Opening an international location for Lune et Jardin

Archie Bye

Introduction

- Who are Lune et Jardin?
  - An established French restaurants with two locations in Paris.
- What problem do they have?
  - They want to open a restaurant in London but don’t know the area.
- Can we solve it for them?
  - Yes! With data!

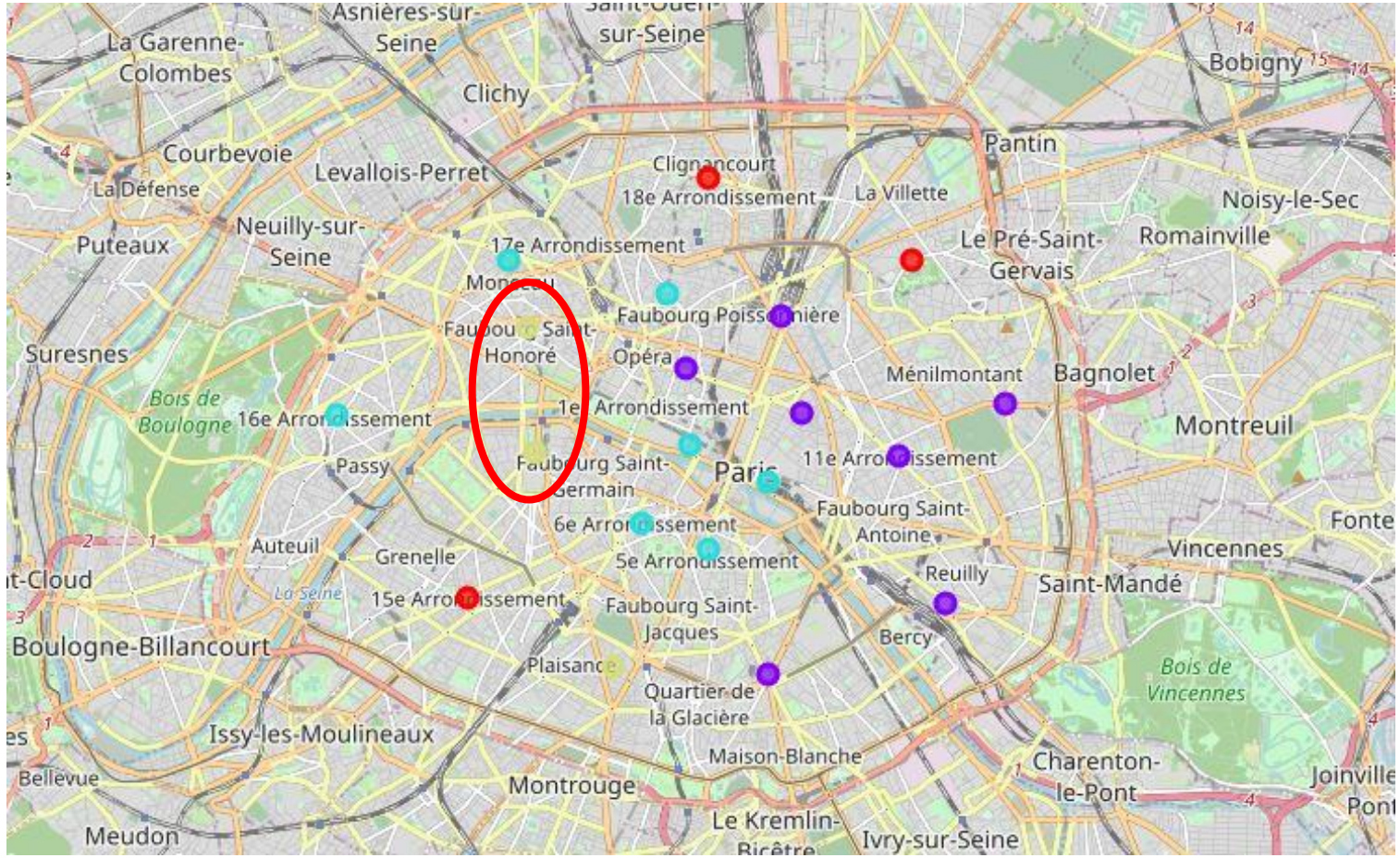
Data

- Foursquare
  - To give us information about commercial establishments around a given set of coordinates. We will use the data to characterise the locations of the restaurants in Paris.
- Neighbourhoods
  - Data about the names and locations of neighbourhoods in London and Paris has been scraped from Wikipedia.

Methodology

1. Scraping and cleaning the data
2. Visualise the neighbourhood data on a map using Folium
3. Iterate through the neighbourhoods for both Paris and London and get the data about commercial establishments in each of the neighbourhoods.
4. We can now cluster the neighbourhoods of Paris to see if the current locations of the Lune et Jardin restaurants fall into the same cluster.

Paris Clustering



Current Lune et Jardin locations are in the same cluster.

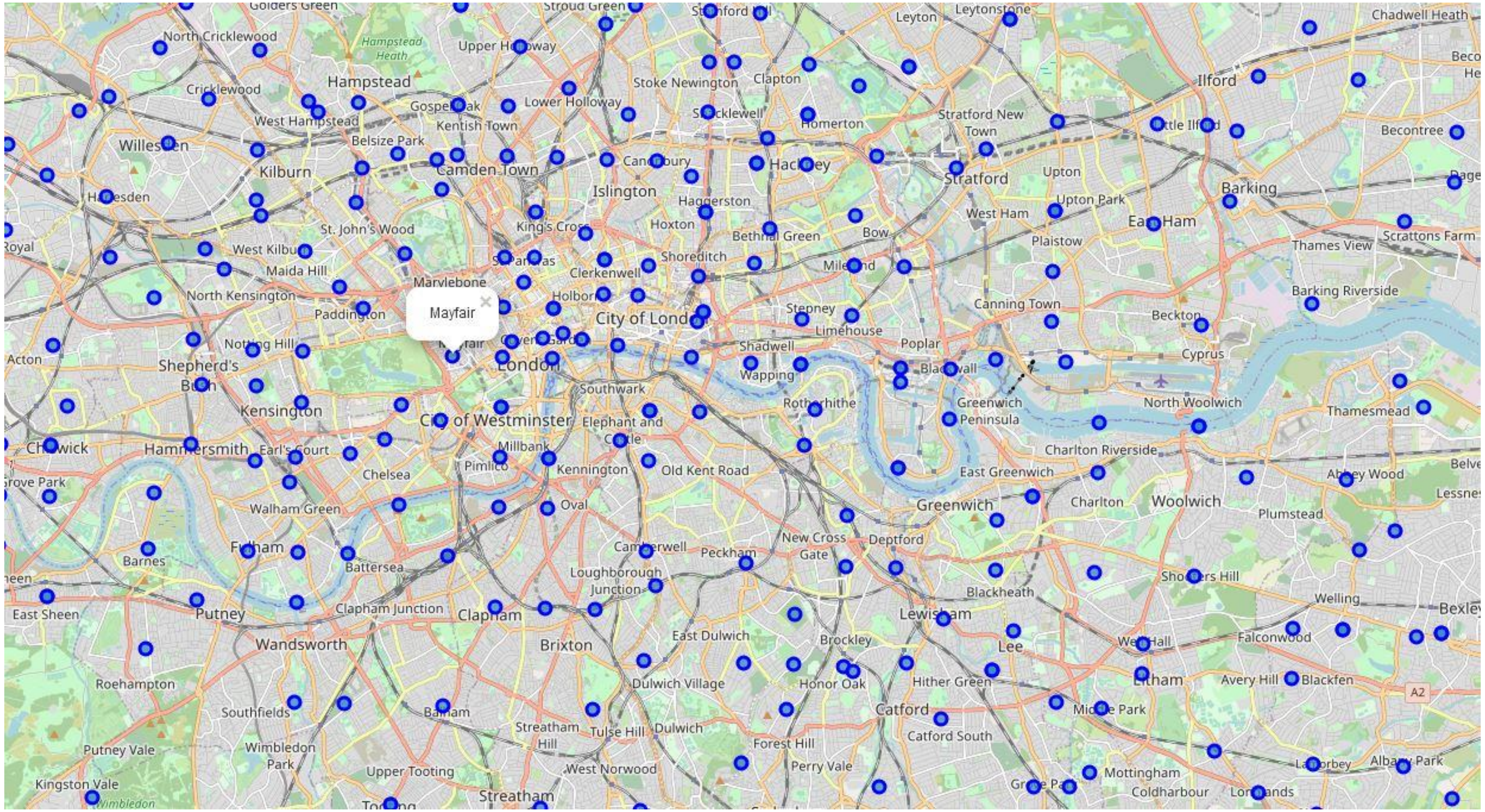
Methodology cont.

5. We get the average feature values for the cluster that the Paris locations fall in.
6. We use this average value to find a suitable London location.
7. We use Cosine Similarity to find this new location.

Cosine Similarity

$$\text{similarity} = \cos(\theta) = \frac{\mathbf{A} \cdot \mathbf{B}}{\|\mathbf{A}\|\|\mathbf{B}\|} = \frac{\sum_{i=1}^{n} A_i B_i}{\sqrt{\sum_{i=1}^{n} A_i^2} \sqrt{\sum_{i=1}^{n} B_i^2}},$$

Results



Mayfair
Golders Green
North Cricklewood
Hampstead Heath
Upper Holloway
Stroud Green
Leyton
Leytonstone
Chadwell Heath
Cricklewood
Hampstead
Stoke Newington
Clapton
Ilford
West Hampstead
Gospel Oak
Lower Holloway
Stratford New Town
Kentish Town
Homerton
Becontree
Belsize Park
Willesden
Kilburn
Camden Town
Islington
Stratford
Upton
Barking
Harlesden
Upton Park
West Ham
East Ham
St. John's Wood
Hoxton
Bow
Plaistow
Scrattons Farm
Thames View
West Kilburn
Shoreditch
Maida Hill
Clerkenwell
Barking Riverside
North Kensington
Marylebone
Canning Town
Paddington
City of London
Stepney
Beckton
Limehouse
Notting Hill
Shadwell
Poplar
Cyprus
Acton
Shepherd's Bush
London
Wapping
Southwark
Rotherhithe
Greenwich Peninsula
North Woolwich
Kensington
City of Westminster
Elephant and Castle
Thamesmead
Hammersmith
Earl's Court
Millbank
Charlton Riverside
Chelsea
Pimlico
Kennington
Old Kent Road
East Greenwich
Walham Green
Oval
Greenwich
Charlton
Woolwich
Plumstead
New Cross Gate
Deptford
Camberwell
Peckham
Fulham
Barnes
Battersea
Loughborough Junction
Blackheath
East Sheen
Putney
Clapham Junction
Clapham
Lewisham
Welling
Wandsworth
Brixton
East Dulwich
Brockley
Lee
Roehampton
Dulwich Village
Honor Oak
Hither Green
Eltham
Avery Hill
Blackfen
A2
Southfields
Balham
Catford
Middle Park
Streatham Hill
Tulse Hill
Dulwich
Catford South
Putney Vale
Wimbledon Park
Forest Hill
Upper Tooting
West Norwood
Perry Vale
Mottingham
Albany Park
Kingston Vale
Streatham
Coldharbour
Wimbledon

Conclusion

- How did it go?
  - Lune et Jardin should be happy with the results of this analysis and could easily use these results to move forward with their international expansion.
- How can we improve?
  - More data!