

# **The Battle of Neighborhoods**

Best Location for Bookstores near Swiss Universities

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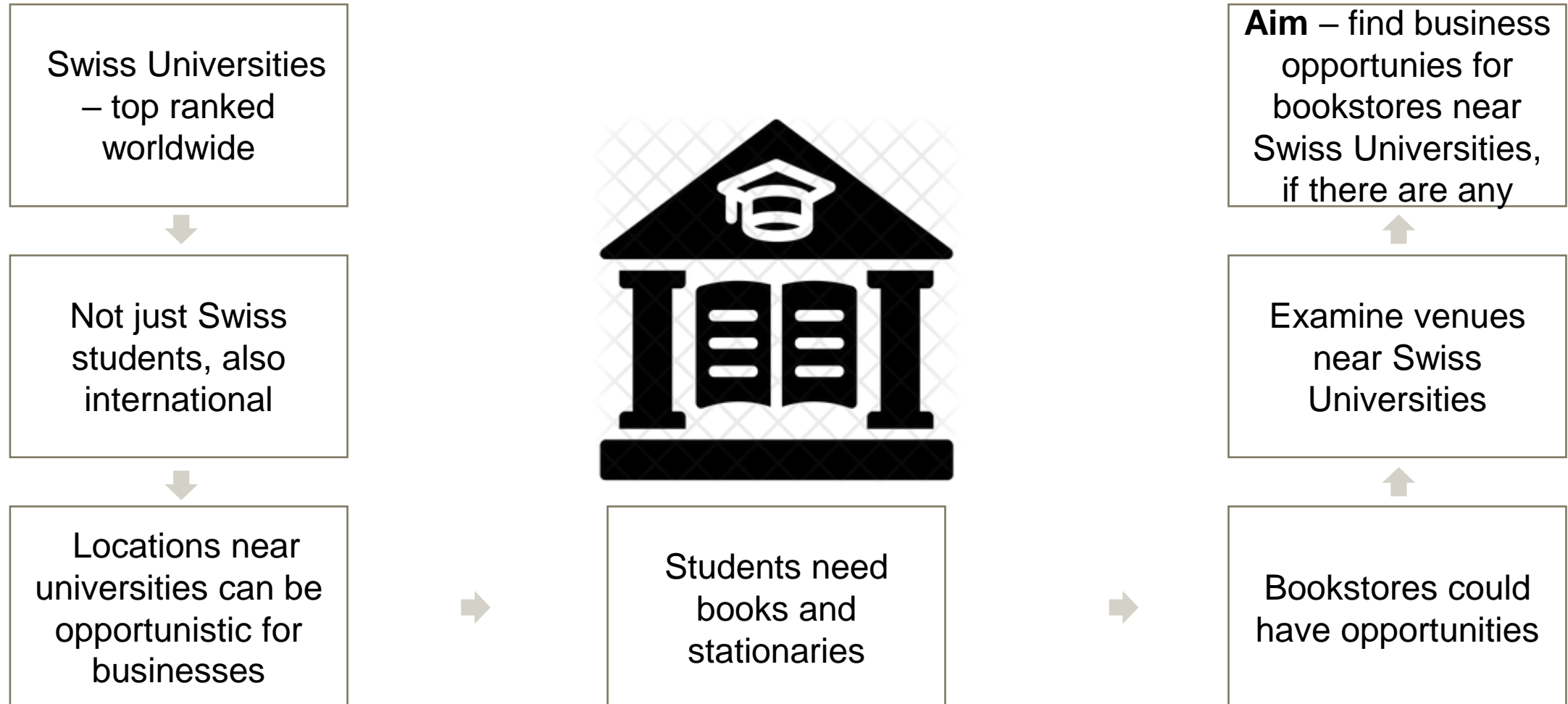
# Agenda

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- Introduction
- Data Acquisition and Clean-Up
- Methodology
- Results
- Discussion
- Conclusion

# Introduction

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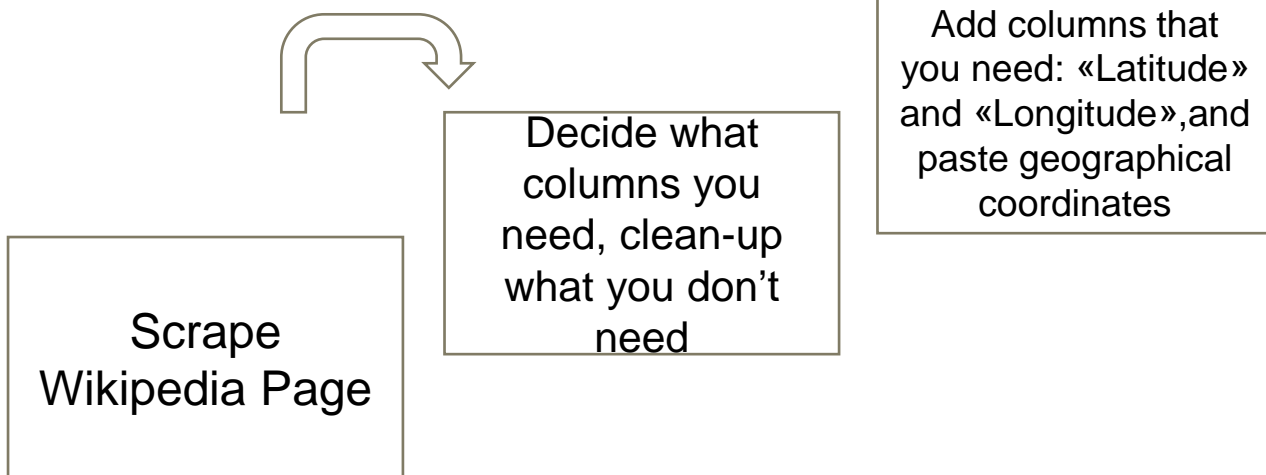


# Data Acquisition and Clean-Up

- What do we need ?

- List of Swiss Universities
- Geographical Coordinates of Swiss Universities

- How do we get it?



	Neighborhood	Abbreviation	Borough	Latitude	Longitude
0	University of Basel	UNIBAS	Basel	47.558600	7.583600
1	University of Bern	UNIBE	Bern	46.950519	7.438109
2	University of Fribourg	UNIFR	Fribourg	46.806250	7.151740
3	University of Geneva	UNIGE	Geneva	46.199496	6.145142
4	University of Neuchâtel	UNINE	Neuchâtel	46.993730	6.938547
5	University of Lausanne	UNIL	Lausanne	46.521075	6.580322
6	University of Lucerne	UNILU	Lucerne	47.049444	8.312222
7	University of Lugano	USI	Lugano	46.011000	8.958000
8	University of St. Gallen	HSG	St. Gallen	47.431667	9.374722
9	University of Zurich	UZH	Zurich	47.374593	8.548889
10	Swiss Federal Institute of Technology Lausanne	EPFL	Lausanne	46.519174	6.566653
11	Swiss Federal Institute of Technology Zurich	ETH / ETHZ	Zurich	47.376402	8.548025

# Methodology

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## Foursquare API

- Firstly, a function is created and run that extracts the categories of venues near Swiss Universities in the radius of 500 meters.
- Dataframe “venues” is created.

## Count

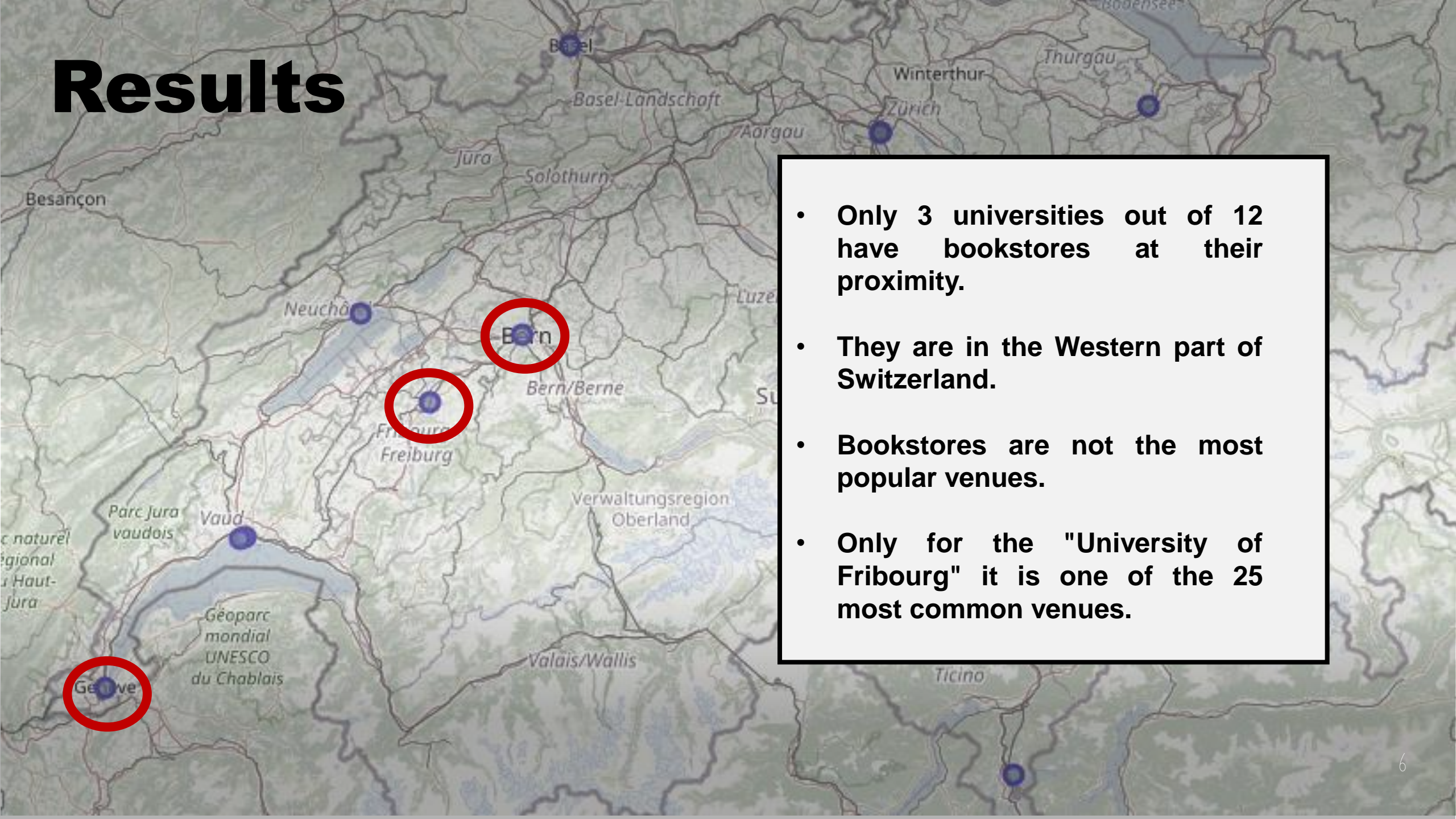
- The number of venues in each neighbourhood is counted.
- The number of unique categories is calculated. It accounted for 125 unique categories.

## Venue Analysis

- It is done with one hot encoding as well as by grouping rows by university and by taking the mean of frequency of occurrence of each category.
- Dataframe “book” is created, which shows the occurrence of bookstores near Swiss Universities.
- 25 most common venues near Swiss Universities are examined.



# Results

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- Only 3 universities out of 12 have bookstores at their proximity.
  - They are in the Western part of Switzerland.
  - Bookstores are not the most popular venues.
  - Only for the "University of Fribourg" it is one of the 25 most common venues.

# Discussion

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## Observations:

- There are not many bookstores near Swiss Universities.
- Bookstores are not the most popular venues for students.
- Bookstores that are located near Swiss Universities, are in the Western part of Switzerland. ➡
- The most popular venues for students are the ones which are related to food and drinks. ➡

## Assumptions:



- Digitalization → No need for physical books and stationaries
- Culture makes a difference (Western part of Switzerland is mostly French speaking)

## Recommendations:

- Open a bookstore in the Western part of Switzerland, near such universities as University of Neuchâtel, University of Lausanne, or Swiss Federal Institute of Technology Lausanne.
- Reconsider a business model – open bookstore/coffee shop

# Coclusion

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- **Aim** – met 
- **Analysis** – conducted 
- **Important! Limitations:**
  - Only Swiss Universities were considered. There are other educational institutions in Switzerland, as business schools, colleges, etc.
  - Project is based on observations and personal assumptions. It does not include any scientific background and literature.