

Battle of Neighborhoods of -Port Elizabeth & Pretoria in South Africa

Capstone Project

1. Introduction / Business Problem

- When thinking about relocating to a new city or country for work purposes or to start a new life, or to go for a holiday destination people tend to research areas before moving. This research includes population rate, average house price, school ratings, crime rates, weather conditions, recreational facilities, holiday destinations-tourism, Carnivals and Sports events/activity. etc.
- Based on the above, a search engine algorithm would be an efficient tool to use that will allow users to enter cities and get the neighborhood name that best suits their lifestyle or living conditions.
- In this project, we will study in detail the area classification using foursquare data and machine learning segmentation and clustering. And segment areas of two cities based on the most common places captured from Foursquare.
- This could be done as the **aim** of this Project using an algorithm (*Using segmentation and clustering*) that will perform an extensive analysis on
 1. The similarities and dissimilarities between neighborhoods in the two cities of the user's search criteria, and
 2. Determine which neighborhoods best suits their lifestyle.

For this project, I will be developing a recommendation system using the **Port Elizabeth** and **Pretoria** cities in South Africa as my search criteria:

**** Brief Information About: Port Elizabeth and Pretoria ****

- **Port Elizabeth** and **Pretoria** are two major cities in **South Africa** Both the cities become a center of attention for residential, holiday destinations-tourism, education, job employment, shopping and sports activity. Both cities are well known in South Africa and become the top choice for local and foreign communities. Also for the best holiday destinations in the world because of its Mediterranean climate, vibrant nightlife, Michelin Star restaurants, scenic coastal drives, staggering mountain landscape and friendly people; the latter holds the top spot as a family-friendly destination and for its wonderful beaches and water activities.