

Billionaires – Who are they?

ECE 143 Project – Group 7

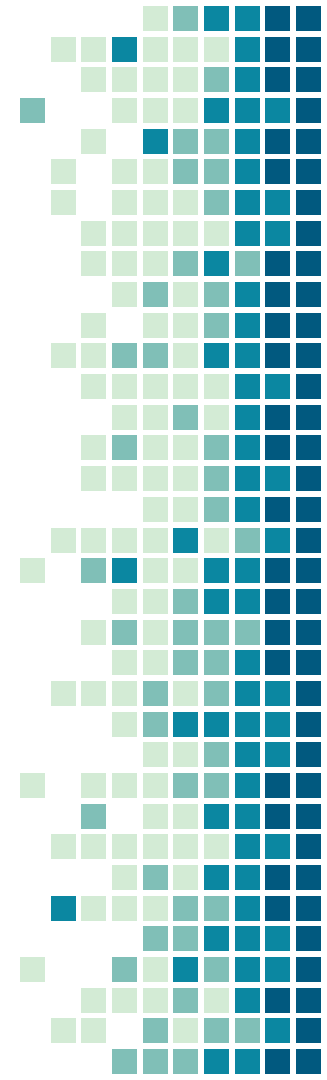
Andrina Hoffman
Aram Chemishkian
Jerry Yan
Tung Hsiao
Haoxuan Sun



Motivating Questions

Increasing odds of becoming a billionaire:

1. How are billionaires distributed geographically?
2. How are billionaires distributed across factors?
3. How do these factors change in different areas?



Outline Presentation

1. Data analysis methodology
2. Global results
3. USA/California results



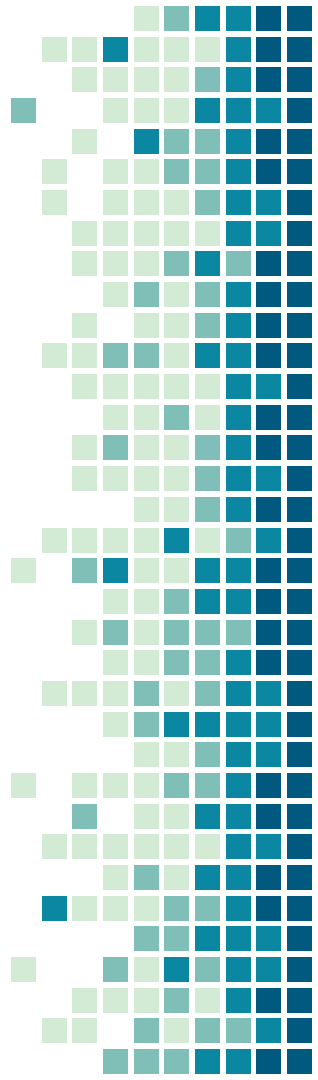
Datasets

- Forbes: The World's Billionaires (2003-2023)
- Credit Suisse: Global Wealth Report (2021)

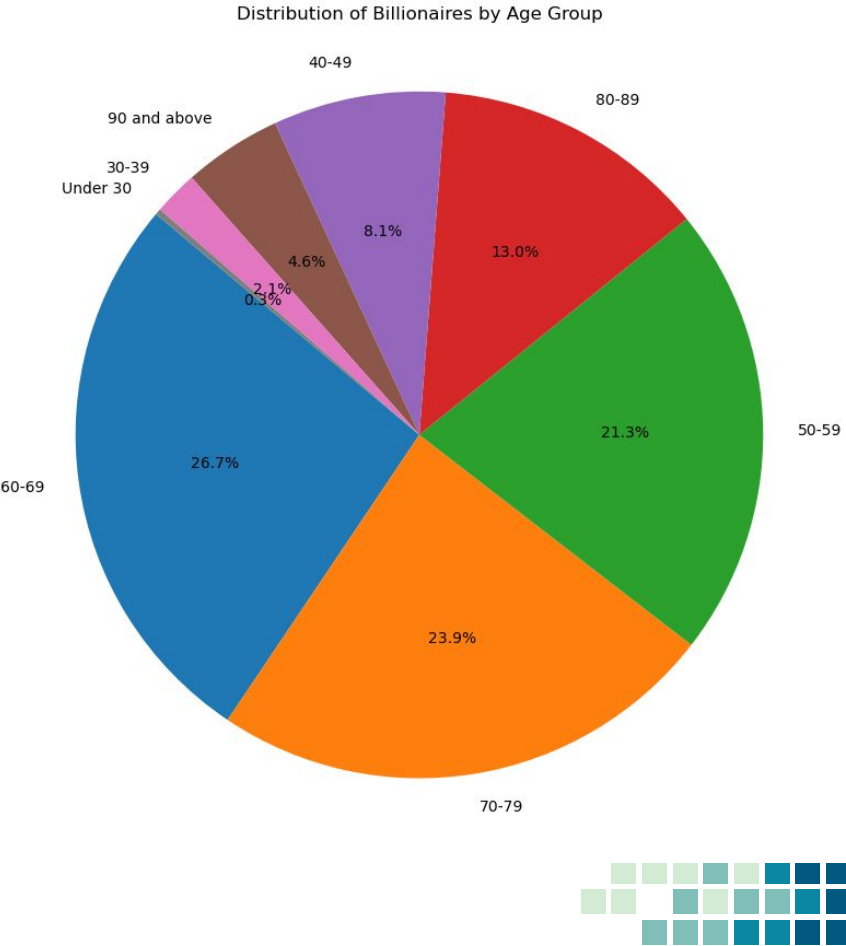
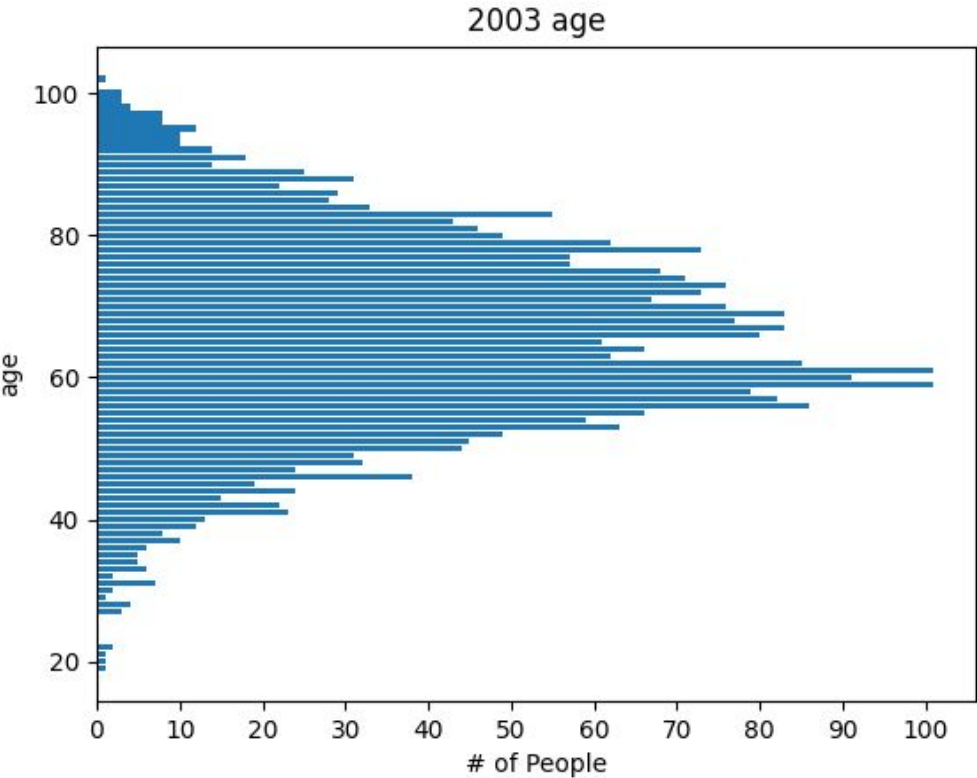


Coding Methodology

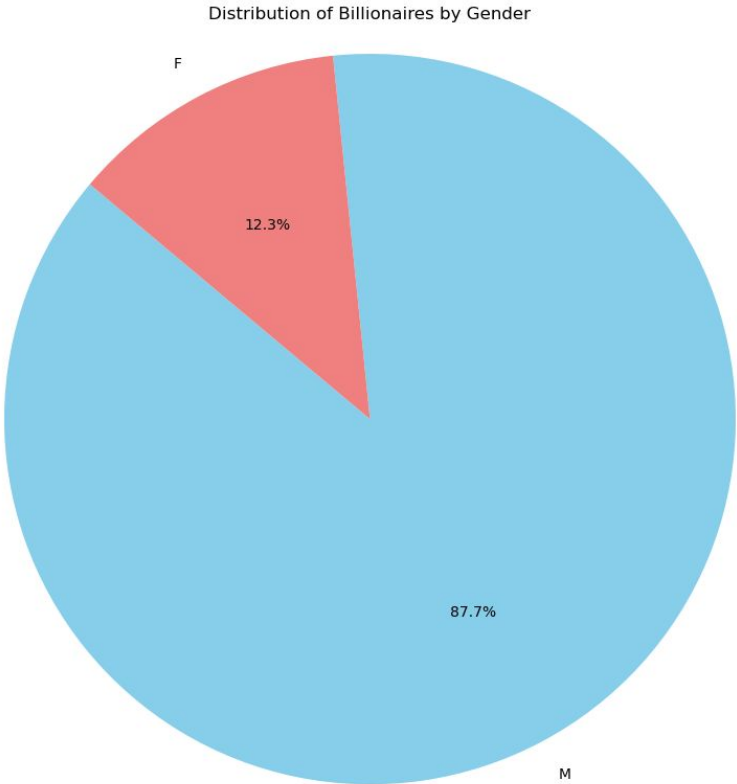
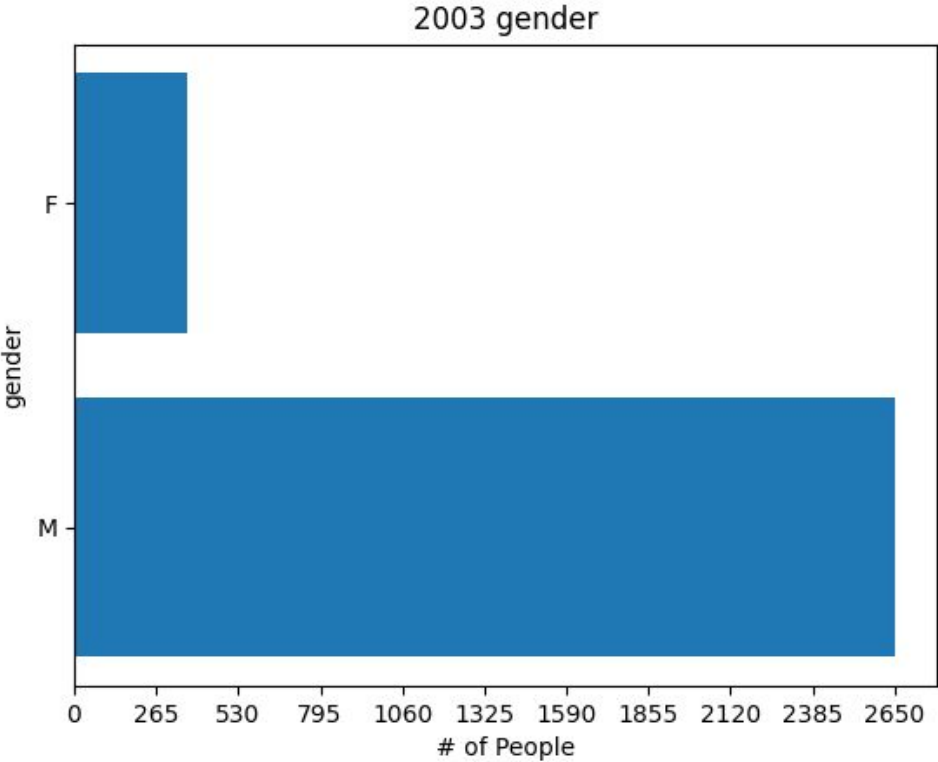
1. Dataset downloaded
 - a. Forbes: The World's Billionaires (2003-2023)
 - b. Credit Suisse: Global Wealth Report (2021)
2. Extracted and Parsed
 - a. Extract Cols - country, state, gender, age, industry, source, and name
 - b. Removed Cols - headquarters, title, timestamp, position, and many more
 - c. Standardized values and removed broken data
3. Analyzed
 - a. Built animated bar graphs, pie charts, heat maps



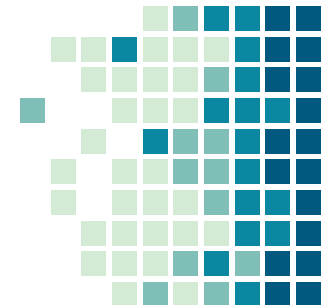
Results Age



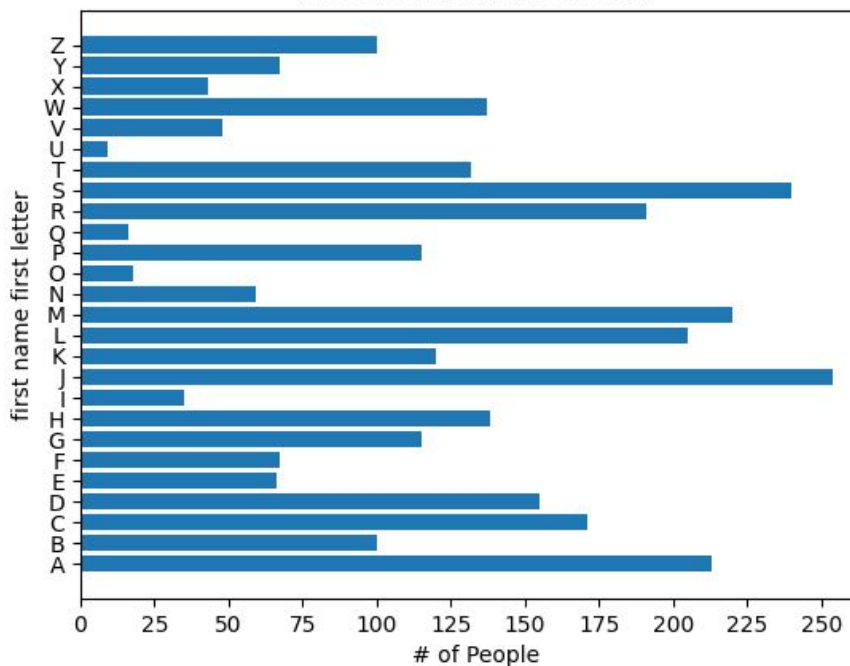
Results Gender



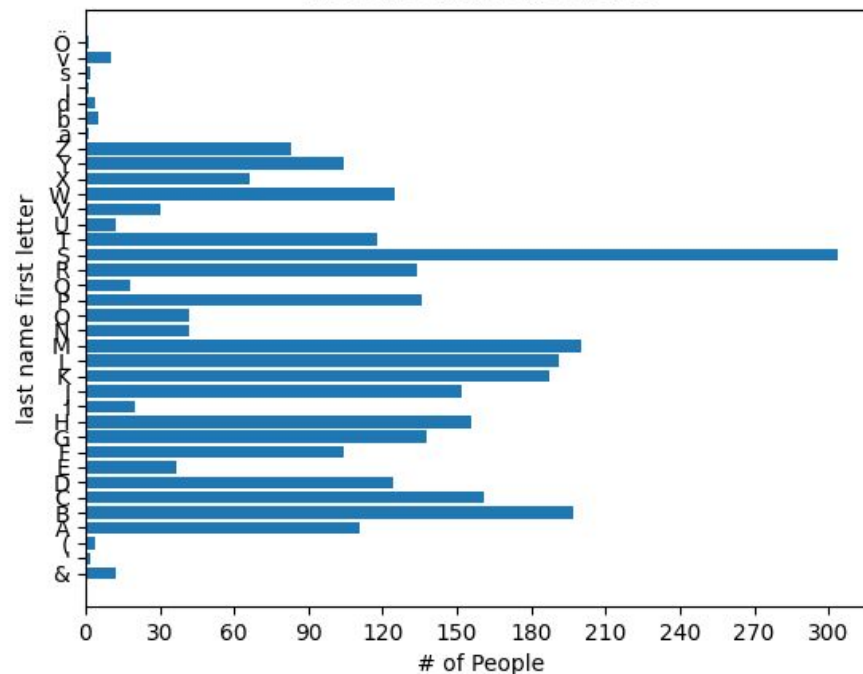
Results Name



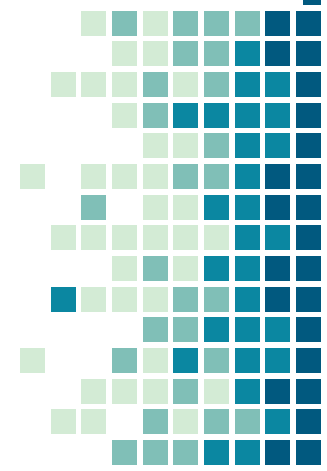
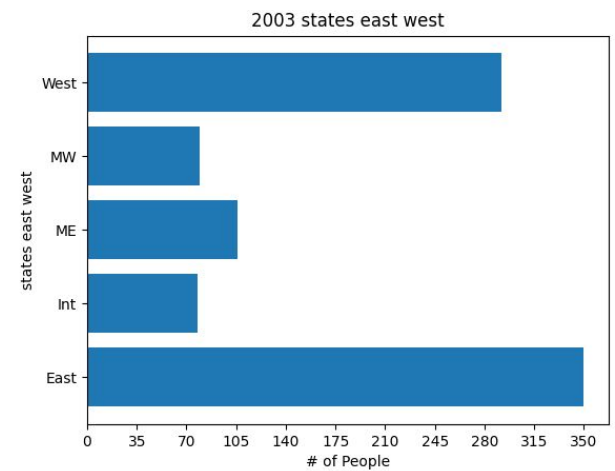
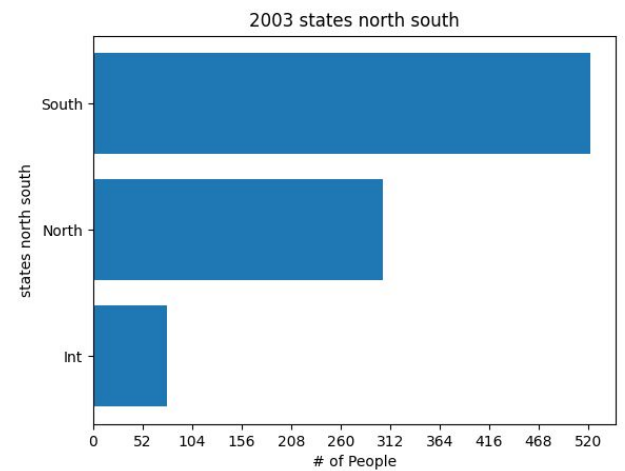
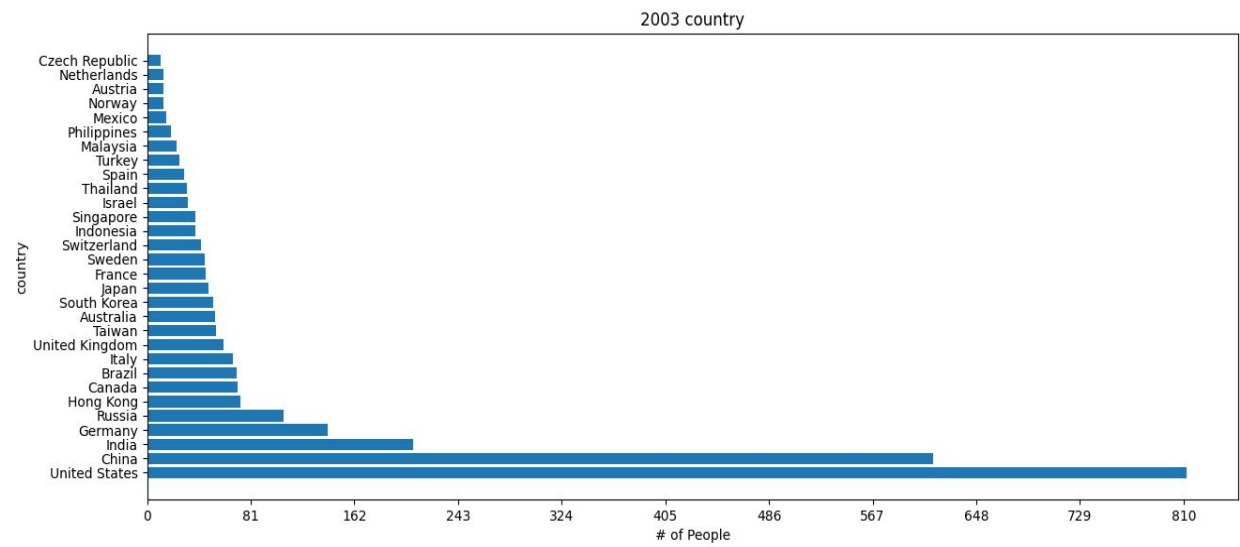
2003 first name first letter



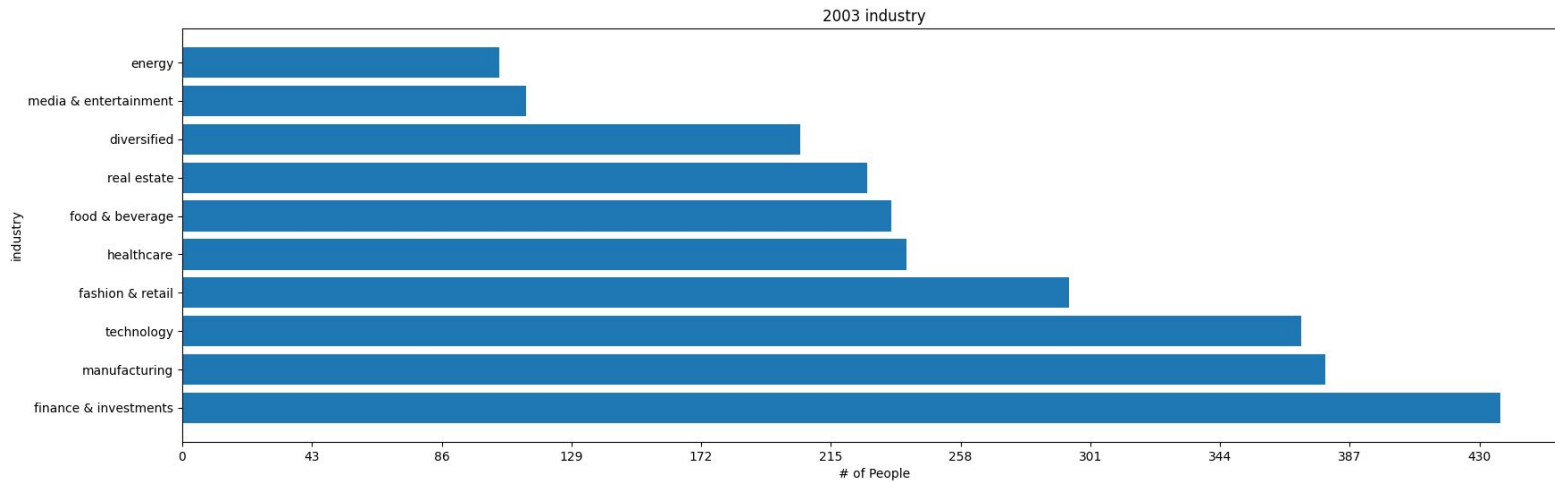
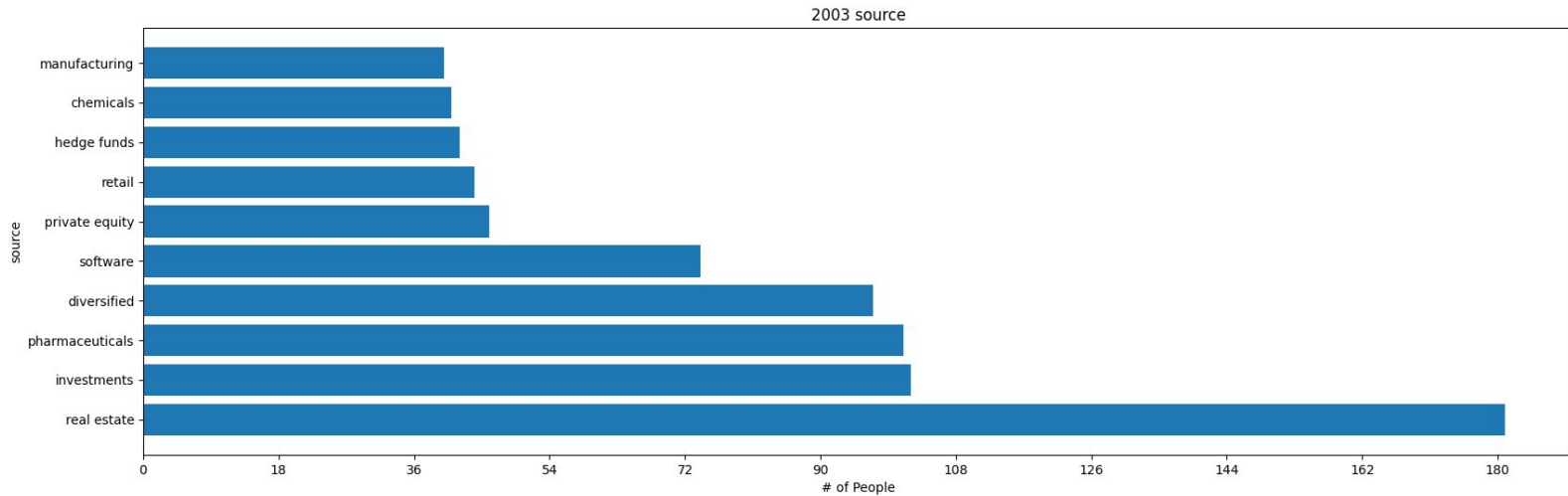
2003 last name first letter



Distribution of
billionaires across
countries/regions

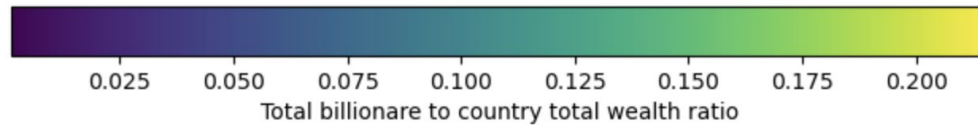
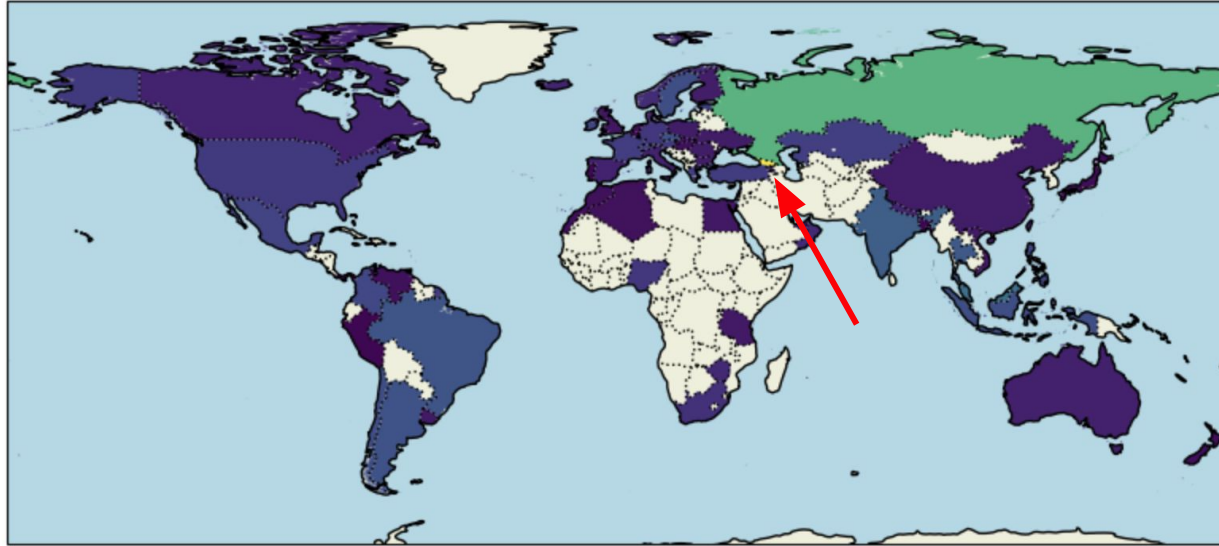


Billionaire income sources and industries

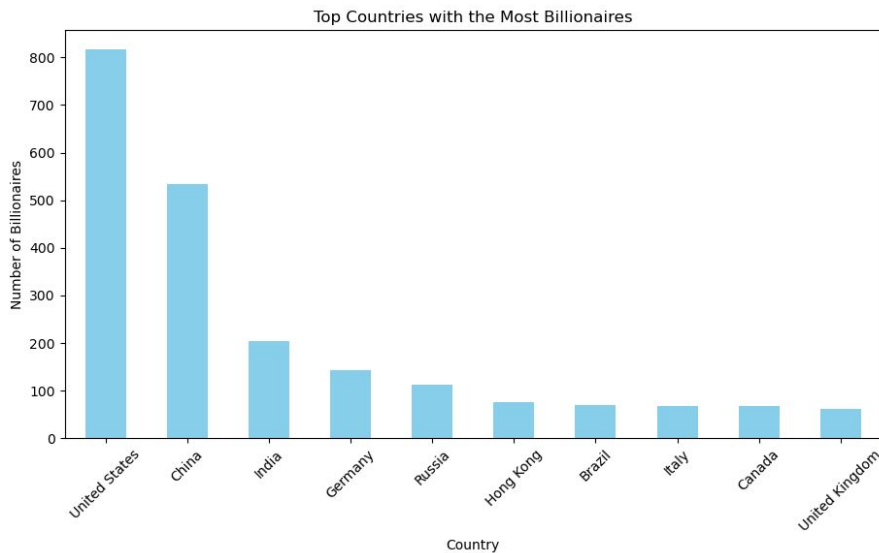
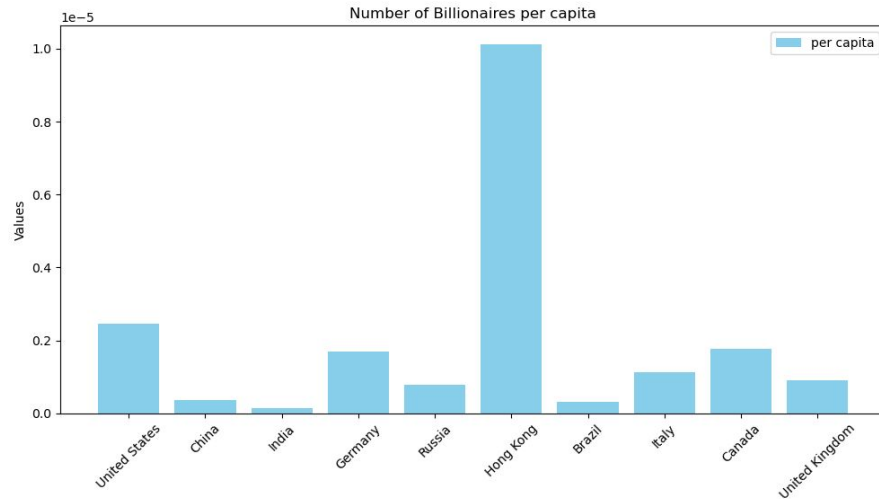


World View – Economy ratio map

Global comparison of total billionaire to country total wealth in 2021



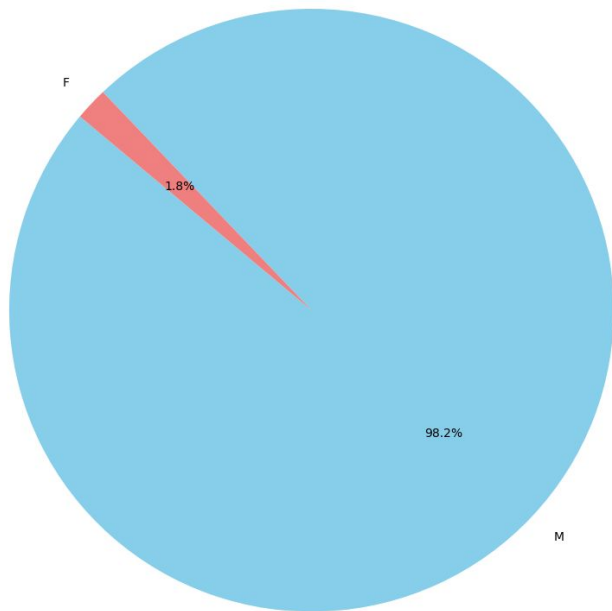
World View – Top 10 countries



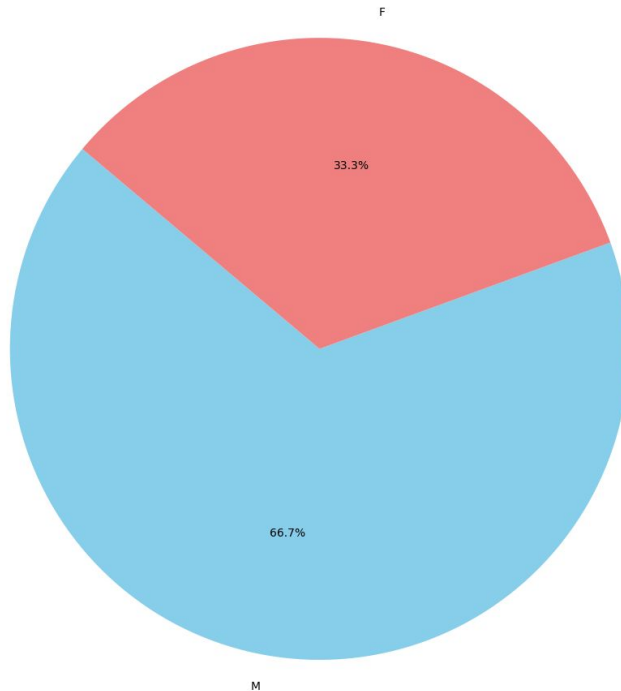
Country Specific Examples

Country with high and low female billionaires rates

Distribution of Billionaires by Gender in Russia



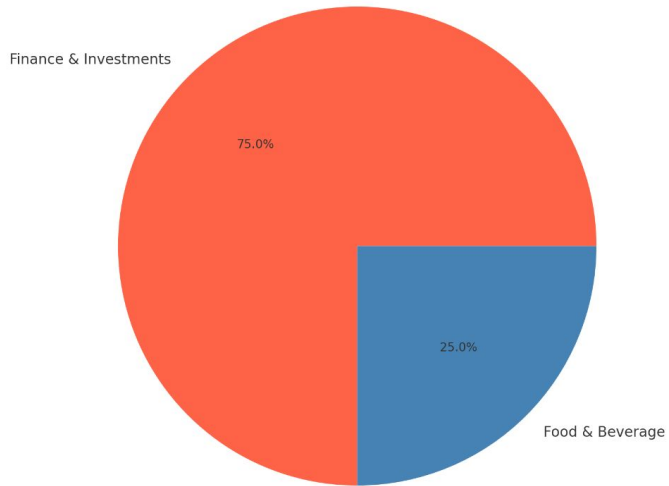
Distribution of Billionaires by Gender in Denmark



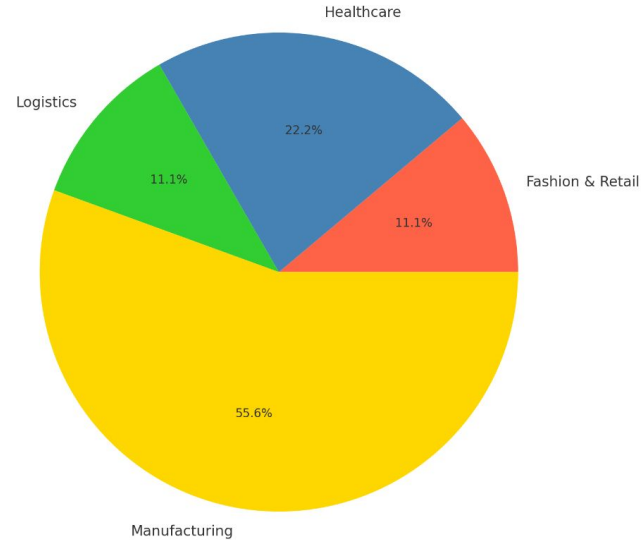
Country Specific Examples

Country with high proportion in one industry

Industry Proportions in Colombia



Industry Proportions in Denmark

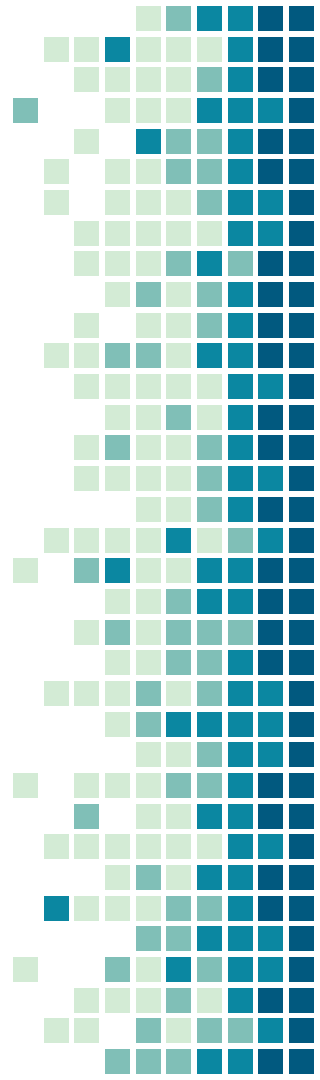


But what if....

What if it is too late for you to be born in the UK and study to be an investment banker?

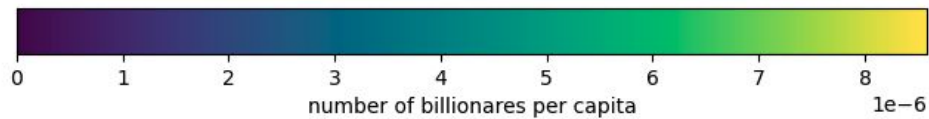
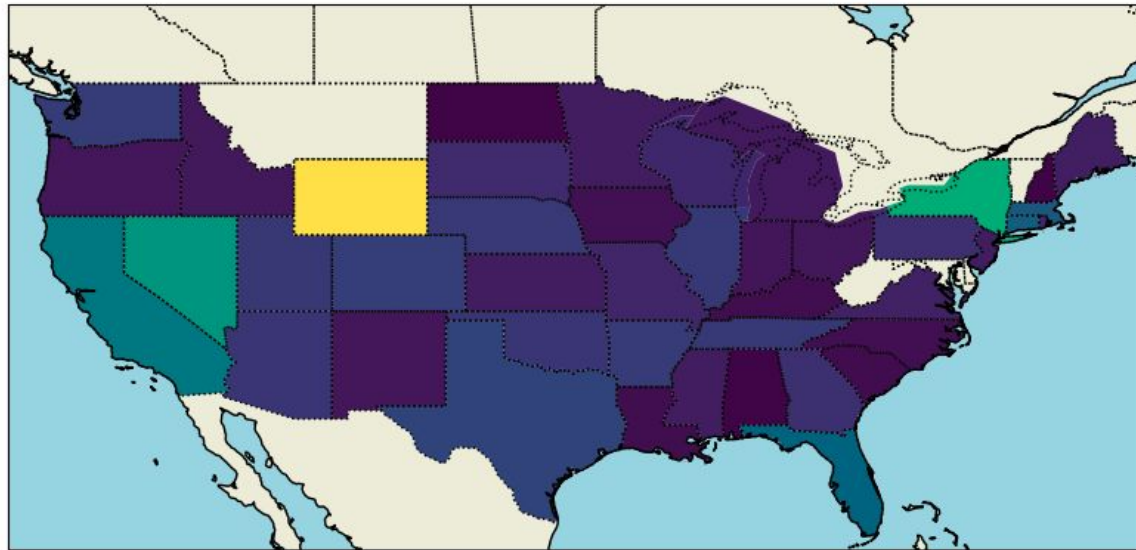
Maybe you're in the USA

Maybe in fact, you're an engineering student in **ECE 143 at UC San Diego**. What are your odds then?



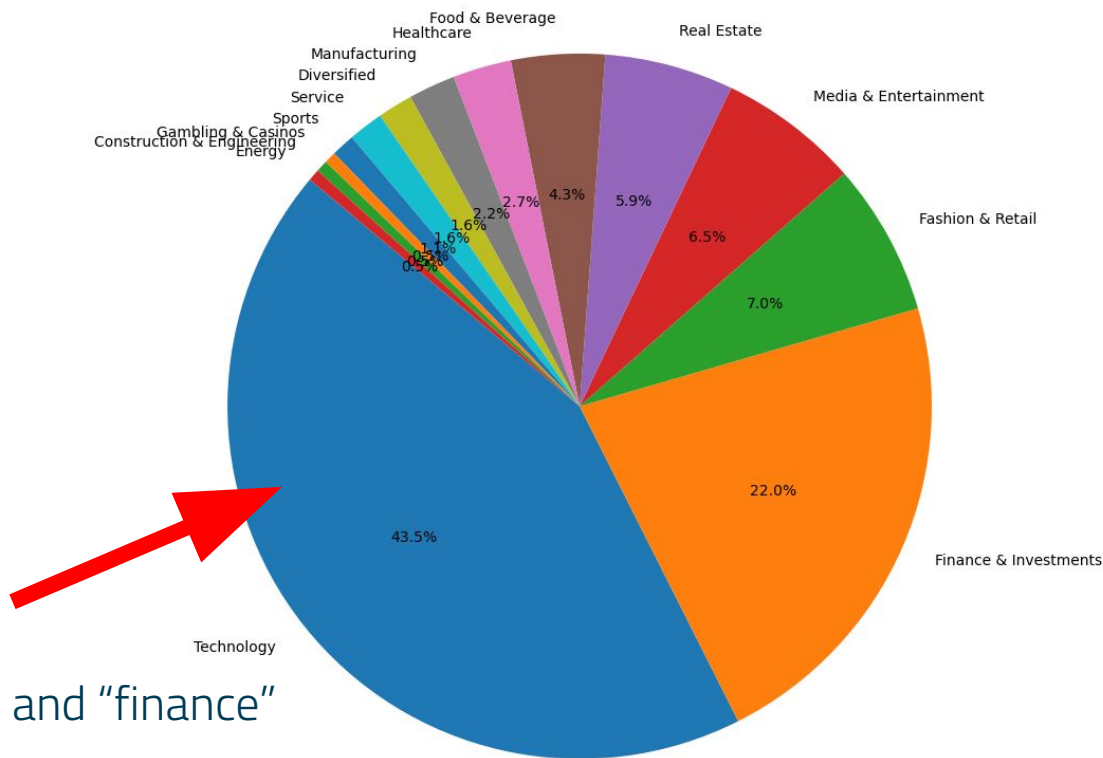
USA Specific View

USA number of billionaires per capita by state 2021



California Specific View

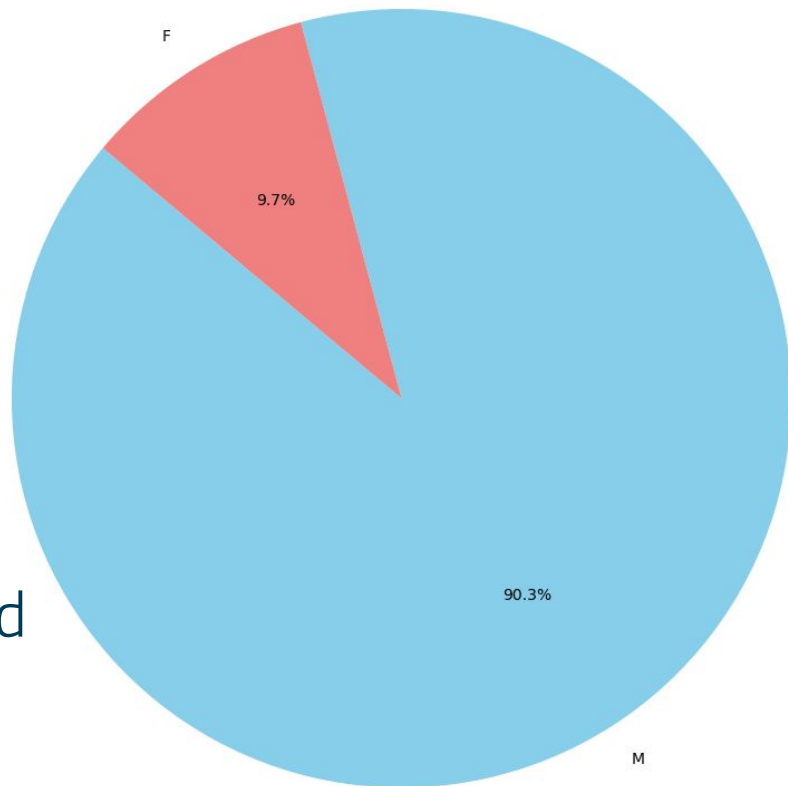
Distribution of Billionaires by Industry in California



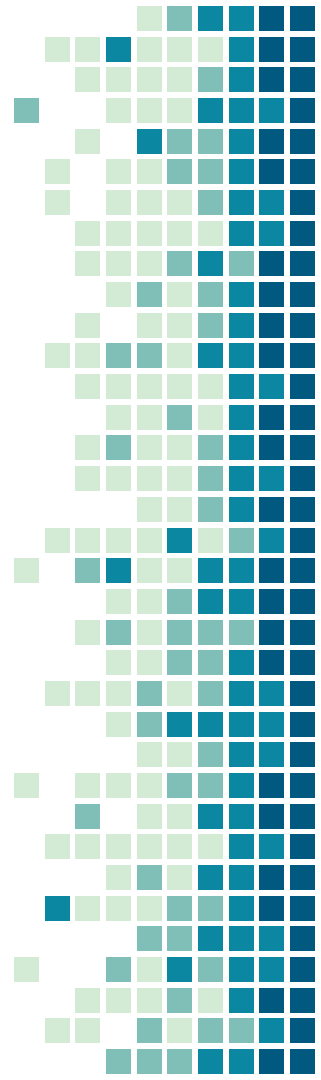
Mostly "tech" and "finance"

California Specific View

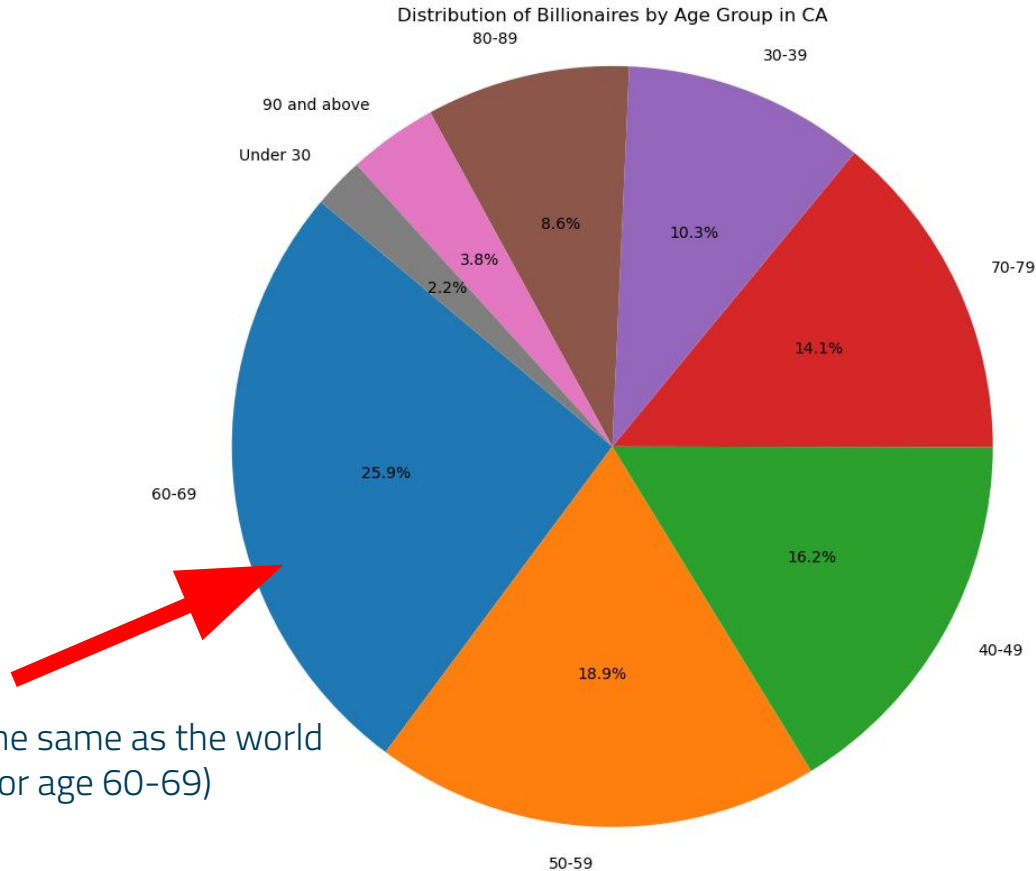
Distribution of Billionaires by Gender in CA



This is about the same as the world (world: 12.3%)



California Specific View



This is about the same as the world
(world: 26.7% for age 60-69)

Conclusions

- Industry - technology and finance
- Source - Real Estate!
- Gender - Primarily Male
- Age - less likely before or after ages 50-79



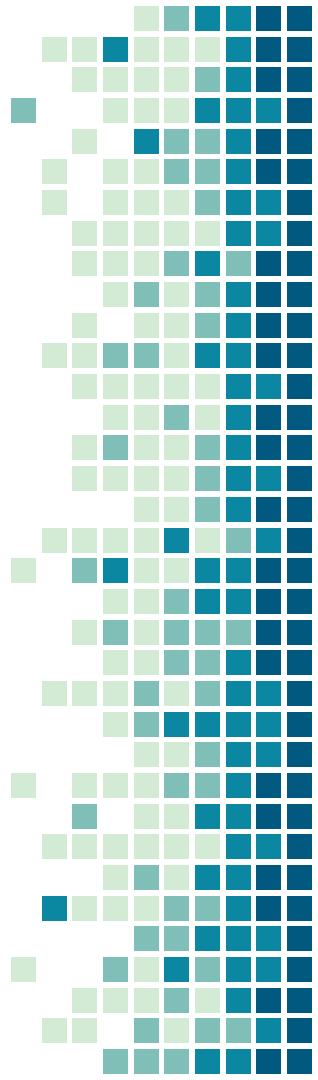
Thank you!

And good luck on
becoming a billionaire!
(You'll need it)
It's a .0000345% chance

Some summary billionaire stats

Possible plots:

- industry distribution
- percent wealth in countries
- country distribution



THANKS!

Any questions?

You can find me at:

@username

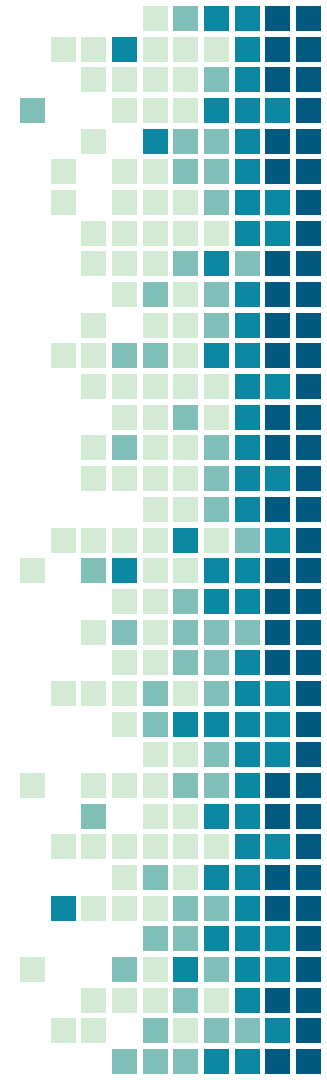
user@mail.me

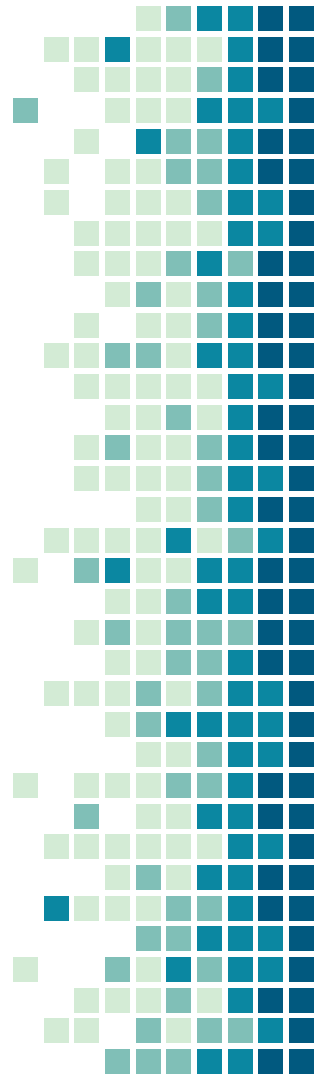
Country specific statistics

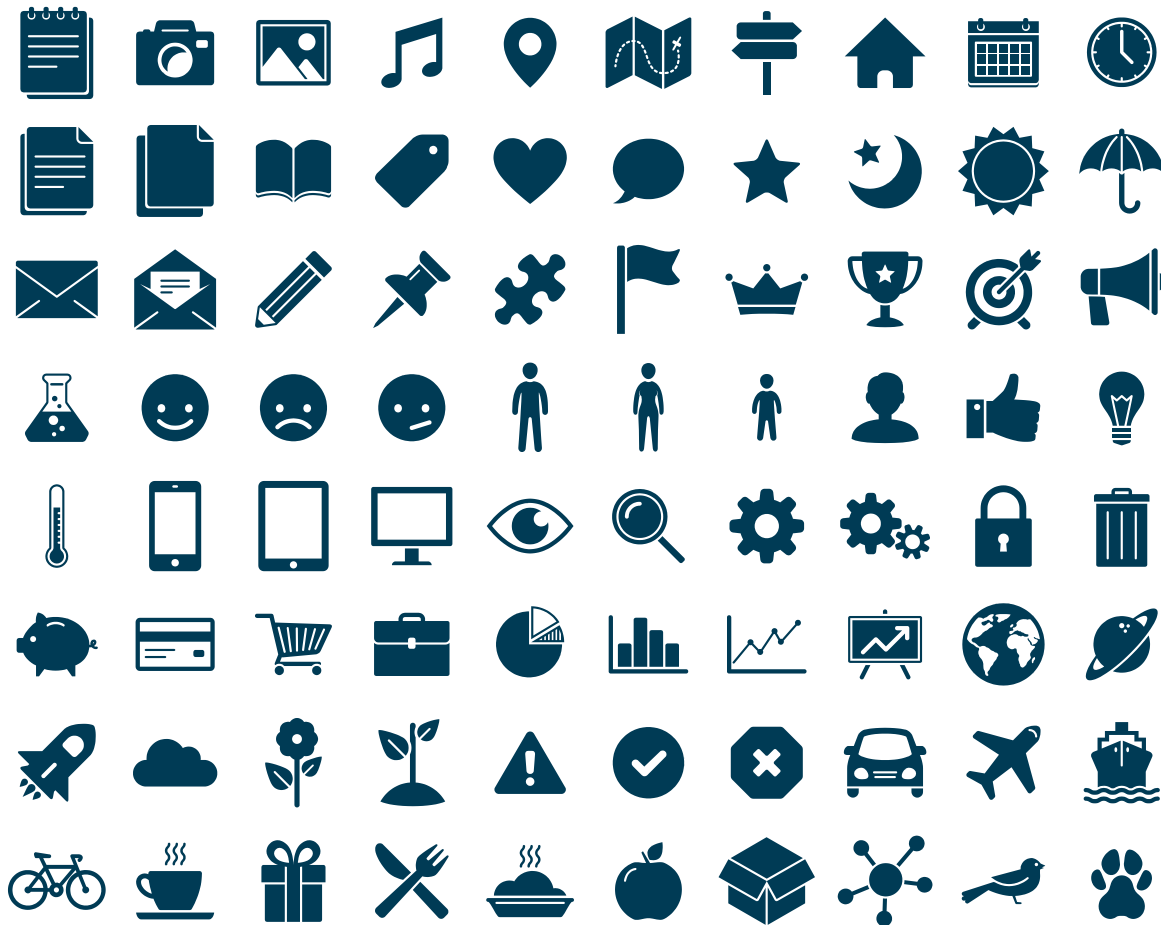
- Most prevalent industry of billionaires in major countries



USA tax/spending vs billionaires







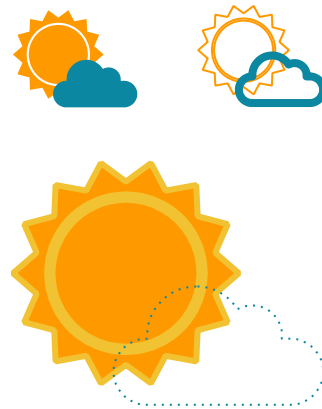
SlidesCarnival icons are editable shapes.

This means that you can:

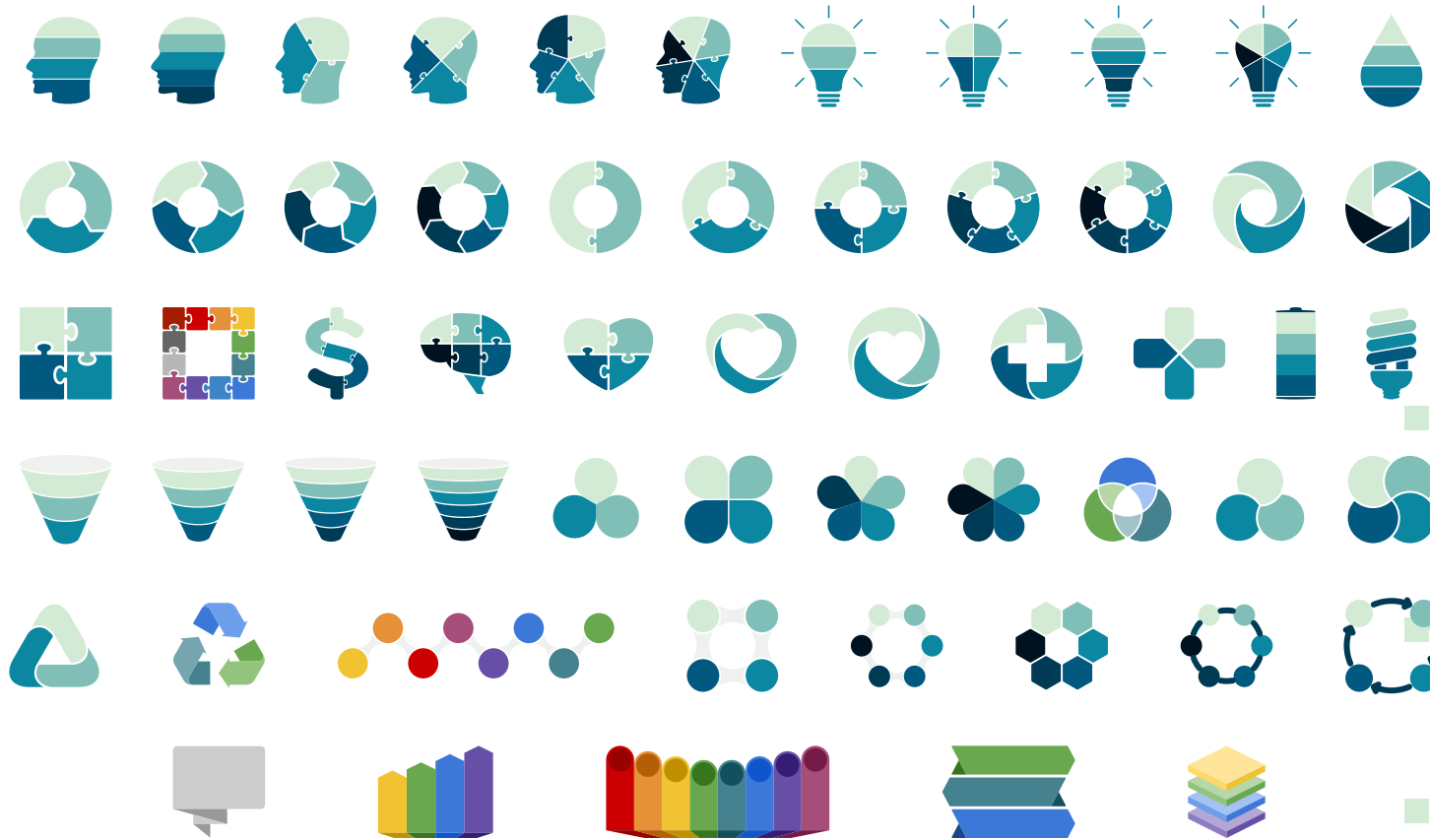
- Resize them without losing quality.
- Change fill color and opacity.
- Change line color, width and style.

Isn't that nice? :)

Examples:



DIAGRAMS AND INFOGRAPHICS



Methodology - Analysis

- Use util functions to extract data by grouping (industry, state, etc)
- Perform grouping-specific analysis and visualization

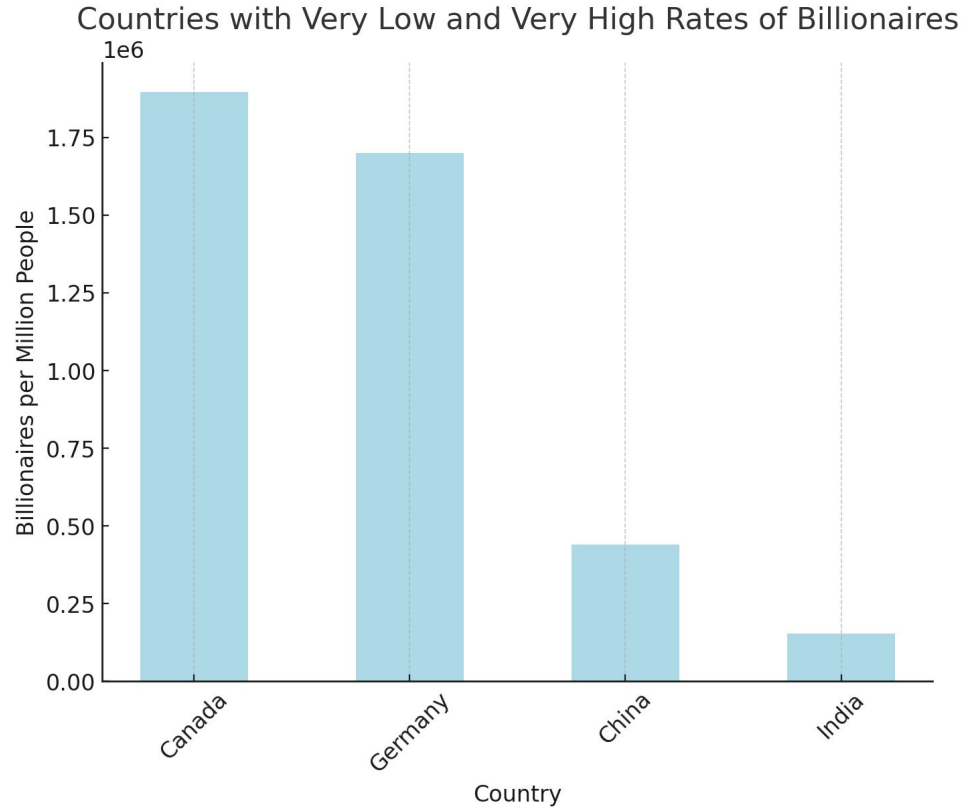


“ *Our goal of this project is to study the economic weight billionaires have in controlling the wealth of a country globally and how to increase your chances of becoming one.*

Sad Reality

- However, we have to face a depressing fact
- While we are interested in becoming a billionaire, which we see has X% in the US...
- We see that the average person is much more likely to become...homeless
- Contrast homeless ratio to billionaire ratio, add in taxation data if possible

Country Specific Examples



Motivating Questions

1. What is the distribution of billionaires in the USA/World across different factors?
2. What factors (controllable & uncontrollable) whether determine whether an individual will become a billionaire?
3. How does this change in different areas (countries/states?)

