

IBM CAPSTON PRESENTATION

Siyuan Liu



Introduction:

- ❖ Seattle has always been a desirable city. Siyuan Liu is a young artist who plans to move to Seattle and open her first personal art exhibition there. I plan to use a data-driven method to analyze the cultural space resources of each block and neighbor in Seattle to present a recommendation to Siyuan. Through that process, I also hope can help other artists who faced the similar problem of moving to a new city.

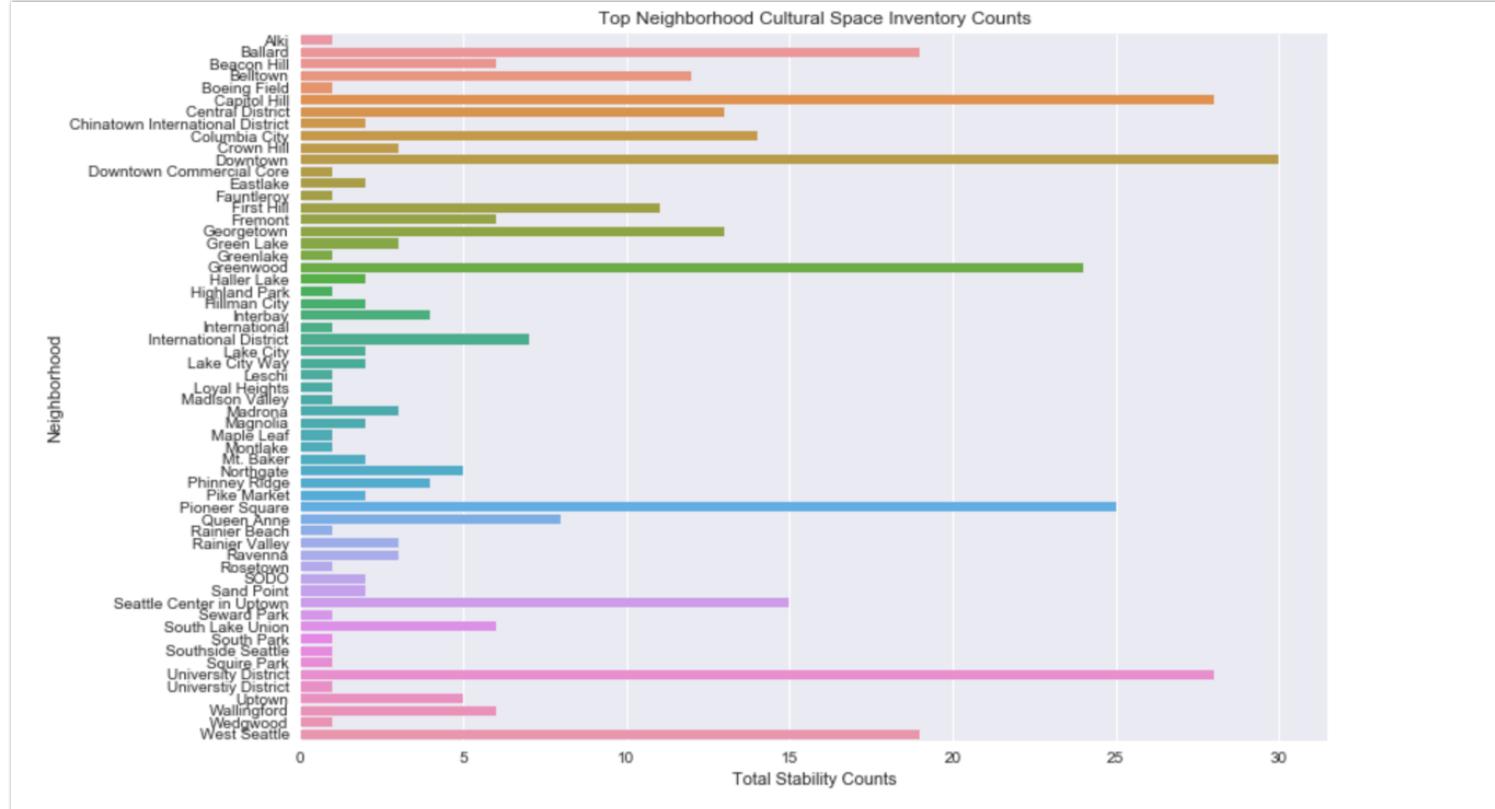
Data:

- ❖ Cultural Space Inventory data from government website: <https://data.seattle.gov/>
- ❖ Geocoder Seattle location data
- ❖ Seattle location data from FourSquare API, including venue ID, venue Name, Latitude and Longitude, and category name.

Methodology:

- ❖ • Data Cleanup and re-grouping: retrieved data, clean up unwanted data, drop uncompleted and missing data, check data type, fix if needed, and add geographical coordinates.
- ❖ • Top Neighborhood Cultural Space Inventory Counts.
- ❖ • Use seaborn and matplotlib.pyplot to generate graph.
- ❖ • Top 10 most common Cultural Space Inventory type counts.
- ❖ • Using Geocoder Seattle to retrieve coordinate data and render map with folium.

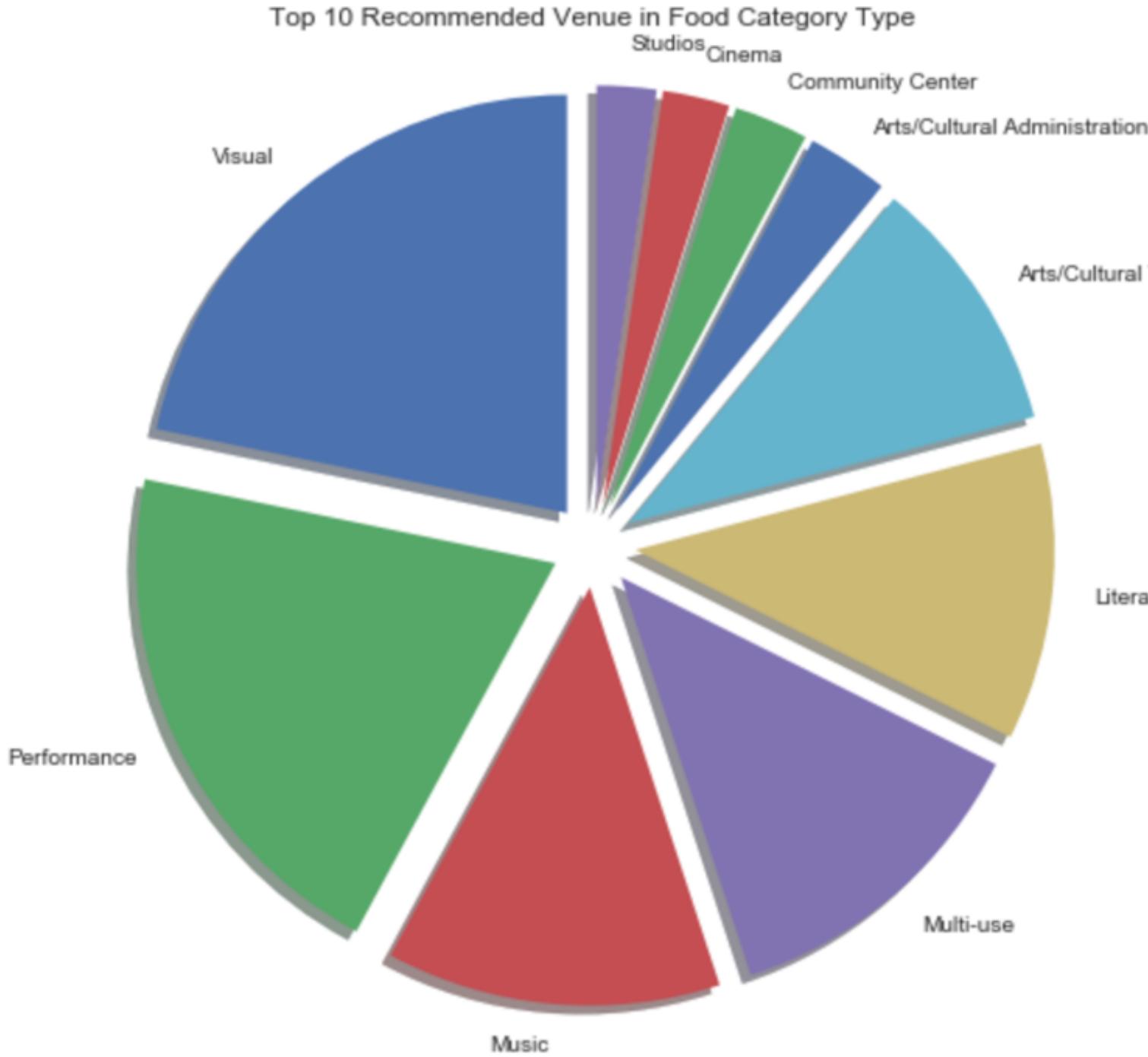
Top Neighborhood Cultural Space Inventory Counts:



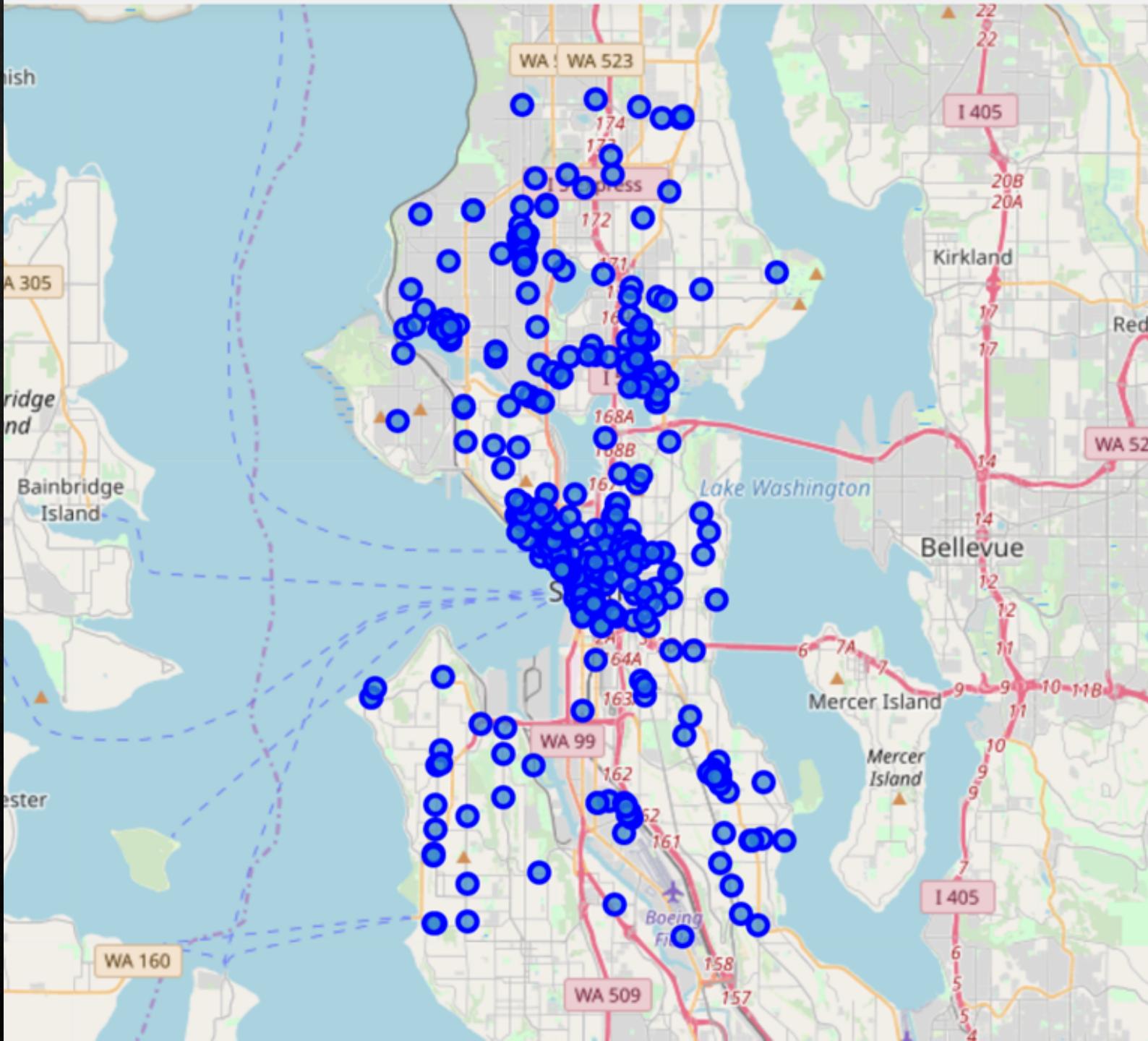
Top 10 most common Cultural Space Inventory type counts:

	Dominant Discipline	Name
0	Visual	76
1	Performance	71
2	Music	45
3	Multi-use	44
4	Literary	40
5	Arts/Cultural Training or Education	35
6	Arts/Cultural Administration or Advocacy	11
7	Community Center	10
8	Cinema	9
9	Studios	8

Visualization:



Coordinate
data and
render map:



Conclusion:

- ❖ Recommendation for Siyuan:
Top three cultural neighborhood in Seattle are downtown, capitol hill and university district. Top three cultural inventory are visual, performance and music. Seattle is a recommended city for artist.

