**Capstone Project-1 Proposal**

Predicting arms transfers with using multiple data sets;

**Background**

It is a fact that today’s trillion-dollar defense industry had its beginnings only after World War II. There had been industrialized armaments production prior to and during the first great conflict of the 20th century, but on a small scale. In a world that yearns for disarmament and peace, warfare has become a globalized problem. The defense industry is a key element in the equation, answering some trends of armament may contribute to this problematic field.

Stockholm International Peace Research Institute (SIPRI) database is a unique resource for researchers, policy-makers and analysts, the media and civil society interested in monitoring and measuring the international flow of major conventional arms.

The SIPRI Arms Transfers Database contains information on all transfers of major conventional weapons from 1950 to the most recent full calendar year. The database is updated annually. This data set will be used to reach below goals.

**Goals**

Main purpose is to make a contribution to estimation phase of a security crisis with prediction of flow of major conventional arms.

Trying to answer questions such as:

* Is there any relation between arms exported and imported?
* Who are the suppliers and recipients of major conventional weapons?
* What weapons have been exported or imported by specific suppliers or recipients?
* How have the relationships between different suppliers and recipients changed over time (Germany and Iran samples)?
* Can we predict the future arms transfers?‘≠

**Data Source**

I will use the [Global Terrorism Database](https://www.start.umd.edu/gtd/) (GTD), and below data sets of [World Bank](http://databank.worldbank.org/) @Data.World.

1. Importer/exporter the total trend-indicator value (TIV) tables
2. The interface below provides the total trend-indicator value (TIV) of a country or rebel group's arms imports or exports, broken down by supplier, recipient or type of weapon system.

Different date sets might be added during the project

**Approach**

* Understand the variables in the data
* Clean data to exclude redundant entries
* Explore and construct model
* Test

**Deliverables**

* Report/Paper
* Jupyter Notebooks with intermediate data analysis

**Importer/exporter TIV tables**

The interface below provides the total trend-indicator value (TIV) of a country or rebel group's arms imports or exports, broken down by supplier, recipient or type of weapon system.