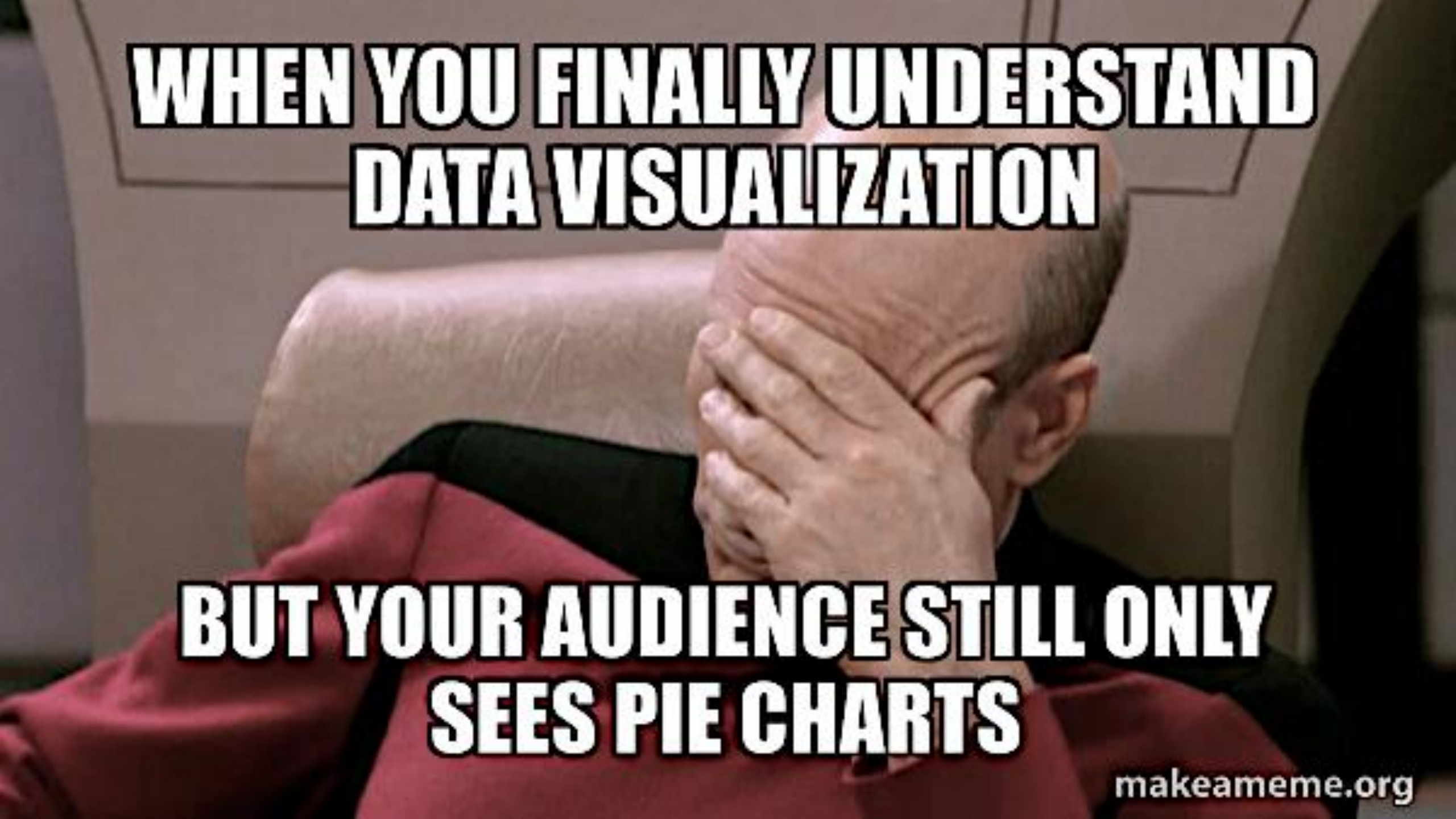
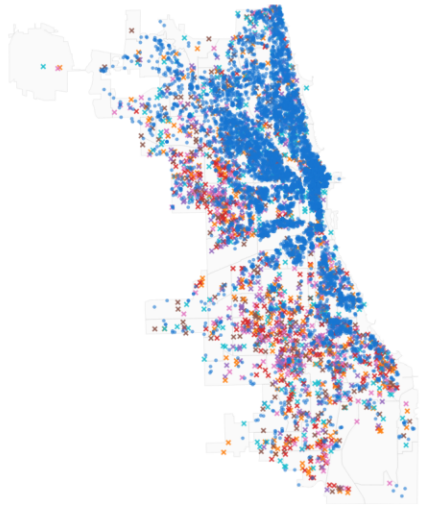

WHEN YOU FINALLY UNDERSTAND DATA VISUALIZATION
BUT YOUR AUDIENCE STILL ONLY SEES PIE CHARTS
makeameme.org

Chicago Airbnb and Crime Dashboard

District: All Districts | Room Type: All Room Types | Clear Filters | Showing 8263 of 8263 listings

Location Map

Scroll to zoom, drag to select

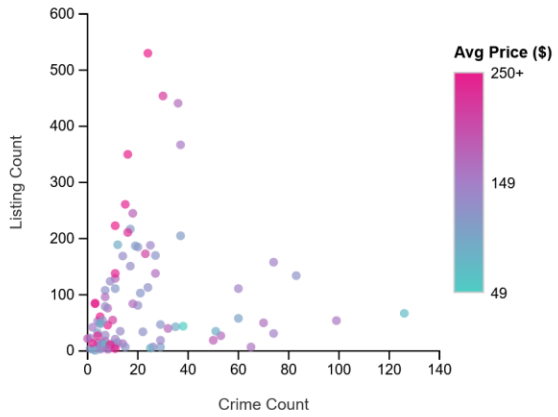


Airbnb

All Crimes
ASSAULT
BATTERY
BURGLARY
HOMICIDE
ROBBERY
THEFT

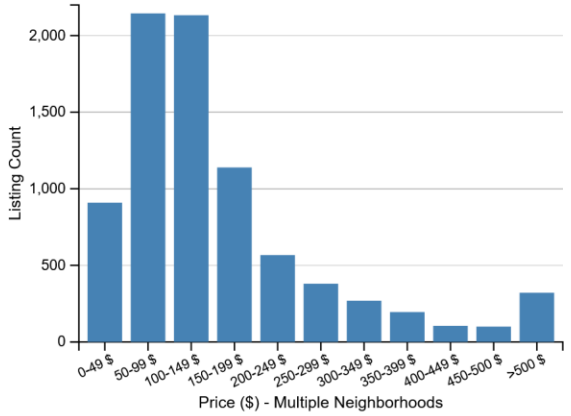
Crime vs Listings by Neighborhood

Click point to filter by neighborhood



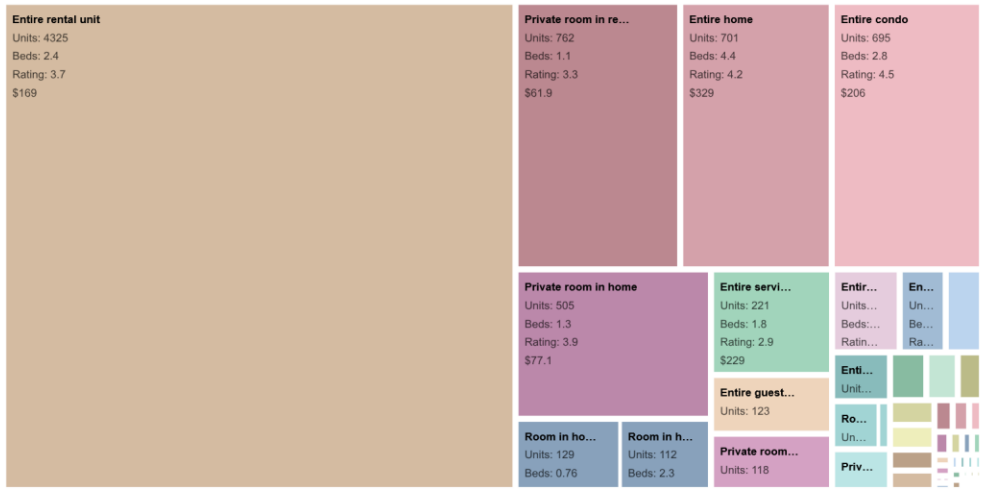
Price Distribution

Click bar to filter treemap



Airbnb Feature Breakdown

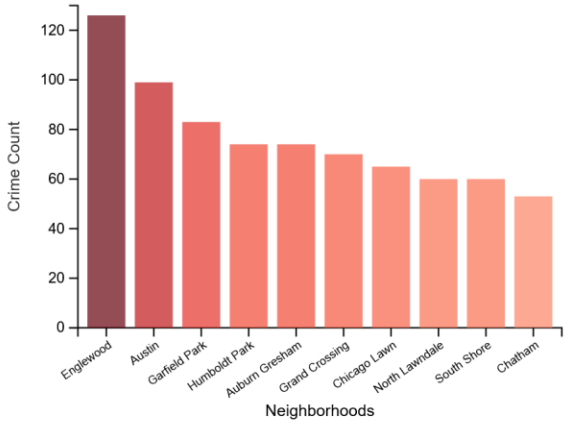
Click cell to filter histogram



Level 1: Property Type
Level 2: Room Type
Level 3: Property Type

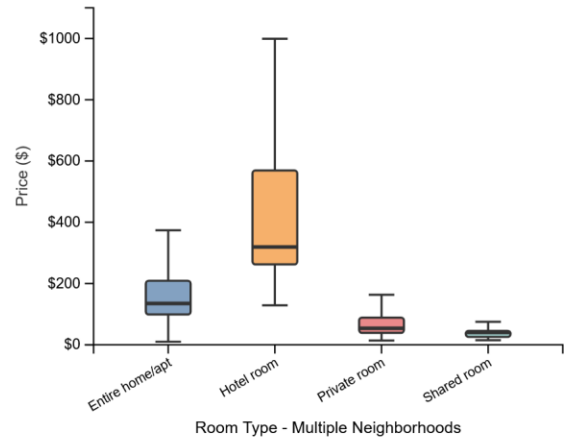
Top Neighborhoods by Crime

Click bar to filter by neighborhood



Price by Room Type

Average price comparison



What?

AirBnB listings

- diverse listings characteristics on a tree-map
- price distribution
- price by room type

Chicago crime records

- crime incidents per type on Chicago map
- crime vs. listing counts
- number of crime incidents by neighborhood

Interactivity

- join attributes:
  - longitude, latitude
  - listing id

RQs.

I. **Investors**
Where are the top Airbnb districts that yield the highest prices and welcoming surroundings for tourists

How can one effectively identify Airbnb market location- and pricing patterns in Chicago based on external factors like crime statistics and location?

II. **Public Policy**
How can the local administration locate and identify Airbnb and pricing patterns to effectively steer city zoning?

Insights.

Identify geographic patterns
Detect clusters of Airbnb's and compare them with crime density (e.g., HOMICIDE hotspots).

Explore/detect correlations
Examine how features such as property amenities, types or crime rates influence Airbnb prices and/or density.

Compare categories/types
Compare Airbnb's accommodation types (room vs. entire home). Potentially in combination with neighbourhoods in terms of price and safety.

Foster decision making
Policymakers have increasingly been taking Airbnb into consideration when talking about housing affordability. The visualizations should help identify patterns relevant to i.e. limiting the supply of Airbnb's in certain areas or enabling more development elsewhere.

Users.

1. Airbnb hosts, property owners, investors

- Pricing
- Competition
- Neighbourhood safety
- Investment opportunities

2. Travelers

- Seek save & affordable accommodations

3. Urban planners & policymakers

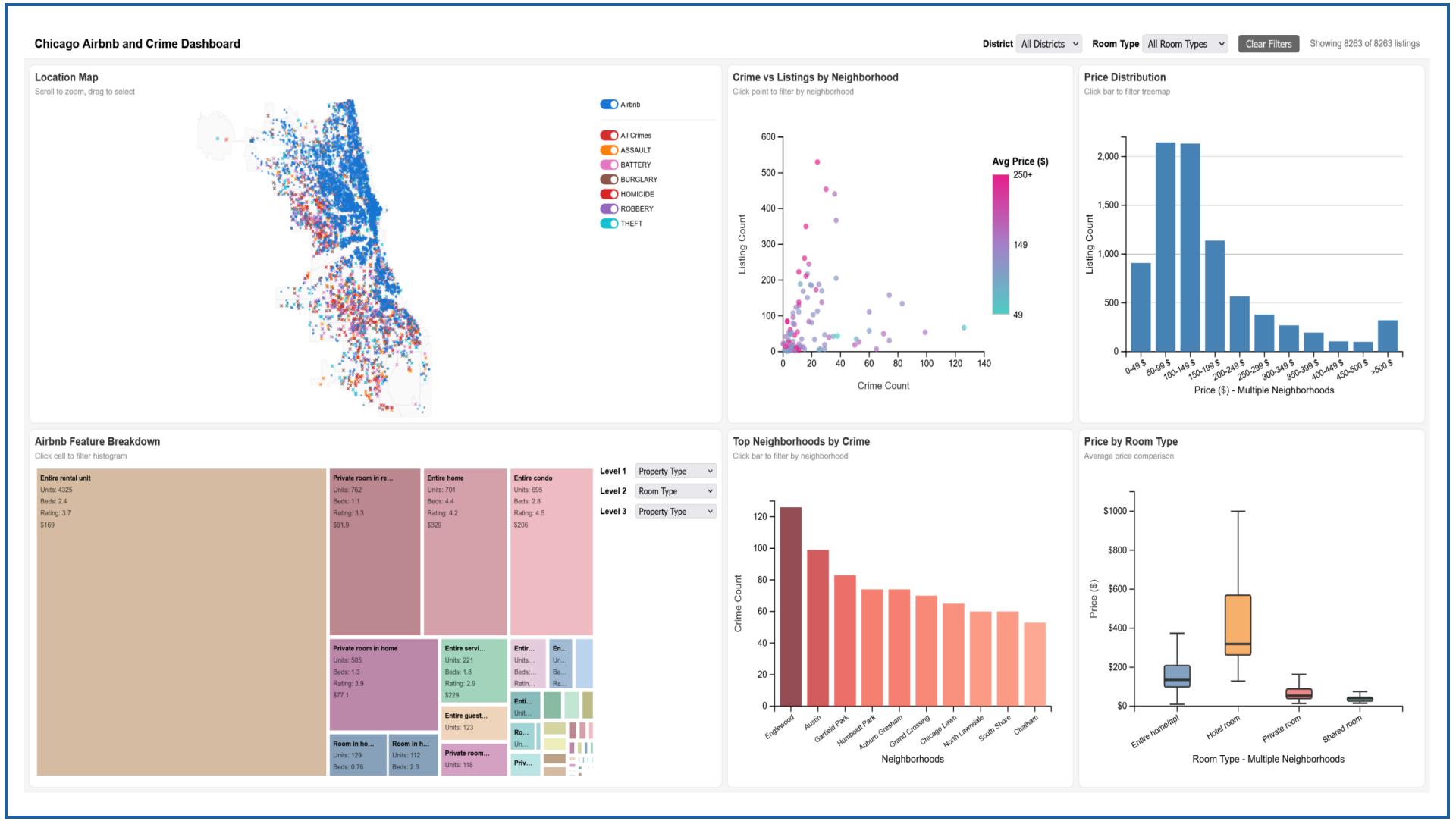
- Spatial distribution of short-term rentals
- Analyze crime hot-spots – where to intervene to reduce crimes – did interventions help?

Data.

AirBnB listings [source: AirBnB]

- price
- amenities
- host information
- platform details
- geolocation data
- subset to {Q3 & Q4 2023}

Chicago crime records [source: City of Chicago]

- crime incidents per type
- coordinates, and timestamps (2001–2024)

Project Demo