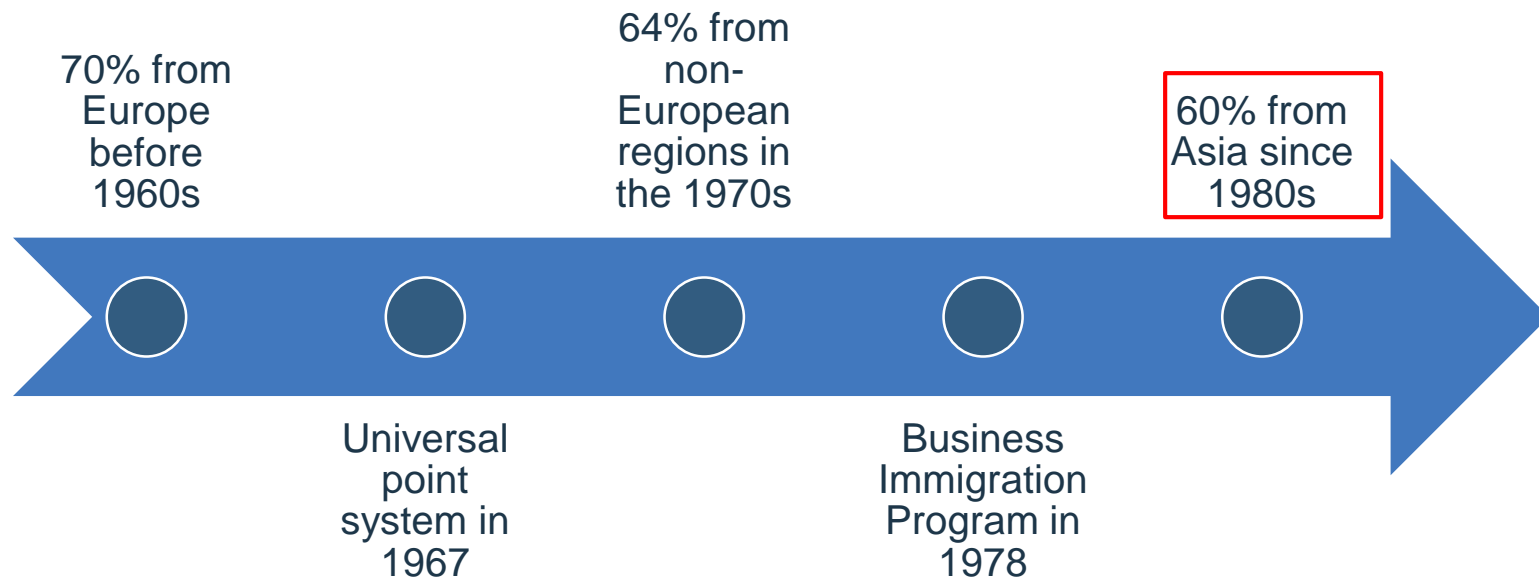


# IBM DATA SCIENCE PROFESSIONAL CAPSTONE PROJECT

WEN YIDA  
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# Background: Immigration to Canada



# Quick Fact: Toronto

- Toronto – Population 6.1 million by 2019
- 10.8% of the city's population, or 658 K(\*) are Chinese, based on 2016 Census -> **Big Market Share**
- Location is key to run a successful Chinese Cuisine Restaurant.



Source: <http://worldpopulationreview.com/world-cities/toronto-population/>

# About this project

- This is the capstone project for IBM Data Science Professional Certificate.
- Due to very high market share, it is a very good opportunity to open an Chinese Cuisine restaurant in Toronto.
  - This project is trying to find out the ideal location for open Chinese Cuisine restaurant in Toronto:
    - Neighborhoods list in Canada Toronto (week 3, from Wikipedia);
    - Use Foursquare API to get list of venues and coordinates;
    - Coordinates of Toronto Neighborhoods;
    - Use K-means Clustering to group by Toronto Neighborhoods by Chinese Cuisine restaurants.
    - Visualize the map and data by using Folium taught during visualization class.
  - Target Audience:
    - Entrepreneurs
    - Joint Venture or Private Equity who has interests on acquiring Chinese restaurants.

# Data

- To solve this problem, we will need below data:
  - List of neighborhoods in Toronto, Canada;
  - Latitude and Longitude of these neighborhoods;
  - Venue data related to Chinese restaurants;
  - Neighborhoods that are good to open an Chinese Restaurants.

## EXTRACTING THE DATA

- The list of Toronto neighborhoods in Wikipedia;
- Latitude and Longitude data of neighborhoods via CSV provided during Week 3;
- Foursquare API to get venue information related to Chinses restaurants.

# Result and Visualization (To-Be-Update in Week 5 Result)

- To be updated during week 5 after program is done.
- Will give out the location where is ideal location (to be updated).



# THANK YOU



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