

Recommendation for the opening of a Latin American Lounge bar in Zurich

1. Introduction

1.1 Background

Zurich is a multi-cultural city in Switzerland, with a high variety of restaurants, bars and coffee shops. Among the high variety of cultures and different languages spoken in Switzerland and Zurich, there is a large latin american community present in the city of Zurich.

Latin American folks are renowned for their love of dance and music, as well as to socialize and eating out. While there are a number of south American style restaurants and bars in Zurich, those establishments are often mixing south American and European culture in order to attract more guests. The intent is to provide an environment in form of a lounge bar which represents the specific characteristics of latin-american culture.

Due to its specific focus, it is therefore important to identify the best location for the opening of such lounge bar in the city of Zurich, in order to run a successful business.

1.2 Problem

Data that might contribute to determining the ideal location for a latin American lounge bar in Zurich include population, nationality by district in Zurich, as well as information regarding existing bars and pubs which represent the competition to the intended business. This project aims to recommend the ideal location for the opening of a latin american lounge bar in Zurich.

We are particularly interested in areas with no bars in vicinity which are targeting latin American people. We would also prefer locations with highest population of south American nationality.

We will use our data science powers to generate a few most promising neighborhoods based on this criteria. Advantages of each area will then be clearly expressed so that best possible final location can be chosen by stakeholders.

2. Data

Based on definition of our problem, factors that will influence our decision are:

- number of habitants of latin american nationality per district
- number of existing lounge bars that target latin American / American population

2.1 Data sources

Information regarding population and nationality by district in Zurich as well as local businesses can be found in two csv datasets that are provided publicly by the city of Zurich (<https://www.stadt-zuerich.ch/portal/de/index/ogd.html>).

One dataset provides information for nationalities as well as continent of origin by district, another dataset lists information about existing bars and lounges in Zurich by district, incl. a categorization of each business into subtypes, such as cocktail bar, music bar, pub, etc.

2.3 Feature selection

In a first step, data for Zurich districts, i.e. district names, zip codes, as well as geographic coordinates were sought. Since no suitable data source was identified which could be fetched directly from a website or service, a file was built for the different districts, with information manually fetched from https://en.wikipedia.org/wiki/Subdivisions_of_Z%C3%BCrich as well as individual Wikipedia pages for each district.

This file served as the base file for all available districts in the city of Zurich, providing also the coordinates in order to add information to visual maps.

	Stadtquartier	QuarCD	BFSCode	PLZ	PLZ2	Kreis	Latitude	Longitude
0	Rathaus	NaN	261011	8001	NaN	1	47.376389	8.548056
1	Hochschulen	NaN	261012	8001	NaN	1	47.376389	8.548056
2	Lindenhof	NaN	261013	8001	NaN	1	47.364645	8.566284
3	City	NaN	261014	8001	NaN	1	47.364645	8.566284
4	Wollishofen	NaN	261021	8038	NaN	2	47.343944	8.530114
5	Leimbach	NaN	261023	8041	NaN	2	47.328632	8.512999
6	Enge	NaN	261024	8002	NaN	2	47.364078	8.531718
7	Alt-Wiedikon	NaN	261031	8003	NaN	3	47.368441	8.517243
8	Friesenberg	NaN	261033	8045	8055.0	3	47.362441	8.504677
9	Sihlfeld	NaN	261034	8003	NaN	3	47.372576	8.517592
10	Werd	NaN	261041	8004	NaN	4	47.371225	8.528148
11	Langstrasse	NaN	261042	8004	NaN	4	47.376269	8.526671
12	Hard	NaN	261044	8004	NaN	4	47.379607	8.516012
13	Gewerbeschule	NaN	261051	8005	NaN	5	47.384676	8.531743
14	Escher Wyss	NaN	261052	8005	NaN	5	47.389670	8.517275
15	Unterstrass	NaN	261061	8006	5057.0	6	47.391446	8.538775
16	Oberstrass	NaN	261062	8006	NaN	6	47.384337	8.548424
17	Fluntern	NaN	261071	8044	NaN	7	47.376313	8.559645
18	Hottingen	NaN	261072	8032	NaN	7	47.368120	8.560444
19	Hirslanden	NaN	261073	8032	NaN	7	47.364645	8.566284
20	Witikon	NaN	261074	8053	NaN	7	47.358651	8.590252
21	Seefeld	NaN	261081	8008	NaN	8	47.362748	8.548504
22	Mühlebach	NaN	261082	8008	NaN	8	47.361522	8.554969
23	Weinegg	NaN	261083	8008	NaN	8	47.357990	8.564934
24	Albisrieden	NaN	261091	8047	NaN	9	47.375391	8.485338
25	Altstetten	NaN	261092	8048	NaN	9	47.387530	8.485842
26	Höngg	NaN	261101	8049	NaN	10	47.401979	8.499374
27	Wipkingen	NaN	261102	8037	NaN	10	47.392670	8.523429
28	Affoltern	NaN	261111	8046	NaN	11	47.419094	8.506474
29	Oerlikon	NaN	261115	8050	8057.0	11	47.410281	8.544459
30	Seebach	NaN	261119	8052	NaN	11	47.419424	8.547829
31	Saatlen	NaN	261121	8050	NaN	12	47.410191	8.564081
32	Schwamendingen Mitte	NaN	261122	8051	NaN	12	47.404200	8.581984
33	Hirzenbach	NaN	261123	8051	NaN	12	47.404628	8.587309

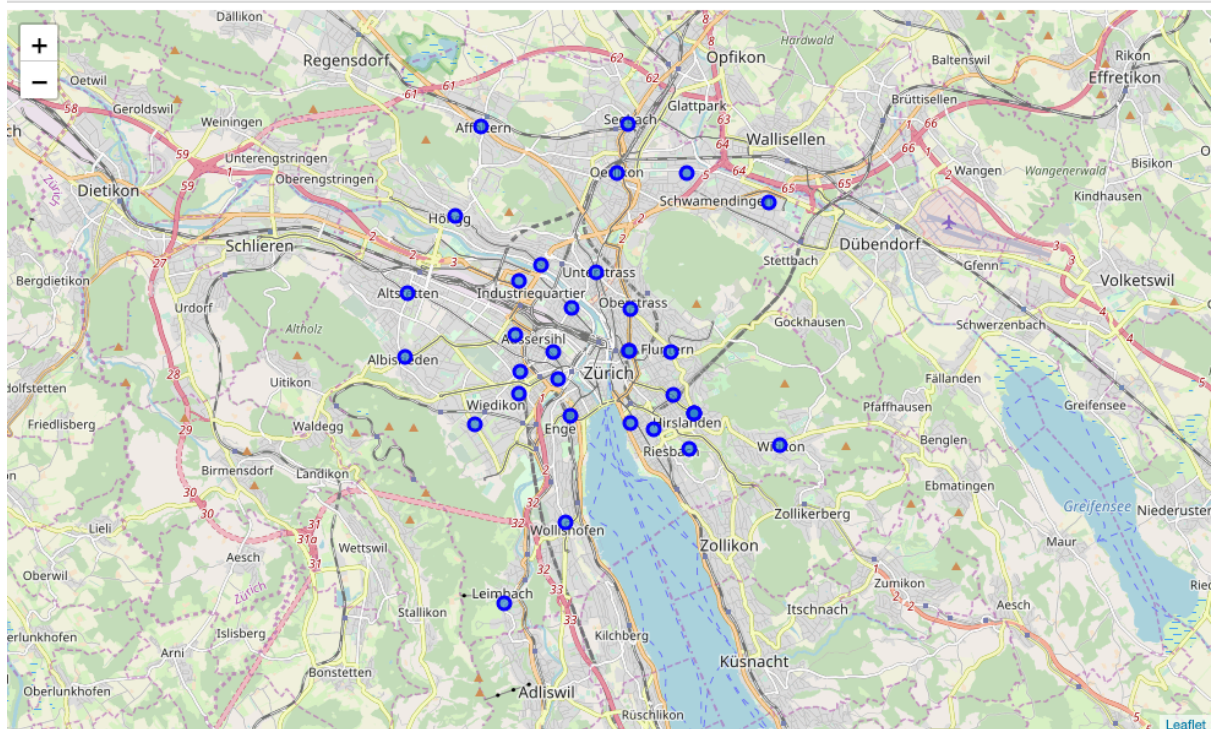
As a second step, population data was fetched from https://data.stadt-zuerich.ch/dataset/bev_bestand_jahr_quartier_nationalitaet_od3361, providing information on the population per nationality and district in the city of Zurich. Since we focus on the latin American population, we filtered the dataset by the relevant region codes – this reduced the dataset to countries from Central and South America, and the Caribbean. Since the dataset provided population figures per year since 1993, we also filtered out all information prior to 2018 which is the last captured year in the dataset.

In order to get the total population figure for latin americans per district, we had to aggregate the dataset, so that we have one row per district, with the associated number of latin American people.

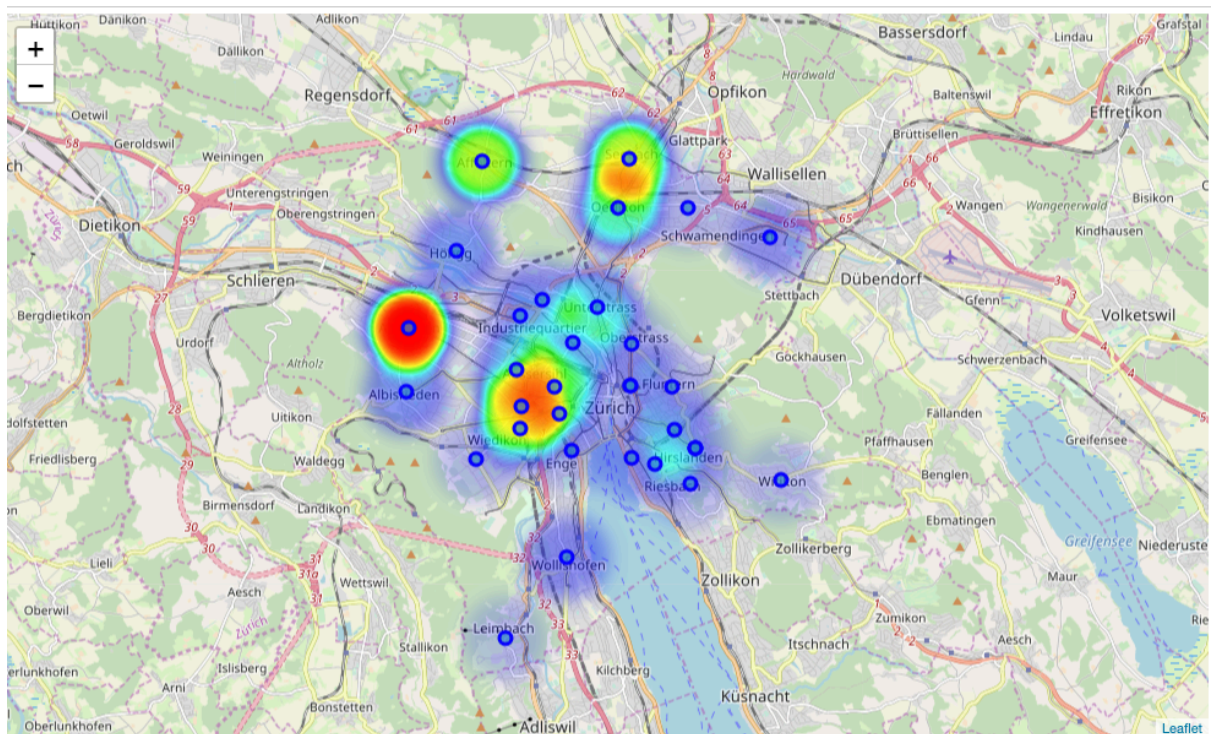
The resulting dataframe is shown below:

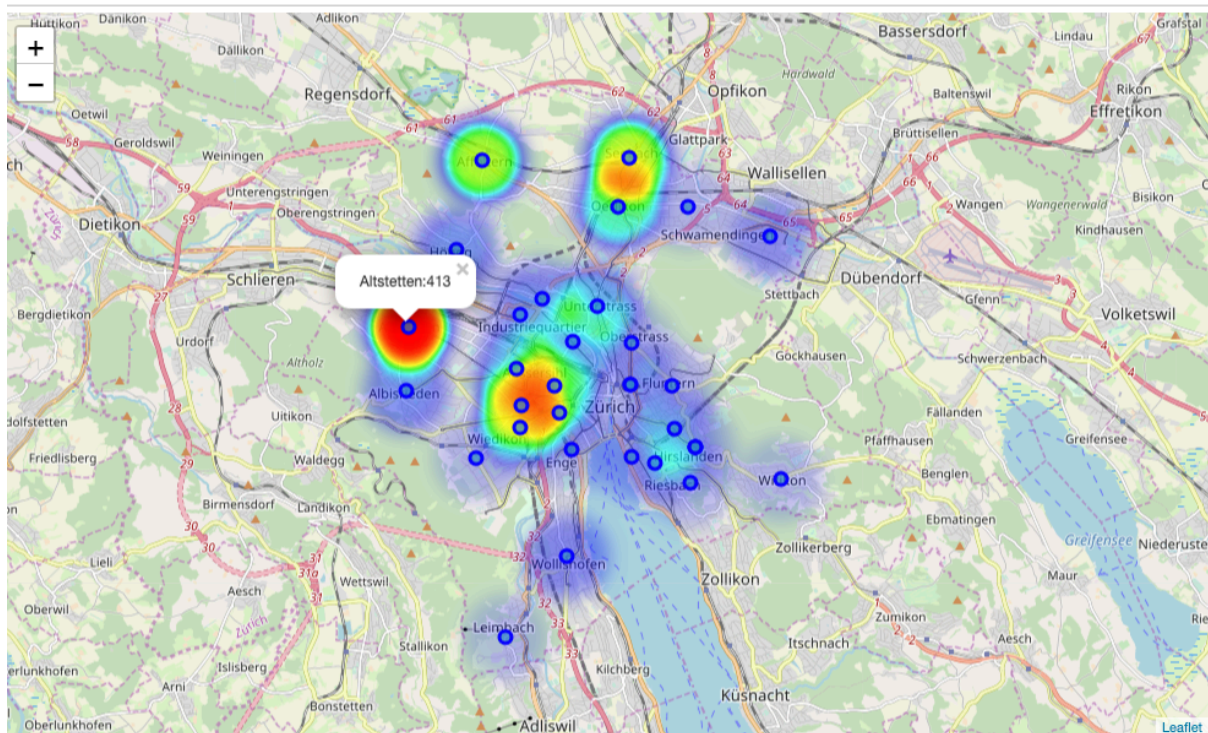
Affoltern	314
Albisrieden	178
Alt-Wiedikon	172
Altstetten	413
City	9
Enge	78
Escher Wyss	69
Fluntern	32
Friesenberg	74
Gewerbeschule	92
Hard	181
Hirslanden	48
Hirzenbach	149
Hochschulen	7
Hottingen	58
Höngg	184
Langstrasse	225
Leimbach	58
Lindenhof	5
Mühlebach	48
Oberstrass	73
Oerlikon	262
Rathaus	19
Saatlen	82
Schwamendingen-Mitte	169
Seebach	319
Seefeld	53
Sihlfeld	260
Unterstrass	201
Weinegg	50
Werd	37
Wipkingen	126
Witikon	83
Wollishofen	163

The collected data was marked on a city map of Zurich, with the blue dots showing the different districts in Zurich:



In order to show the density of latin American population per district, a heatmap was produced, highlighting visually where most latin American people reside in the city of Zurich:





Based on the provided heatmap, it becomes clear that the latin-american community in the city of Zurich concentrates on the district of Altstetten while also in the city center a larger community of latin americans is present.

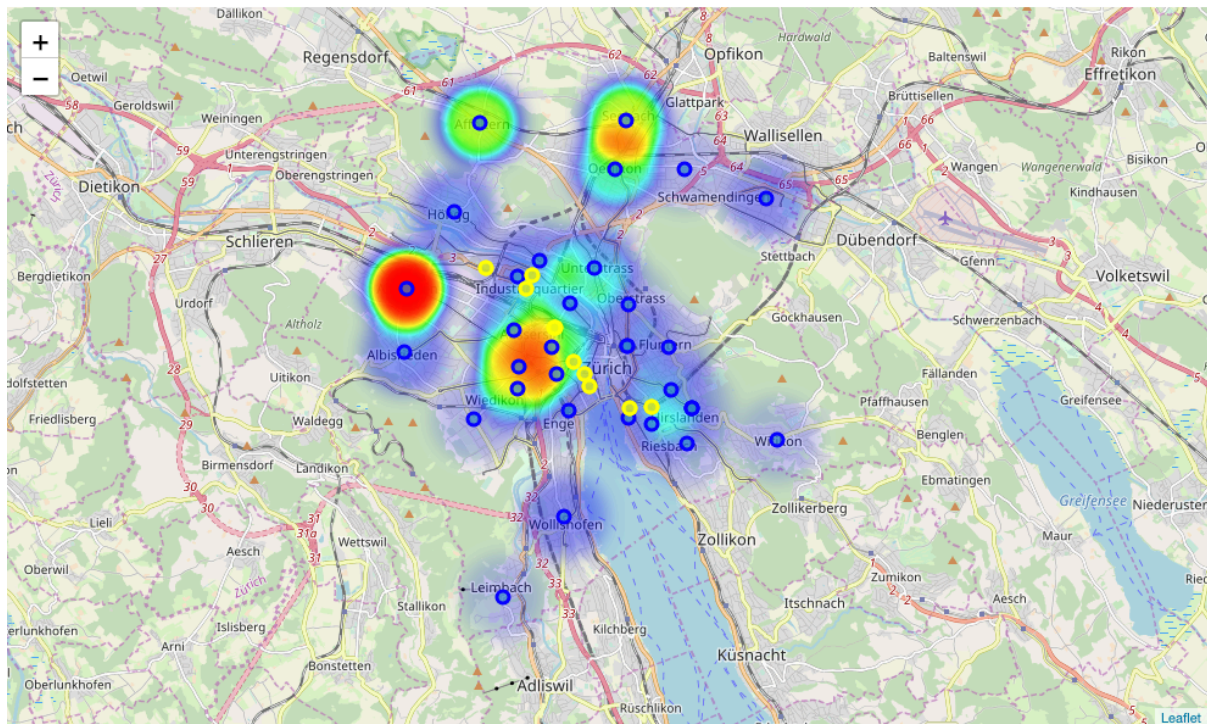
This would suggest to focus on those districts in terms of the opening of a latin-american lounge bar.

In order to fine-tune the results towards a recommendation, information regarding existing businesses, i.e. existing bars and lounges in Zurich which target the latin-american or American community. The public dataset at https://data.stadt-zuerich.ch/dataset/statistisches_quartier/resource/c837926e-035d-48b9-8656-03f1b13c323b/download/statistische_quartiere.json provides relevant information by district, incl. a categorization of each business into subtypes, such as cocktail bar, music bar, pub, etc.

The data was filtered by target audience (latin, American):

	Name	Postal Code	Latitude	Longitude
0	Escherwyss Club	8005	47.389899	8.521228
1	Jade Club	8001	47.371059	8.535909
2	PurPur	8008	47.364734	8.548579
3	Fat Tony	8004	47.380067	8.527701
4	Le Raymond Bar	8001	47.368860	8.537515

The resulting businesses shown above were added to the city map of Zurich (shown as yellow dots):



2.4 Recommendation

Based on the performed analysis, it is highly recommended to target the Zurich district of Altstadt for the opening of a new latin-american lounge bar.

This is driven by the following reasons:

- The district of Altstadt shows the highest density of latin American people across Zurich and therefore a target clientele present in this district (although clients from other cultures or nationalities are expected as well)
- Competing businesses are rather concentrated in the city center

