Problem to address and motivation

Option 1 will be chosen for this study.
Visualization will be applied to the domain of Tourism.
We would like to visualize:

- Flows of tourism from and to countries.
- Change of number of students in time (dataset contains roughly last 20 years for most countries).
- Correlation between inbound and outbound tourism and countries GDP pro capita (PPP).
- Amount of money spent by tourist by country (should show which country have "richest tourism", which country manages to make people spend more… etc).

Data from World Bank (WB) and World Tourism Organization (UNWTO) and possibly other datasets from the United Nations will be used.
See http://data.un.org/Explorer.aspx?d=19 for the databases mentioned.
We believe lot of economical phenomena can be showed through tourism. In a growing economy people generally have more money and travel more outside the country, whereas in shrinking economies show more internal tourism. It will definitely interesting to visualize:

- 2008 crisis for western countries
- the recent rise of B.R.I.C.S. countries
- devaluation of money in Argentina and Iceland
- Impact of wars
- and many more…

Tools and Techniques

Different tools and techniques will be used for a clear and interactive visualization. As a web page will be presented in the end, HTML, CSS and Javascript Library like D3, D3 plus and Plotly are our first choices. Compared to D3, D3 plus is an extension to the D3 library that allows fast and easy creation of data. Plotly is a high-level, declarative charting library built on top of D3 and it ships with 20 chart types. Python will be used to process huge amount of data. In the process of the project, we likely find other powerful tools and will update our website with these techniques at anytime. In the web page, we will highlight its interaction instead of putting too many infographic and use proper charts to visualize different results.

Deliverables:

1. One web page
2. Codes and data
3. Report