

World University Rankings

Executive summary

Ranking universities is a difficult, political, and controversial task. The following dataset contains a list of universities all around the world, and it has the purpose to show the universities better ranked according to the Times Higher Education World University Ranking, the Academic Ranking of World University and the Center for World University Rankings.

Objective

The purpose of the following analysis is to give a tool for students looking for a university to make easier the process of choosing an institution.

Data sources

The data used for this analysis was downloaded from [World University Rankings/Kaggle](https://www.kaggle.com/datasets/c4duffy/world-university-rankings)

Limitations and Ethics

- The data used for this analysis contains information from 2012 to 2015.
- The ranking is limited to the Times Higher Education World University Ranking, the Academic Ranking of World Universities, and the Center for World University Rankings.
- The information presented is transparent and is not private. The criteria shared in the data frame doesn't put in risk any personal identifiable information (PII)

Data Cleaning and Data Consistency Checks

- The data set has a size of 2200 lines and 14 different columns.
- The general view of the information is the following:

```
#   Column      Non-Null Count  Dtype
---  -
0   world_rank    2200 non-null    int64
1   institution    2200 non-null    object
2   country        2200 non-null    object
3   national_rank  2200 non-null    int64
4   quality_of_education 2200 non-null    int64
5   alumni_employment 2200 non-null    int64
6   quality_of_faculty 2200 non-null    int64
7   publications   2200 non-null    int64
8   influence      2200 non-null    int64
9   citations      2200 non-null    int64
10  broad_impact   2000 non-null    float64
11  patents        2200 non-null    int64
12  score          2200 non-null    float64
13  year           2200 non-null    int64
dtypes: float64(2), int64(10), object(2)
memory usage: 240.8+ KB
```

- The information does not contain meaningful null information, so the database will remain the same.

Columns Details

Columns	Column description	Data Type	Time variant
world_rank	World rank	Quantitive	No
institution	Name of institution	No Quantitive	No
country	Country where the institution is located	No Quantitive	Yes
national_rank	Internal rank for the universities in that country	Quantitive	Yes
quality_of_education	Rank for the quality of education from 1 to 367	Quantitive	Yes
alumni_employment	Rank for alumni employment 1 - 567	Quantitive	Yes
quality_of_faculty	Rank for quality of faculty 1 - 218	Quantitive	Yes
publications	Rank for papers published from 1 - 1000	Quantitive	Yes
influence	Rank for influence from 1 to 991	Quantitive	Yes
citations	Rank for university with the higher number of citations	Quantitive	Yes
broad_impact	Rank for the univiesities with higher broad impact	Quantitive	Yes
patents	Rank according to the number of patents	Quantitive	Yes
score	Overalle score of the university	Quantitive	Yes

year	Time period when the criteria was analyzed	Quantitative	Yes
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Questions to explore.

- What are the best universities to be enrolled in?
- Top universities by country
- Countries with the highest number of ranked universities