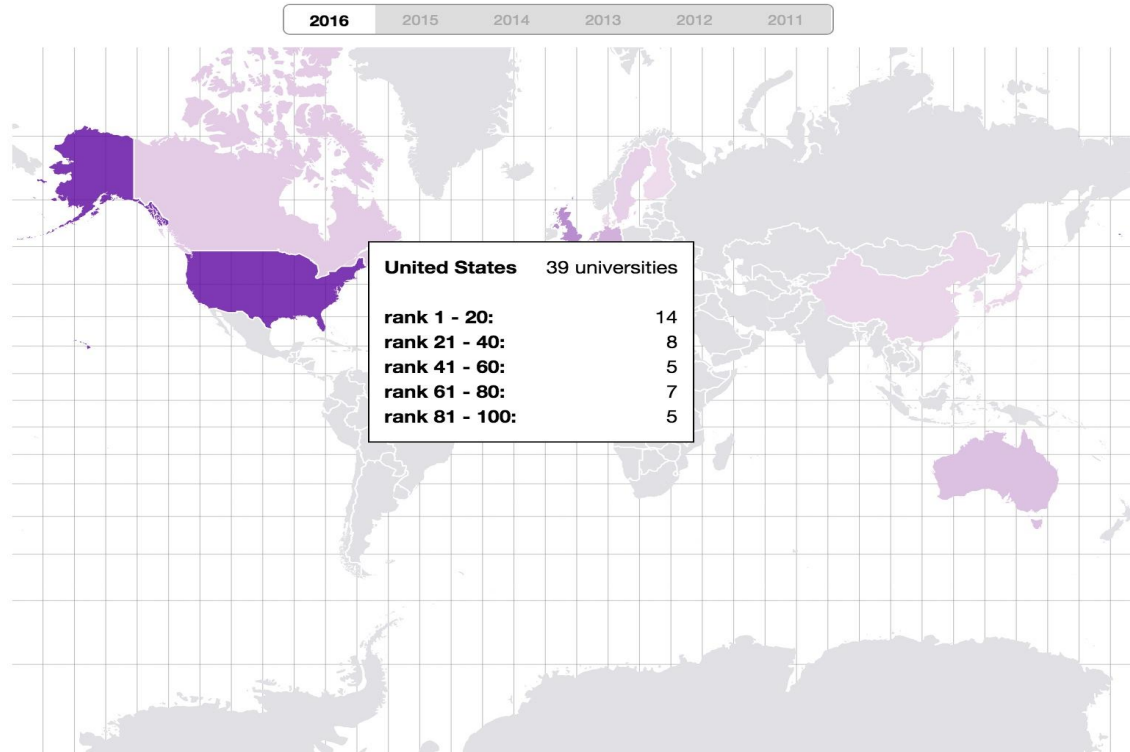
Data Set

- world_rank - world rank for the university.

- university_name - name of university.

- country - country of each university.

- teaching - university score for teaching (the learning environment).

- international - university score international outlook (staff, students, research).

- research - university score for research (volume, income and reputation).

- citations - university score for citations (research influence).

- total_score - total score for university, used to determine rank.

- international_students - Percentage of students who are international.

- year - year of the ranking (2011 to 2016 included).

Goal

- How top 100 universities distributed in different countries.

- University's ranking information and scores in multiple areas.

- Trend of universities' ranking in last 6 years.

- Compare two universities based on different aspects.

Geographic Data Visualization

- Overview

- Distribution of top 100 universities

- Education level of each country

Collapse Tree Visualization

- List all top 100 universities of a country
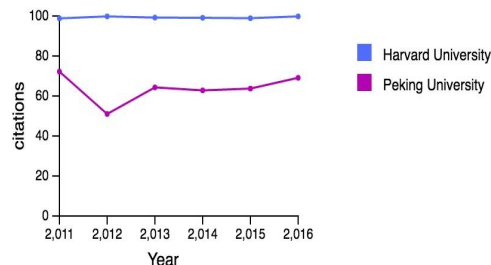
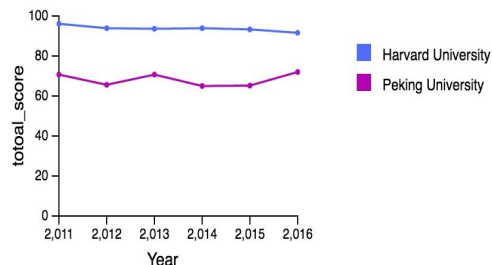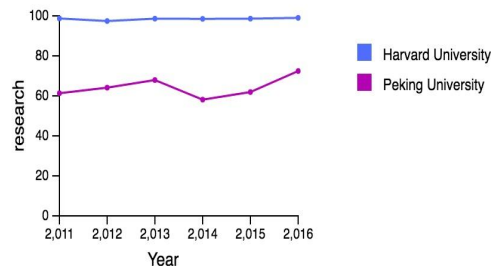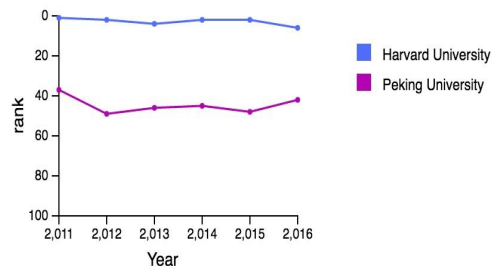- Up to 6 years ranking data

Parallel Visualization

- Find university scores in different aspects
- Every page show 25 universities to make the view clear

Line Graph with Search Bar

- Detail comparison

- Compare two universities in six aspects with interactive

- University trend

Challenges

Design

Choose Visualization fit the data set and also present data comprehensively

Technical

Page layout

Data Handling

Tooltip location. Use relative position

Reference

https://www.kaggle.com/mylesoneill/world-university-rankings

http://githut.info

http://www.caleydo.org/tools/lineup/

https://github.com/mbostock/d3

Suggestion and Question ?