

Capstone Project

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Abstract

This report discusses the use of Foursquare Api to build upon the comparison between Paris and London and the correlation whether someone should start a buisness in either of the two cities. Various machine learning algorithms were used to compare and differentiate the two cities as well as other geolocation tools to check either of the city is good to start an Artificial Intelligence Business.

1 - Introduction

The final course of the Data Science Professional Certificate consist of a capstone project where in all the skills and relevant knowledge that one has gathered from this 9 intense courses has to be applied on a final capstone project.

The final problem as well as the analysis is left for the reader to explore and decide. The idea uses location data with the help of the foursquare api that can be leveraged into coming up with a problem that the foursquare location data to solve it or just in contrast to compare cities or neighbourhoods of one's own choice.

London is the capital and largest city of England and the United Kingdom. Standing on the River Thames in the south-east of England, at the head of its 50-mile (80 km) estuary leading to the North Sea, London has been a major settlement for two millennia.

Paris is the capital and most populous city of France, with an estimated population of 2,150,271 residents as of 2020, in an area of 105 square kilometres (41 square miles). Since the 17th century, Paris has been one of Europe's major centres of finance, diplomacy, commerce, fashion, science and arts.

The main Goal of this project that I have chosen would be to evaluate the comparison between Paris and London as well as point out the differences. Another factor to be included is which city would be more ideal to start an Artificial Intelligence company and the various factors correlating to it as both cities are major cities and global hotspots in the world for tech companies.

Target Audience

- Potential Entrepreneurs who want to start a business relating to Machine learning /AI/data science.
- People who wanna choose which city to live in the future
- Course instructors and learners who will grade this project as well as showcase what I have learnt through this course.

2- Buisness Problem

In this ever changing world of technology and reforms the use of AI will dominate and change most of the world and industries as we know so among the two busiest cities in the world which one would a person be willing to start a buisness in AI. Various factors would be included such as pricing , multiculturalism , language bariers and so on would influence this desicison.

3 - Data

Various data sets were collected, reformatted and analysed in order to get the required results. Some of them include

- <http://www.cgedd.developpement-durable.gouv.fr/house-prices-in-france-property-price-index-french-a1117.html> - House Prices in France
- <https://www.kaggle.com/alphaepsilon/housing-prices-dataset> - Housing Dataset
- <https://data.world/datasets/real-estate> - Numerous Datasets for differes categories
- <https://data.london.gov.uk/dataset?tag=start-ups> - Data sets for london
- <https://www.kaggle.com/tags/companies> - Various companies and their datasets

More datasets were included and merged to get the final dataset relating to the idea.The use of even foursquare datasets were used and

important features such as Housing Prices, Locality, Famous icons, Restaurant Prices, transportation facilities, technological hotspots as well as access to a high wifi speed and so on were all assessed.