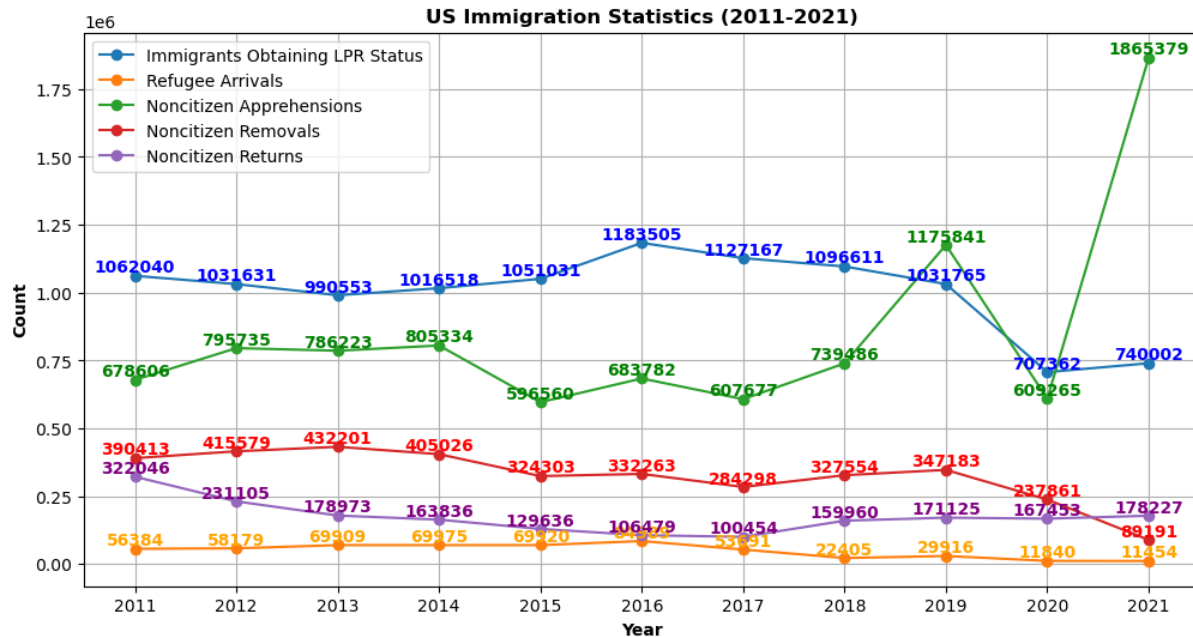


INFSCI 2415 Final Report

Analysis in US Immigration: A Decade Snapshot (2011-2021)

Figure 1: Line Plot



Legend explained

- Blue line represents immigrants obtaining Lawful Permanent Resident (LPR) status.
- Orange line represents refugee arrivals.
- Green line represents noncitizen apprehensions.
- Red line represents noncitizen removals.
- Purple line represents noncitizen returns.
- The colored values represent the number of individuals in each category in each year.

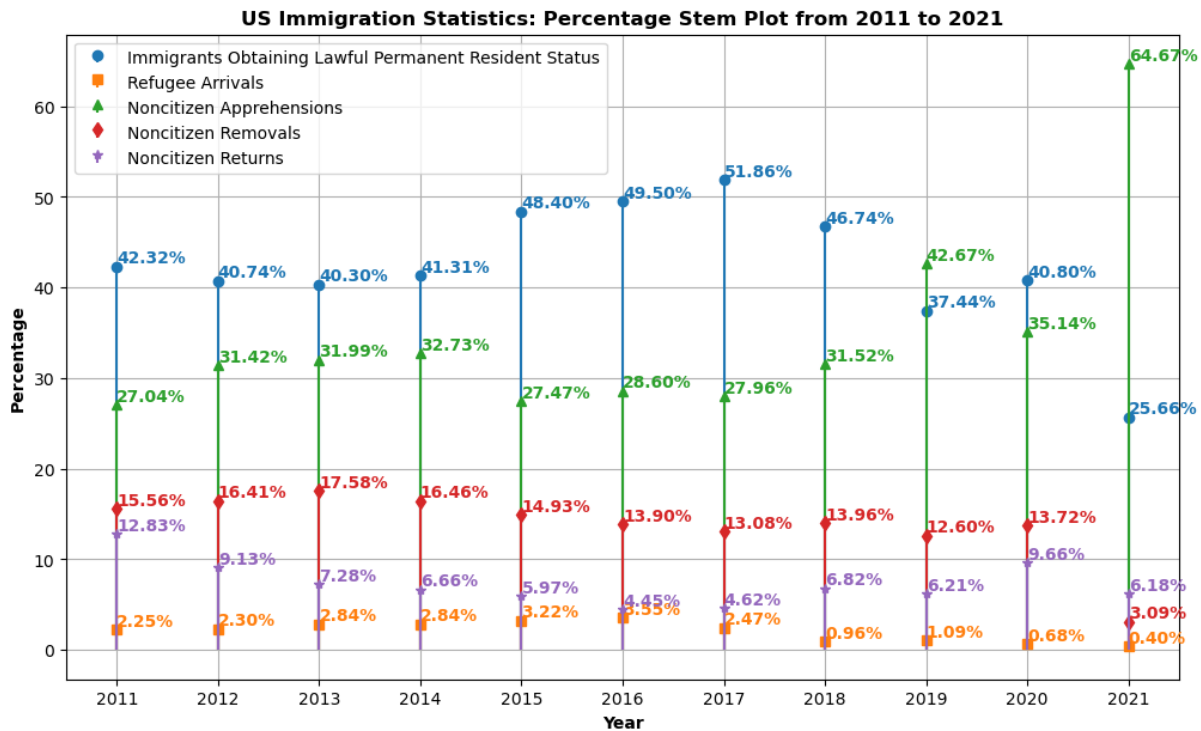
Findings text introducing highlights of the produced figure in bulletin points

- This is a line plot that represents US immigration statistics from 2011 to 2021.
- Noncitizen apprehensions went up significantly in 2020. The reason might be the data inclusions that related to the COVID-19 pandemic.
- Removals dropped notably in 2020. This could be related to the increase in the noncitizen apprehensions or a direct side effect of the COVID-19 pandemic.
- The counts of noncitizen returns, noncitizen removals, and refugee arrivals have been relatively steady over the past 10 years. There is a recent decrease in the count of noncitizen removals likely due to the COVID-19 pandemic.

Data: <https://www.kaggle.com/datasets/justin2028/us-immigration-statistics-1980-2021/data>

Github: <https://github.com/Kamisama-D/INFSCI2415-Information-Visualization>

Figure 2: Stem Plot



Legend explained

- Blue circle represents immigrants obtaining LPR status.
- Orange square represents refugee arrivals.
- Green triangle represents noncitizen apprehensions.
- Red diamond represents noncitizen removals.
- Purple star represents noncitizen returns.
- The colored values represent the percentage of individuals in each category in each year.

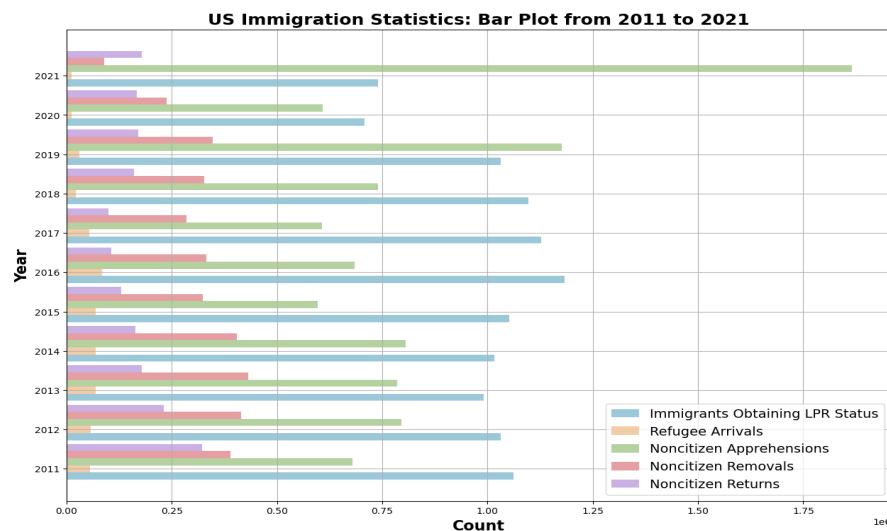
Findings text introducing highlights of the produced figure in bulletin points

- This is a stem plot that represents US immigration statistics from 2011 to 2021.
- There is no bottom line because all categories fluctuate over time.
- The stem plot uses vertical lines with a marker at the top to clearly show the percentage of each category of immigration in each year.
- The lower the dots on the graph, the smaller the portion is for that certain category of immigration in that year.

Data: <https://www.kaggle.com/datasets/justin2028/us-immigration-statistics-1980-2021/data>

Github: <https://github.com/Kamisama-D/INFSCI2415-Information-Visualization>

Figure 3: Bar Plot



Legend explained

- Blue represents immigrants obtaining LPR status.
- Orange represents refugee arrivals.
- Green represents noncitizen apprehensions.
- Red represents noncitizen removals.
- Purple represents noncitizen returns.

Findings text introducing highlights of the produced figure in bulletin points

- This is a bar plot that represents US immigration statistics from 2011 to 2021.
- In the recent 10 years, the number of immigrants obtaining LPR status and noncitizen apprehensions are most significant compared to the others.

Data and method text describing the data and method used in this process

- I used Pandas, NumPy, and Matplotlib to create all the visualizations in Jupyter Notebook.
- NumPy was used for numerical operations, Pandas for data manipulation and analysis, and Matplotlib for creating the figures.
- The dataset provides yearly data from 2011 to 2021, covering various aspects of US immigrations.

Significance statement on why the presented figure is important

- Illustrative Overview: Provides a visual summary of a decade of US immigration data.
- Pandemic Impact: Reflects the significant impact of the COVID-10 pandemic on immigration, evident from the shifts in noncitizen apprehensions and removals.
- Policy Insights: Offers valuable insights for policymakers into the changing landscape of US immigration enforcement and policy effects.

Data: <https://www.kaggle.com/datasets/justin2028/us-immigration-statistics-1980-2021/data>

Github: <https://github.com/Kamisama-D/INFSCI2415-Information-Visualization>