# University of Arizona
# School of Information

# An Analysis of the Relationship Between Tourism and Crime Rate

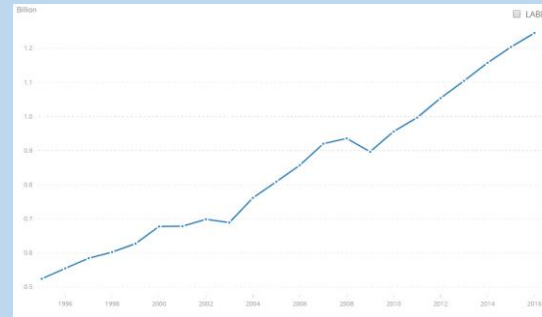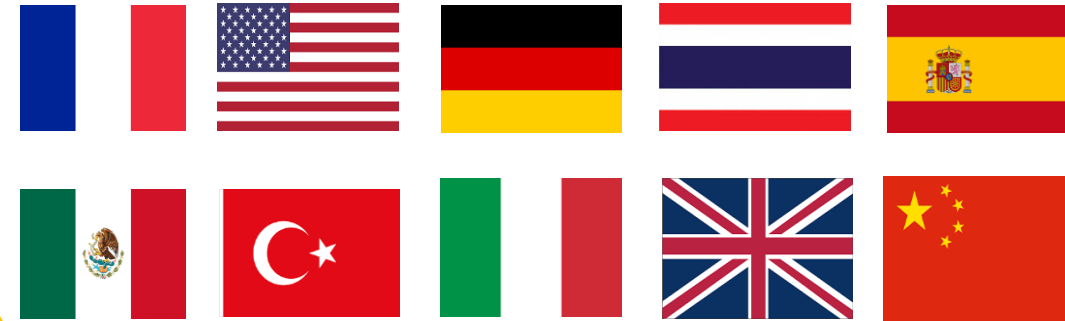YongBaek Cho, Chloe Park, Senior, B.S. in Information Science and Technology

## Purpose of Project

As time goes by, the number of tourists around the world continues to increase. Except for 2009, when the global economic recession hit, the number of tourists continues to increase until 2016. So, the travel industry in each country is growing and travelers' travel options are also diversified. Travelers have analyzed the country's crime rate and safety, which are important criteria for traveling, and this analysis will help travelers select their destinations reasonably.



An Analysis of World Travelers Over 20 Years

## Most Top 10 Visited Countries in the World



## How does this project affect people?

The criteria people choose for travel destination are the safety, information and their budget. People think that safety level is the most important of these three criteria. This project analyzed crime rates around the world, assess whether they are safe as a destination, and determine their destination. It will also help people choose their destination in the future by analyzing the standards and trends for safe travel based on the latest data.

Python Pandas, NumPy, matplotlib and Excel
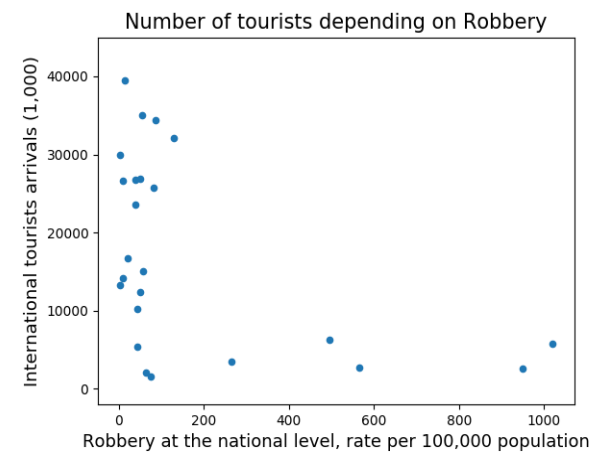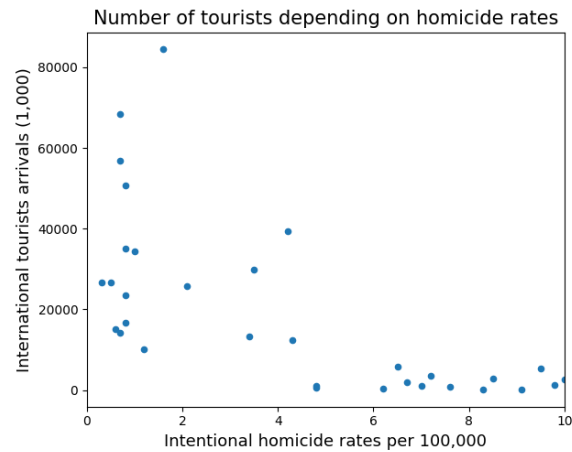
## Methodology



Data Scraping from the Website(API, csv)

Data Cleansing and Analyzing

Create the graphs with Data (Data Visualization)

## Results



Number of tourists depending on homicide rates

Slope:-1.057

Number of tourists depending on Robbery

Slope: -0.03

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Data Sour | World Development Indicators | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | Last Upda | ####### | | | | | | | | | | |
| 4 | | | | | | | | | | | | |
| 5 | Country N | Country C | Indicator | Indicator C | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| 6 | Aruba | ABW | Internatior | ST.INT.AR\ | 619000 | 641000 | 650000 | 647000 | 683000 | 721000 | 691000 | 643000 |
| 7 | Afghanista | AFG | Internatior | ST.INT.ARVL | | | | | | | | |
| 8 | Angola | AGO | Internatior | ST.INT.AR\ | 9000 | 21000 | 45000 | 52000 | 45000 | 51000 | 67000 | 91000 |
| 9 | Albania | ALB | Internatior | ST.INT.AR\ | 304000 | 287000 | 119000 | 184000 | 371000 | 317000 | 354000 | 470000 |
| 10 | Andorra | AND | Internatior | ST.INT.ARVL | | | | | 2347000 | 2949000 | 3516000 | 3387000 |
| 11 | Arab Worl | ARB | Internatior | ST.INT.AR\ | 21155219 | 21929047 | 23843321 | 26232083 | 30108429 | 33912574 | 34786174 | 39041453 |
| 12 | United Ara | ARE | Internatior | ST.INT.AR\ | 2315000 | 2572000 | 2476000 | 2991000 | 3393000 | 3907000 | 4134000 | 5445000 |
| 13 | Argentina | ARG | Internatior | ST.INT.AR\ | 2289000 | 2614000 | 2764000 | 3012000 | 2898000 | 2909000 | 2620000 | 2820000 |
| 14 | Armenia | ARM | Internatior | ST.INT.AR\ | 12000 | 13000 | 23000 | 32000 | 41000 | 45000 | 123000 | 162000 |

The analysis of the correlation between the number of travelers in each country and the most important crimes for travelers such as homicide rate and theft has led to negative relationships.(The results were analyzed through open API of various websites.) In other words, a rise in crime rates reduces the number of tourists and hurts the nation's travel industry.

Facts: The crime rate is related to the number of travelers. This affects the travel industry in each country and if crime rates increase, the travel industry will shrink and, if not, the travel industry will be promoted. Travelers can travel more safely if they travel to countries with lower crime rates and travel to countries with higher crime rates will not be guaranteed a safe trip.