

Project: Find the safe/closer community around University of Toronto

1.Introduction/Business Problem

A couple of friends have a child that plans to go to University of Toronto. Friends are thinking about moving to Toronto too, they want to find a community that meets following criteria:

- (1) The community is safe and has lower crime rate.
- (2) The community has more grocery stores, restaurants.
- (3) The community is close to University of Toronto.
- (4) The median house price is not extremely high.

The solution of this problem could be helpful for those who want to move to Toronto because of a job offer from University of Toronto, or those students who are admitted to University of Toronto.

2.Data

I plan to use following Data Sources:

- (1) FourSquare location data to find grocery stores, restaurants, find the driving distance from the community to University of Toronto.
- (2) Toronto Police Open data
This free open data has crime data. All criminal records are listed in the community level and even with latitude and longitude information. It is very easy to find the crime rate by community.
e.g.: <https://data.torontopolice.on.ca/datasets/assault-2014-to-2019/data>

(3) Median house price per community:

This website lists the median house price per city, and per community. It is very easy to find the house price information.

<https://housesigma.com/web/en/analyze/city-median-price-report>

I am going to use the Decision Tree Machine Learning model to build a community selection mechanism to help the target audience.

3. Python Code