

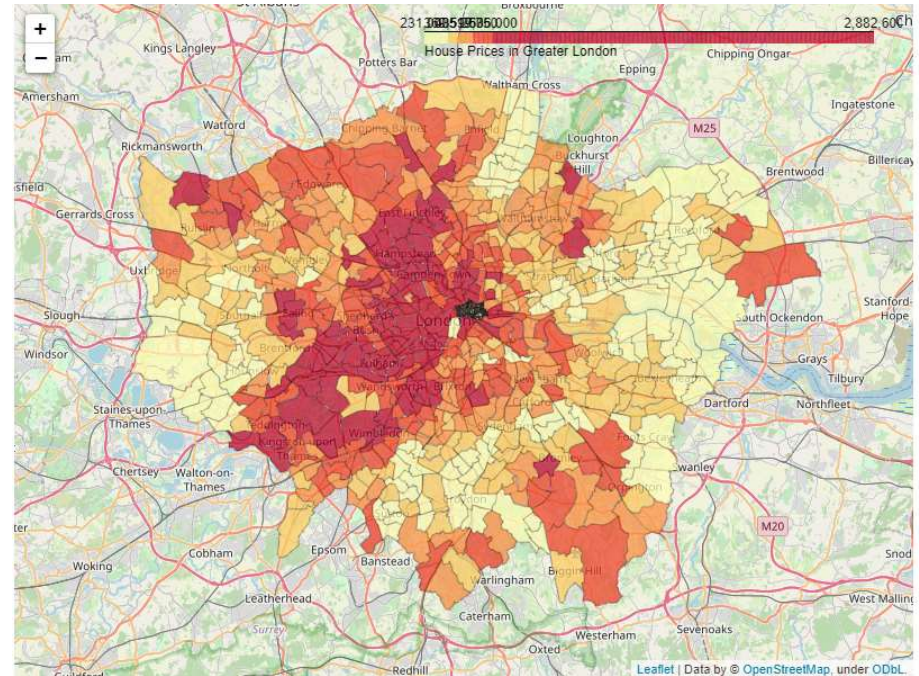
EXPLORING LONDON

PREDICTING HOUSE PRICES USING FOURSQUARE LOCATION DATA



LONDON HOUSE PRICES

- Obtained house price statistics from London Datastore for each London Ward (the smallest administrative division) – using December 2017 values.
- Categorised average London house prices into equal sized bins from lowest (pale yellow) to highest value (dark red)
 - The highest quantile has by far the largest range of prices, from around £640,000 to over £2.8 Million
- Highest values are in the city centre, and the south-west quadrant of Greater London.



FOURSQUARE DATA

- For each ward we queried Foursquare's Developer API for the first 100 venues within 500m of the Ward's centre point
- We were then able to collate the venue categories into the top 10 venue categories for each Ward

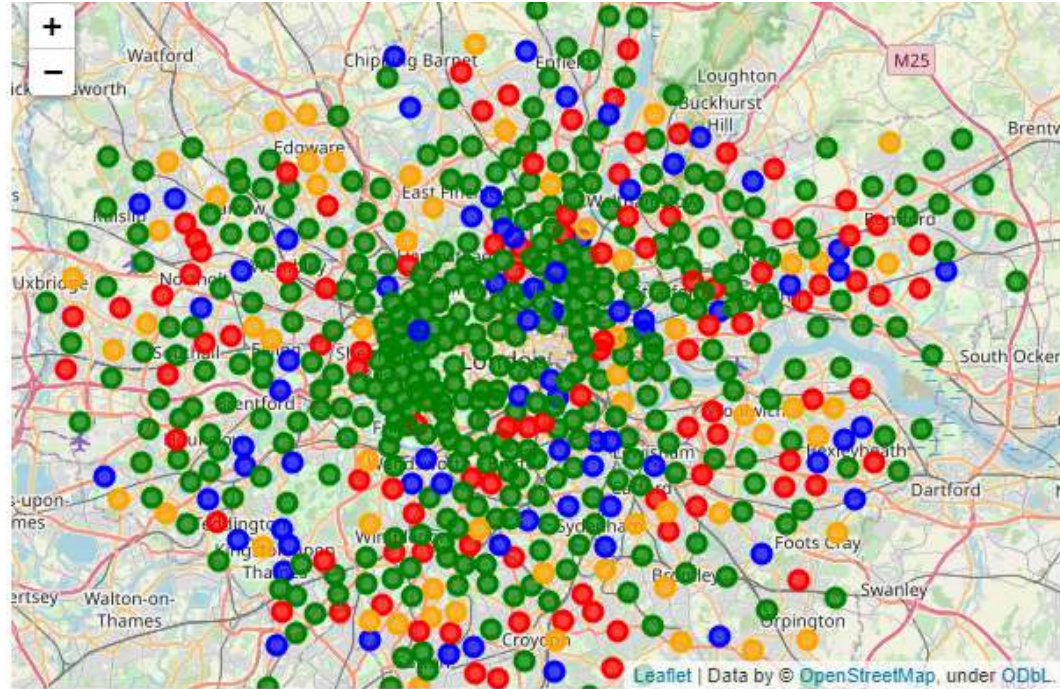
FOURSQUARE
CITY GUIDE

	Ward_name	Ward Latitude	Ward Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Abbey	51.539711	0.077935	Nando's	51.539780	0.082297	Portuguese Restaurant
1	Abbey	51.539711	0.077935	Cristina's	51.536523	0.076672	Steakhouse
2	Abbey	51.539711	0.077935	The Gym London Barking	51.536193	0.078601	Gym
3	Abbey	51.539711	0.077935	Subway	51.538000	0.081319	Sandwich Place
4	Abbey	51.539711	0.077935	Costa Coffee	51.539272	0.081341	Coffee Shop

Finding Similar areas within the City

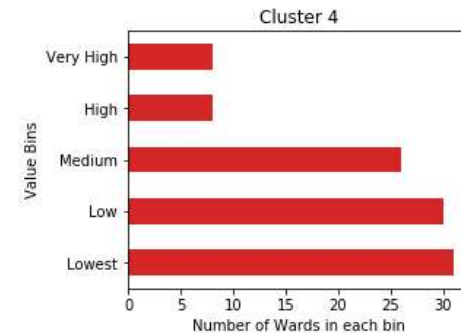
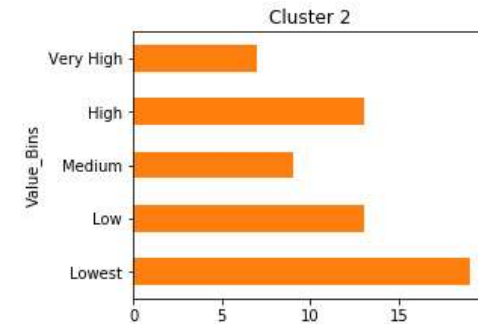
- We used a form of unsupervised machine learning, K-means clustering, to split London Wards into 4 clusters based on the frequency of the top 10 venue types in each ward.

- Cluster 1
- Cluster 2
- Cluster 3
- Cluster 4



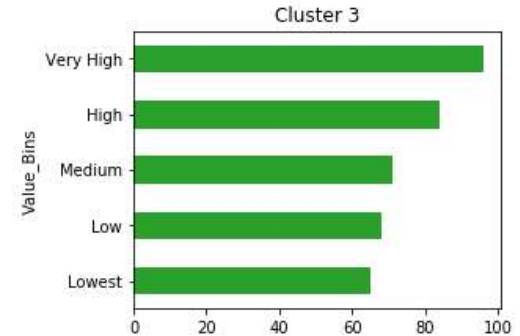
House prices lower near Factories

Clusters 2 and 4 showed similarities in that both skewed towards low value properties, and both featured factories



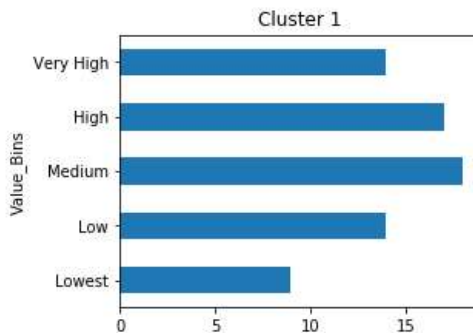
What about high value areas?

- Cluster 3, which is most concentrated in Central London – hotels, restaurants and places for workers to grab lunch - was the only cluster to skew (slightly) towards high value properties.
- We suggest that that venue category alone is not enough to distinguish one area from another.
 - We suggest further work to refine our data to account for venue rating and/or price tier (£ to ££££) which will help distinguish between Michelin-star worthy restaurants and Kitchen Nightmares. This is a premium end-point on Foursquare's API, and may require additional subscription.








Decidedly Average - or - Stereotyping London


- The histogram shows an almost normal distribution of house prices – possibly indicating that areas in Cluster 1 represent ‘average’ London. Cluster 1 is also fairly evenly spread throughout Greater London, including the centre.
- There cannot be a more typically London venue than the classic London Pub – and it’s Pubs that are the top feature in this Cluster.



FOURSQUARE

CITY GUIDE



The Sherlock Holmes

Pub, Gastropub, and English Restaurant

£££

Charing Cross

Tips 134

Photos 818

7.8

709 ratings

Given the COVID-19 pandemic, call ahead to verify hours, and remember to practice social distancing

🍷

"Sherlock Holmes ale is very good!" (5 Tips)

🍷

"Great sausage and mashed potatoes with yorkshire pudding!! Huggit!" (3 Tips)

🍷

"A great little pub just off Trafalgar square" (3 Tips)

🍷

"Try the Sherlock Holmes Ale and the Steak and Ale pie." (2 Tips)

📖 113 Tips and reviews

FILTER

beer, trafalgar square, lively, authentic, good for groups, (15 more)

📍

Mapbox

📍

The Sherlock Holmes

10 Northumberland St

Charing Cross

Greater London

WC2N 5DB

Get directions

🕒

Open until 11:00 PM (Show more)