

AirBnB Listings Reconsidered by Reputation and Description

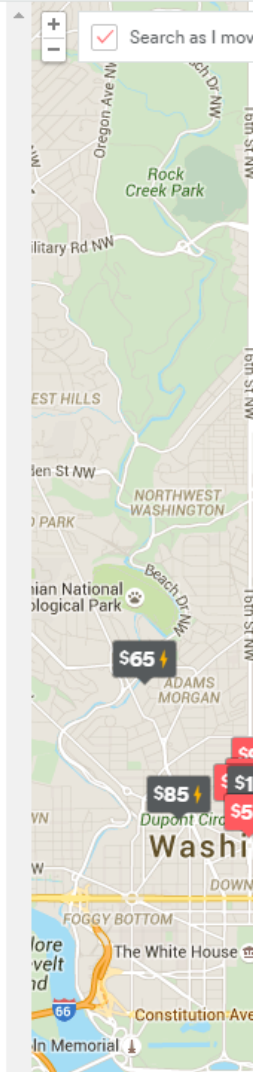
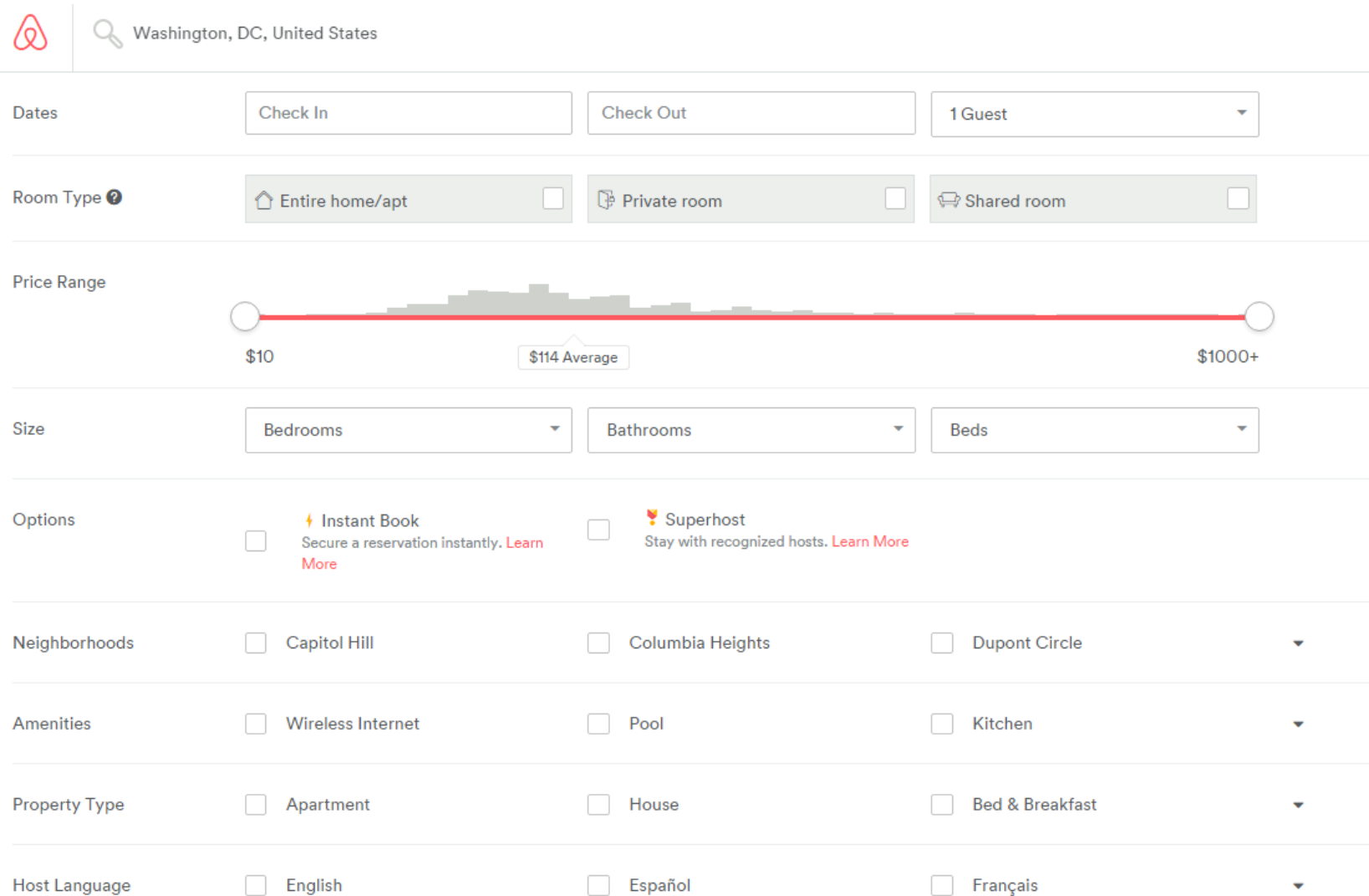
Talha Oz

December 2015

Web-based GIS by Dr. Pfoser

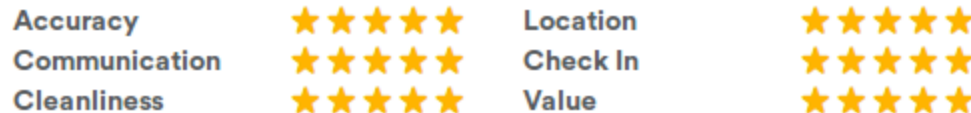
George Mason University

Background - AirBnB

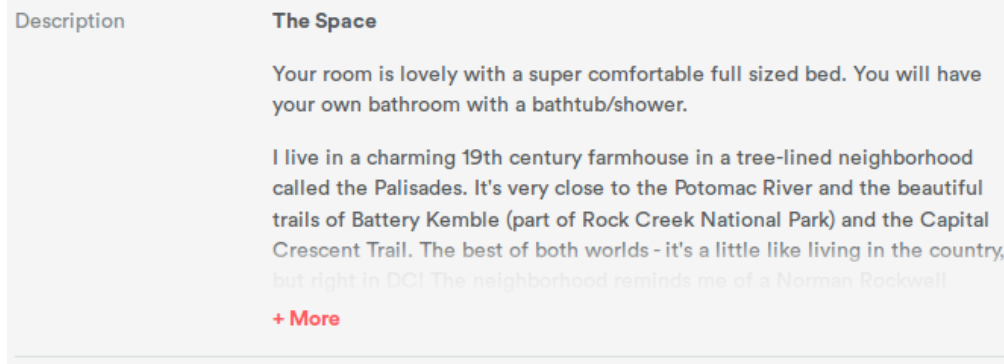


Objective/Contributions

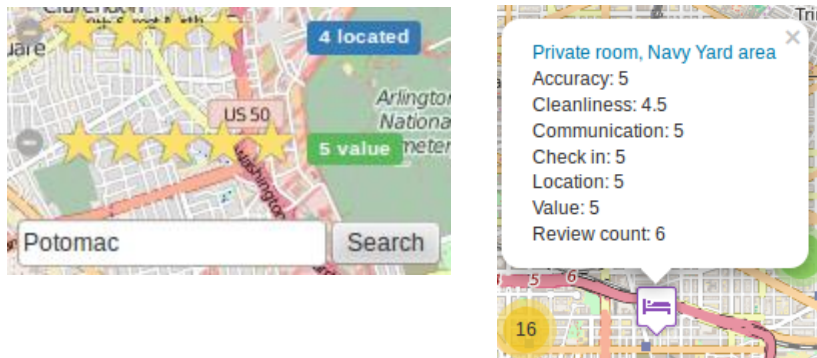
- Filter listings by review scores



- Search in listing descriptions



- Visualize & communicate effectively



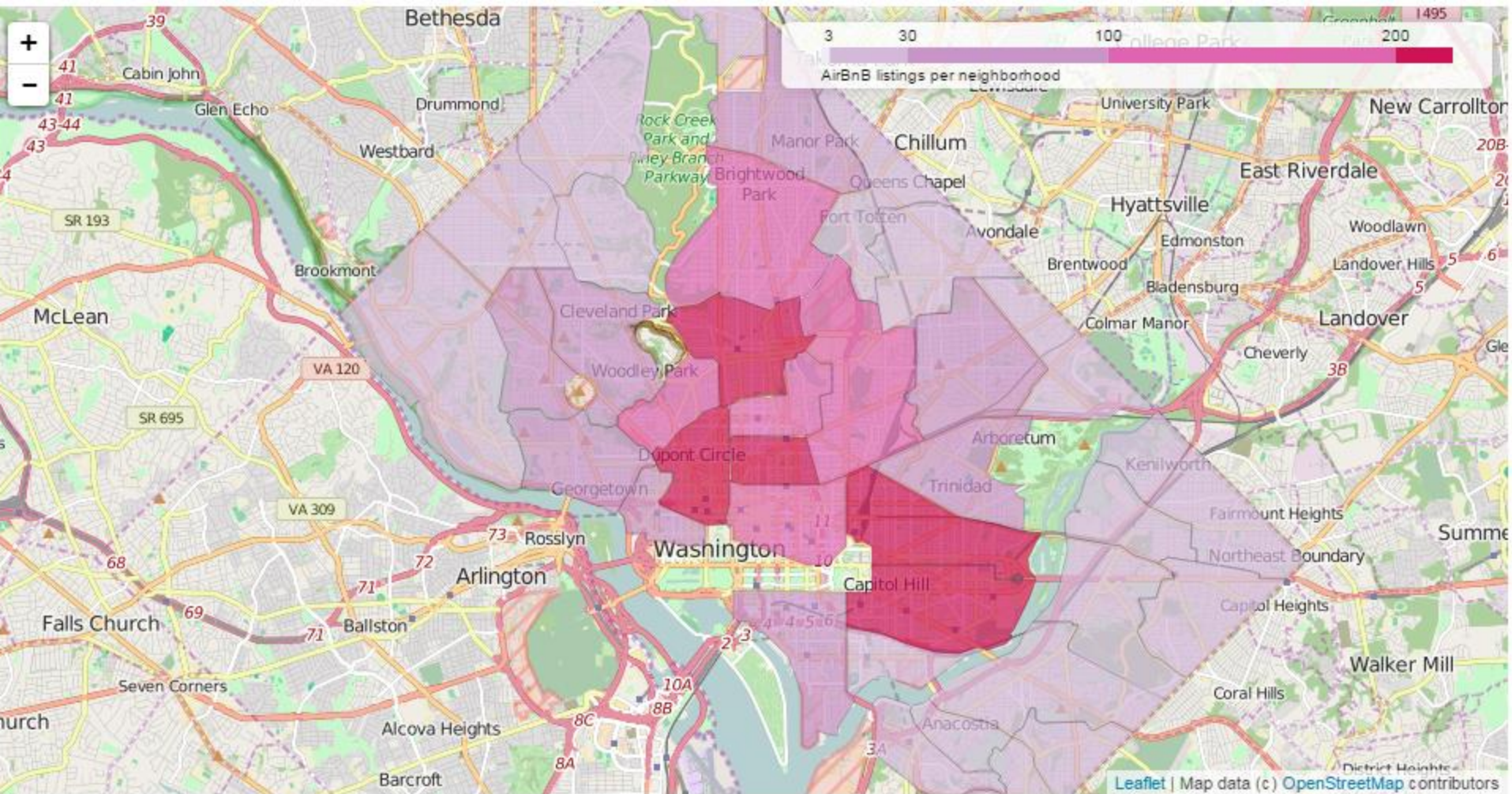
Data 1 - Descriptive Stats

- 3723 (2846) x 91

Name	Type
name	String
listing_url	String
room_type	String
cleanliness	Integer
accuracy	Integer
communication	Integer
checkin	Integer
location	Integer
value	Integer
number_of_reviews	Integer
the_geom	Point

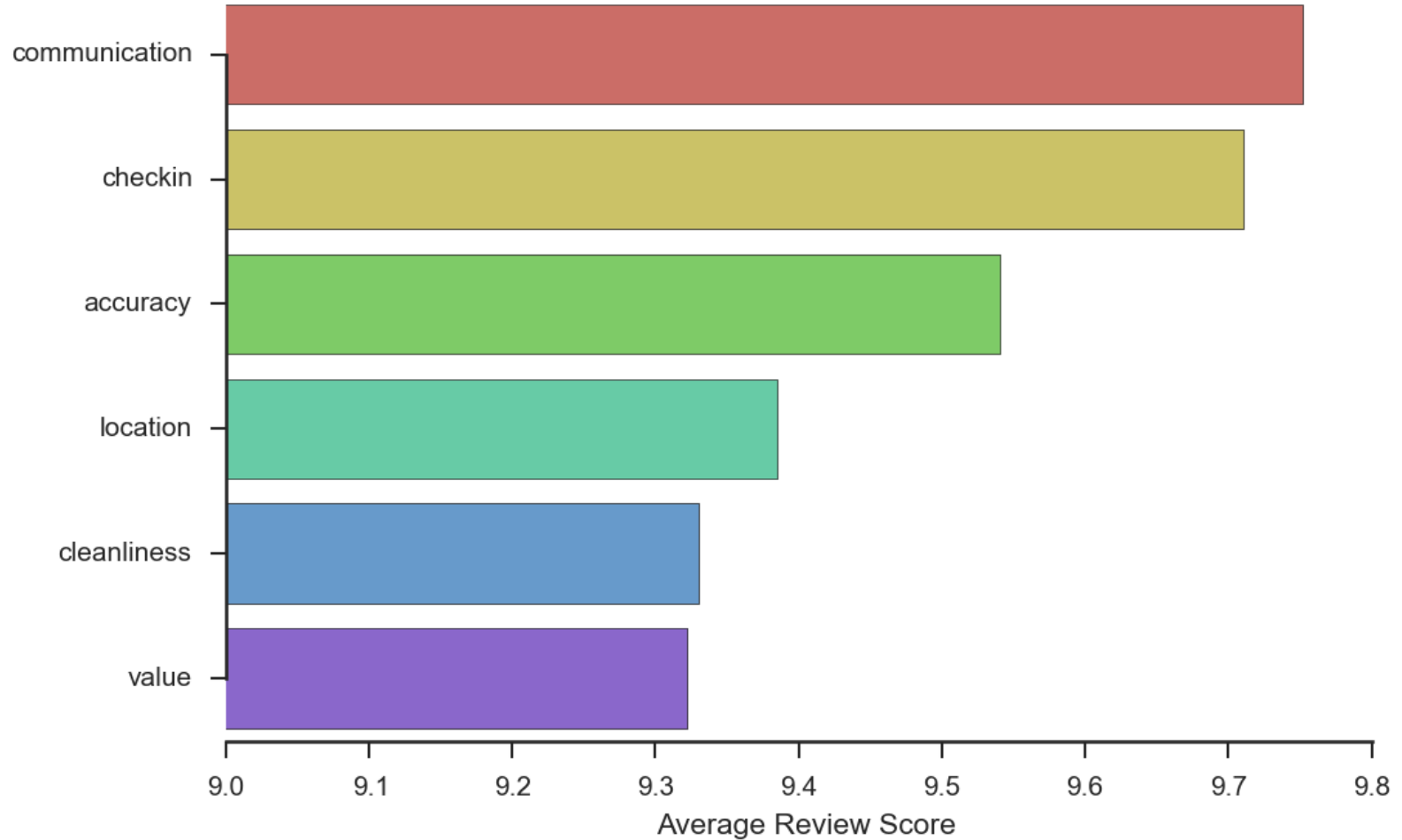
neighborhood	count
Columbia Heights, Mt. Pleasant, Pleasant Plain...	351
Dupont Circle, Connecticut Avenue/K Street	285
Capitol Hill, Lincoln Park	242
Shaw, Logan Circle	239
Union Station, Stanton Park, Kingman Park	234
Edgewood, Bloomingdale, Truxton Circle, Eckington	194
Kalorama Heights, Adams Morgan, Lanier Heights	183
Brightwood Park, Crestwood, Petworth	140
Downtown, Chinatown, Penn Quarters, Mount Vern...	135
Howard University, Le Droit Park, Cardozo/Shaw	114
West End, Foggy Bottom, GWU	95
Georgetown, Burleith/Hillandale	87

Data 2 – Listing Density Map






Data 3 – Review Scores

AirBnB Listings in Washington, D.C.

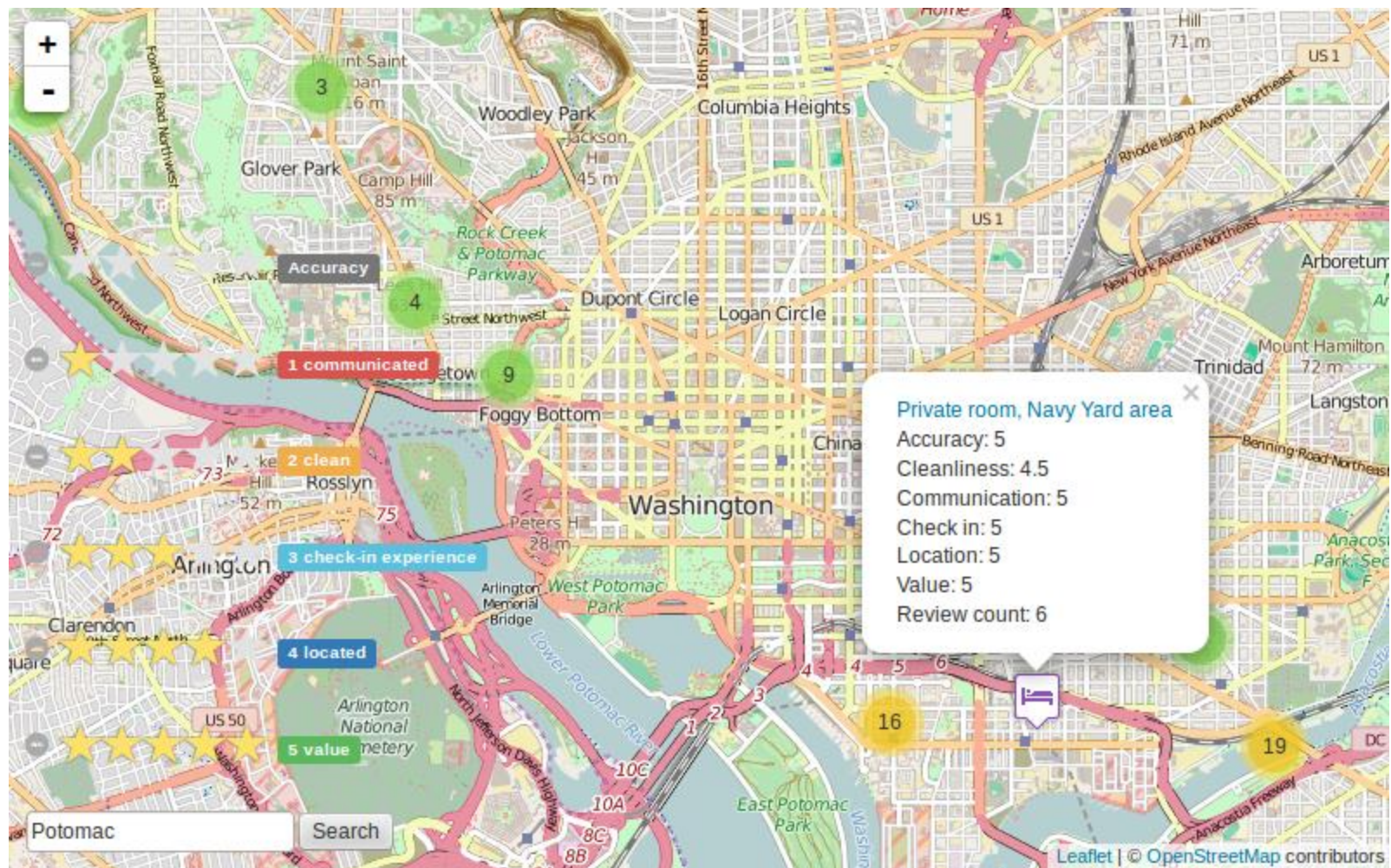


Design

- Back-end
 - PostgreSQL + PostGIS
 - GeoServer + WFS
- Front-end
 - Leaflet + geoJson, Icon, markerClusterGroup
 - JQuery + ajax
 - Bootstrap + Star Rating Plugin
 - Map Icons Collection +   

Related scripts
will be shown
during the demo

Control Elements & Visualization



Wrap-up

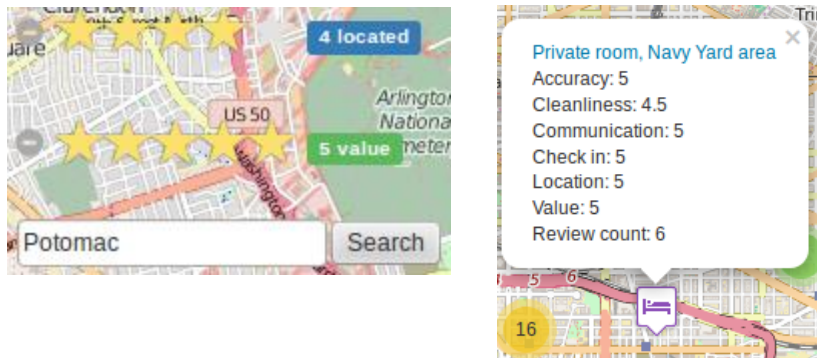
- Filter listings by review scores

Accuracy	★★★★★	Location	★★★★★
Communication	★★★★★	Check In	★★★★★
Cleanliness	★★★★★	Value	★★★★★

- Search in listing descriptions

Description	The Space
	<p>Your room is lovely with a super comfortable full sized bed. You will have your own bathroom with a bathtub/shower.</p> <p>I live in a charming 19th century farmhouse in a tree-lined neighborhood called the Palisades. It's very close to the Potomac River and the beautiful trails of Battery Kemble (part of Rock Creek National Park) and the Capital Crescent Trail. The best of both worlds - it's a little like living in the country, but right in DC! The neighborhood reminds me of a Norman Rockwell</p> <p>+ More</p>

- Visualize & communicate effectively



Demo

- <http://nbviewer.ipython.org/github/oztalha/airbnb-ratings-geo-web-app/blob/master/airbnb-ratings-geo-web-app.ipynb>
- Thank you !!!
- Questions ???
- Talha Oz - @tozCSS