CRIME DATA ANALYSIS
IN TAMILNADU(2014-PRESENT)

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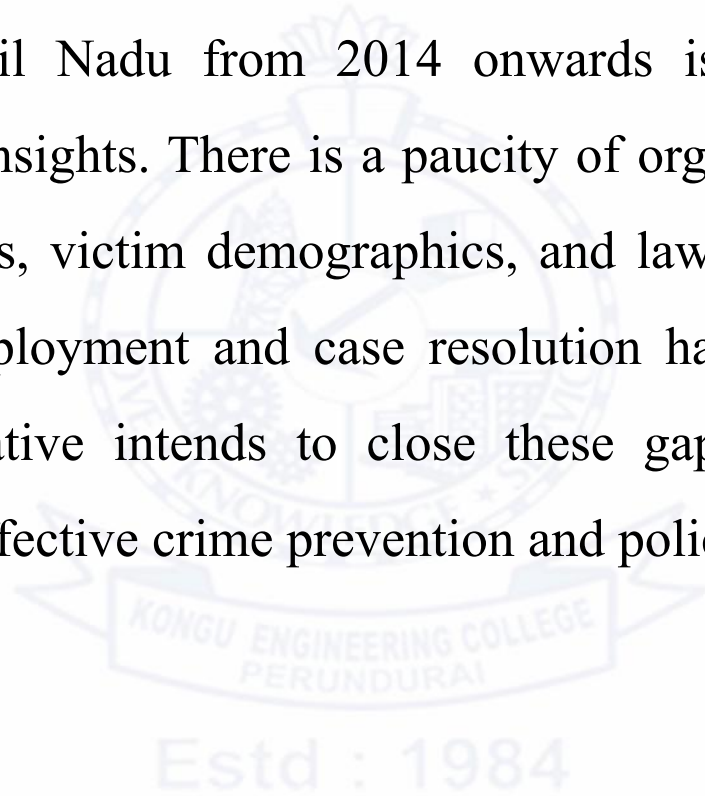PERUNDURAI.

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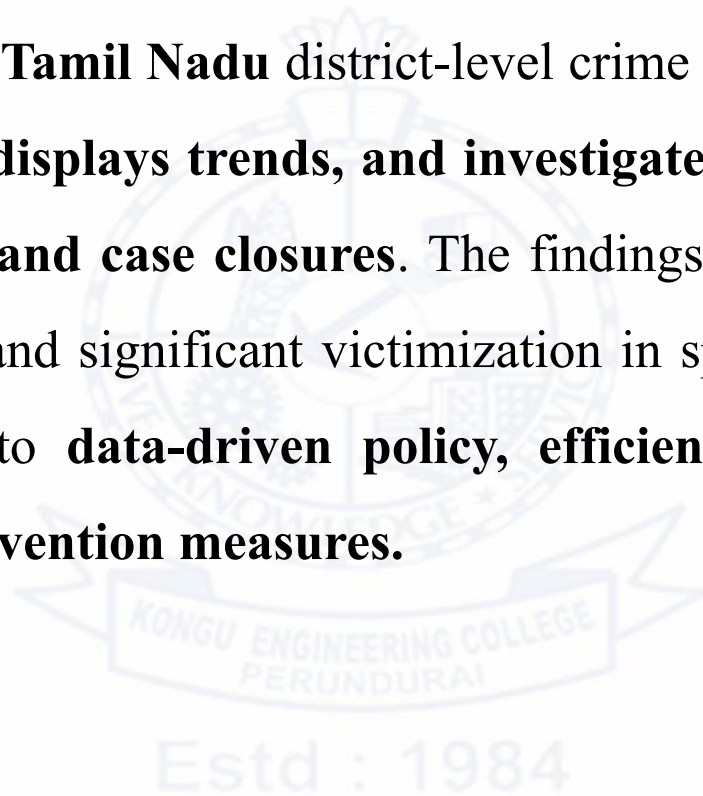Karunyajane@gmail.com

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PROBLEM STATEMENT

Crime data in Tamil Nadu from 2014 onwards is mostly underused for producing relevant insights. There is a paucity of organized analysis to detect trends in crime types, victim demographics, and law enforcement responses. Trends in police deployment and case resolution have not been thoroughly assessed. This initiative intends to close these gaps by using data-driven research to inform effective crime prevention and policy decisions.

SOLUTION

This study examines **Tamil Nadu** district-level crime data from **2014 onwards.** It classifies **crimes, displays trends, and investigates patterns in victim age, police deployment, and case closures**. The findings show poor closure rates, erratic deployment, and significant victimization in specific age groups. These findings contribute to **data-driven policy, efficient patrol planning, and improved crime prevention measures.**

CRIME DATASET

- **Date of Occurrence -** 01-Jan-2020 to 07-Dec-2024

- **City -** 28 unique cities (e.g., Chennai, Bangalore, Mumbai, etc..)

- **Crime Description -** 21 types (eg.Homicide,Burglary,etc..)

- **Victim Age -** 10 to 79 years

- **Victim Gender -** M, F, X

- **Weapon Used -** Blunt Object, Firearm, Knife, Explosives, Poison

- **Crime Domain -** Violent Crime, Other Crime, Fire Accident, Traffic Fatality.

- **Police Deployed -** 1 to 19 officers

- **Case Closed -** Yes, No

INSIGHTS

Key Insights from the Crime Data Analysis

1. **Peak Crime Hours Identified:**

   Most crimes occur during **late-night and early-morning** hours **(1 AM to 6 AM)**, suggesting a need for increased night-time patrolling.

2. **High Crime Concentration in Urban Districts:**

   Chennai shows the highest number of reported crimes among Tamil Nadu districts, indicating concentrated urban crime zones.

INSIGHTS

3. Irregular Police Deployment:

Several serious crime categories show low or inconsistent police deployment, implying resource misallocation.
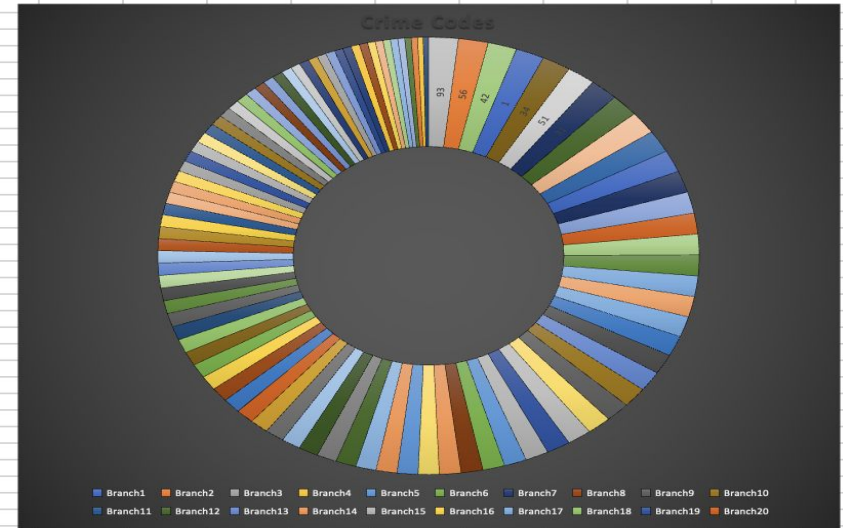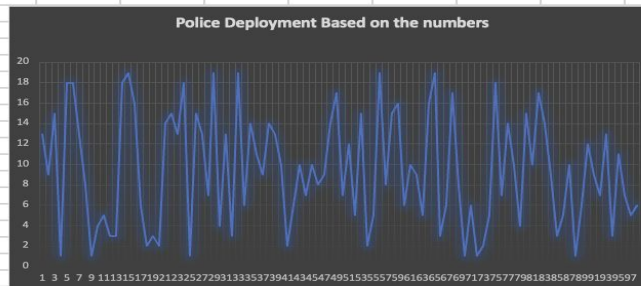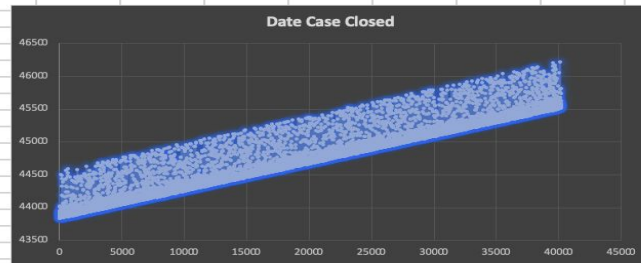
4. Low Case Closure Rates:

A significant proportion of crimes remain unresolved, particularly in violent and theft-related domains, highlighting process inefficiencies.

EXCEL VISUALIZATION
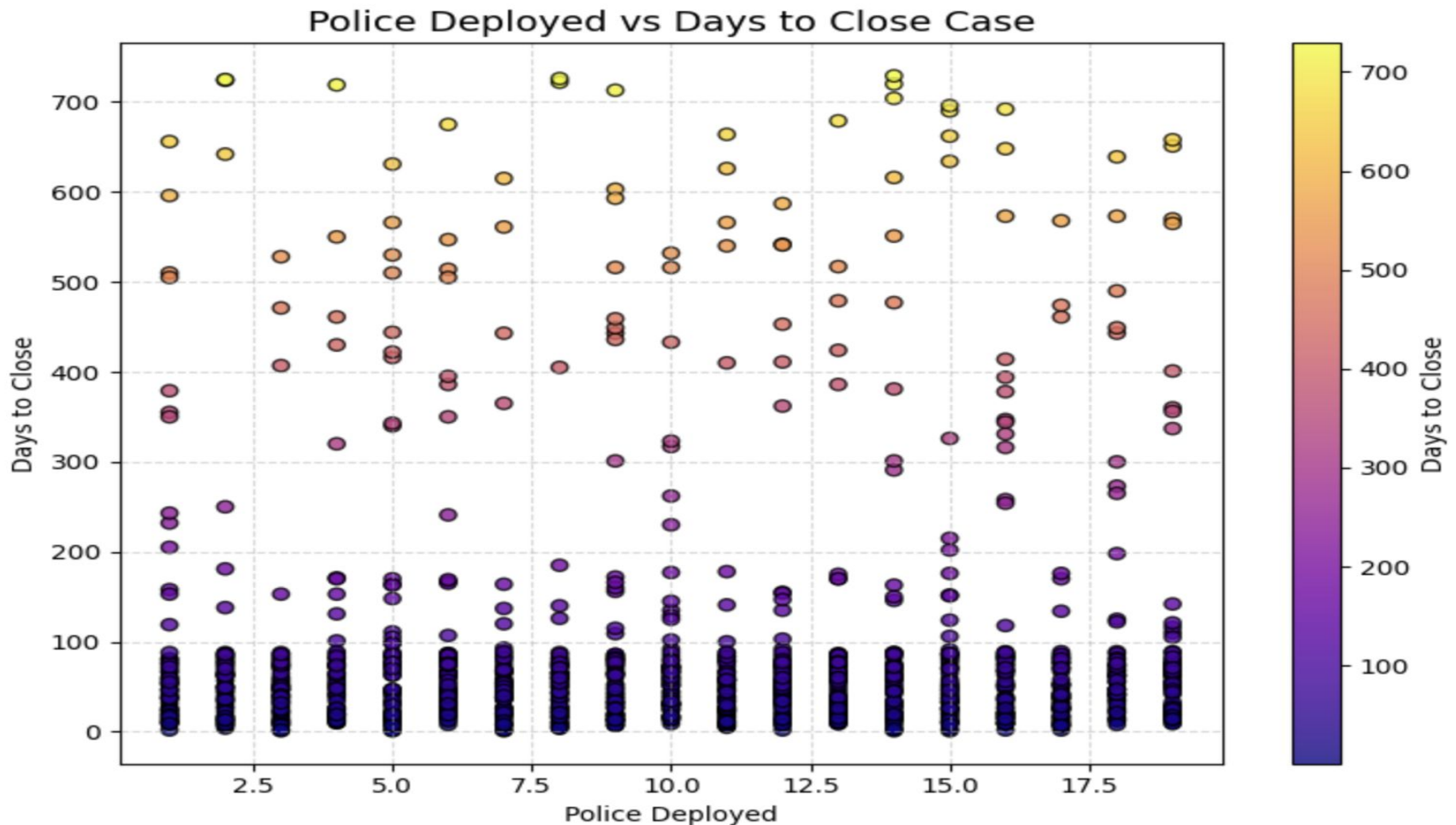
CO-RELATION FOR POLICE DEPLOYED VS DAYS TO CLOSE CASE

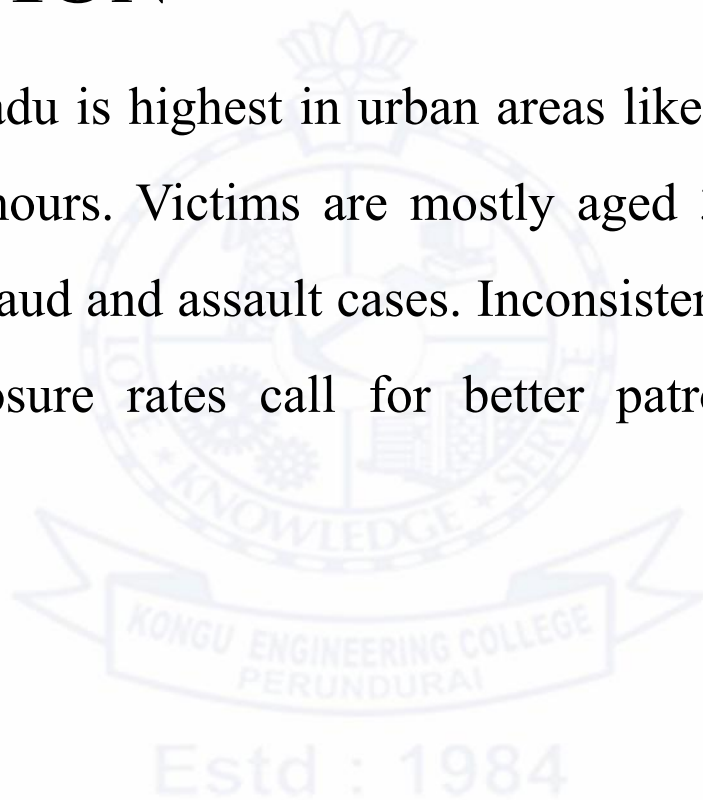Police Deployed vs Days to Close Case

INFERENCE

- Crime rates are greatest in **metropolitan areas like Chennai**, particularly for **violent and theft-related offenses**. Most events occur **late at night** or **early in the morning**, indicating high-risk times.

- The majority of victims are between the **ages of 30 and 50**, with women being particularly vulnerable.

- Police deployment appears to be uneven, and case closure rates remain low.

- The study emphasizes the need for **better resource allocation** and **time-targeted patrolling tactics**.

CONCLUSION

Crime in Tamil Nadu is highest in urban areas like Chennai, especially during late-night hours. Victims are mostly aged 30–50, with women often affected in fraud and assault cases. Inconsistent police deployment and low case closure rates call for better patrolling and resource planning.

THANK YOU