

# Capstone Project

**Suggest a neighbourhood for Noah to open a pizzeria that can give good business.**

# Introduction

- Noah is from East York, Canada who wants to open a pizzeria in East York.
- He intends to make maximum business
- He wants to avoid clashes with existing pizza places.
- So, our work here is to help Noah find the best neighbourhood in East York to open his pizzeria considering all these constraints.

# Business Problem

- To find out the best neighbourhood to open the pizzeria.
  - Information about all the neighbourhoods in Toronto.
  - Analyze each neighbourhood in terms of potential customers and competitions.

# Data

To address the problem in hand we would need the following data;

- The neighbourhoods of Toronto, Canada.
- Geospatial data for these neighbourhoods, to obtain Foursquare data
- Foursquare data for exploring the neighbourhoods in terms of various pizza places, schools, offices and parks in various neighbourhoods of East York, Toronto.

# Methodology

- Neighbourhoods from East York are to be extracted.
- Foursquare data for these neighbourhoods for the selected venue categories are procured.
- Count of each of the venues in each neighbourhood is calculated.
- Weights were assigned to each of these categories based on its importance with respect to the problem
- A popularity score was computed as a weighted sum of each of these categories

# Results

	Neighbourhood	Popularity Score
4	Thorncliffe Park	17.0
0	Woodbine Gardens	16.5
1	Parkview Hill	16.5
2	Woodbine Heights	13.5
5	East Toronto	9.5
3	Leaside	7.5

- Thorncliffe Park with a Popularity Score of 17.0 is the best neighbourhood to open a pizzeria.
- Woodbine Gardens and Parkview Hill with score of 16.5 are the next options.

***So, the best place for Noah to open his pizzeria in East York is Thorncliffe Park***