



# **CAPSTONE PROJECT THE BATTLE OF NEIGHBOURHOODS**


STUDIES ON THE BEST LOCATION FOR A FRENCH GASTRONOMY RESTAURANT IN PARIS

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# **SUMMARY**

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# INTRODUCTION

- CATERING IS A MAJOR COMPONENT OF TOURISM IN FRANCE AND PARTICULARLY IN PARIS
- GASTRONOMIC CATERING REPRESENTS THE 6TH LARGEST EXPENDITURE ITEM FOR TOURISTS IN FRANCE
- IN OTHER SIDE PARISIAN CULTURAL SITES WELCOMED 70.2 MILLION VISITORS IN 2017.
- THE TOP 5 OF THE NUMBER OF VISITS TO PARISIAN CULTURAL SITES IN 2017:
  - NOTRE-DAME DE PARIS CATHEDRAL: 12,000,000,000
  - BASILICA OF THE SACRED HEART OF MONTMARTRE: 10,000,000
  - LOUVRE MUSEUM: 8,022,300
  - EIFFEL TOWER: 6,207,303
  - CENTRE POMPIDOU: 3,337,000



# INTRODUCTION

- **BUSINESS CASES :**
  - OUR CLIENT, A GASTRONOMIC CHEF, WOULD LIKE TO OPEN A NEW GASTRONOMIC RESTAURANT. WE THEREFORE PROPOSE TO HELP HIM TO CHOOSE THE BEST SITE IN PARIS WHILE TAKING ADVANTAGE OF THE TOURIST OPPORTUNITIES THAT THE LARGEST CULTURAL SITES IN PARIS CAN OFFER AND WE WILL STUDY IN THIS ANALYSIS THE 5 MOST VISITED SITES IN PARIS AND THEIR NEIGHBORHOODS.
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# METHODOLOGY

- **DATA**

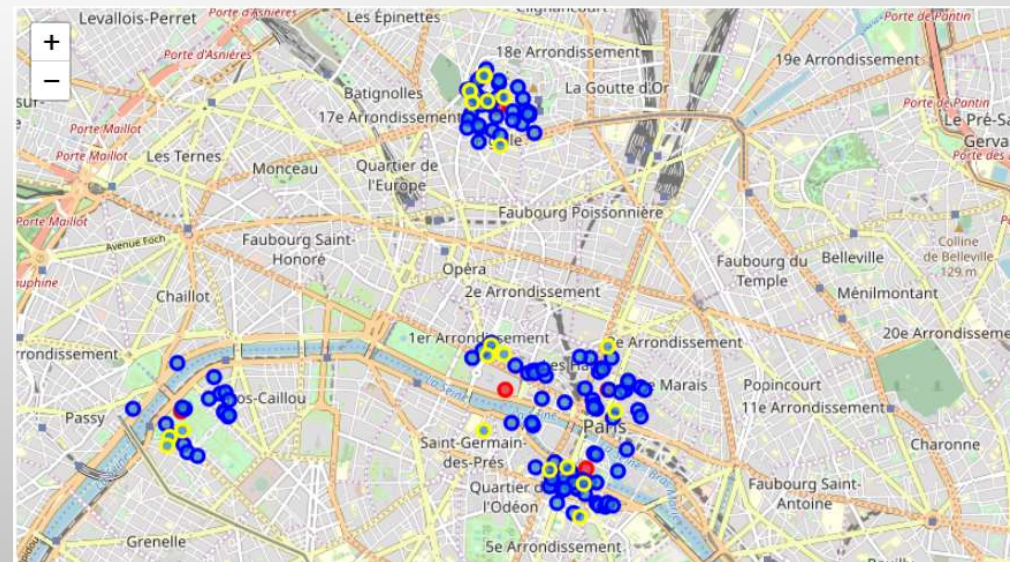
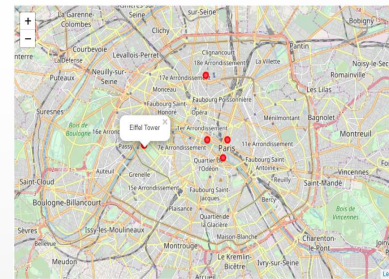
- FOR THIS PROJECT WE WILL USE THE FOURSQUARE API TO IDENTIFY THE MAIN VENUE IN THE NEIGHBORHOOD OF THE 5TH MORE POPULAR TOURISM SITE IN PARIS
- WE ALSO USE A DATA SET AVAILABLE ON KAGGLE BASED ON DATA FROM TRIPADVISOR AND ALLOW US TO HAVE SEVERAL COMPLEMENTARY DATA LIKE:
  - CUISINE STYLE: CUISINE STYLE(S) OF THE RESTAURANT, IN A PYTHON LIST OBJECT
  - RANKING: RANK OF THE RESTAURANT AMONG THE TOTAL NUMBER OF RESTAURANTS IN THE CITY AS A FLOAT OBJECT
  - RATING: RATE OF THE RESTAURANT ON A SCALE FROM 1 TO 5, AS A FLOAT OBJECT
  - PRICE RANGE: PRICE RANGE OF THE RESTAURANT AMONG 3 CATEGORIES, AS A CATEGORICAL TYPE

- **APPROACH**

- FIRST, WE WILL PROPOSE A VISUALIZATION OF THE SELECTED SITE ON THE MAP OF PARIS
  - USING FOURSQUARE API WE WILL IDENTIFY THE DIFFERENT VENUES IN THE 500M AROUND THESE FIVE LOCATIONS
  - IN A THIRD TIME WE WILL ADD THE DATA FROM KAGGLE TO MEASURE COMPETITION IN TERMS OF QUALITY AND COST AND HELP TO CHOOSE THE BEST EMPLACEMENT.
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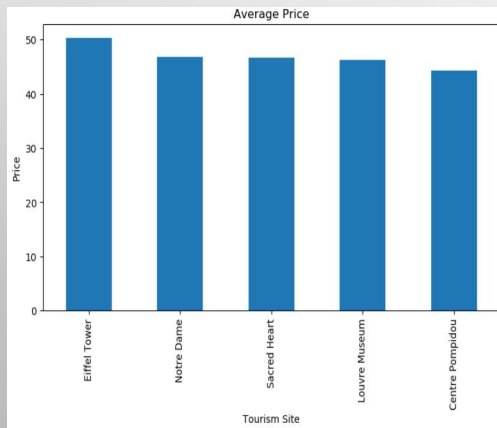
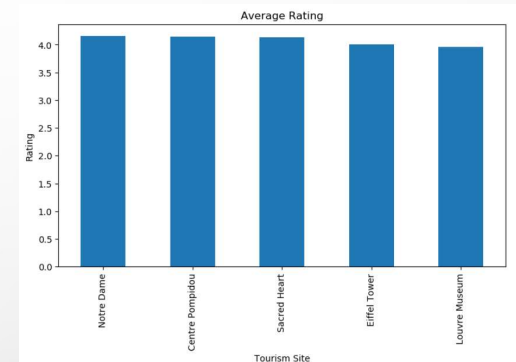
# RESULTS : MAPS

- ON THIS PICTURE WE HAVE IDENTIFIED THE EIFFEL TOWER, ON THE NORTH OF THE EIFFEL TOWER YOU HAVE THE SACRED HEARTH, AND ON THE EAST, YOU WILL FIND THE THREE OTHERS SITE WHICH ARE MORE CLOSER.
- BASED ON THIS SELECTION WE HAVE ADDED MARKS IN YELLOW TO IDENTIFY THE "HOTEL" CATEGORIES AND WITH BLUE MARK WE HAVE PLACE THE RESTAURANTS AND IN BLUE MARK FOR RESTAURANTS.
- WE FIND THAT OVERALL THE DENSITY OF HOTEL (IN YELLOW ON THE MAP) IS RELATIVELY CLOSE BETWEEN THE 3 AREAS WITH PERHAPS AN ADVANTAGE IN THE AREA OF THE SACRED HEART. THE DENSITY OF RESTAURANTS (IN BLUE ON THE MAP) IS HIGHER IN THE AREA OF THE LOUVRE MUSEUM, THE CENTRE POMPIDOU AND NOTRE DAME BUT THIS AREA INCLUDES AS WE HAVE SEEN 3 TOURISTS' SITES SO ALSO COVERS A WIDER AREA.



# RESULTS : BAR PLOT

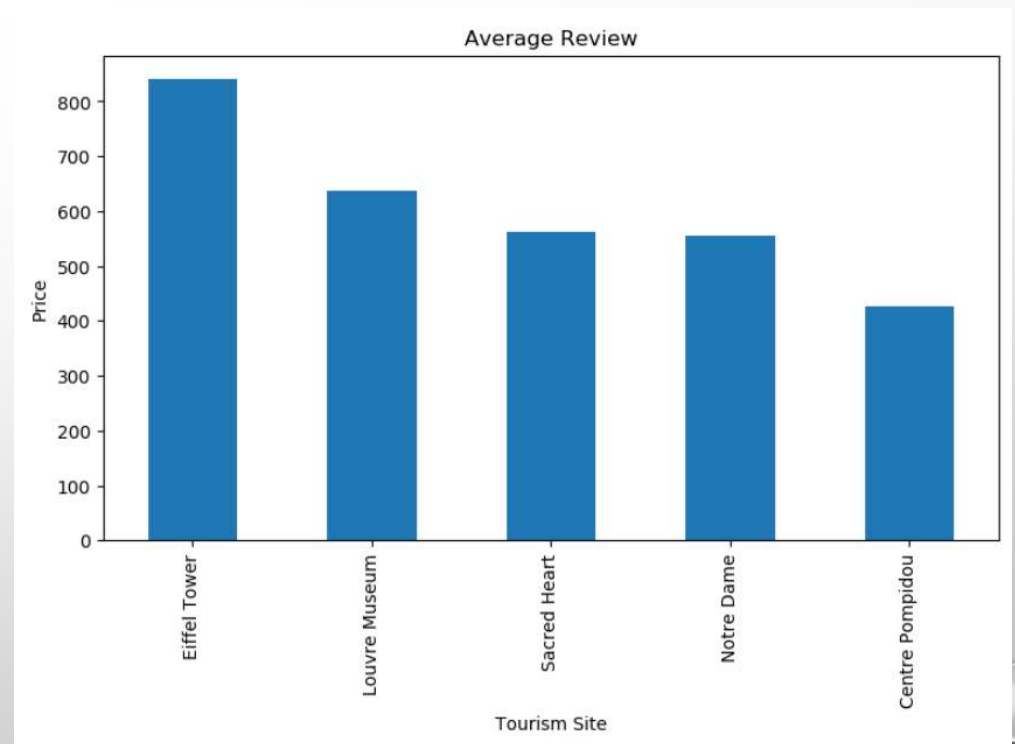
- OVERALL THE AVERAGE RATINGS ARE COMPARABLE ALTHOUGH WE FIND THAT THE FIRST 3 SITES NOTRE DAME DE PARIS, CENTRE POMPIDOU, SACRED HEART HAVE A HIGHER AVERAGE RATING OVERALL.



- OUR APPROACH TO THE AVERAGE PRICE IS DEBATABLE BECAUSE WE DO NOT HAVE PRECISE FIGURES (TABLE NUMBER, AVERAGE BASKET, ...).
- WE BASED ON AN AVERAGE PRICE APPRECIATION. HOWEVER, IF OVERALL THE RESULTS REMAIN CLOSE WE NOTE HOWEVER THAT THE SITE OF THE EIFFEL TOWER STANDS OUT WITH A HIGHER AVERAGE PRICE OF RESTORATION.

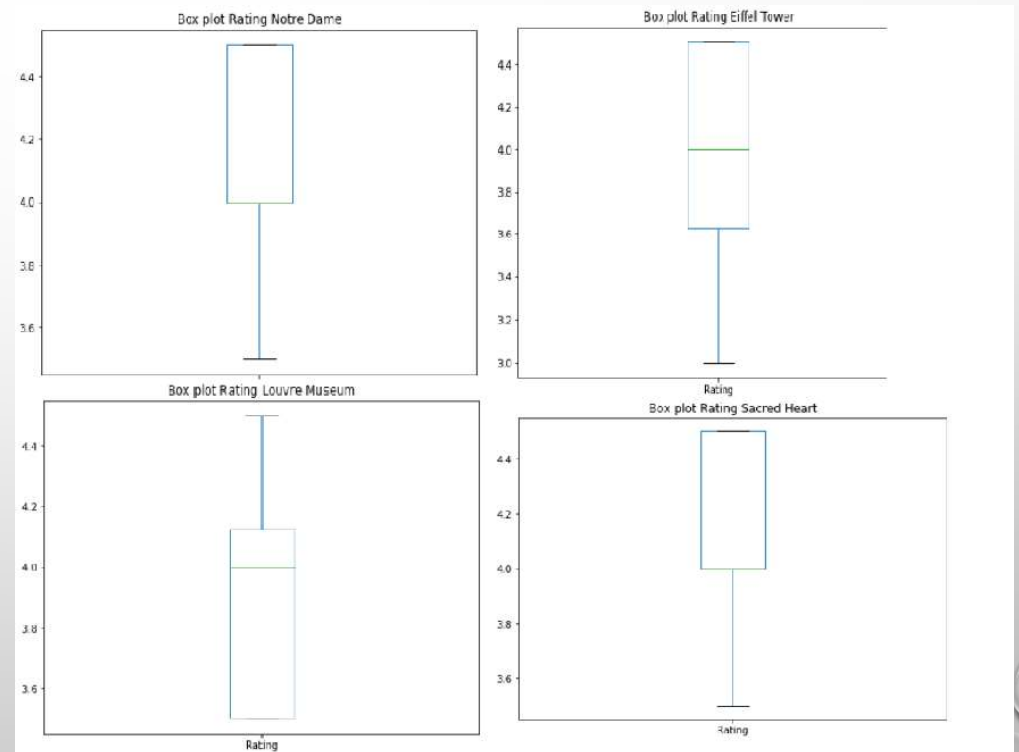
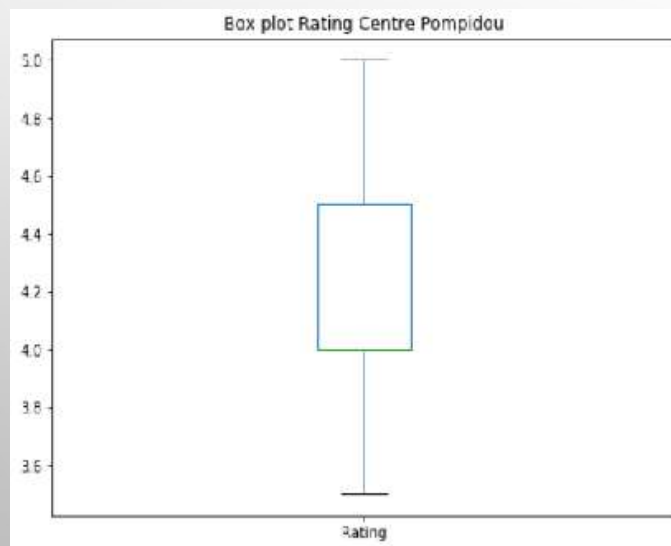
# RESULTS : BAR PLOT

- IF WE TAKE THE AVERAGE NUMBER OF RECOMMENDATIONS, WE RECALL THAT THIS DATA COMES FROM THE TRIP ADVISOR SITE IT SEEMS QUITE CLEAR THIS TIME THAT THE RESTAURANTS OF THE EIFFEL TOWER SITE GET SCANS MUCH MORE THAN ON THE OTHER SITES. ONE CAN THEREFORE THINK THAT THE RESTAURANTS THERE ARE MORE VISITED /POPULAR THAN THOSE OF OTHER SITES.
- WE THEN OFFER BOXPLOTS ON THE DIFFERENT RATINGS IN ORDER TO GET A BETTER IDEA OF THEIR DISTRIBUTION.






# RESULTS : BOXPLOT



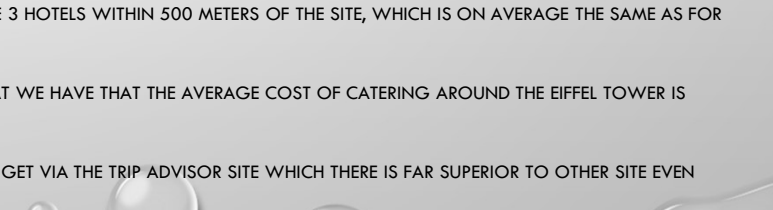


# RESULTS : BOXPLOT

- THE LESSONS THAT CAN BE LEARNED IS THAT CUSTOMER SATISFACTION IS RELATIVELY HOMOGENEOUS WITH MEDIAN SCORES ALMOST ALWAYS AT 4.
  - ON THE OTHER HAND, THERE ARE HIGHER HIGH SCORES IN THE AREA OF THE CENTRE POMPIDOU AND THE OPPOSITE OF LOW NOTES AROUND 3 IN THE VICINITY OF THE EIFFEL TOWER.
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# DISCUSSION

- OUR CHEF'S GOAL IS TO OPEN A GOURMET RESTAURANT, AS WE SAW AT THE INTRODUCTION THERE IS A REAL DEMAND IN FRANCE FOR THIS TYPE OF POSITIONING SINCE GASTRONOMY REPRESENTS THE 6TH ITEM OF EXPENDITURE OF FOREIGN TOURISTS.
  - IT IS OBVIOUSLY NOT TO HAVE ENOUGH REGULAR CLIENTELE FOR THIS KIND OF ESTABLISHMENT, SO IT SEEMS APPROPRIATE FOR OUR CLIENT TO SUPPLEMENT THIS CLIENTELE WITH THE BENEFITS OF TOURISM.
  - FROM THE BEGINNING OF THE ANALYSIS WE CAN SEE THAT THE BETTING CENTER WITH NOTRE DAME, THE POMPIDOU CENTRE AND THE LOUVRE MUSEUM IS A STRONG MAGNET AND THEREFORE SEEMS AT FIRST THE IDEAL SITE.
  - HOWEVER, THIS TOURIST ATTRACTION COULD ALSO HAVE A NEGATIVE EFFECT AS TOURISTS IN THIS AREA MIGHT NOT TAKE THE TIME TO SETTLE DOWN AND ENJOY A GOURMET RESTAURANT.
  - ADDED TO THIS IS THE FACT THAT DESPITE THE PRESENCE OF THESE THREE IMPORTANT TOURIST SITES THE HOTEL OFFER DOES NOT SEEM SO MUCH WIDER THAN IN THE OTHER TWO AREAS STUDIED, FROM THE MOMENT OUR CONSUMER CHOOSES TO TAKE THE METRO OR VTC TRANSPORT, ACCESS OTHER SITES IS NOT MUCH MORE PROBLEMATIC.
  - REGARDING THE SACRED HEART, THE OVERALL SITUATION MAKES THAT SITE IS EVEN OFF-CENTER, SO ON THE OTHER HAND WE NOTICE THE PRESENCE OF A LITTLE MORE HOTEL BUT THIS TIME WE ALSO NOTICE A VERY HIGH DENSITY OF RESTAURANT.
  - FROM OUR ANALYSIS BY BAR PLOT OR BOXPLOT THE NEIGHBORHOOD OF THE SACRED HEART NEVER EMERGES.
  - FINALLY, THE EIFFEL TOWER DISTRICT DOES NOT REALLY STAND OUT BECAUSE OF THE PRESENCE OF HOTEL. THERE ARE 3 HOTELS WITHIN 500 METERS OF THE SITE, WHICH IS ON AVERAGE THE SAME AS FOR THE SITE NOTRE DAME & CO ONLY THE SACRED HEART OFFERS A BETTER OFFER.
  - HOWEVER, WHAT SEEMS TO US TO BE TWO VERY SIGNIFICANT ADVANTAGES TO OUR CLIENT'S POSITIONING IS THAT WE HAVE THAT THE AVERAGE COST OF CATERING AROUND THE EIFFEL TOWER IS SIGNIFICANTLY HIGHER, WHICH CAN BE A DEFINITE ADVANTAGE FOR OUR POSITIONING.
  - THE OTHER INFORMATION THAT WE THINK IS STRONG FOR THIS SITE IS THE NUMBER OF REVIEWS WE WERE ABLE TO GET VIA THE TRIP ADVISOR SITE WHICH THERE IS FAR SUPERIOR TO OTHER SITE EVEN THOUGH THE NUMBER OF RESTAURANTS IN THIS AREA IS CLEARLY NOT THE HIGHEST.
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# CONCLUSION

- OUR ADVICE TO OUR CLIENT WOULD BE TO MOVE TO THE EIFFEL TOWER SITE, THE TWO MAJOR ASSETS SEEMING TO US TO BE THE AVERAGE COST OF THE RESTORATION QUITE HIGH WHICH WILL NOT BE TOO MUCH OF A PROBLEM. IN ADDITION, THE DENSITY OF RESTAURANTS IN THIS AREA SEEMS TO US OVERALL LOWER BUT ABOVE ALL THE NUMBER OF COMMENTS IS STILL MUCH HIGHER, REFLECTING FOR US QD EVEN A SHARPER PEAK OF ATTENDANCE.
  - OUR SECOND CHOICE WILL BE CHÂTELET WHICH, AS CAN BE SEEN ON THE MAP, IS A DISTRICT IN THE CENTRE OF THE 3 SITES CENTRE POMPIDOU, MUSÉE DU LOUVRE AND NOTRE DAME.
  - FINALLY OUR LAST CHOICE WILL BE ON THE SITE OF THE SACRED HEART BECAUSE OF ITS LOCATION ON THE EDGE OF PARIS, THE HIGH DENSITY OF RESTAURANTS AT THE FIRST OF THE SITE AND THEREFORE THE LACK OF VISIBILITY TYPICALLY ON THE INTERNET.
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