

Capstone Project - The Battle of Neighborhoods

Introduction

Kannur and Kozhikode are two major cities in Kerala, India. Both cities become a center of attention for residential, job employment, tourism, education, and shopping and sports activity. Both cities are well known in India.

Brief information about both cities:

- **Kannur** is a city and a Municipal Corporation in Kannur district, state of Kerala, India. Kannur is the largest city of North Malabar region.[1] As of 2011 census population of Kannur was 232,486.[2] Kannur is one of the million-plus urban agglomerations in India with a population of 1,642,892 in 2011. (Source: <https://en.wikipedia.org/wiki/Kannur>)
- **Kozhikode**, also known as Calicut, is an Indian city, second-largest urban agglomeration in the State of Kerala and 20th largest in the country with a population of 2 million as of 2011 (Source: <https://en.wikipedia.org/wiki/Kozhikode>)

Objective

In this project, we will study in details the area classification using Foursquare data and machine learning segmentation and clustering. The aim of this project is to segment areas of Kannur and Kozhikode based on the most common places captured from Foursquare.

Using segmentation and clustering, we hope we can determine:

1. The similarity or dissimilarity of both cities
2. Classification of area located inside the city whether it is residential, tourism places, or others

Data

The data acquired from wikipedia pages and restructure to csv file for easier manipulation and reading. Both files uploaded to my github for references. Link to the files are:

<https://github.com/sharikaavi/CapstoneProject/blob/master/Kannur.csv>

<https://github.com/sharikaavi/CapstoneProject/blob/master/Kozhikode.csv>

Another aspect to consider for this project is the foursquare data. I believe that the data as good as provided, meaning although we are using Foursquare data for segmentation and clustering, the amount and accuracy of data captured can't 100% determine correct classification in real world.