

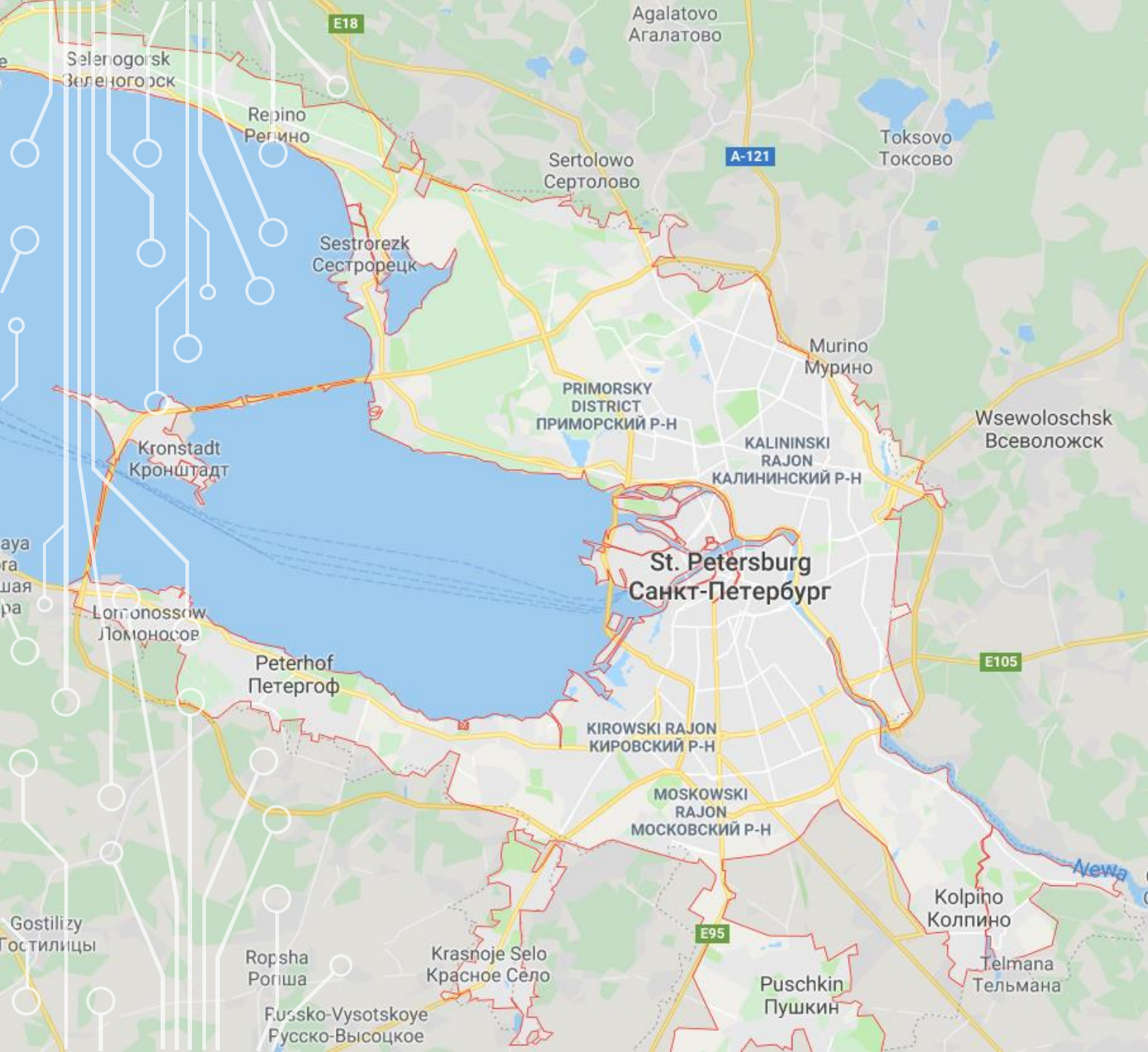


COURSERA CAPSTONE

OPENING A NEW SUSHI BAR IN SAINT PETERSBURG, RUSSIA

BY: PAVEL KRAVETSKIY

JUNE 2019



INTRODUCTION

- Saint Petersburg overview
 - Description
 - Location
 - Business perspective

BUSINESS PROBLEM

- Business question: Which neighborhoods would be a good choice for opening a new sushi bar in Saint Petersburg, Russia?
- Analysis and selection of the best location for a sushi bar
 - Using exploratory data analysis
 - Using clustering algorithm
- Success criteria

DATA

Data required:

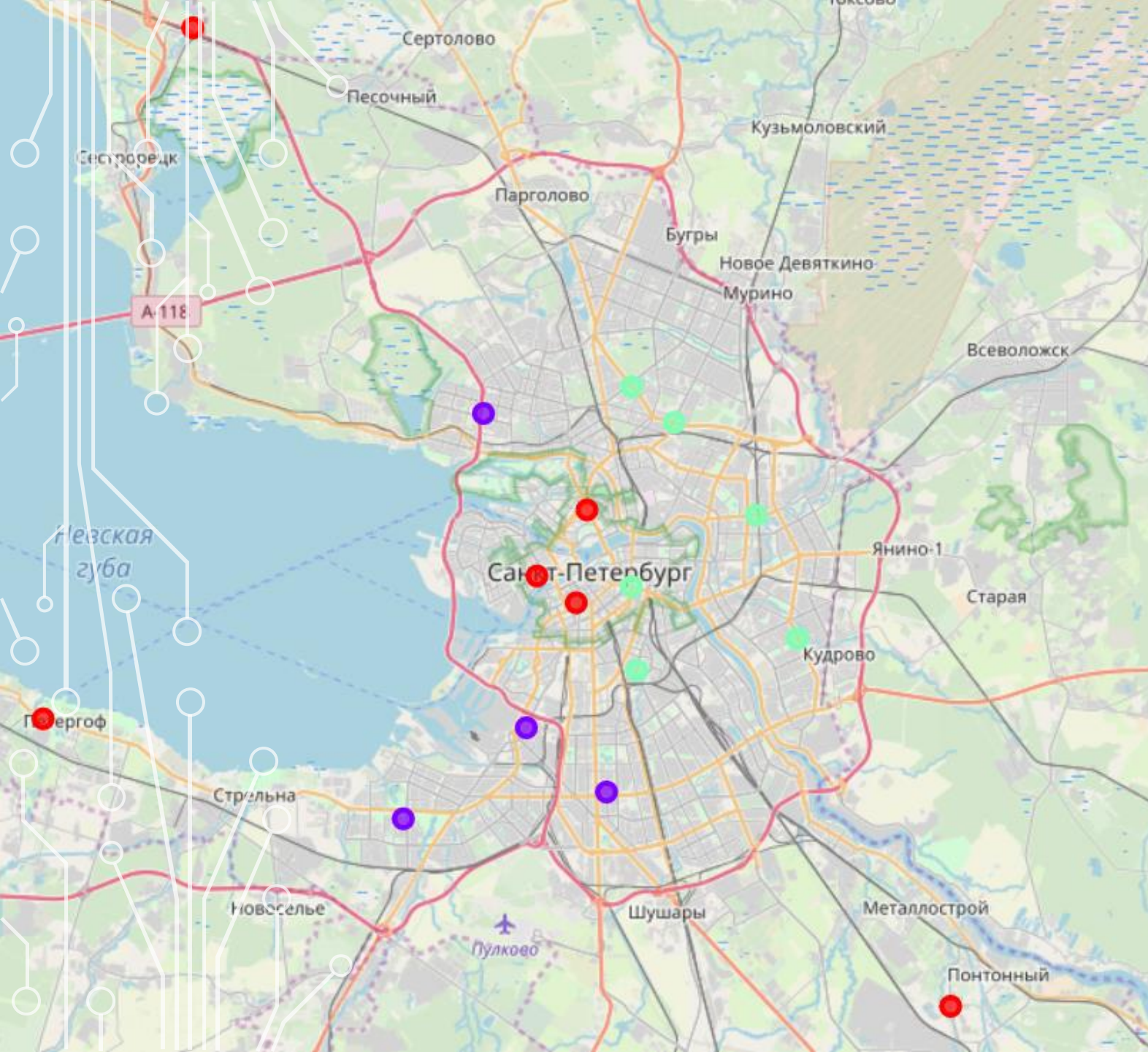
- List of neighbourhoods in Saint Petersburg
- Latitude and longitude coordinates of those neighbourhoods
- Venue data, particularly data related to sushi bars

DATA

	Neighborhood	Latitude	Longitude	VenueName	VenueLatitude	VenueLongitude	VenueCategory
0	Admiralteysky District	59.92659	30.3056	Булочная Ф. Вольчека	59.926702	30.307921	Bakery
1	Admiralteysky District	59.92659	30.3056	Chao, mama!	59.926993	30.308474	Hotel
2	Admiralteysky District	59.92659	30.3056	CUP IN CUP	59.928074	30.302705	Coffee Shop
3	Admiralteysky District	59.92659	30.3056	ЛУУК	59.926154	30.310403	Clothing Store
4	Admiralteysky District	59.92659	30.3056	Расман	59.923537	30.307985	Hookah Bar

METHODOLOGY

- Web scraping Wikipedia page for neighbourhoods list
- Cleaning of the data
- Get latitude and longitude coordinates using Geocoder
- Use Foursquare API to get venue data
- Group data by neighbourhood and taking the mean of the frequency of occurrence of each venue category
- Filter venue category by sushi bar
- Perform clustering on the data by using k-means clustering
- Visualize the clusters in a map using Folium



RESULTS

Categorized the neighbourhoods into 3 clusters :

- Cluster 0: Neighbourhoods with low number to no existence of sushi bars
- Cluster 1: Neighbourhoods with moderate number of sushi bars
- Cluster 2: Neighbourhoods with high concentration of sushi bars

DISCUSSION

- Most of the sushi bars are concentrated around the central area of the city
- Highest number in cluster 2 and moderate number in cluster 1
- Cluster 0 has very low number to no sushi bars
- Findings of this project will help the relevant stakeholders to capitalize on the opportunities on high potential locations while avoiding overcrowded areas in their decisions to open a new sushi bar in Saint Petersburg

CONCLUSION

- Open a new sushi bar in neighbourhoods in cluster 0 with little to no competition
- Can also open in neighbourhoods in cluster 1 with moderate competition if have unique selling propositions to stand out from the competition
- Avoid neighbourhoods in cluster 2, already high concentration of sushi bars and intense competition

The background is a blue gradient with decorative white circuit-like lines in the corners. These lines consist of straight segments and small circles, resembling a stylized electronic circuit or data flow diagram.

THANK YOU FOR YOUR ATTENTION!