

Proposal – Capstone Project 1

- **TITLE**

Analyzing New York City Crime Data and Predicting Future Crime Location

- **INTRODUCTION**

In a big city like New York it's a challenging task for the Law Enforcement Agencies to maintain law and order. Imagine if we had predictive model that could predict the possible crime location?

This is what the model is trying to achieve by analyzing New York City Crime Data along with After School Program Data for each borough and deriving a pattern between the after school educational program and the crime rate. Through this model we might be able to achieve some recommendations about where should the law enforcement agencies be placed in order to try and prevent future crimes. Furthermore we can try to forecast future crimes in the manner of months and to be able to plan strategic educational plans to prevent future crimes trends.

- **WHO IS THE CLIENT**

Primary audience is New York City Law enforcement Agency who could use the model that can predict future location of crimes base on the future criminal profile and weekday. The model created could be utilized tactically for crime prevention and also to aid strategic plans to fight crime around the city in the future.

- **DATASET**

Data available in NYC Public Data

- After school activities NYC :

<https://data.cityofnewyork.us/Education/DYCD-after-school-programs/mbd7-jfnc>

- NYPD 2019 Arrest Dataset NYC :

<https://data.cityofnewyork.us/Public-Safety/NYPD-Arrest-Data-Year-to-Date-/uip8-fykc>

- **MODELING APPROACH**

Will build a simple model, with 2 targets - the latitude and longitude co-ordinates. The model can predict future location of crimes based on the future criminal profile and on the Day of the week.

- **DELIVERABLES**

1. Code (Notebooks)
2. Capstone Project Report