Mapping High Crime Areas to aid Smart Law Enforcement

Introduction

Where the crime rates of New York have been on a declining trend since 1940s, some neighborhoods still experience high rates of crime. So the question becomes how to use the scarce resources to effectively resolve the problem in the most efficient manner? For addressing this question, I’ll highlight areas with highest crime rates, identify which areas have a specific type of crime (e.g. sexual, homicide etc.) so that targeted interventions can be instituted, and what are the common attributes of the venues around those neighborhoods so that an association can be established to predict which areas can be at risk of such crimes.

Data

For answering the three questions, I will be using two datasets:

1. New York Arrest Data <https://data.cityofnewyork.us/Public-Safety/NYPD-Arrest-Data-Year-to-Date-/uip8-fykc/data>
   1. To identify neighborhoods which are experiencing high crime rates, and the types of those crimes
2. Foursquare Location Data
   1. To find common attributes in venues around those neighborhoods