# EGIM08 - Coursework 1

## Prajwal Bharadwaj - 2337862

# 1 Goal

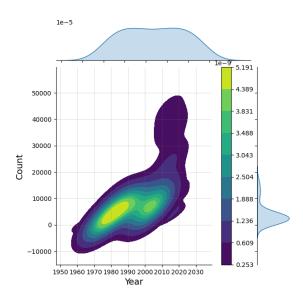


Figure 1: Illustration of Highest death toll faced by Middle Eastern countries

This visualization aims to show how the Terrorism Density, a measure of the frequency and fatality of terrorism incidents, has changed over the years. This density estimate is combinational quantity consisting of frequency of Terrorism Incidents and Fatality of theses incidents which is the Death Toll

# 2 Insights

The joint plot in the Figure 1 describes the Terrorism Density estimate progressing over the years. This density estimate is a quantity comprised of two attributes which is frequency of Terrorism Incidents and Fatality of theses incidents which is the Death Toll from this Terrorism incident, which combines to form a density estimate to give as sense of how terrorism has been progressing and remained silent for very few years.

## 3 Data Abstraction

- Dataset Type : Tabular Data Comma separated Value File
- Items: Each Item is a terror event consisting of data related to information of Terrorism event
- Attributes: For the below visualization of Terrorism density estimate over the years, a merged data-frame consisting of Total terror incidents frequency which is a quantitative attribute type and Total Killed which is again a quantitative attribute are computed and plotted against the Years which is sequential attribute type on the x axis.

### 4 Task abstraction

• Marks: <u>Contour Lines</u>
Indicates the density growth of density estimate over each channel

#### • Channels: Colorbars

Indicates the intensity of Density estimate. More the number of incidents and death toll, more is the intensity of the color-bar. Color-bar is indicated to utilize for better analysis.

• Users: General public, researcher, journalist, and policy maker.

#### • Actions :

High level  $\rightarrow$  Present the Data Mid Level  $\rightarrow$  Browse the Data Low Level  $\rightarrow$  Compare the Data

- Sparse incidents and low fatalities from 1960s to 1980s, continuing into early 2000s.
- Significant rise in incidents and fatalities post-2000, notably after 9/11 attacks.
- Some isolated points contribute to density despite representing fewer incidents.
- Reflects escalated terrorism landscape from 2000s onwards.
- Target: Dependency: → Observation hints at a direct relationship between incident frequency and death tolls, crucial in understanding terrorism dynamics.

### 5 Additional Data source

No additional data source has been utilized except the Input Data file from the Kaggle Website

Dataset: Global Terrorism Dataset

Link: https://www.kaggle.com/datasets/START-UMD/gtd