

# **SESMIC 2022**

## Terror Activities Prediction Model

For

Social Welfare and Global Tranquility/Peace

### ***Team details***

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**Study:** B.Tech CE 3rd Year

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# Problem Statement

- ★ The Terror Prediction Model is a model which will help to track terror activities in one's country.
- ★ To make a model that could predict through the data that:-
  - In which places the terror attacks can be conducted
  - Which terror organizations can conduct
  - Terror organizations' next plannings
  - Their connections.
  - Any specific type of crowd they are targeting
  - AI/ML/DL approach will be used

# **NECESSITY OF THE IDEA**



# Effects of the problem

- Terrorism is a global issue
- One terror organization gives birth to new terror organizations.
- Fear of terror cause anxiety and sometimes mental stress as well



# Effects of the problem

- Globally, 22,847 people died in terrorist attacks in 2020.
- Most victims of terrorism die in the Middle East, Africa, and South Asia.
- Over the previous decade, the average number of annual deaths was 26,000. However, there can be significant year-to-year variability. Over this decade the global death toll ranged from its lowest of 8,200 in 2011 to the highest year of 44,600 in 2014.

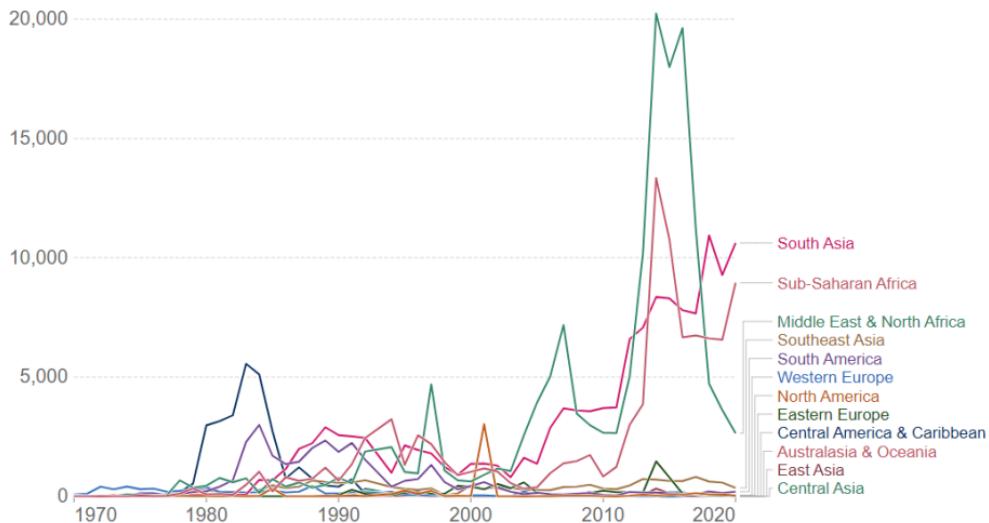


# Effects of the problem

- Deaths from terrorism, 1970 to 2020

Confirmed deaths, including all victims and attackers who died as a result of the incident.

Our World  
in Data



Source: Global Terrorism Database (2022)

Note: The Global Terrorism Database is the most comprehensive dataset on terrorist attacks available and recent data is complete. However, we expect, based on our analysis, that longer-term data is incomplete (with the exception of the US and Europe). We therefore do not recommend this dataset for the inference of long-term trends in the prevalence of terrorism globally.

OurWorldInData.org/terrorism • CC BY

# Effects of the problem



- Number of lives are lost
- Many children get orphaned
- The greatest soldiers are martyred
- Family gets incomplete
- Loss in the economy
- Fear of terror

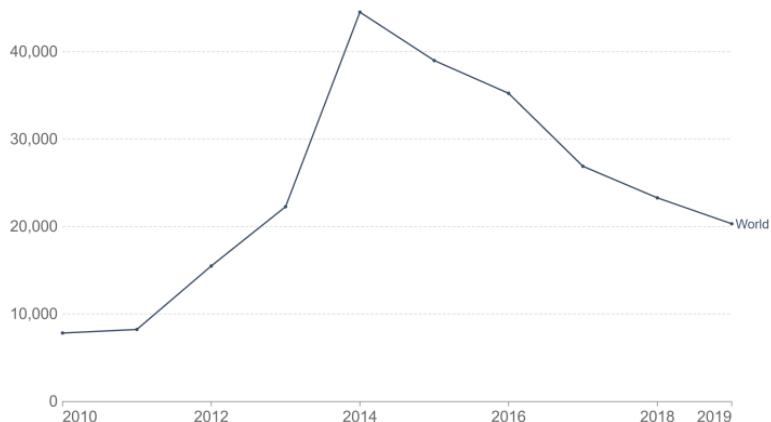


# Effects of the problem



Deaths from terrorism, 2010 to 2019  
Confirmed deaths, including all victims and attackers who died as a result of the incident.

Our World  
in Data



Source: Global Terrorism Database (2021)

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Note: The Global Terrorism Database is the most comprehensive dataset on terrorist attacks available and recent data is complete. However, we expect, based on our analysis, that longer-term data is incomplete (with the exception of the US and Europe). We therefore do not recommend this dataset for the inference of long-term trends in the prevalence of terrorism globally.

- [https://ourworldindata.org/grapher/fatalities-from-terrorism?time=2010..2019&country=~OWID\\_WRL](https://ourworldindata.org/grapher/fatalities-from-terrorism?time=2010..2019&country=~OWID_WRL)

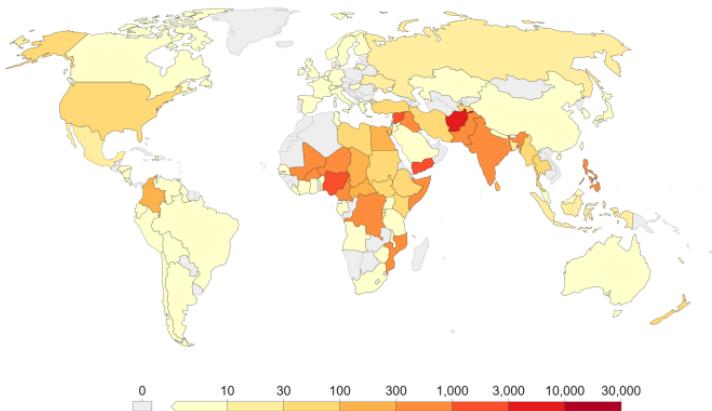
# Effects of the problem



Deaths from terrorism, 2019

Confirmed deaths, including all victims and attackers who died as a result of the incident.

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# Effects of the problem



# Effects of the problem



- World Trade Centre (New York), before and after attack



• Before Attack



• After Attack

# Effects of the problem



- Hotel Taj (Mumbai), before and after attack



- Before Attack



- After Attack

# Solution and Approach

- Terror activities prediction model is a set of certain programs which helps us predict that what attack are possible in the future based on the past incidents.
- We will be predicting this using the data of previous attacks
- Whole project will be done using Machine Learning and Deep Learning domains



# Solution and Approach



- Main features that will play prominent roles are:
  1. Terror Organization (Who conducted the attack)
  2. Location (Place where attack was made)
  3. Targeted people (People who were victims, e.g. Children, Women, Government Officials, civilians etc)
  4. Type of attack (e.g. Assassination, Bombing, Hijacking, Kidnapping, Shooting etc)
  5. Date (Date when the attack happened)



# Solution and Approach



- Using the main features we will train the model through certain ML and DL algorithms
- This model will provide judgement and will give the possibility of certain possible outcomes
- The possible outcomes are as follows:
  1. Who can conduct the attack(e.g. any organization)
  2. Location where attack can be made
  3. What type of people can be targeted
  4. What type of attack can be made
  5. Any suitable date that is convenient for the attack

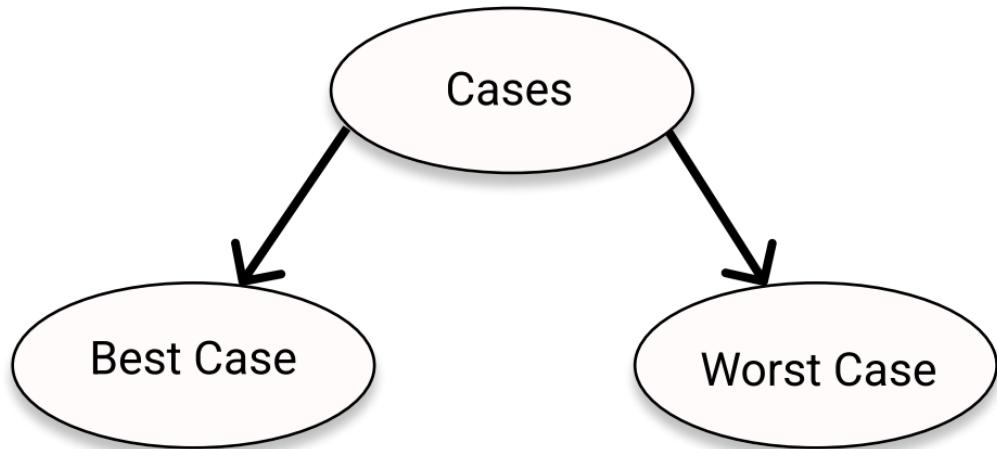


# Solution and Approach

- Now, take an example that unfortunately any attack has been conducted
- Then, using the data and its analysis this model will help us to identify that which organization is responsible
- The dataset we are using is real and valid



# Predictions Based on Cases



# Predictions Based on Cases

## Best Case

- Attack has been made (Bombing etc)
- Specific group of people are targeted (Civilians , govt. officials etc)
- 



# Predictions Based on Cases

## Worst Case

- Only terror organizations information is available.
- Outputs what type of attack can be made by any specific organization.



# Applications

- Beneficial for social welfare and global tranquility/peace
- Can be used in Intelligence agencies and military purposes
- Reduction in the occurrence of terror activities
- There will be a strong eye on the terror organizations



# Applications

- Being a student it is our utmost duty to serve the nation with our utmost knowledge and intelligence
- Not only army and intelligence agency is responsible for welfare and security of nation
- We will contribute our nation with our utmost courage and technical skills

# Thank You

From

Karan Bhatt   Yatharth Chauhan   Shweta Thakkar   Yug Dave   Himani Shah

