

## Introduction:

Hangzhou is one of the top 5 developed cities in China and in 2022 the Asian Games is going to take place in Hangzhou. As you may know, there are several world-class companies, especially IT giants in Hangzhou like Alibaba and Netease. Among them, Alibaba has become the largest retailer company in the world which also indicates its asset is considerable. For the purpose of this capstone project, let's say Alibaba wants to build a luxury hotel before 2022 so that it can serve VIPs from all over the world when Asian Games begin. But first they want to build the hotel in a place where there are **not so many peers** to compete and also the hotel has to be near train or subway stations to guarantee the **convenience of transportation**. Therefore, I am chosen to provide information to help the board of directors of Alibaba company decide ideal place to build the hotel. Thus, Foursquare system can offer me location data of main transportation stations and big hotels in Hangzhou to help me accomplish my mission.

## Data:

The data collected and arranged in this project is mainly about hotels and stations in Hangzhou, China obtained from Foursquare system on 2/4/2020. The data includes latitude and longitude, i.e. the geographic location coordinates. A table about stations is shown below.

	name	categories	address	lat	lng	postalCode	state
0	Amethyst Hotel (浙江紫晶大酒店 Amethyst Hotel)	Hotel	78 Qinchun E Rd   庆春东路78号	30.260068	120.187794	310016	浙江
1	杭州大酒店 Hangzhou Hotel	Hotel	下城区延安路546号	30.240637	120.187955	NaN	NaN
2	SORL Hotel Hangzhou (杭州瑞立江河汇酒店)	Hotel	NaN	30.258688	120.221039	NaN	浙江
3	Hong Lou Hotel (杭州红楼大酒店)	Hotel	上城区西湖大道2号	30.247297	120.177491	NaN	浙江
4	Shangri-La Hotel Hangzhou Midtown (杭州城中香格里拉大酒店)	Hotel	长寿路6号   No.6 changshou Rd	30.262363	120.156609	NaN	浙江
5	云顶之星杭州店 Genting Star Hotel (Hangzhou)	Hotel	上城区秋涛路264号	30.240459	120.184398	NaN	NaN
6	Evergreen Hotel (四季青大酒店)	Bed & Breakfast	No. 136	30.260398	120.185587	310000	浙江
7	Relax Hotel (瑞莱克斯大酒店)	Hotel	No. 333, Wangjiang Dong Road	30.230867	120.187229	310006	浙江