



Crime and Unemployment Analysis in the United States

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Introduction

- Crime rates impact the economy, sociology, and public policy.
- High unemployment rates may contribute to increased crime levels.

Objective: Investigate the relationship between unemployment and crime across U.S. states.

Key Question: Does unemployment significantly influence crime rates?



Data Sources

1. **US Crime Dataset:** Provides crime reports by state, type, victims, and monthly time period.
2. **Unemployment in America Dataset:** Captures state-wise unemployment rates over the years.

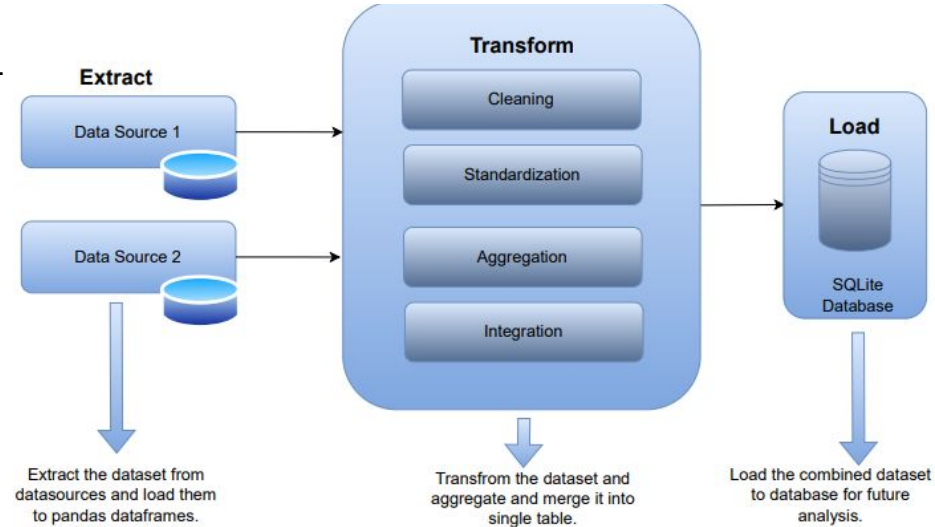
ETL Process

Extraction: Raw data gathered from online sources (Kaggle).

Transformation:

- Handled missing values.
- Standardized date formats.
- Merged datasets.

Load: Data stored for analysis.





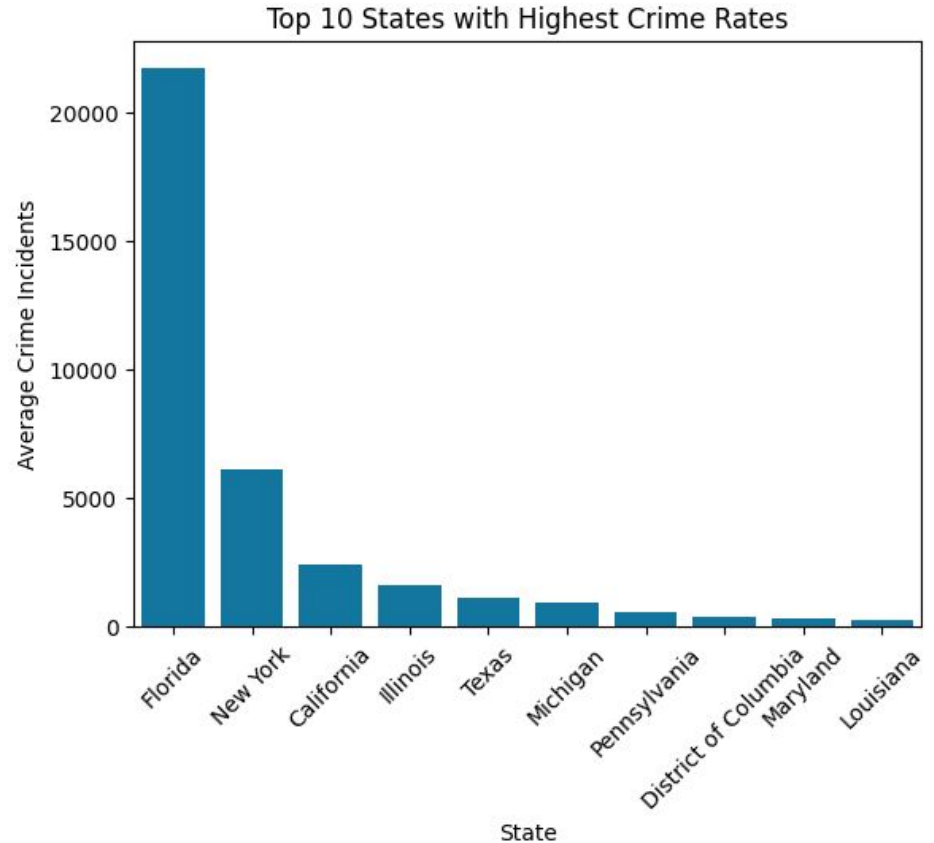
Exploratory Data Analysis (EDA)

- Examined crime trends across different states.
- Analyzed unemployment rate variations over time.
- Identified regional differences in crime and economic factors.
- Used bar charts, line plots, and heatmaps for insights.

Crime Incidents by State

Top 3 states with highest crime rates: Florida, California, and Texas.

Urban density and economic disparity.

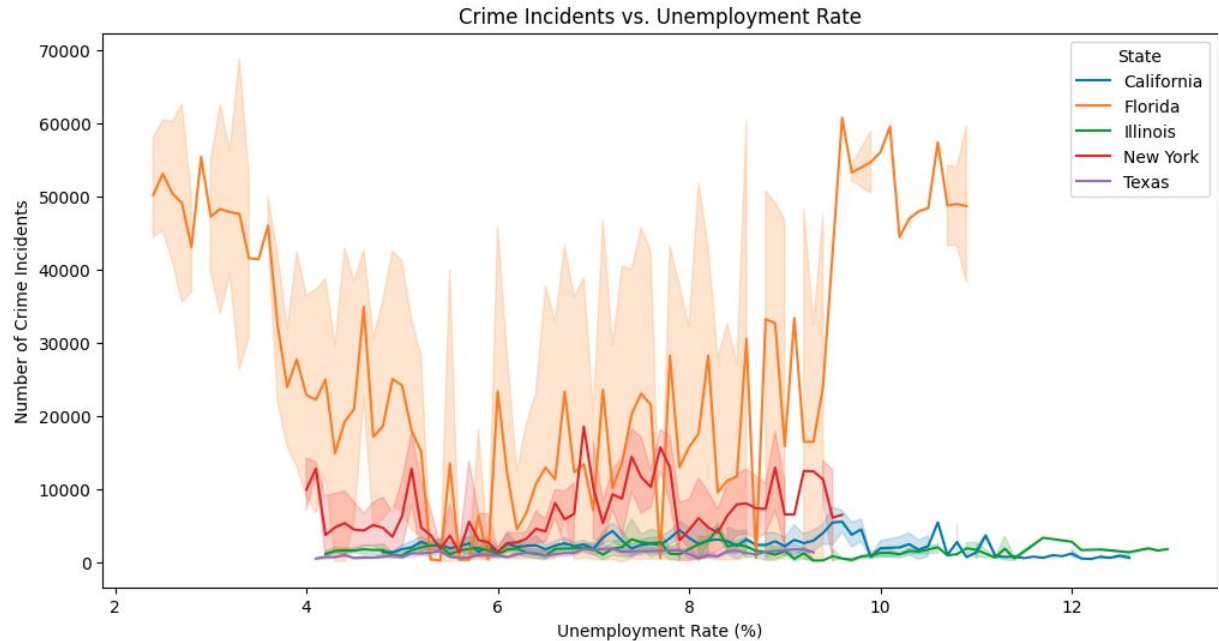


Yearly Trends

Crime incidents tend to rise during periods of high unemployment.

Unemployment rates do not show a consistent decline over time.

Notable Spike: After 2000s, crime incidents increased in several states.

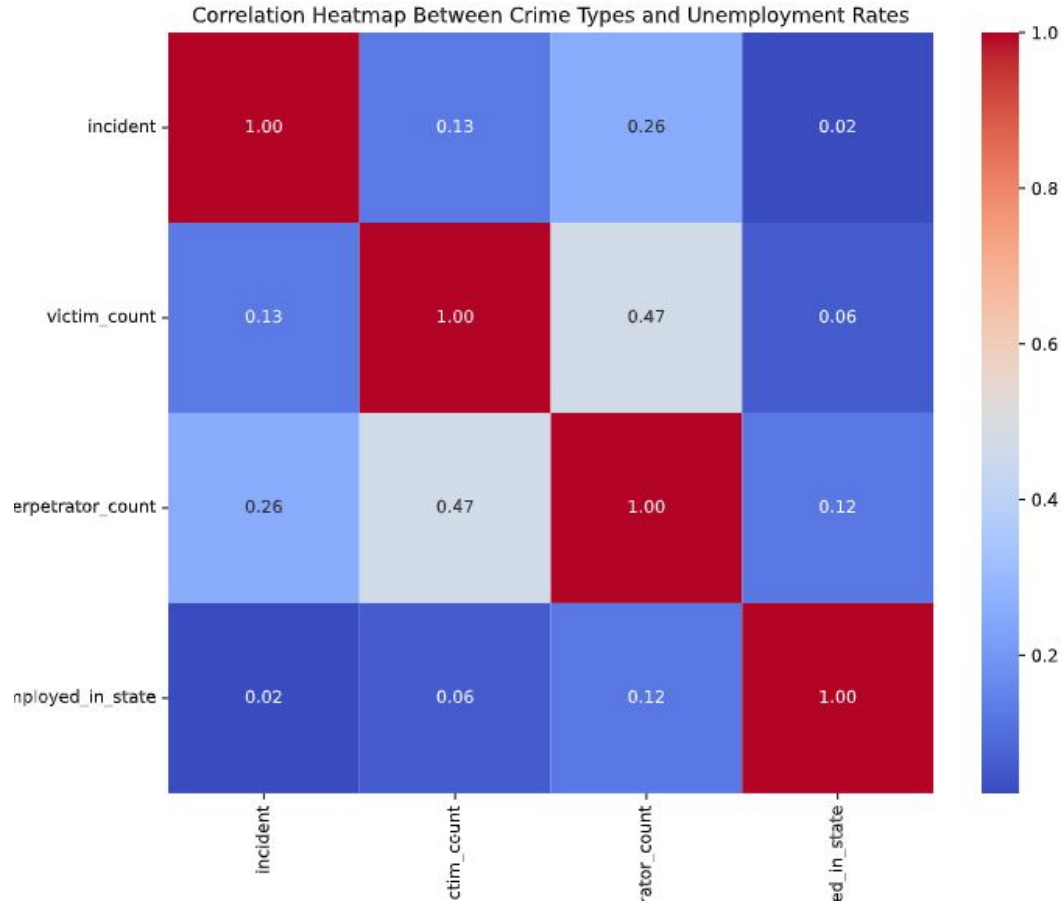


Correlation Analysis

Used correlation heatmaps to analyze relationships.

Weak correlation between unemployment and crime incidents.

Other socio-economic factors influence crime rates.

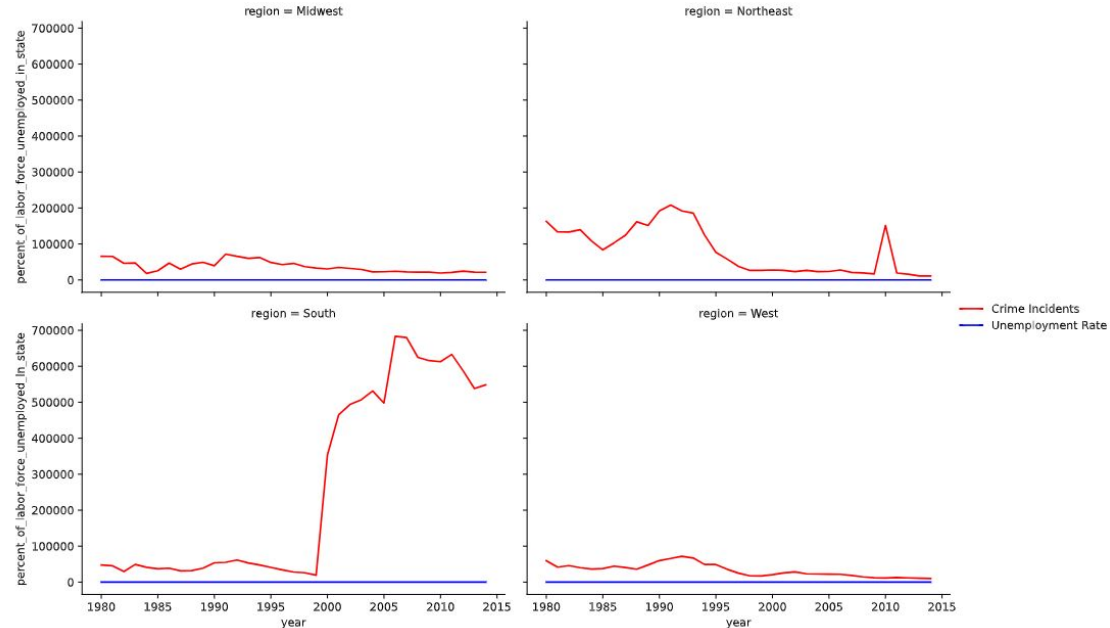


Regional Crime & Unemployment Trends

South region contains a spike in crime during the late 1990s and early 2000s.

Midwest, Northeast, and West had more stable trends.

Regional policies and economic conditions play a critical role in unemployment than crimes.





Conclusion

- No strong correlation between unemployment and crime rates.
- States with larger populations report higher crime numbers.
- Regional differences suggest local policies impact crime trends.
- Other socio-economic factors like education, poverty, and urbanization should be considered



Thank You!

Any Questions???