



# The CollocMap

*Find the flatshare of  
your dreams*



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Sélim Besseling - Justin Cornut - Clara Nessi - Ari Jet Stojanovski

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## Our goal: help students

When a student arrives at a new university, he or she usually knows little or nothing about the city. This asymmetry of information can generate a real obstacle in the search for the most appropriate collocation. With this in mind, we decided to create the CollocMap. This web app allows you to find in a few clicks the flatshare offers that correspond the most to your quality of life criteria: public transportation services, the offer of food supermarkets, the number of bars and parks nearby or even the political affiliation of your neighborhood.





## Special features

1

The site can be used over time as collocations are reloaded each time a new user arrives on the map. So the listings are constantly renewed and the site is always up to date!

2

Some of our team members are Swiss and therefore go to the polling station on Sundays, so it seemed essential to put the political filters in our application.

3

In order to find the best commune for your future accommodation, we have also added an option that allows you to have a brief description of the commune you have selected on the map.

4

One of the features that makes this project unique is the fact that it is accessible to everyone as the colours are also suitable for colour blind people and it is fully adaptable for the mobile version.



## How does it work?

1. For this first part, we have web scrapped eleven sites of flatshares that we thought were the most relevant so that we can present them in a table with our interactive map. The [webscraping websites](#) folder, which is used to fetch information about collocations in Geneva, via sourcing from the central [main.r](#) file, which will launch all our crawlers, then merge the data with merge.R and finally return main.Rda.
2. In a second step, we collected the relevant data for the Geneva communes that were gathered in a csv file.. Then, we use th [geojson manipulation](#) to combine the data of our geojson file containing the polygons of each commune, with the information of each commune.
3. The [Communes.R](#) file, which webscrapes in 1500 lines of code the different informations from the communes in the canton of Geneva, translate it using [Deepl.com](#) and save it into [communes.Rda](#).



## How does it work?

4. Then we created an interactive [Map](#), which displays the communes and, when clicked, the table of all the collocations available in the commune.
5. We then added a description sidebar-panel displaying live informations about each commune, coming from our 1500 lines of code webscraping-script [Communes.R](#).
6. Finally we created a n-dimensional filtering system of the interest parameters of the future tenants, which updates the attractiveness indexes (from 1 to 100) of each commune according to all the selected checkboxes. The filter system calculates a satisfaction ratio from 1 to 100 per commune, the total sum of the ratios in the whole canton being 100. The ratios are calculated by taking the weighted average of each of the data selected by checkbox. The system thus calculates a dynamic ratio according to the choices, preferences and profiles of the user.



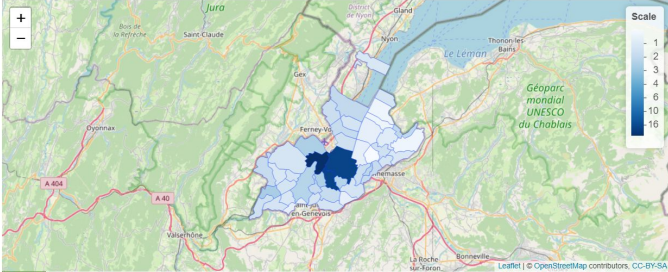
# Various possible profiles

Find roommates to live with in the perfect place !

What parameters are you interested in?

- ☐ Restaurants
- ☐ Bars
- ☐ Fitness
- ☐ Parks
- ☐ Criminal Offences
- ☐ Bakery
- ☐ PDC
- ☐ UDC
- ☒ PS
- ☐ Green
- ☐ Communists
- ☐ PLR
- ☐ Young
- ☐ Middle age
- ☐ Retired
- ☐ All supermarkets
- ☐ Coop
- ☐ Migros
- ☐ Aldi
- ☒ Lidl

Show commune description



**Vernier**

According to the Federal Statistical Office (FSO), Vernier measures 7.68 km<sup>2</sup>. 72.7 % of this area corresponds to housing or infrastructure, 13.2 % to agricultural land, 9.7 % to wooded land and 4.4 % to unproductive land. The municipality is divided into 8 districts(4): 1) Vernier-village; 2) Châtelaine; 3) Bailexert; 4) Les Libellules; 5) Cointrin; 6) Les Avanchets; 7) Aire and Le Lignon; 8) Gordon-Bennett. A vast urban development project is planned for the Chemin de l'Etang, which will make it the 9th district[5] groundbreaking ceremony on Friday 16 March 2018[6]. The commune borders Meyrin, Le Grand-Saconnex, Geneva, Chex, Bernex, Lancy and Salgny. Since 2009, its territory is crossed by a greenway[7].

Show: 10 entries

	desc	lieu	prix *	link
1	Chambre à louer	1214 Vernier	650	<a href="#">Voir la Colloc</a>
4	Location d'une chambre dans un appartement de 5½ de 125 m². Dans un quartier calme et bien situé, à 200 m de Bailexert (grand centre commercial) et des transports publics (n° 10, 14, 18). Pour une personne seule, une grande chambre lumineuse et correctement meublée (draps, literies fournies). La salle de bains est semi-privative, comprenant une baignoire-douche, lavabo, WC et armoires. Accès WiFi et charges comprises dans le loyer. Accès libre à la cuisine équipée (vaisselle et ustensiles à disposition), à la salle à manger, au salon et au balcon (grill à disposition). Une machine à laver le linge est à disposition gratuitement. Possibilité de partager un réduit de 3 m².	Vernier	1000	<a href="#">Voir la Colloc</a>

If a person is affiliated to the socialist party and is fond of Lidl shops, we can see on our map that the commune that corresponds the most to his interests is Vernier.

By clicking on the commune in the map a description of the commune appears as well as all the options of collocation available in this commune.

In addition, if you click on the flag of the commune this will redirect you to the wikipedia page of the commune

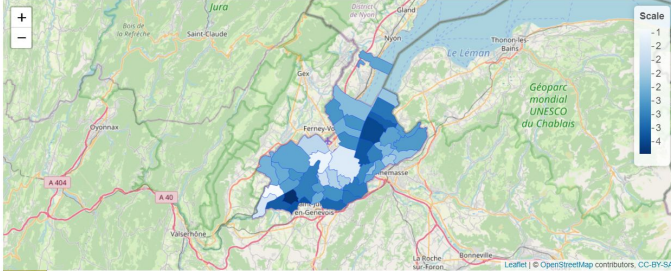
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- ☐ Retired
- ☐ All supermarkets
- ☐ Coop
- ☐ Migros
- ☐ Aïdi
- ☐ Lidl

Show commune description



**Laconnex**

According to the Swiss Federal Statistical Office, Laconnex measures 3.83 km<sup>2</sup>[2]. 10.4 % of this area is used for housing or infrastructure, 79.9 % for agriculture, 8.9 % for woodland and 0.8 % for unproductive land. The commune borders Bernex, Sorai, Avusy and Cartigny.

Show: 10 entries

	desc	lieu	prix	link
1	Chambre en colocation dans une maison avec jardin. Cuisine, buanderie, sanitaires à partager. Salle de musique à disposition. À proximité du bus, à 15 minutes de l'arrêt de bus 2 pour Genève plage. Possibilité de parking. Visite possible.	Cologny	1500	<a href="#">Voir la Colloc</a>

Showing 1 to 1 of 1 entries

Previous 1 Next

If a person is more attracted by the centre in politics, therefore rather PLR and PDC, the best commune for this person will be Laconnex.

In addition, on the footnote there is a link to a map of air quality in Switzerland and to a map of nuisance from SITG in the canton of Geneva in order to find the best commune for your flat share!

Note: You can also find more information on the quality of life in Geneva, in particular the air quality published live on the airCheck application ( [link 1](#) ) or the noise level for each building on the interactive SITG map ( [link 2](#) ).

# Conclusion

In conclusion, if you are looking for a flat share in the canton of Geneva and you don't know where to look, the Collocmap is made for you!

Our interactive map with our filters will help you to find the commune that is right for you and the flat share of your dreams!

Go check our site here:

[The CollocMap](#)

