**Battle for Neighbourhoods**

**Capstone Project - Final Project**

**Background**

The emergence of location services is serving a multitude of uses today. With the current situation of Covid 19, many companies are analyzing the possible problems that they may have due to the possible need or request to telework on the part of their workers. New technologies are influencing a wide variety of decisions to be made by companies when making new decisions at a strategic level. To remain competitive, companies have embraced the use of location data to identify consumer patterns, tastes and trends. Location data is available on various social media platforms, including Google maps, Facebook log data, location reviews on sites like TripAdvisor and Booking, Foursquare, among other providers of location data. A company that wants to relocate its offices in the current situation to ensure that workers telecommute the minimum, has hired a company specialized in data science, with the aim of implanting the offices in an area that improves both the experience of its customers and their loyalty, as well as promoting the majority of workers to attend the office.

**Problem**

The new location of the offices must be in a sufficiently central point of the city of Barcelona, to ensure the existence of all types of transport and facilitate access, and it must have nearby some restaurants to ensure that employees can go out to the street to lunch without wasting a lot of time getting there and back.

**Applying data science to solve the problem**

To solve existing problems, it is necessary to collect location data from Foursquare and apply data science tools and techniques. The data collected will include comparing two locations to determine the best location to recommend the location of the new offices. The two locations under consideration are Barcelona's Plaza Urquinaona and the Sagrada Familia area. The client has requested that offices be proposed where the average distance to the different restaurants in the area is less than 1,400 meters and with a nearby restaurant with good recommendations. We examined these two locations to find the best restaurant and recommend the area that best meets your expectations.