

# Applied Data Science Specialization

Capstone Project – By John Linskey



# Aim

- This project is aimed to provide a local bicycle business crucial information in their decision making concerning opening a new retail location. Specifically, the business owner is requesting detail information comparing the two cities of Smyrna (starting trail-head) and Cedartown (ending trail-head).



# Problem Statement



- A local bicycle shop in the south metro community of Peachtree City, Hometown Bikes, is investigating into expand into the Atlanta Metro area. They see that the time is right to expand their business. In addition to expanding, they are aiming to be located near the Silver Comet trail in order to provide support and services to travelers along the trail.
- In addition to providing bicycle service and parts, the business is considering providing other such services as coffee, food, and overnight accommodations. They are requesting location information of competitors' venues within the two cities in order to determine which area is being under-served.

# Background Info

- With the recent closure of all Performance Bicycle retail stores (largest national retailer of bicycles and accessories), the Atlanta metro has lost 4 major bicycles shops. Today, many people within the metro community are without any bicycle shop due to the closures.
- The Silver Comet and Chief Ladiga trails join to form one continuous 94-mile (151 km) trail from Smyrna, Georgia (Atlanta area) to Anniston, Alabama, which together form the second longest paved rail trail in the U.S. Hometown Bikes is only considering a retail location within the state of Georgia, therefore they have picked Cedartown as the western most potential location.

# Objectives

- I will begin by obtaining the geojson data for both Smyrna and Cedartown.
- Then, analyzing the data using the Foursquare API.
- Afterwards I will use clustering to identify each area and its category. The data source that I will be using is from Foursquare, which is a technology company that uses location intelligence to build meaningful consumer experiences and business solutions.

# Conclusion

- By making use of Foursquare data sets and data science methodology, I have successfully created information to assist the business owner in selecting a new retail location that will serve the needs of travelers along the Silver Comet Trail.