**Unemployment Rate and Median Household Income**

The topic of my portfolio would be labor market and employment, especially on gender-related inequality. The data visualizations would allow the readers of my portfolio have a brief idea about important factors for employment situation at various geographical level, the inequality between men and women in different aspects of labor market, how the US labor market has been changing in recent years and what was the shock of Covid, and some comparison with OECD countries.

For the first part of this portfolio, I would explore several important factors for the unemployment rate in the US labor market. For the first data visualization picture, I want to have a brief look on the economics status and the employment rate of a county, and their relationship. This can give the reader a general understanding of how unemployment rate could reflect the economics performance of the region.

My data comes from 2020 county data from AHRQ, Agency for Healthcare Research and Quality. I chose "Estimated Median Household Income" as my x variable, which came from SAIPE, Census Bureau Small Area Income and Poverty Estimates. I chose "Percentage of civilian labor force that is employed (ages 16 and over)" as my y variable, which came from ACS, American Community Survey. I would draw a smooth fitted line based on the scatter plots. My data visualization would allow the readers to see how the employment rate would change with the estimated median household income among counties among the US.