**How to find a place in Shanghai to open a new coffee shop**

# Introduction

## Description and Discussion of the background

Shanghai is one of the four municipalities of the People's Republic of China. It is located on the southern estuary of the Yangtze, with the Huangpu River flowing through it. With a population of 24.28 million as of 2019, it is the most populous urban area in China and the second most populous city proper in the world. Shanghai is a global center for finance, innovation and transportation and the Port of Shanghai is the world's busiest container port.[1]

As you see, Shanghai has a high population. There are a lot of retails in the city. The wealth is different from each district. A friend want to open a coffee shop in Shanghai.

The coffee shop he want to open has a theme about the culture, so he want to the place where he open the shop can have culture background. And around the shop, there is not too much other coffee shops. Of course, the more the people want to drink coffee in the place, the better.

## Data Description

As I consider all the problem above，we can create a map with all the districts’ data which show the following information.

* I get the ‘街道’ district from the wiki page.[2]
* Use the Geocoder to turn the 街道’district’ to longitude and lagitude.
* Use the four square api to get the venues around the ‘街道’
* Group the ‘街道’ with the most ’culture’
* Find the 街道 has the least coffee shops.
* Download a geojson file of Shanghai from gitbit[3]
* Create a hot map with ‘区’district to show which 区 has the highest house price

## <https://en.wikipedia.org/wiki/Shanghai>

## <https://zh.wikipedia.org/wiki/%E4%B8%8A%E6%B5%B7%E5%B8%82%E4%B9%A1%E7%BA%A7%E4%BB%A5%E4%B8%8A%E8%A1%8C%E6%94%BF%E5%8C%BA%E5%88%97%E8%A1%A8>

## <https://github.com/d3cn/data/tree/master/json/geo/china/province-city>