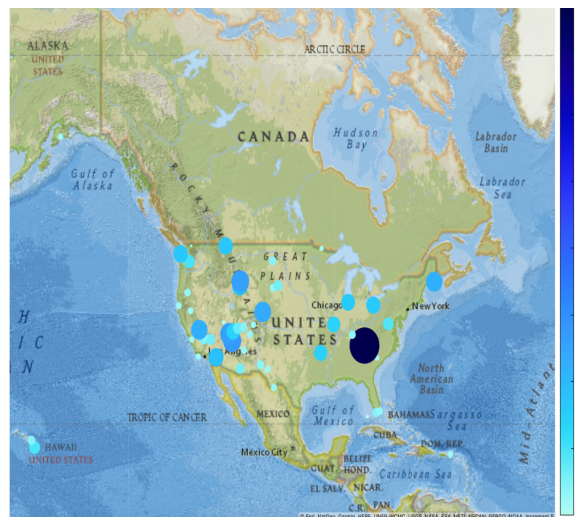**UCF Data Visualization Bootcamp: Project 1 Analysis and Conclusion**

Team 4:

Daniel Pulliam, Kayla Blais, Madeline Rondino, Savi Rahiman, Steven Quintero
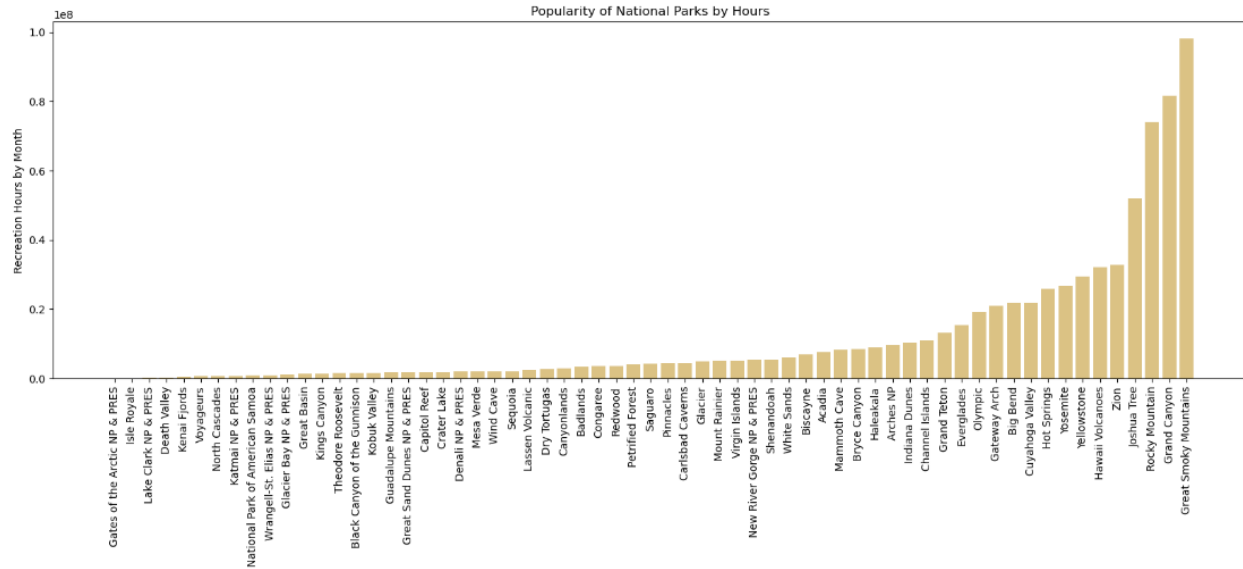
_____

Our team was curious about what the most popular National Park is, and why. We found two sources that could help us confidentially determine an answer to this question and could supply us with other supplementary information. After data cleaning, we were able to answer our questions with different visuals and analysis.

To start, we wanted to know how many National Parks there are and where they are located. Using our "National Parks Data CSV" source, we identified 63 National Parks in the United States, and have their various locations across America plotted in a visual. The size of the bubbles in [Figure 1] below are based on the number of total recreational visits per park.
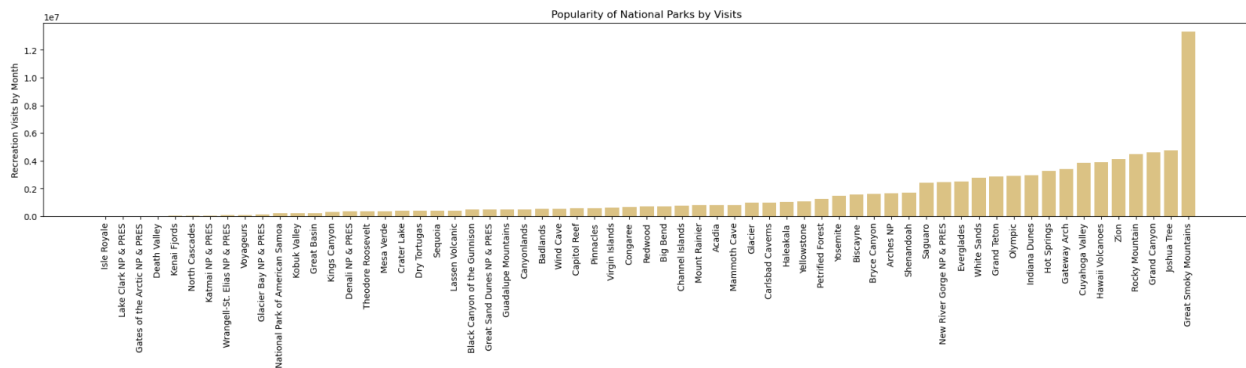

[Figure 1]

To determine which National Park was the most popular, our team looked at both the total hours spent in the parks over the 2023 year, and the total number of visits to the parks in the year 2023. The Great Smokey Mountains Park came out on top of both categories with 98,083,629 visitor hours logged in 2023 (seen in [Figure 2] below), and 13,297,647 guest visits in 2023 (seen in [Figure 3] below). With these numbers, we draw the conclusion that the Great Smokey Mountains Park is the most popular National Park.
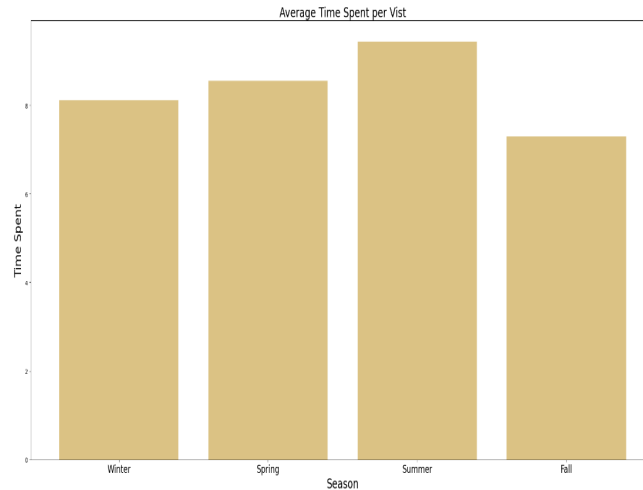
Popularity of National Parks by Hours

[Figure 2]
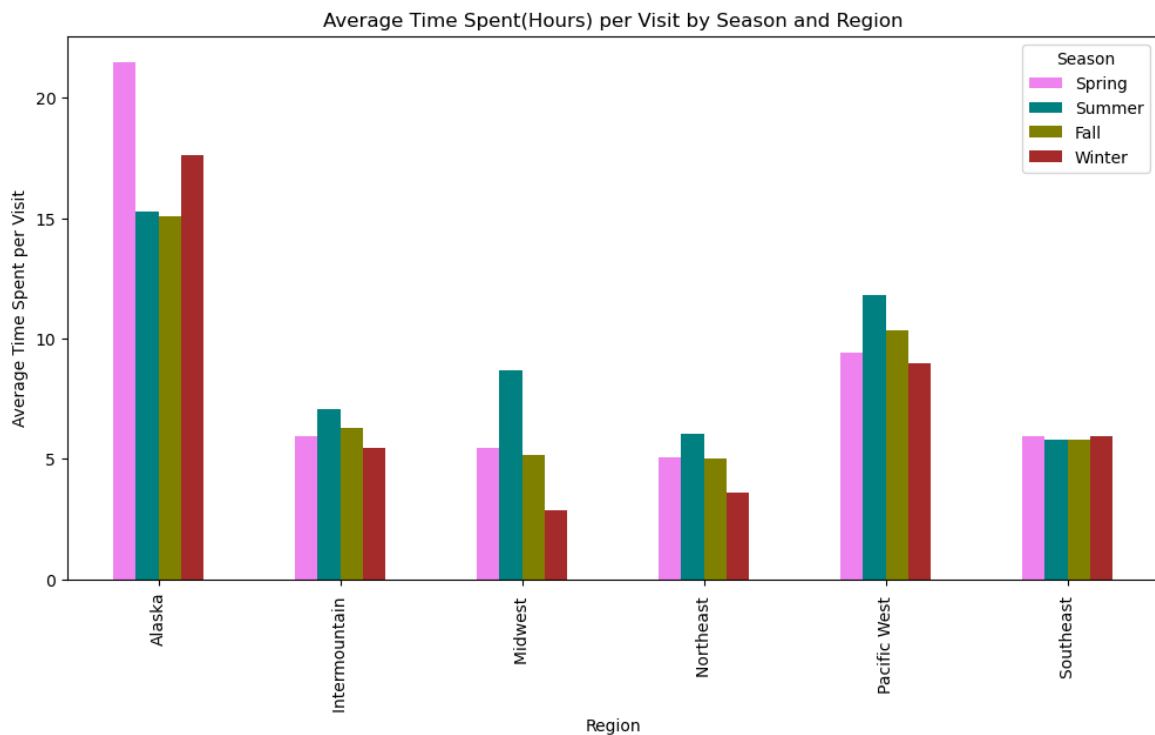

Popularity of National Parks by Visits

[Figure 3]

We were curious about how the seasons affected National Park attendance and did research on seasonality hours. When looking at the average visit length in hours at the different parks per season (Winter, Spring, Summer, Fall), we found that visitors spend an average of 9.43 hours per visit during the Summer, which was higher than all other seasons. A bar graph of this summary can be seen in [Figure 4] below. When you look closely at the regions where the parks are located, Alaska has the highest average visit length in hours for all 4 seasons. The [Figure 5] visual below has these regions split into seasonal visitations by the average visit length in hours.

Average Time Spent per Vist

[Figure 4]

Average Time Spent(Hours) per Visit by Season and Region

[Figure 5]

After finding out that The Great Smokey Mountains was the most popular National Park, we were curious about what activities contributed to the park being popular. Our team pulled in an API with park activities and found activity options for both The Great Smokey Mountains and the Wrangell–St. Elias National Park, since this park
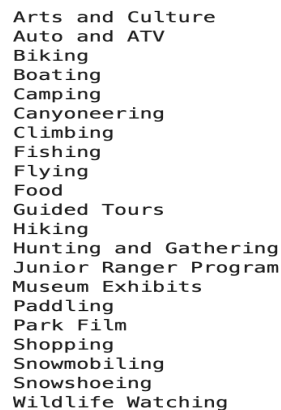
had the longest average visit length per visitor. The API showed us that at The Great Smokey Mountains park, there are lots of learning activities, and outdoor sports. [Figure 6] below shows the activated at The Great Smokey Mountains park according to the API.

```
Arts and Culture
Astronomy
Auto and ATV
Biking
Camping
Fishing
Food
Guided Tours
Hands-On
Hiking
Horse Trekking
Junior Ranger Program
Museum Exhibits
Park Film
Shopping
Wildlife Watching
```

[Figure 6]

The API showed us that at Wrangell–St. Elias National Park, there are lots of water activities, and outdoor fishing/hunting, . [Figure 6] below shows the activated at Wrangell–St. Elias National Park according to the API.

```
Arts and Culture
Auto and ATV
Biking
Boating
Camping
Canyoneering
Climbing
Fishing
Flying
Food
Guided Tours
Hiking
Hunting and Gathering
Junior Ranger Program
Museum Exhibits
Paddling
Park Film
Shopping
Snowmobiling
Snowshoeing
Wildlife Watching
```

[Figure 7]

In conclusion, we found that The Great Smokey Mountains was the most popular National Park when you analyze the total number of visits in a year, and total hours spent in a year. The Wrangell–St. Elias National Park is an anomaly because it is very popular when looking at the average length of visit per visitor.