Michael McPherson

Curry Gardner

Natalie Mason

University of Denver,

Artificial Intelligence and Machine Learning Boot-camp.

Project 1

10 January 2024

**Analysis Summaries**

**1. The Day the Fun Decided to Show Up**

Optimal Festive Days: Which day of the week experiences the highest levels of feel-good family fun?

In this analysis, we explore the dynamics of festive family activities in both New York City (NYC) and San Francisco (SF). By examining the data across various days of the week, we uncover patterns that reveal the optimal day for encountering feel-good events. Whether it's a bustling Monday or a serene Sunday, our exploration aims to shed light on the VIP guest at the Feel-Good Family Fiesta.

**2. City Hotspots**

Hotspots of Celebration: What part of the city boasts the highest probability of discovering a good time?

Embark on a journey through the urban jungles of NYC and SF as we identify and dissect the hotspots of celebration. By focusing on specific districts, we uncover where the festive fun is concentrated. Whether it's the vibrant streets of Manhattan or the eclectic neighborhoods of San Francisco, our analysis reveals the beating heart of each city's celebratory spirit.

**3. Cheer Overload**

Chronicles of Cheer: When is the prime time for encountering cheerful activities?

Seasonal spirit knows no bounds, and in this analysis, we trace its journey through the years. By examining the evolution of festive activities from 2008 to 2017, we uncover when the holiday cheer goes into turbo mode. Whether it's a surge of events during specific months or a consistent spread throughout the years, our exploration captures the essence of the festive season.

**4. East Coast Swagger vs. West Coast Cool**

Coastal Chronicles: East coast vs West coast—whose gangstas have the most festive fun?

Join us in a comparative analysis of holiday celebrations on the East and West coasts. From the iconic streets of New York to the laid-back vibes of San Francisco, we delve into regional differences, exploring which coast's gangstas rule the festive realm. This analysis promises to unveil the unique flavors each coast brings to the holiday season.

**5. District Showdown**

What district has the most activities?

Navigate the cityscape as we break down the data to identify the district that takes the crown for the most festive activities. From the bustling boroughs of NYC to the diverse neighborhoods of SF, our analysis paints a vivid picture of where the happening hoods are, offering insights into the geographical distribution of festive fun.

**6. Regression Blues**

Regression, shows downward trend in all activities from beginning to end of month

In a month-long statistical sigh, our regression analysis explores the trends in festive activities. By examining how incidents change throughout the month, we aim to uncover any underlying patterns or variations. This deep dive promises to unravel the subtle nuances in the temporal dynamics of festive fun.

**7. Other Questions Explored**

**The Evolution of Incidents: How Have Festive Activities Changed from 2008 to 2017?**

Embark on a chronological journey through the years as we examine the evolution of festive incidents, providing insights into trends, peaks, and shifts in holiday activities.

**Incidents vs. Population: Is the Festive Fun Per Capita Really a Numbers Game?**

Explore the relationship between festive incidents and population, diving into the per capita analysis to discern whether the festive fun truly corresponds to the numerical density of each city's inhabitants.

**Weekend Warriors: Are Saturdays and Sundays the True Heroes of Holiday Merriment?**

Join us in evaluating the significance of weekends in spreading holiday joy. Uncover whether Saturdays and Sundays stand out as the true heroes of holiday merriment.

**Seasonal Swings: Do Festivities Peak During Specific Months of the Year?**

Delve into the seasonal dynamics of festive activities, exploring whether specific months experience peaks in celebratory events.

**Demographic Dynamics: Does Age Play a Role in Embracing the Holiday Spirit?**

Explore the impact of age on festive engagement, unraveling whether specific age groups are more inclined to embrace the holiday spirit.

**Law Enforcement Priorities: How Have Policing Approaches Shaped Festive Incidents?**

Examine the interplay between law enforcement priorities and festive incidents, uncovering potential influences that shape the occurrence of holiday activities.

**The Price of Merriment: Does Festive Fun Come with a Price Tag, and How Has It Changed Over the Years?**

Explore the financial aspect of festive fun, evaluating whether the cost of merriment has evolved over the years.

**Population vs. Incidents: Is There a Correlation Between Urban Density and Festive Shenanigans?**

Investigate the correlation between urban density and festive incidents, providing insights into whether the vibrancy of the cityscape correlates with the occurrence of celebratory events.

**Climate and Celebrations: Does Weather Affect the Frequency of Festive Activities?**

Uncover the impact of weather on festive celebrations, exploring whether climate conditions influence the frequency of holiday activities.

**Weekday vs. Weekend Wonders: Are Weekdays or Weekends More Conducive to Spreading Holiday Joy?**

Dive into the analysis comparing the festive activities during weekdays and weekends. Uncover whether Saturdays and Sundays truly stand out as heroes of holiday merriment.