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# Where to start a yoga studio?

Segmenting and clustering of neighborhoods in  
Calgary, Alberta, Canada

# Background and aim

- Yoga is popular
- Positive effects, e.g.:
  - ➔ Quality of life
  - ➔ Academic performances
  - ➔ Stress, anxiety, depression
  - ➔ Pain
  - ➔ Sleep patterns
- More yoga studios is beneficial
- What is the right spot in Calgary?

# Data acquisition and processing

- Wikipedia dataset
  - ➔ Postal codes
  - ➔ Boroughs
  - ➔ Neighborhoods
  - ➔ Coordinates
- Delete missing values
- Foursquare API
  - ➔ Nearby venues
  - ➔ One hot encoding

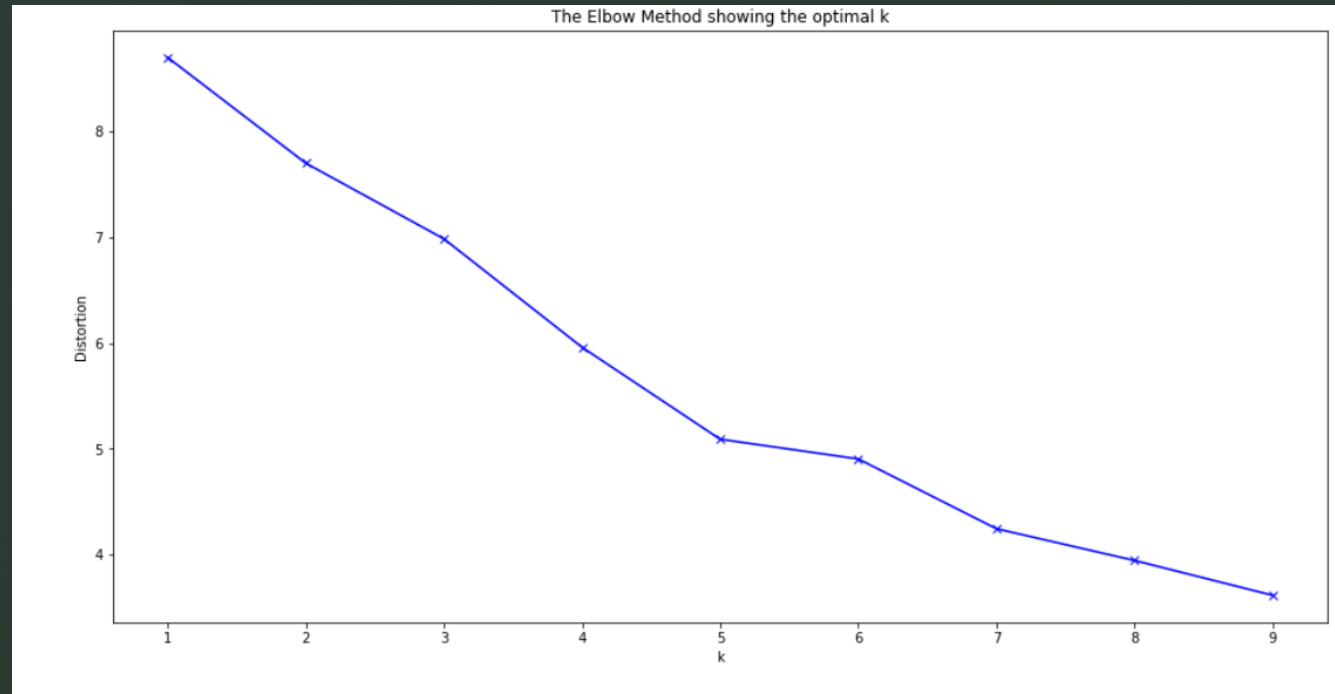




# Analyses

- K-means clustering on neighborhoods
- Top 10 venues
- Elbow plot
- Division of yoga studios

# Results

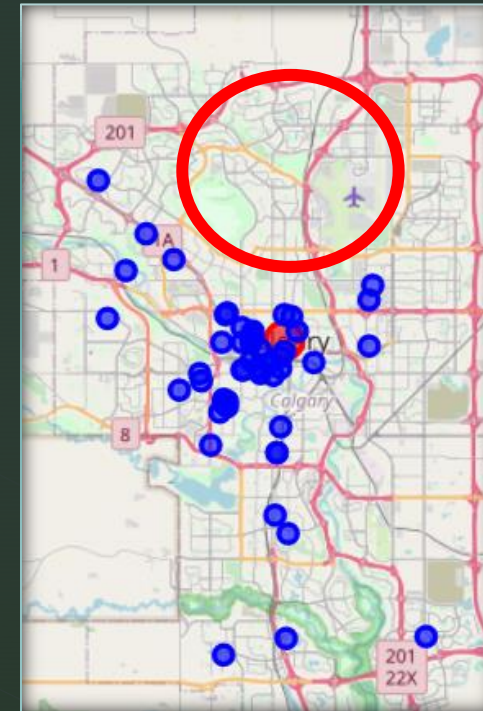
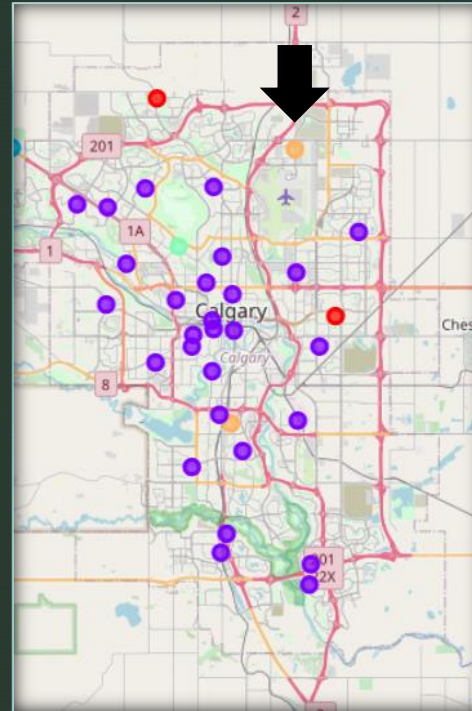


- Not really a good plot
- $K = 5$



# Clusters and division

- 5 clusters
- Most neighborhoods in cluster 2 (purple)
- No yoga studios in Northeast Calgary  
→ orange dot and red circle





Advise

# Start up of a yoga studio in Northeast Calgary



# Research suggestions

- Other analysis methods such as DBSCAN
- Look into preferences and needs in Northeast Calgary