

Predicting AirBnB Rental Rates

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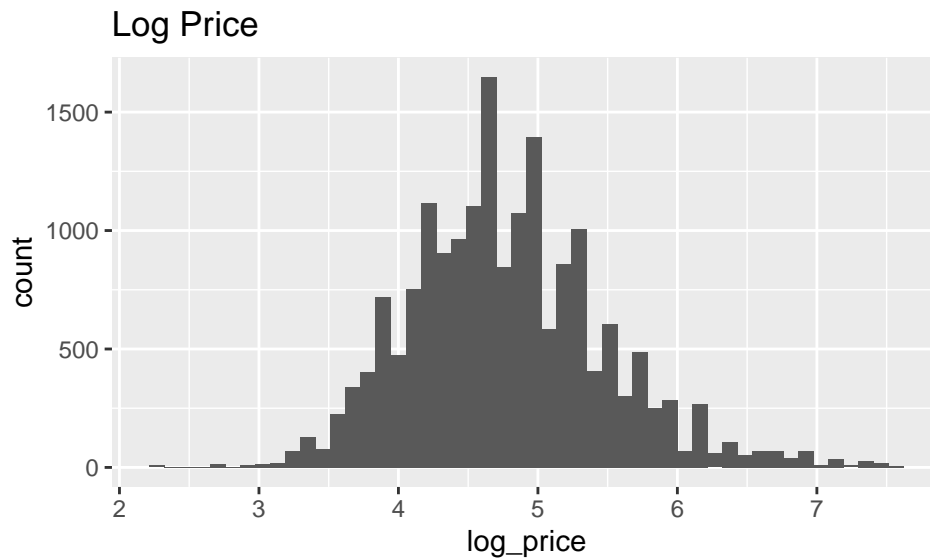
12/10/2021

```
##      id log_price property_type    room_type
## 1 15842436 3.806662    Apartment  Private room
## 2  4644790 4.828314        House Entire home/apt
## 3  9920493 5.736572        House Entire home/apt
## 4 20943640 5.700444    Apartment Entire home/apt
## 5   453109 4.510860    Apartment Entire home/apt
## 6  6490927 4.700480        House Entire home/apt
##
## 1
## 2 {TV,"Wireless Internet",Kitchen,Heating,"Family/kid friendly","Smoke detector","Carbon monoxide de
## 3
## 4
## 5
## 6
##      accommodates bathrooms bed_type cancellation_policy cleaning_fee city
## 1              2          1.0 Real Bed          flexible        FALSE   LA
## 2              2          1.0 Real Bed          moderate         TRUE   SF
## 3              6          2.0 Real Bed          flexible         TRUE   LA
## 4              4          1.5 Real Bed             strict         TRUE  NYC
## 5              2          1.0 Real Bed             strict         TRUE  NYC
## 6              4          1.0 Real Bed          moderate         TRUE   LA
##
## 1 * Free on street parking * 8 blks (1 mile from the beach) * Metro Station 1/2 blk away * Leather C
## 2 Beautifully remodeled chic, modern, clean, quiet home in a safe neighborhood with easy access to e
## 3 This is a modern completely remodeled house with 3 bedrooms, 2 bathroom, living room and Huge Che
## 4
## 5 This is a sunny and bright studio in the classic Upper East Side. In a single day, you can grab go
## 6
##      first_review host_has_profile_pic host_identity_verified host_response_rate
## 1    2016-03-25              t              t              100%
## 2    2017-06-24              t              t              100%
## 3    2016-01-26              t              f
## 4    2017-09-03              t              f              100%
## 5
## 6    2016-02-20              t              f              100%
##      host_since instant_bookable last_review latitude longitude neighbourhood
## 1 2015-01-07              f 2017-04-24 33.78229 -118.19165    Long Beach
## 2 2017-05-09              f 2017-09-23 37.75861 -122.47618    Inner Sunset
## 3 2015-06-26              f 2016-11-15 33.96533 -118.31997
## 4 2017-08-14              t 2017-09-24 40.72407 -73.98251    Alphabet City
## 5 2015-11-25              t              40.76954 -73.94904 Upper East Side
## 6 2016-02-01              f 2017-04-20 33.92626 -118.42076    El Segundo
```

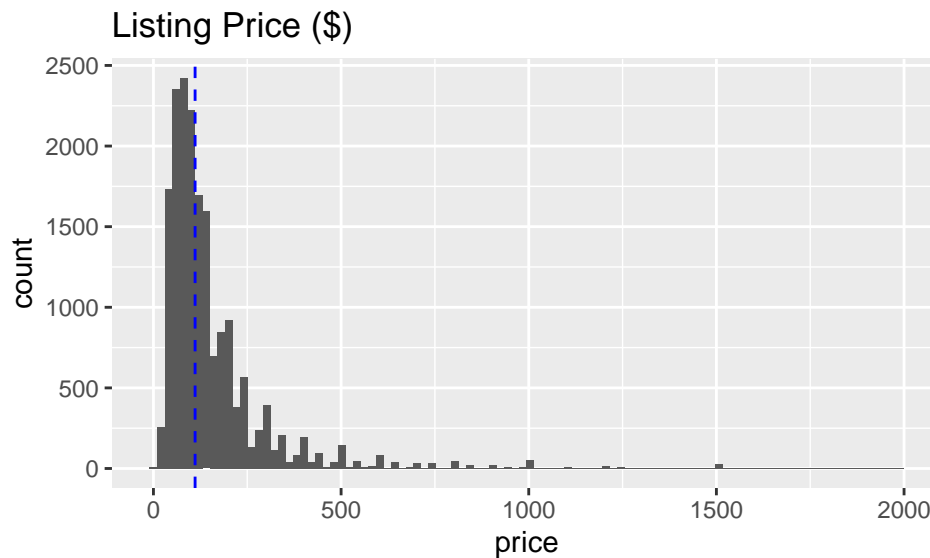
##	number_of_reviews	review_scores_rating	zipcode	bedrooms	beds	price
## 1	57	87	90813	1	1	45
## 2	8	100	94122	1	2	125
## 3	4	100	90305	3	3	310
## 4	3	87	10009.0	2	3	299
## 5	0	NA	10075	0	1	91
## 6	61	97	90245	0	2	110

Variable Descriptions:

Log Price



Price



Property Type

property_type	Total
Apartment	11851
House	4054
Condominium	642
Townhouse	433
Loft	300
Other	145
Bed & Breakfast	128
Guesthouse	117
Bungalow	92
Guest suite	36
Villa	34
Dorm	26
Cabin	24
Camper/RV	24
In-law	20
Boutique hotel	16
Hostel	14
Timeshare	14
Boat	12
Serviced apartment	4
Yurt	4
Castle	3
Tent	3
Earth House	2
Vacation home	2

room_type	Total
Entire home/apt	10029
Private room	7423
Shared room	548

City

city	Total
NYC	7766
LA	5492
SF	1603
DC	1383
Chicago	901
Boston	855

Property Details

accommodates	Total
2	7769
4	2853
1	2280
3	1878
6	1245
5	839
8	440
7	242
10	174
16	76
12	66
9	62
14	32
11	21
15	19
13	4

bedrooms	Total
1	12039
2	2723
0	1693
3	1050
4	342
5	87
NA	24
6	23
7	15
10	2
8	1
9	1

bathrooms	Total
1.0	14100
2.0	1930
1.5	907
2.5	403
3.0	261
3.5	111
4.0	67
0.5	55
NA	51
0.0	45
4.5	27
5.0	15
5.5	9
8.0	8
6.0	6
6.5	2

bathrooms	Total
7.5	2
7.0	1

bed_type	Total
Real Bed	17469
Futon	207
Pull-out Sofa	146
Airbed	115
Couch	63

Host details

host_has_profile_pic	Total
t	17908
f	54
	38

host_identity_verified	Total
t	12137
f	5825
	38

instant_bookable	Total
f	13310
t	4690

cancellation_policy	Total
strict	7909
flexible	5401
moderate	4649
super_strict_30	37
super_strict_60	4

Variable Selection?

Models

Final Model

Results