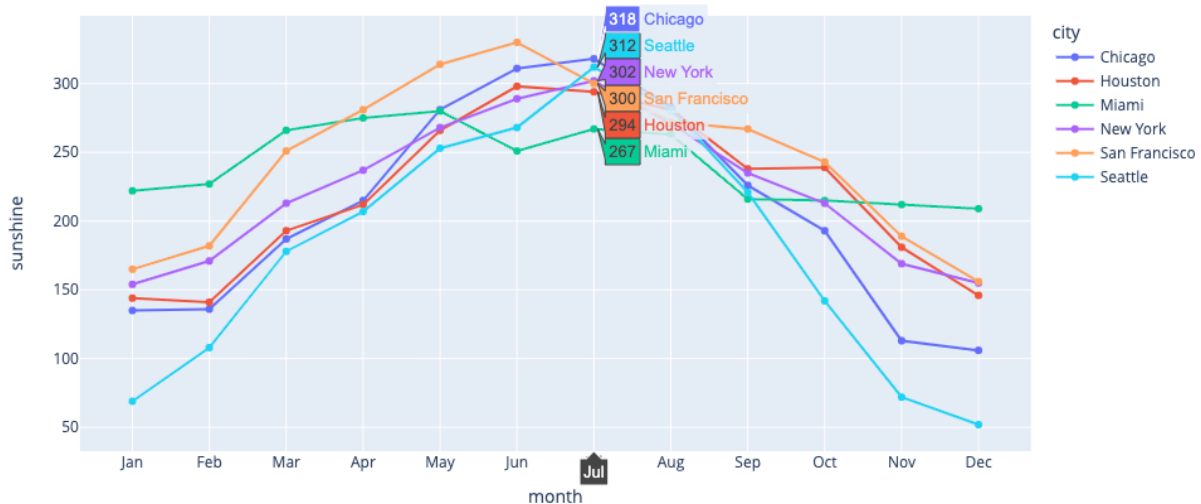


Hourly average sunshine by US Cities (1981-2010)



It is always a topic of interest for some when deciding to relocate to the top US cities based on the average amount of sunshine that can be provided. This prompted the question, "How much hourly average sunshine did some of the top US cities, such as Chicago, Houston, Miami, New York, San Francisco, and Seattle, provide continuously over three decades (1981 to 2010)?"

To answer this question, I used a line plot to show the overall trend of average sunshine in US cities throughout the year. On the y-axis, I decided to plot average hourly sunshine for US cities, while on the x-axis, I plotted months from January to December, which show average hourly sunshine for US cities at each month.

I used Python on a Jupyter notebook and the line plot feature of the Plotly library. I was able to use this line plot feature to color code each city, such as Chicago: Blue, Houston: Red, Miami: Purple, New York: Purple, San Francisco: Orange, and Seattle: Cyan. In addition, on the right, I used a legend that shows cities and their color codes. Hover mode is also used to display the value of sunshine for each month. For example, when we hover to July, we can see that Chicago has the most sunshine (318), while Miami has the least (267).

My findings from the line plot revealed a clear difference in the amount of sunlight received by US cities. As expected, Seattle has the least amount of sunshine throughout the year, whereas Miami has consistent sunshine throughout the year. San Francisco, on the other hand, received the most sunshine in June of 330, while Seattle received the least sunshine in December of 52, representing an 82.24 percent decrease.

