**Global Terrorism Database**

**1. Project Idea:**

Arguably, the most critical collective need of our world is peace. Thus, it is my pleasure to propose to work on analysis and prediction of trends in global terrorism using the Global Terrorism Database. My goal will be to develop a model that enhances our understanding of terrorism patterns, aiding in the prediction and prevention of future incidents.

**2. Relevance to Sustainable Development Goals (SDGs):**

This project aligns with SDG 16 (Peace, Justice, and Strong Institutions) by addressing the global challenge of terrorism. Analyzing terrorism data can contribute to the development of strategies for conflict prevention and the promotion of peaceful societies.

**3. Literature Examples:**

*a.* Improving theClassification of Terrorist Attacks: A Study on Data Pre-processing for Mining the Global Terrorism Database[[1]](#endnote-1)

b. Are Recent Terrorism Trends Reflected in Social Media?[[2]](#endnote-2)

**4. Describe Your Data:**

The Global Terrorism Database[[3]](#endnote-3) dataset contains comprehensive records of terrorist incidents. The data will have to go through preprocessing steps such as: data cleaning, feature extraction, and normalization to ensure the reliability of the model.

**5. Approach (Machine Learning or Deep Learning):**

I will be examining a number of both machine learning and deep learning techniques to analyze the terrorism data. At least, machine learning algorithms could be used for exploratory analysis and feature selection, while deep learning models, such as neural networks, will capture complex patterns in terrorism trends. Also, a hybrid approach may provide a nuanced understanding of global terrorism dynamics.

1. J. V. Pagán, "Improving the classification of terrorist attacks a study on data pre-processing for mining the Global Terrorism Database," 2010 2nd International Conference on Software Technology and Engineering, San Juan, PR, USA, 2010, pp. V1-104-V1-110, doi: 10.1109/ICSTE.2010.5608902. [↑](#endnote-ref-1)
2. I. Terziyska, S. Shah and X. Luo, "Are Recent Terrorism Trends Reflected in Social Media?," 2017 IEEE 14th International Conference on Mobile Ad Hoc and Sensor Systems (MASS), Orlando, FL, USA, 2017, pp. 535-539, doi: 10.1109/MASS.2017.90. [↑](#endnote-ref-2)
3. [Global Terrorism Database (kaggle.com)](https://www.kaggle.com/datasets/START-UMD/gtd/data) [↑](#endnote-ref-3)