



SEGMENTATION OF SHOPS

by
Median Household Income
in Metro Vancouver

Background

- Objective: Find segmentation of shops and effect of income levels
- Location: Metro Vancouver
- Reasons for this location:
 - *Highly diverse urban area*
 - *Wide range of income level*
 - *Large collection of shops*

Data Source

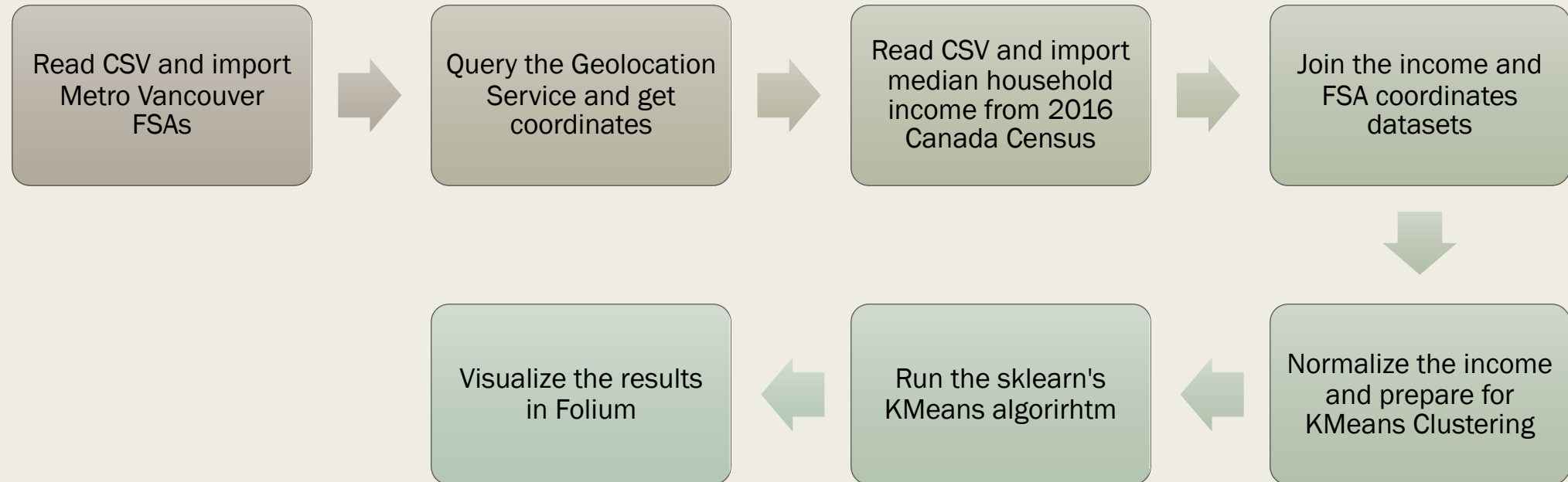
- 2016 Census Profile from Statistics Canada
- Geolocation Services API
- Foursquare API

Methodology

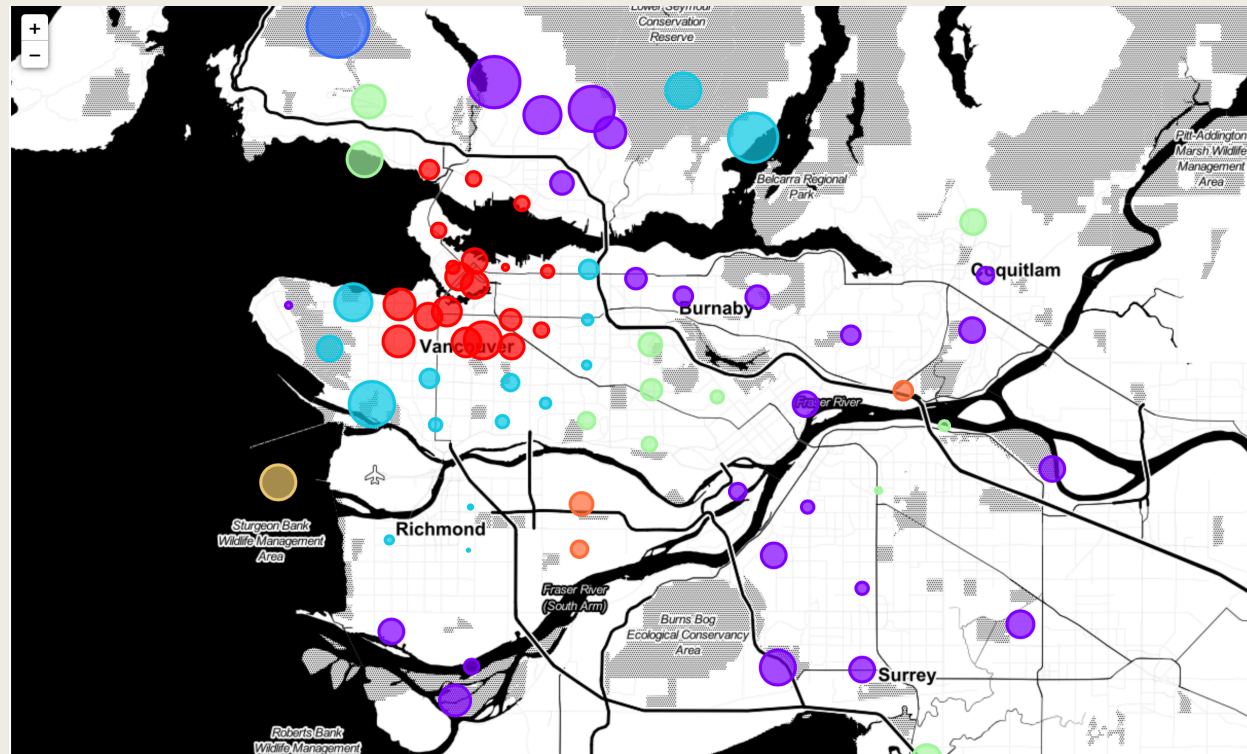
- Python – Jupyter Notebook

- *Pandas*
- *Requests*
- *Sklearn*
- *Etc.*

Data Process Pipeline



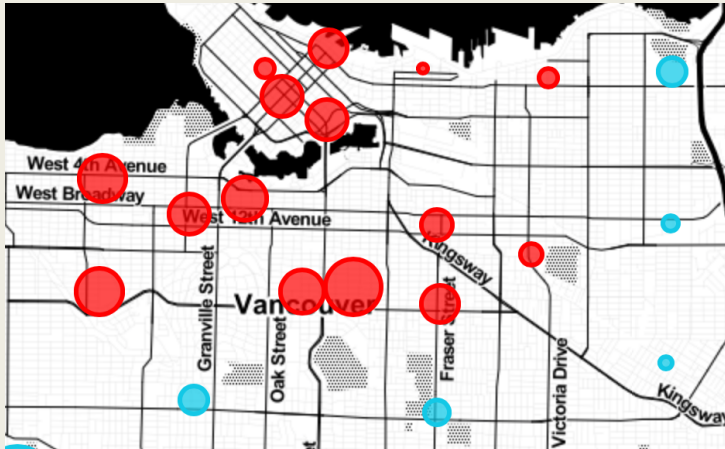
Results



Color: Clusters based on
common restaurants

Size: Median Household
Income

Example

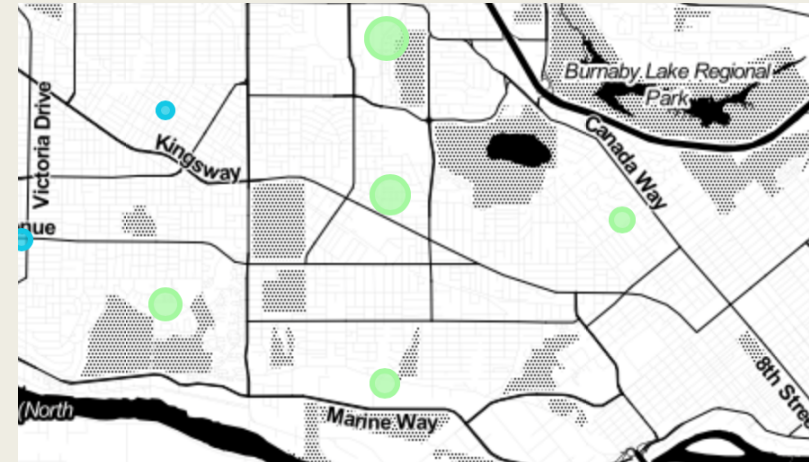


Red Cluster:

Most Common Shops:

- Grocery Store
- Apparel
- Pharmacy
- Liquor Store

Income: \$95407



Green Cluster:

Most Common Shops:

- Big Box Store
- Supermarket
- Discount Store

Income: \$91936

Discussion

- Higher income -> More expensive shops
- More factors may affect the shop categories, such as:
 - *Culture*
 - *Race*
 - *Household size*
 - *Etc.*

THANK YOU

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