

Analysis neighborhoods in Austin

1 Introduction

Austin is the capital city of the US state of Texas, as well as the seat and largest city of Travis County, with portions extending into Hays and Williamson counties. It is the 11th-most populous city in the United States, the fourth-most-populous in Texas, and the second-most-populous state capital city (after Phoenix, Arizona). It was also the fastest-growing large city in the United States in 2015 and 2016. It was the southernmost state capital in the contiguous United States.

1.1 Problem

Austin is an excellent example of a growing city and a unique model for relocation purposes. Sometimes it isn't easy to choose between neighborhoods, especially if you aren't familiar with the city.

This project aims to classify neighborhoods by venues, crime rate, and average rent and help people to choose between them.

1.2 Audience

This project could help those relocating to Austin or someone who needs to know more about their city.

The project will give information to that group of people:

- Which neighborhoods have a high crime rate? It could be useful for someone searching for a peaceful community.
- What neighborhoods should consider relocating by their budget?
- What neighborhoods have venues that you like?

2. Data

- Austin neighborhoods [geojson](#) will help to create future choropleth maps for visualization purposes.
 - Criminal reports from [Austin website](#). It consists of general information about crimes. In my project, I will use dates after the 2015 year, locations, and categories of crimes. Categories will help to create clusters for every neighborhood showing what type of sins is more distributed by areas. It would give enough information to create a choropleth map to visualize the numbers of crimes.
- Average rent per house I will scratch from [here](#). Consist average price for rent per house neighborhoods. This will help to understand how the cost is distributed by areas.

- Foursquare API will give information about venues around each area. This data will be used to create clusters by their similarity and understand what we could find in each neighborhood.