



The Auto House-Appraiser

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Problem

Have you ever had to sell or buy a house, but don't know what it's worth?



Hiring an appraiser or real estate broker is expensive and time consuming.



Wouldn't it be great if there was a model that could estimate the approximate value of your target home with just a few clicks?



Question

Can a model be used to estimate house values in place of a human appraiser?



Solution Proposition

Create a model that will take the characteristics of a house and determine an approximate value of that house for the respective market.



How It Works

Step 1: A model will be built that will determine relevant characteristics of a property.

Step 2: The model will weigh those characteristics as it sees fit. The model will use previous sales data to adjust the weights of all characteristics

Step 3: The model will be able to predict the value of any home based on those characteristics

Step 4: You don't need to hire an appraiser because technology will do the job for you!



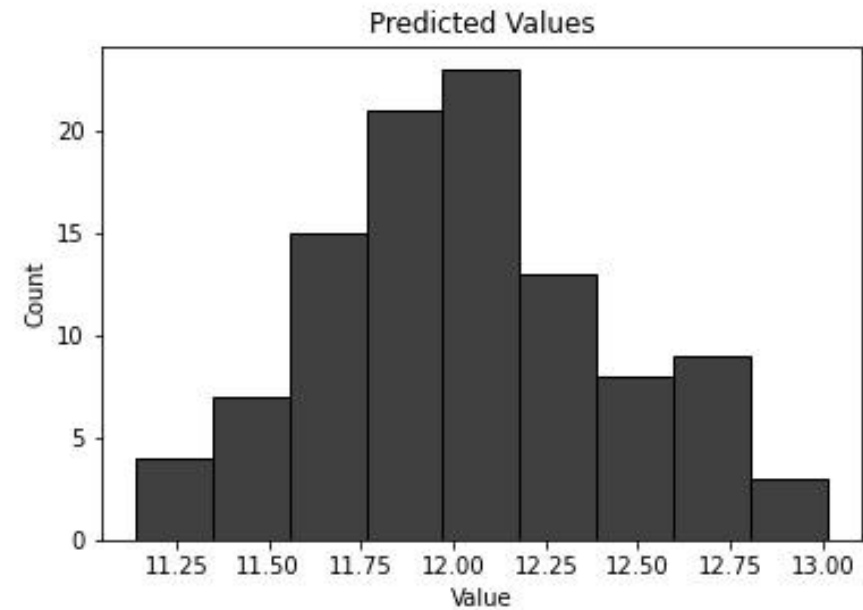
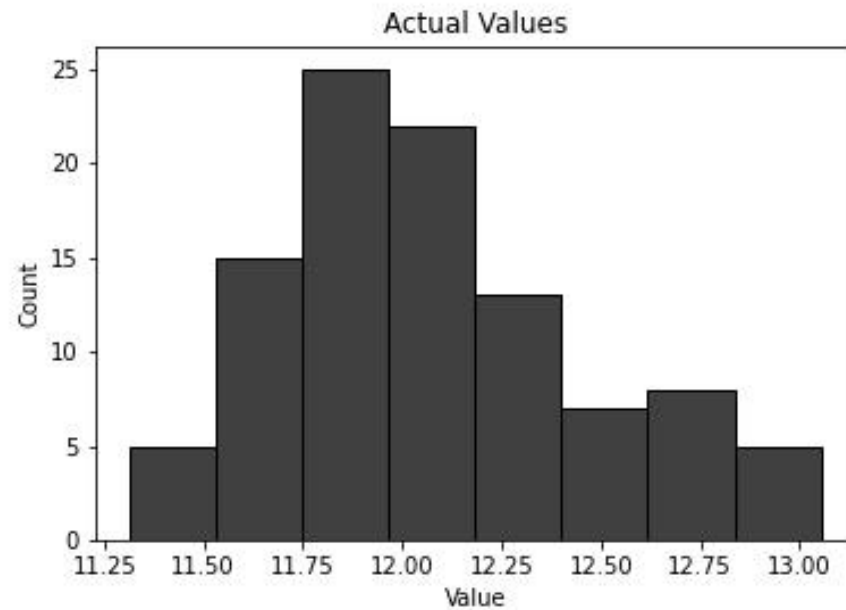
Model Selected Variables

The model determined the following were the 5 most important features of a home:

Rank	Feature
1	Fireplaces
2	Neighborhood
3	Number of full baths in basement
4	Length of street attached to property
5	Garage area size



Model Performance



Predicted property values (right) have close resemblance to actual property values (left).



Future Updates

1. More time to optimize current model
2. Develop more advanced models to improve prediction accuracy

Recommendation

A model CAN replace a human appraiser when it comes to house value estimation. However, at the current stage of the model, I recommend you use it as a guideline, until the model can be improved or replaced with a better-performing model.



Thanks for reading/listening! Questions?