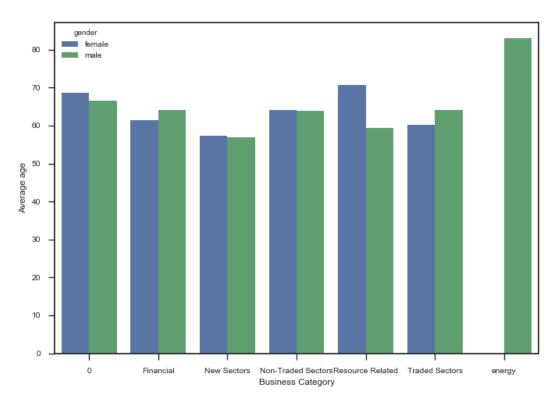
# Introduction to Data Visualization with Seaborn Deena Liz John

Data file used: <a href="https://think.cs.vt.edu/corgis/csv/billionaires/billionaires.html">https://think.cs.vt.edu/corgis/csv/billionaires/billionaires.html</a>
This file contains information about over 2000 billionaires from around the world.

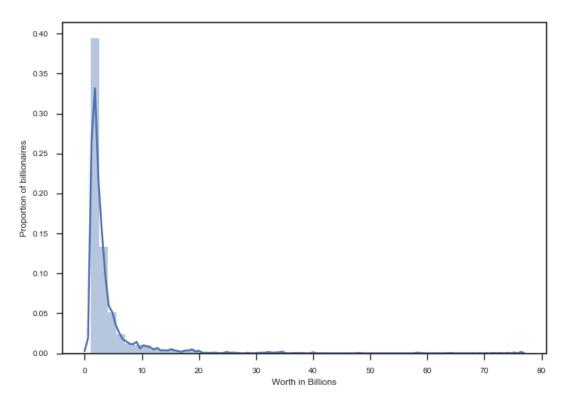
#### 1. Bar chart:



Average Age across Business categories by Gender

On an average, 'New Sector' billionaires are younger as compared to other sectors. The highest average age is for Energy sector. Also, the average ages by categories is almost the same for male and females.

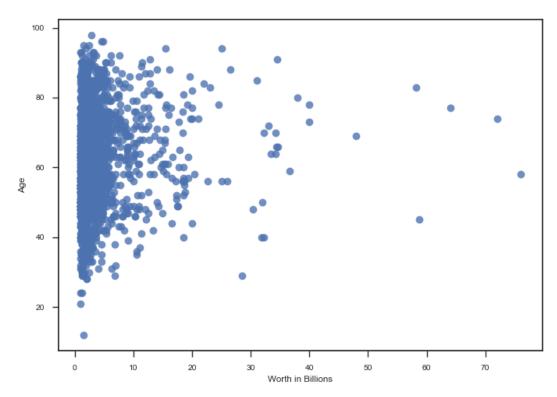
## 2. Histogram or Boxplot



Proportion of billionaires by their worth

Nearly 40% of the billionaires in the data are just over 1 billion worth. The highest worth billionaire is nearly 80 billion worth.

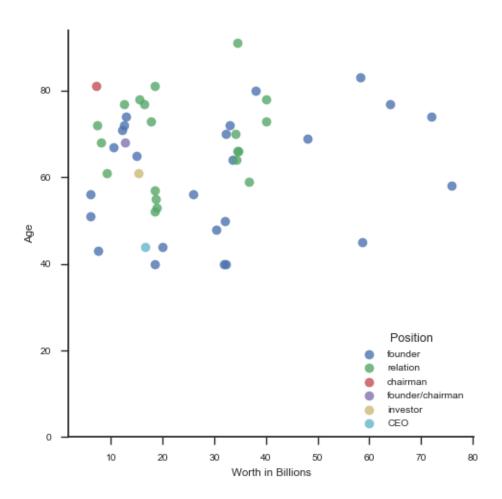
### 3. Scatter plot – bivariate



Distribution of Billionaires Worth by Age

It's interesting that the highest worth billionaire is not even one of the oldest but is just around 60 years old. The overall distribution shows that billionaires are typically over 60 years old, though the youngest is less than 10 years!

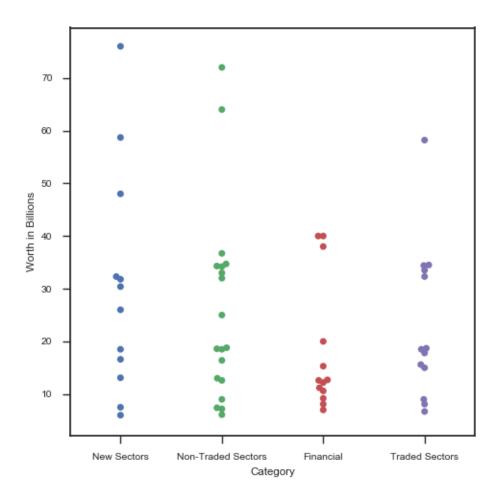
## 4. Scatter plot - trivariate



Distribution of Top Billionaires (Rank < 20) Worth by Age and Position in the company

This graph of top 20 billionaires show that majority are founders of their respective companies or related in some way. Also, the top 20 billionaires are all over 40 years of age.

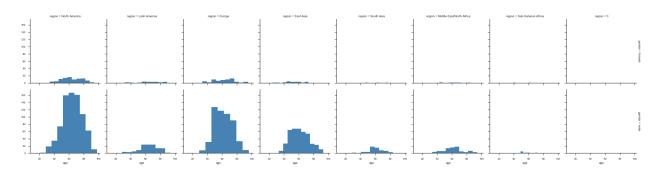
## 5. Swarm plot



Distribution of Top Billionaires (Rank < 20) by Category and Worth

The highest worth billionaire is from 'New Sector' category. It seems Financial sector billionaires do not typically get ranked as one of top 10 billionaires.

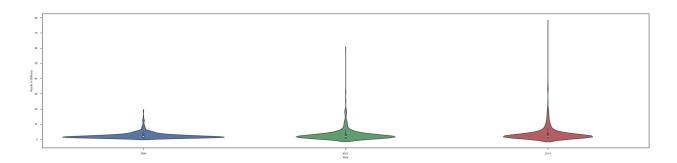
#### 6. Faceted Histogram



Distribution of billionaires by age faceted across Gender and Region

Clearly there are more male than female billionaires with majority coming from North America region. Further, it is interesting to note that certain regions like South Asia, Middle East and Africa have almost no female billionaires. At a region level, North America and Europe dominates in terms of number of billionaires.

#### 7. Violin Plot



Distribution of billionaires in terms of worth by Year

The plot above shows that most billionaires recorded in 1996 were just over 1 billion worth as compared to other years. For 2001 and 2014 the distribution is more spread, and the average worth also increased.