US unemployment rate analysis

Vis 1: The map of US state level unemployment rate. This is an interactive map made with GeoPandas, where the user can explore how unemployment rates vary across the country. This is also a data visualization to show a general overview of the data. In the original data, we have 8 numerical attributes and the state names. In this data visualization, we choose to emphases the relationship between geographical location and unemployment rate. The geographical attribute is represented by the position in the map. The unemployment rate is represented by the color with a continuous color map. Meanwhile, with the tooltip and popup function, we can also display other metrics for any state. When the mouse moves to one state, the state name will show and when we click a certain state, other numerical attributes will be listed. Another type of design we have considered is to set up multiple layers for each attribute. The color and legend choice of the map is by default.

Vis 2: The sorted bar plot for unemployment rate across all states. This is a static plot made with D3. By checking this plot, users can identify the states with the highest and the lowest unemployment rate since the values are sorted. We design the plot as a horizontal bar plot so that the labels for each state can be easily read. The unemployment rate can be compared with positions. If we have any special interest in any state, we can use color to pop out the information for that states.