

## Coursera Applied Data Science Capstone

IBM Data Science Professional Certificate

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## Introduction

- ♦ Chicago, Illinois is the 3<sup>rd</sup> largest city in the United States, divided into 178 different neighborhoods per the Chicago municipal code.
- ♦ Along with the rich history of the city, Chicago is also home to 5 of the most popular professional sports teams in the world the Chicago Bulls, Chicago Bears, Chicago Blackhawks, Chicago Cubs, and Chicago White Sox.
- ♦ The city is very proud and passionate about their teams. This raises the question as a diehard Chicago sports fan, what are the best neighborhoods to live in?

## Business Problem

♦ We will be exploring the different neighborhoods in Chicago to see what each has to offer. For the purpose of this project, we will be considering two main criteria: proximity to stadiums (where the teams play) and proximity to the best sports bars in Chicago. Where is the best place for the city's biggest sports fans?



## Data

- As the capstone project for this IBM course, we will be leveraging our new data science knowledge to help us answer our question.
- Similar to our exploration of New York and Toronto neighborhoods, we will start with a list of neighborhoods and begin building our map with latitude and longitude coordinates. The Foursquare API will take us a step further, providing venue data for sports bars and stadiums.
- ♦ Throughout our analysis, we will work the data into a clean dataframe, plot maps to visualize, and document our step-by-step process in the final report.