



# Moving to Las Vegas

Coursera IBM Data Science Capstone

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# 1. Introduction / Business problem

## 1.1 Scenario

I am currently living in Italy in a sparkling university town called Padova/Padua. I have plenty of venues and attractions especially parks for children, shopping venues for wife and theatres for me. I got a job in Las Vegas and I am planning to relocate if I can find a place to live with similar venues.

## 1.2 Problem to be solved

I need to find a Las Vegas area with:

- similar venues
- availability of a single house with min 2 bedrooms, 2 bathrooms, a garage and a garden with swimming pool, no HOA fees, build after 2009 and a budget of \$500k
- nearby primary, middle and high schools
- maximum distance from Caesars Palace Casino (job location): 10 miles

# 1. Introduction / Business problem

## 1.3 Potential audience

- This project can be useful for all those people that need to relocate with their families in the same country or in different countries or even continents.
- It can be useful for businesses that are planning to relocate and are considering their employees needs in the global balance of pros and cons.
- It can be adapted to the case of evaluating a new business opportunity in a certain area.
- Last, but not least, it can be useful for everyone interested in Data Science as a possible solution for a practical case.

# 2. Data

## 2.1 Data sources

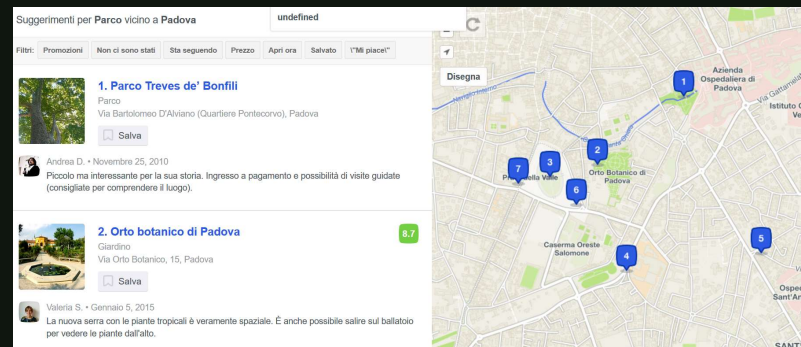
- Geodata for Padova/Padua with venues (Nominatim or geocode, Foursquare and Folium)
- Geodata for Las Vegas neighborhoods including the surrounding cities of North Las Vegas and Henderson, plus the Census-designated places of Blue Diamond, Enterprise, Paradise, Spring Valley, Summerlin South, Sunrise Manor, Whitney and Winchester with venues (Wikipedia, Nominatim or geocode, Foursquare and Folium)
- List of houses to buy (zillow, Nominatim or geocode and Folium)



# 2. Data

## 2.2 Data features

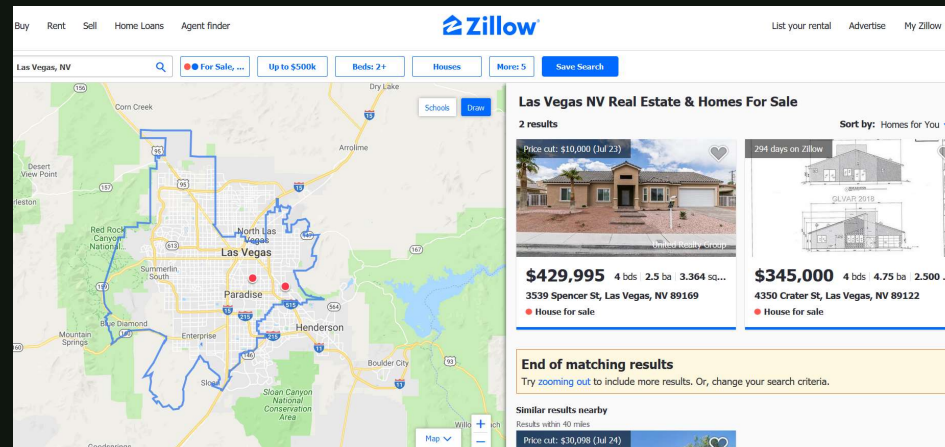
- Padova/Padua
  - My location: latitude and longitude (45.3959547,11.8802724)
  - Parks: from Foursquare with a specific radius of 2.5km



- The same for schools, shopping venues, theatres (from Foursquare) and a specific radius of 2.5km.
- The features we are interested are distance, review score, opening hours and if they are trending.

## 2. Data

- Las Vegas
  - Potential houses to buy (with latitude and longitude)



- As for Padova/Padua, in Las Vegas we use foursquare with a radius of 8km (5mi) because it is easier to reach a more far away destination.
- So parks, schools, shopping venues, theatres (from Foursquare) and a specific radius of 8km (5mi).
- The features we are interested are distance from house, review score, opening hours and if they are trending.
- We consider also the distance of the house from the jobplace (Caesars Palace Casino Las Vegas).