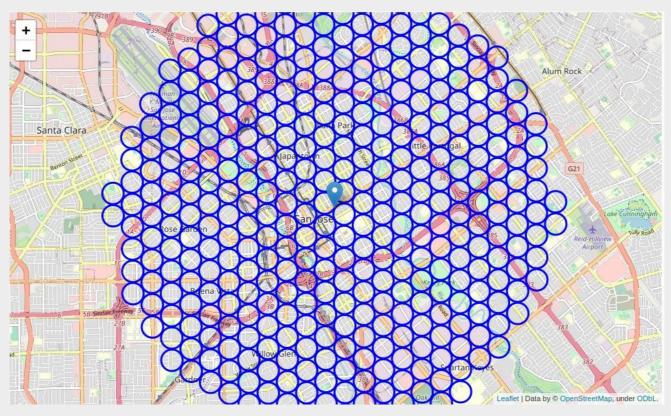


Using geocoding and clustering to find Ideal venues

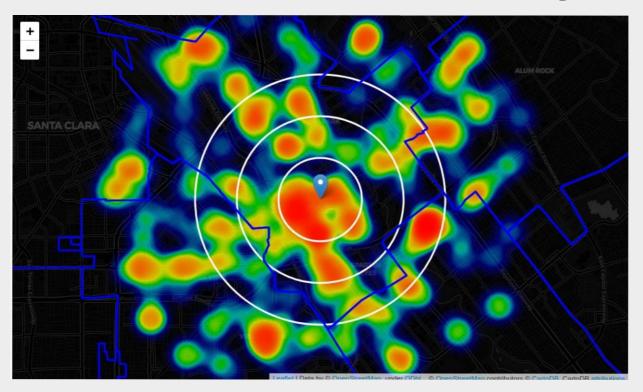
- Geocoding allows us to find addresses all across San Jose
- We can use Foursquare API to ascertain proximity to restaurants
- Clustering and classification yields potential venues
- Human analysis of a narrow list of addresses gives ideal location

Spacing Grid



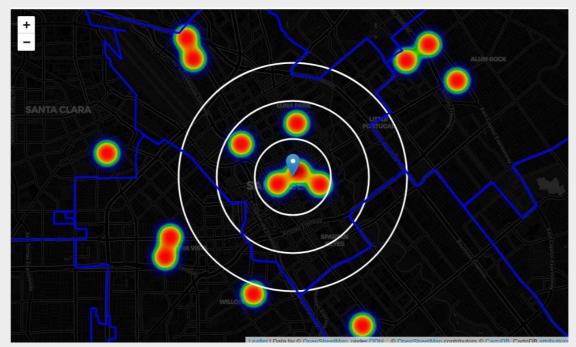
- Grid locations are 300m apart
- Grid locations span 6km radius around City Hall
- Geocoding yields further data for analysis

Restaurant Density



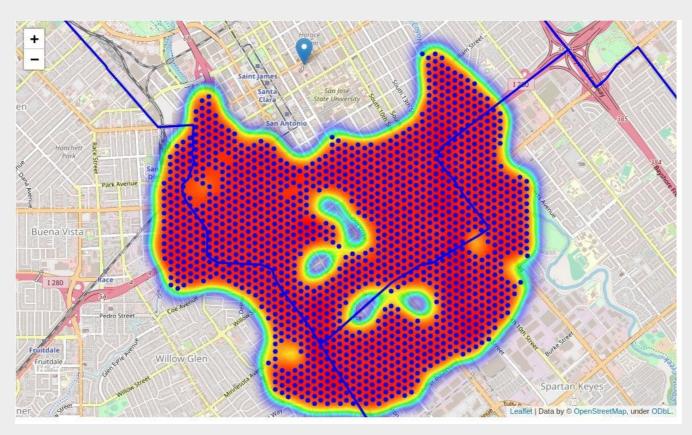
- City Hall Indicated by cental pin
- Circles situated 1km apart
- Heatmap indicates relative presence and absence of restaurants in vicinity of city Hall

Indian Restaurant Density



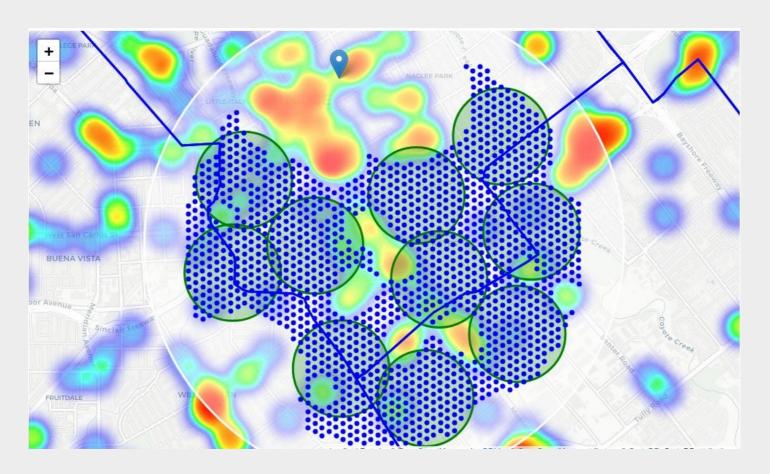
- Indian Restaurants have a sparse distribution indicating robust opportunity
- Gaps located to south and east of City Hall
- Ideal Opportunity will exist in these areas also having no restaurants nearby

Washington-Guadalupe and Spartan-Keyes



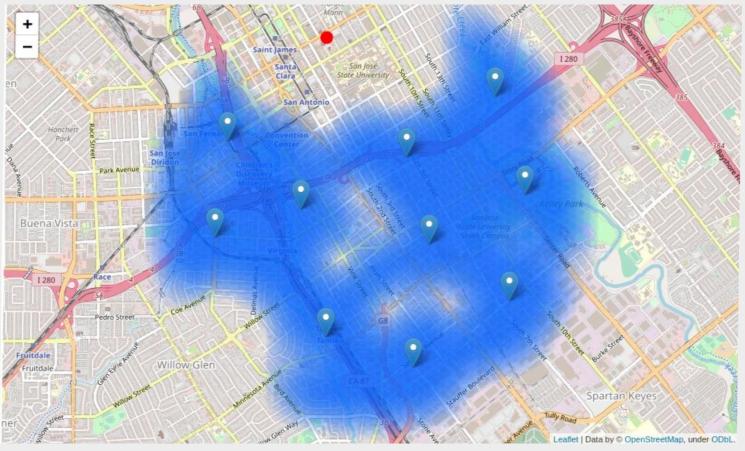
- Best place to open restaurant is in two neighbourhoods south and south-east of city hall
- Up and coming area going from industrial to residential
- Populated with large portion of students, artists, and people living alternative lifestyles

Venue Addresses



- K-Means clustering yields 10 areas within these neighbourhoods
- Each area has a high concentration of good addresses
- We can use reverse geocoding to find central addresses as a starting point for finding venues

Conclusions and Considerations



- Each address indicates a range of possible valid locations within a 300m vicinity
- Addresses are mainly starting points for good locations
- Final decision is subject to human input and consideration of additional factors such as proximity to public transportation