

Arham Khan

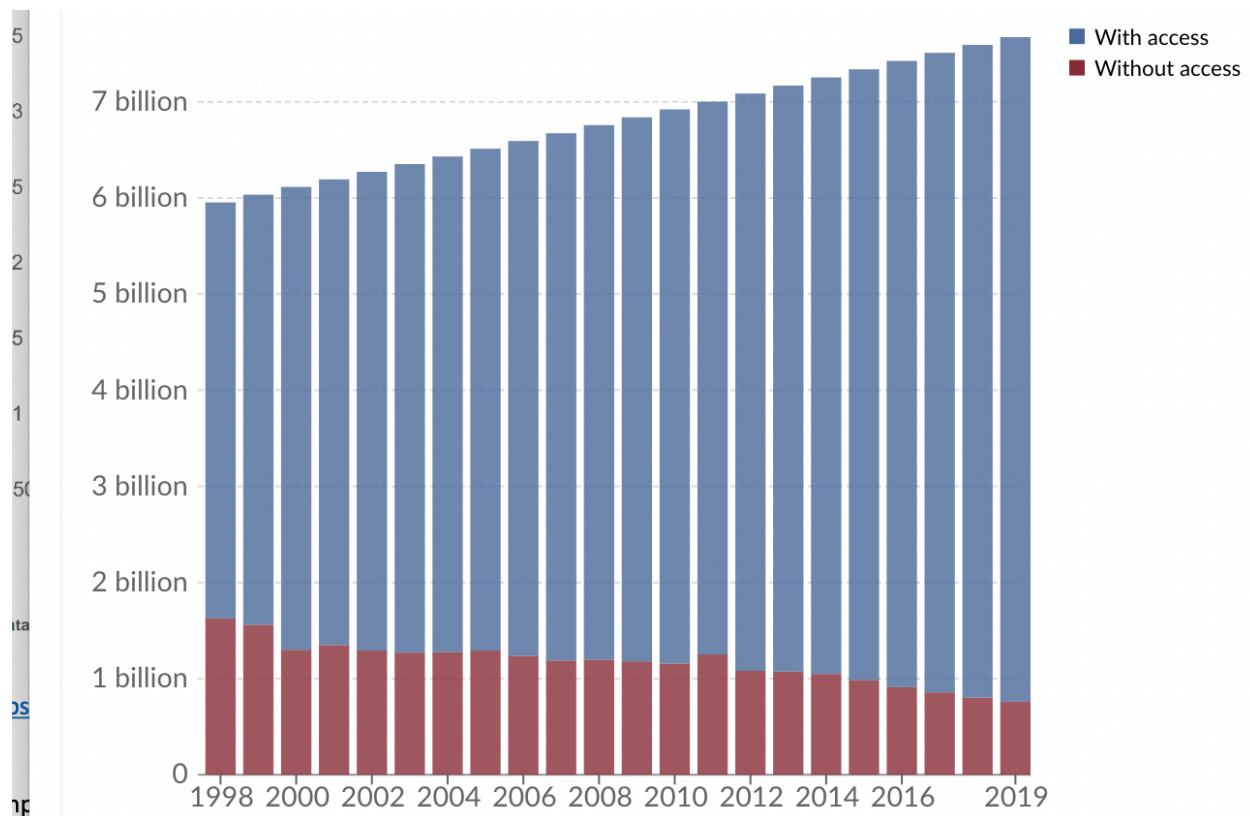
Professor Jordan Wirfs-Brock

CS-215

Project 5: GitHub, Visualization Recreation, Requesting Personal Data

GitHub link: <https://github.com/Kapkant>

Graph obtained from OurWorldinData:

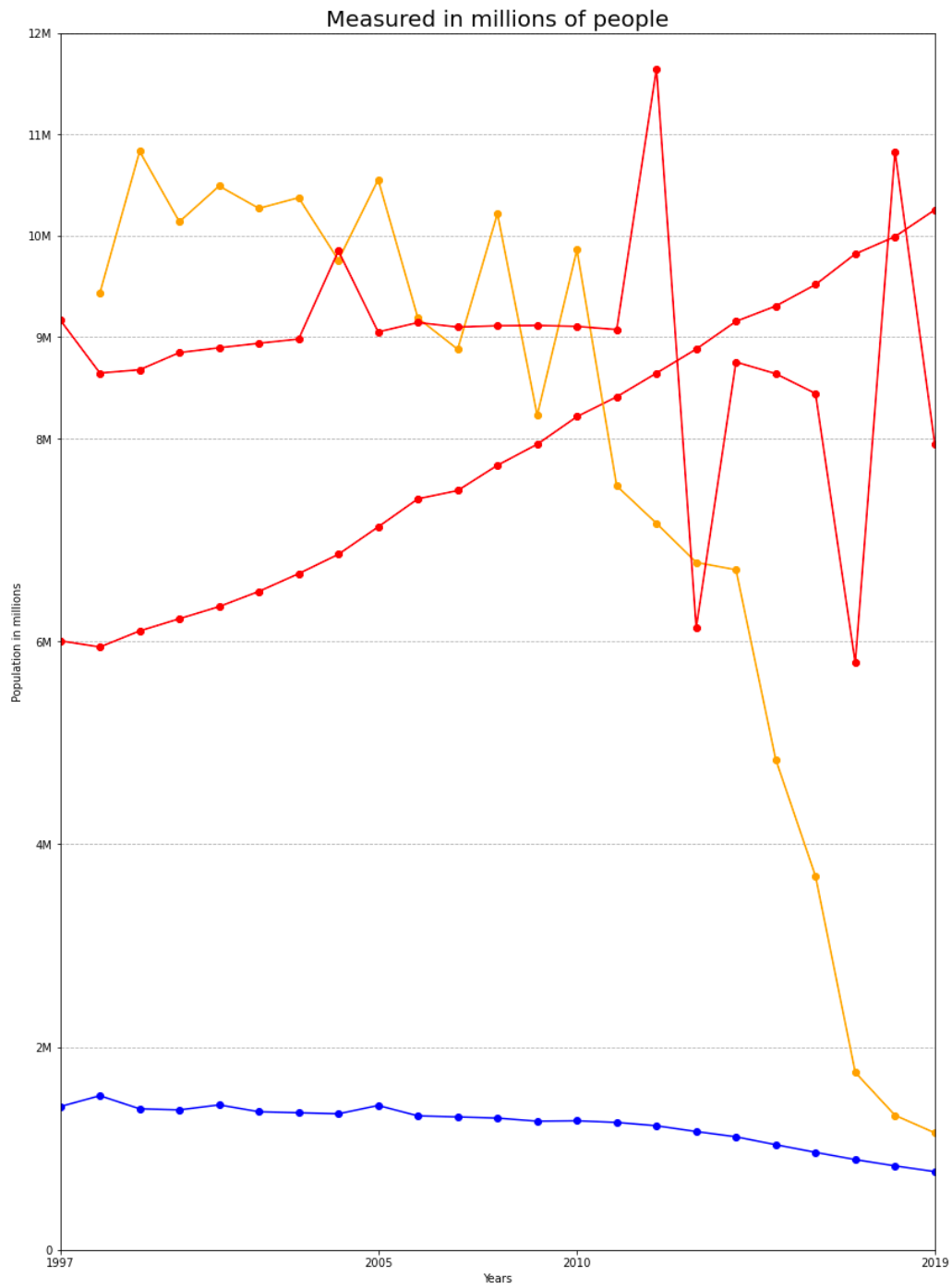


Growing up in Pakistan, one of the most frustrating things was the frequent power cuts everyday, which I thought was a normal part of life. Later in life after I travelled and lived abroad, I noticed that other countries don't have this issue. I was thinking about this when deciding what kind of data to pick, and decided upon world access to electricity/energy.

Taking my own spin on it, I didn't want to settle for a bar graph and decided to see if I could make it work in a line graph. Due to the sheer number of countries, I selected 4 countries that don't have 100% electrification rate: Yemen, Cambodia, Burundi and Nicaragua. They also have relatively comparable populations, and it would help the visualization's clarity.

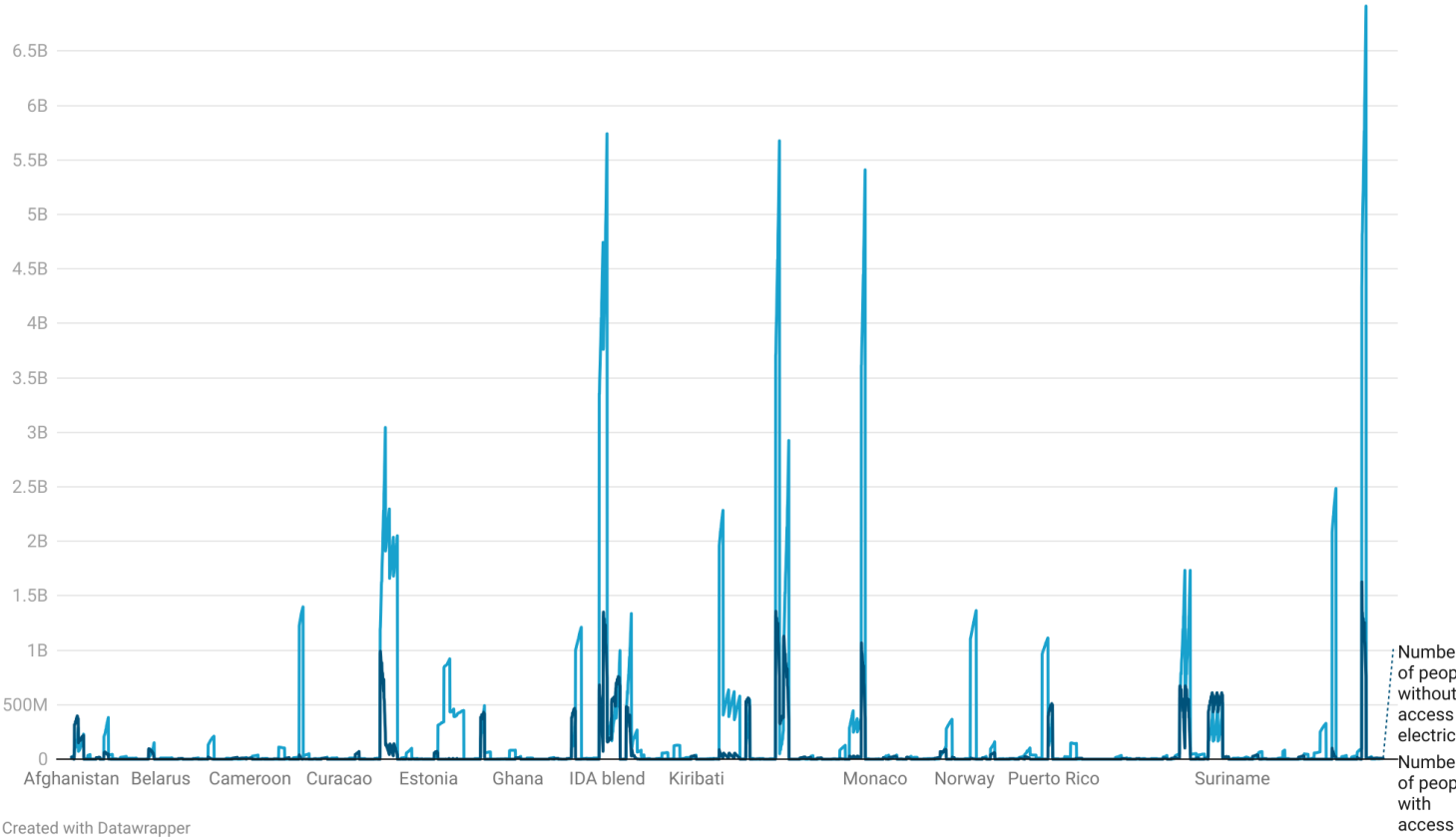
Electricity Access, 1997 to 2021

Matplotlib:

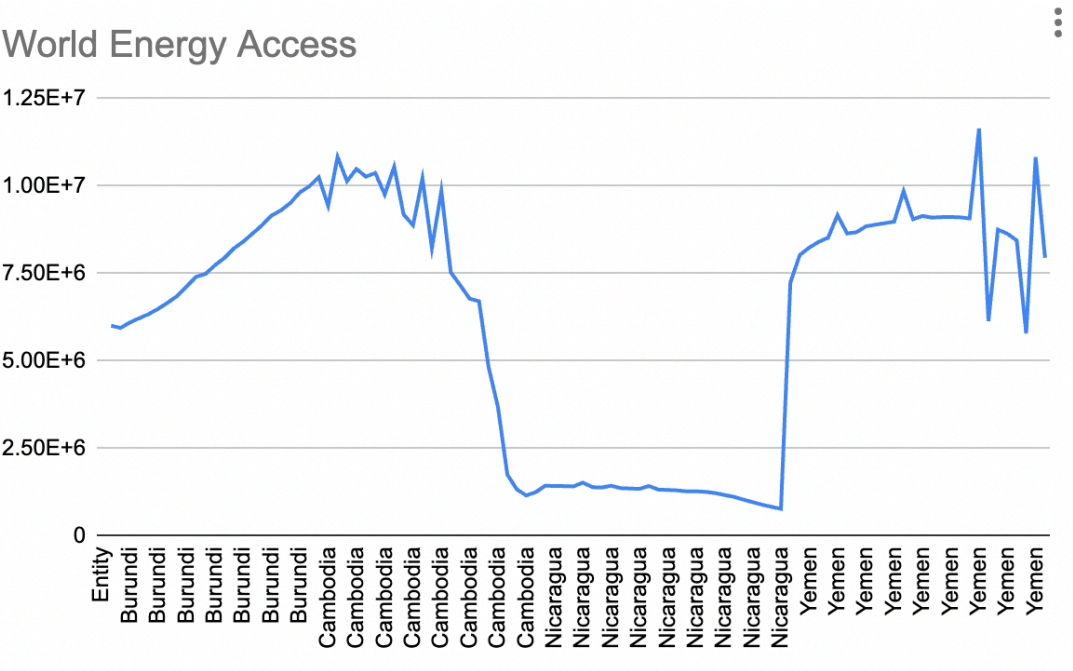


Datawrapper:

World Energy Access]



Google Sheets:



- 1) The easiest of these tools was definitely DataWrapper, in terms of ease of use and beginner friendliness. However, I see it as useful for simple graphs and visualizations but I had a tough time figuring it out and setting the graph in a way where I could limit the range and only have select countries from the column. There's fewer features here than I want, but I like how it automatically sets and fits the data into a graph.
- 2) Google Sheets was my least favorite by far. It feels simple and outdated, and I have always struggled with it (even filling me with a sense of dread) but offers more usability than Datawrapper. I was able to set it up in a way that gave me a unique way of looking at the data: The countries were bunched up on the x-axis, in a row, and the line could be interpreted by matching it with the country on the y-axis. It's pretty fast when it comes to labeling. However, if I have to modify data tables specifically and quickly, Google Sheets might be the way to go.
- 3) Matplotlib was my favorite because I am quite comfortable with it, and it is my go-to. It is very customizable with respect to elements, and has a lot of functionality to make the exact type of graph you need. Matplotlib allowed me to visualize the data (originally a bar graph) as a line graph the way I planned, which I cannot fully say for the other methods though I realize that is because of my relative lack of knowledge of those tools. It is time consuming and code-heavy, but when it comes to customizing a dataset to visualize in a certain way, matplotlib is the best option.

Requesting Personal Data:

I have requested data from: Instagram, Youtube, Spotify, Google Takeout, Facebook. Received confirmation emails for all.