Introduction/Business Problem

The music business has completely changed in the last 20 years. While many look at the rise of streaming as a leading factor in this, it is only a symptom of a larger shift towards live performances being the main revenue streams for musicians. As noted by \_\_\_\_ for Rolling Stone, “Live events are quickly shaping up to be the most lucrative space for musicians in the digital-music era, and for good reason: As listeners become inundated with cheap access to music provided by streaming services, dedicated music fans crave more intimate experiences with their favorite artists.” Whereas artists used to tour in promotion of their records, records are now released as advertisements for tours. Much of the planning and promotional effort surrounding music focuses on how to ensure tours do two things: expand an artist’s fanbase, and make a profit. My capstone project will help touring and local artists book shows in the Austin, Texas area. As a musician, I know first hand how difficult it can be for artists at many levels to book gigs in the Live Music Capital of the world. Being booked at a venue that doesn’t draw people who are into your genre, or performing at the wrong size venue, can make capitalizing off of the tour difficult. As an outsider, it can be difficult to know the lay of the land, and googling where to play almost never works. In my project, I will build a recommendation system that helps artists of any level find the right venues to play.

Data

For my data, I will be using three databases, two of which have robust API’s, and one that I will be interfacing with manually to create my own data frame. The first database is the Foursquare database, which I will use to find an up-to-date list of Austin venues and their metadata, including ratings, reviews, and location. I will expand upon this with another database of Austin venues from Indie on the Move, where I will gain additional insight regarding the genres a venue hosts, as well as its capacity. I will use the above information to create my own dataframe of Austin venues and carry out clustering algorithms and visualization functions. Finally, I will be interfacing with Spotify’s API in order to get information about the given client/band, including streaming figures, genre, and unique monthly listeners. I will use all of the above to find a short list of recommendable venues for the band to book a show at.