



The Battle of the Neighborhoods - Toronto

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Introduction

Moving to another country is a difficult task. Trying to discover where to live, where is safe and have all to offer is no simple task. Imagine that a company is moving to another country to make a new company headquarters and many of the employers are moving with. How can we simplify the search?

First let's define what we are considering a good neighbor:

- Safe place
- Enough attributes of interest for each one (Type of restaurants, Parks and other)



Data

Based on definition of our problem, factors that will influence our decision are:

- The total number of crimes committed in each of the borough during the last year.
- The most common venues in each of the neighborhood in the safest borough selected.

Following data sources will be needed to extract/generate the required information:

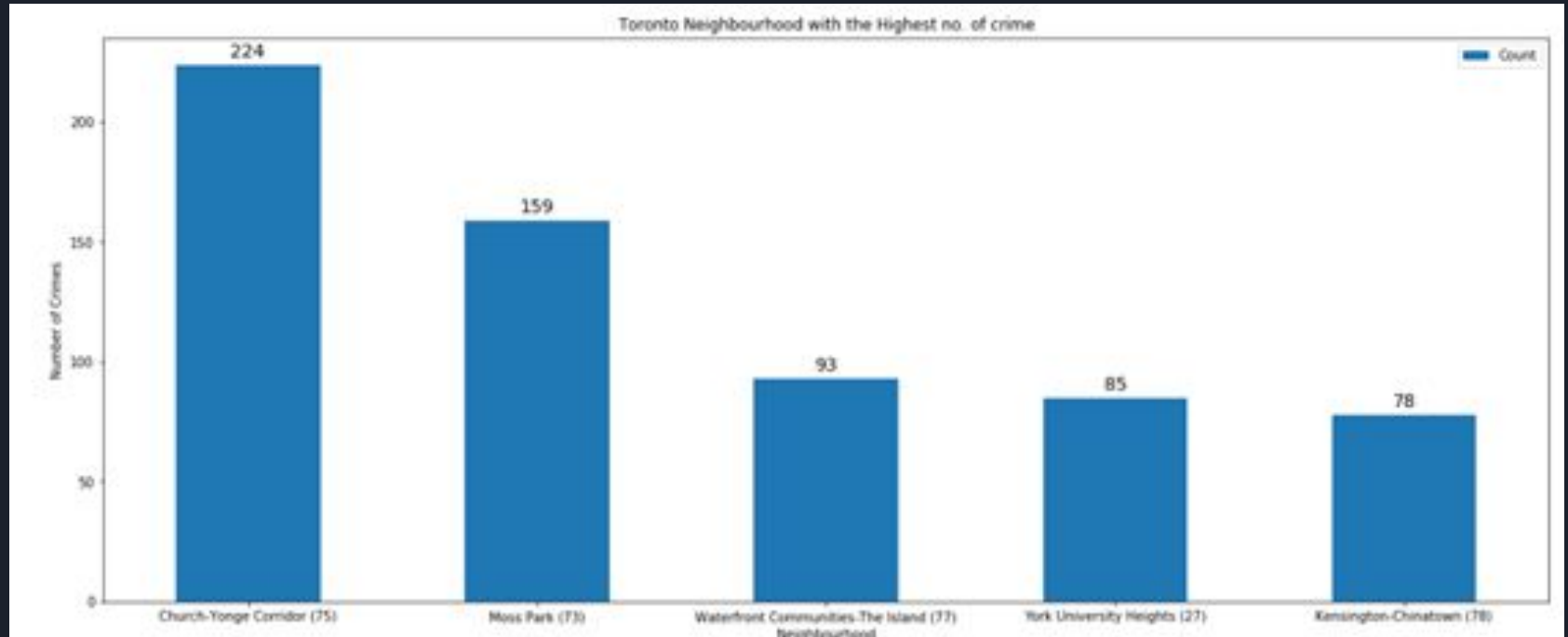
- crimes table: <http://data.torontopolice.on.ca/datasets/robbery-2014-to-2018>
- Toronto Neighborhoods: https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M



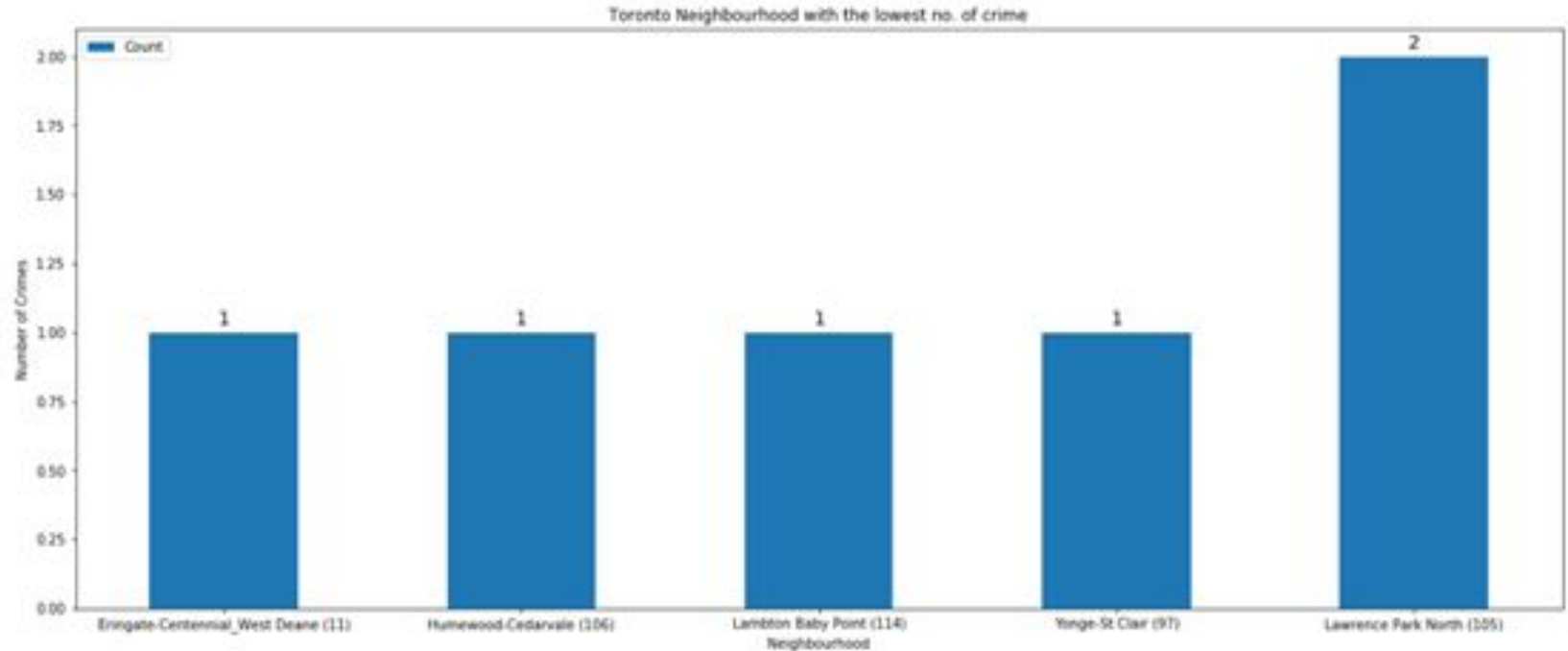
Safety


To discover that was looked the crimes table and reorganizing it in a way that was possible to see the crimes committed during all 2018 grouped by neighborhood. After that was looked in the top 5 and the lowest 5 for more information.

neighborhood with the highest number of crimes committed in 2018



neighborhood with the lowest number of crimes committed in 2018





Is possible to see the 2 neighborhoods com
least number of crimes?

Eringate Centennial West Deane
Humewood Cedarvale

Which borough they are part of?

Etobicoke and York

Etobicoke and York neighborhoods





With the Borough names, is possible to explore what are the most common venue in each one.

Cluster in Etobicoke





Example: Red clusters

Cluster 1 (Red)

1. River

2. Park

3. Wings Joint

4. Coffee Shop

5. Fried Chicken Joint

6. Filipino Restaurant

7. Fast Food Restaurant

8. Drugstore

9. Discount Store

10. Convenience Store

1. Pizza Place

2. Mobile Phone Shop

3. Park

4. Grocery Store

5. Filipino Restaurant

6. Fast Food Restaurant

7. Drugstore

8. Discount Store

9. Convenience Store

10. Coffee Shop

Cluster in York





Example: Red clusters

Cluster 1 (Red)

- | | | | |
|----|----------------------|-----|---------------|
| 1. | Park | 8. | Hockey Arena |
| 2. | Women's Store | 9. | Grocery Store |
| 3. | Market | 10. | Field |
| 4. | Fast Food Restaurant | | |
| 5. | Trail | | |
| 6. | Tennis Court | | |
| 7. | Sandwich Place | | |



Results

Now if all that data collected and analyzed is possible to see what are the most common venues in each cluster.

Example 1: In Etobicoke cluster 3 the most common venue is a drugstore. That information could be useful for an employee that needs medicine with regular basics for him or his family.

Example 2: Imagine that an employee loves pizza and wants to live nearby some place that will have a large variety of stores in that regard. Looking to the clusters the best place for him would be Cluster 5 in Etobicoke.



5. Discussion

This project could use several layers with the proper datasets. With access of rental prices for example, could be add in the project the mean value of the rental in the borough mention.

6. Conclusion

It's possible to see which neighborhood is safer and where each employee will find a place that will accommodate his/her needs.

That's a simple example of the potential in data science. With a good data, and some insight is possible to understand and expand in some many aspects of our lives. Reducing cost, reducing problems, being more efficient.