

# Airbnb price prediction in Seattle WA

Project 2

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# Air bed and breakfast (Airbnb) webservices

Airbnb provides an interface for guests and hosts

- ▶ Homes
  - ▶ Booking and listing properties

# Airbnb rental price in Seattle WA

Question:

- ▶ What property features define rental price?

Potential benefits:

- ▶ Informed listing selection for guests
- ▶ Better rent estimation for hosts

# Data sources and tools



# Airbnb rental rate in Seattle WA

- Linear regression model



► Price estimation:  
\$ price  $\pm$  24%

# Airbnb rental rate in Seattle WA

- Linear regression model

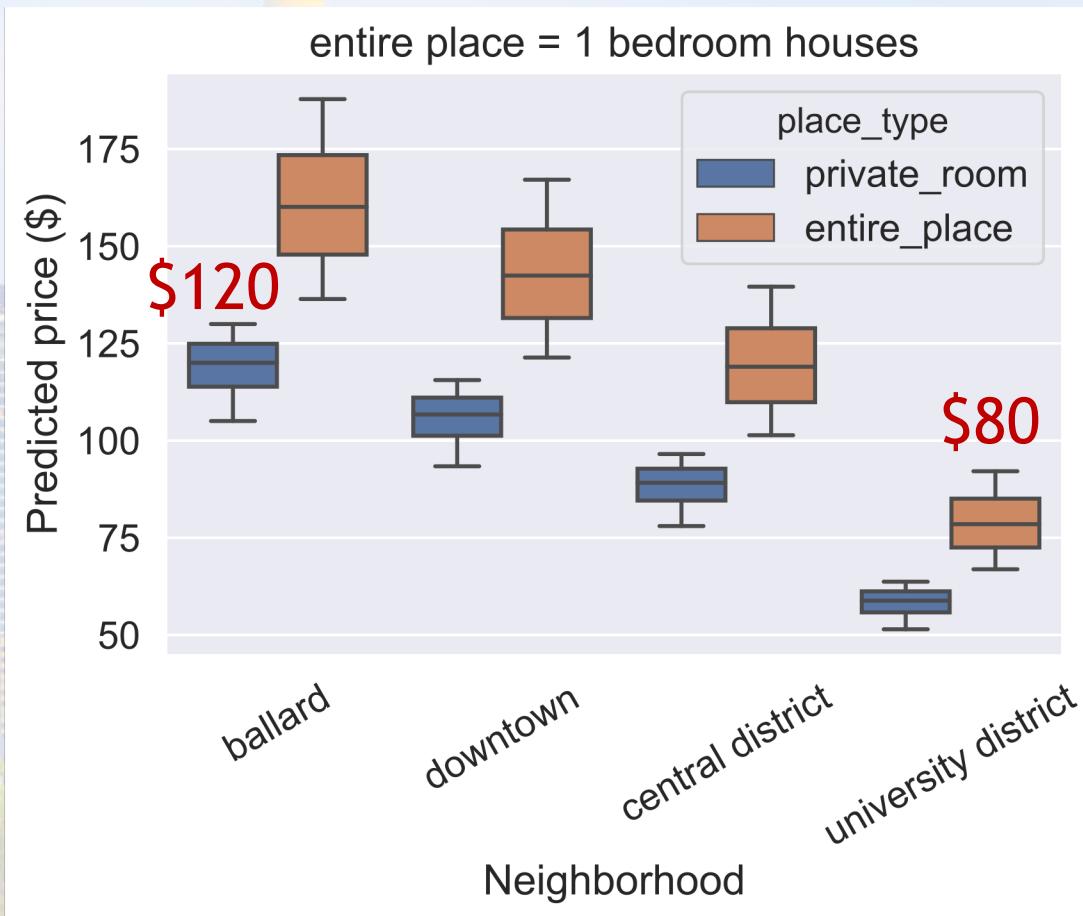
Simulated data  
• 50,000 homes



Predicted  
price

# What makes a place more attractive \$\$\$?

## - Location



► Location

# What makes a place more attractive \$\$\$?

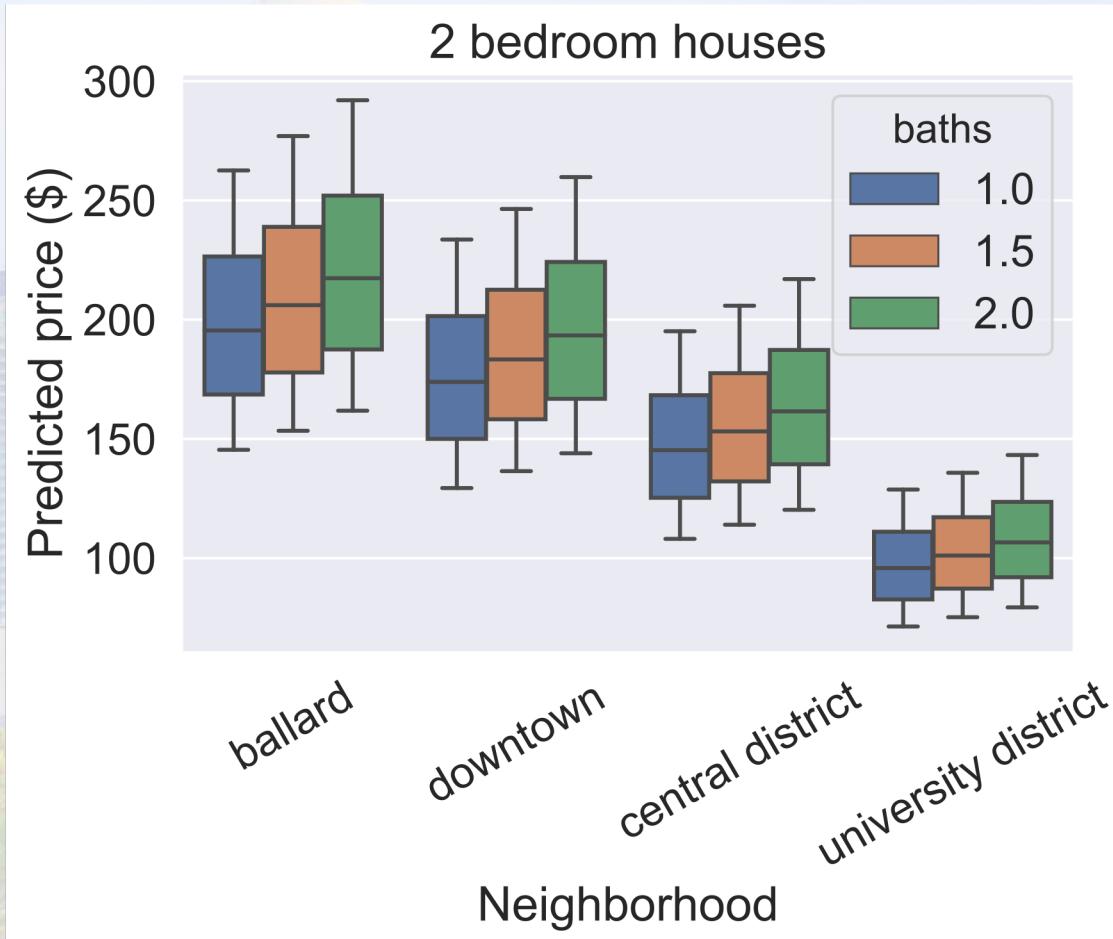
## - Guests



► Guests

# What makes a place more attractive \$\$\$?

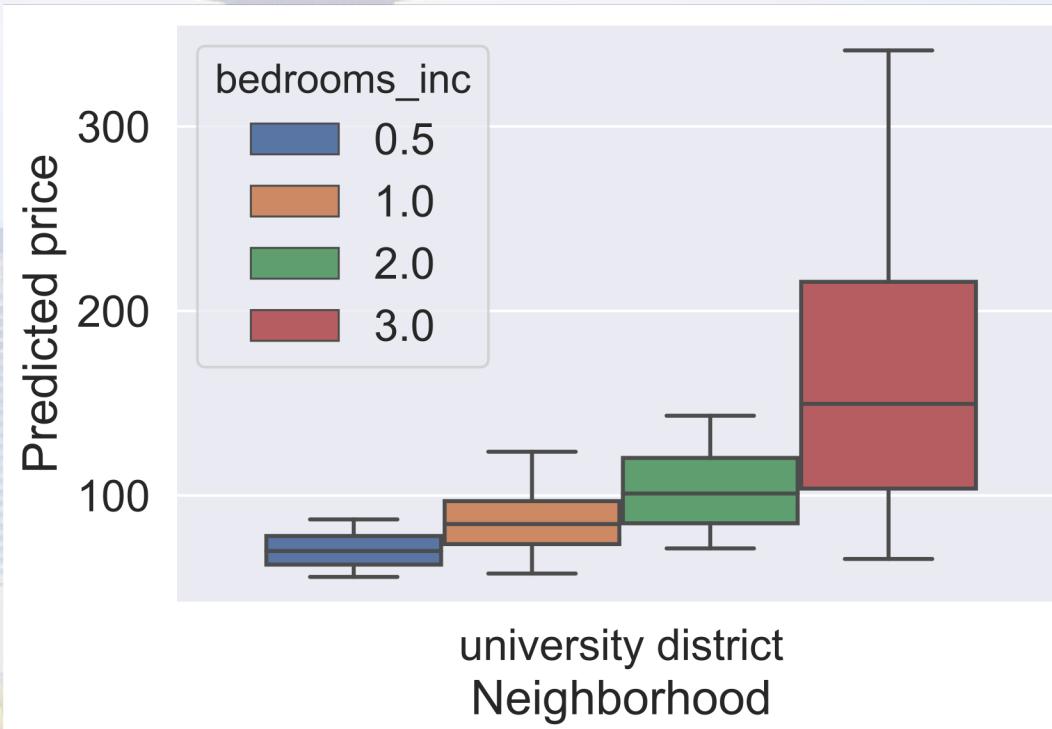
- Bathrooms



Bathrooms

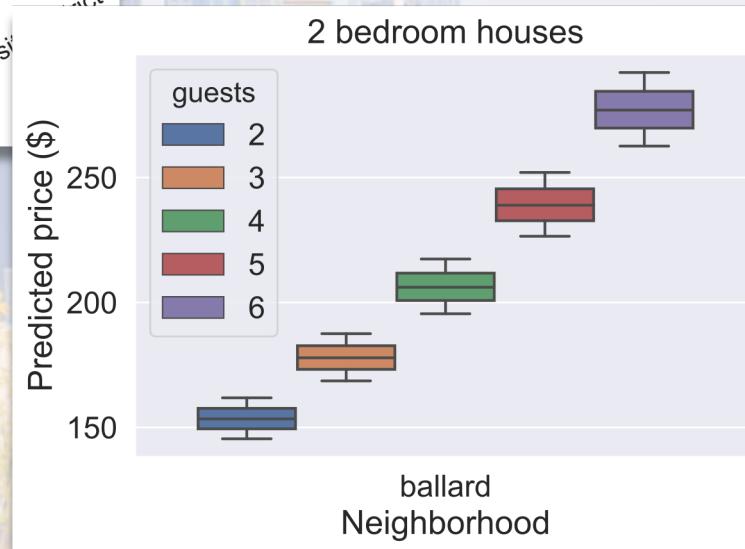
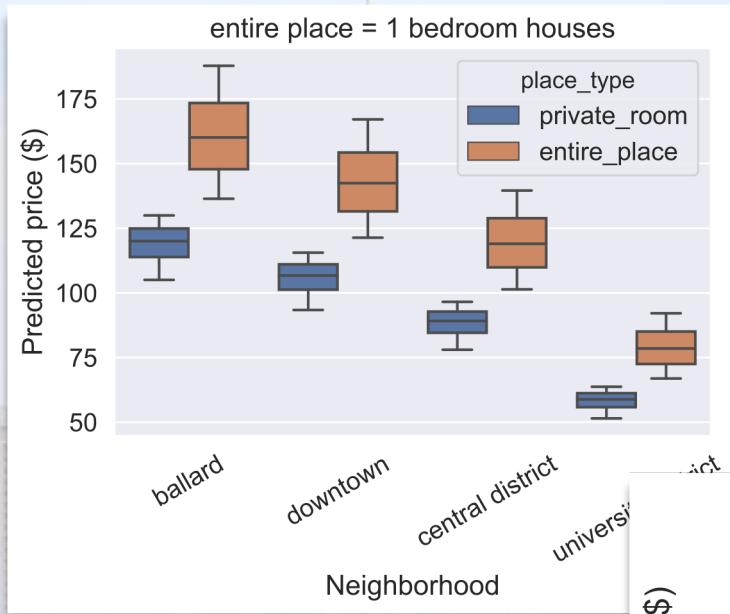
# What makes a place more attractive \$\$\$?

- Bedrooms



► **Bedrooms**

# What makes a place more attractive \$\$\$?



- ▶ Location
- ▶ Guests
- ▶ Bathrooms
- ▶ Bedrooms

# Future directions

Model improvement:

- ▶ Extract amenities data from Airbnb
- ▶ Add property price (Zillow) data (using address)

Additional questions:

- ▶ Compare Airbnb to VRBO

A panoramic view of the Seattle skyline during sunset. The Space Needle is prominent on the left. In the background, Mount Rainier is visible under a blue sky with scattered clouds.

# Thank you!

# Air bed and breakfast (Airbnb) webservices

Airbnb provides an interface for guests and hosts

- ▶ Homes
  - ▶ Booking and listing properties
- ▶ Experiences
  - ▶ Hosting and reserving activities