The Surreabral Blog

Tech explorations

3 Things To Know Before Heading to Craigslist

Tips and Tricks for Buying Your Next Used Car

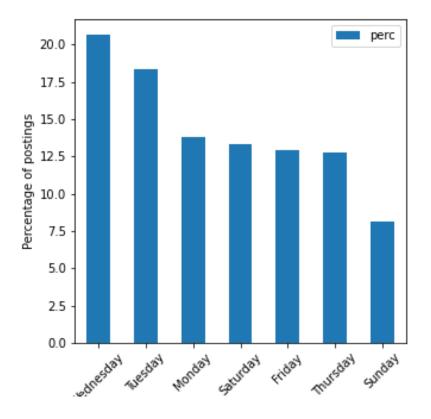
Lisa Quera, December 11, 2020



Buying a used car can be an anxiety-ridden process. But, it doesn't have to be! There are some tips and tricks to be mined from the raw data of Craigslist US used vehicle postings. Read on for suggestions on optimizing your buying experience.

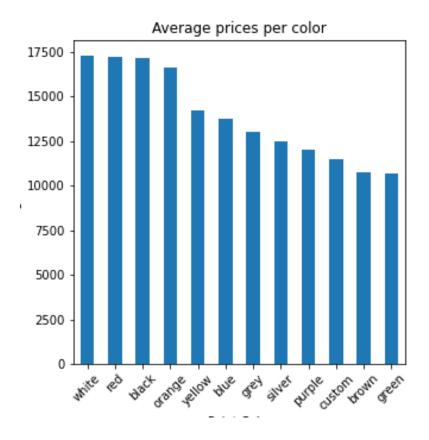
Don't Wait for the Weekend!

For access to the most fresh listings, start your search on a Wednesday. Just over 20% of sellers put their cars up on Wednesday. Combining Monday (13%), Tuesday (18%), and Wednesday, gets you 50% of listings. So, if you wait for the weekend, earlier buyers could have scooped up all the best deals.



Expand Your Color Horizons!

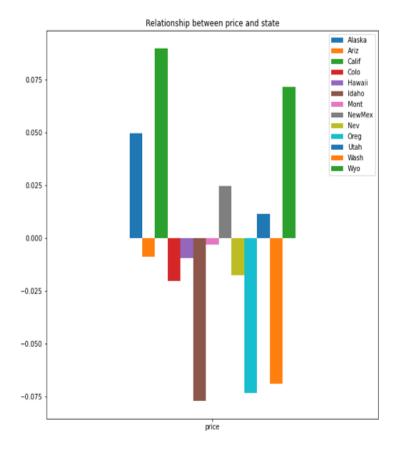
I'm not suggesting you buy a car that makes you cringe. However, if you're willing to look a little beyond the standard White, Red, and Black, you can get a significant price advantage. Be openminded and you just might find a gorgeous green deal!



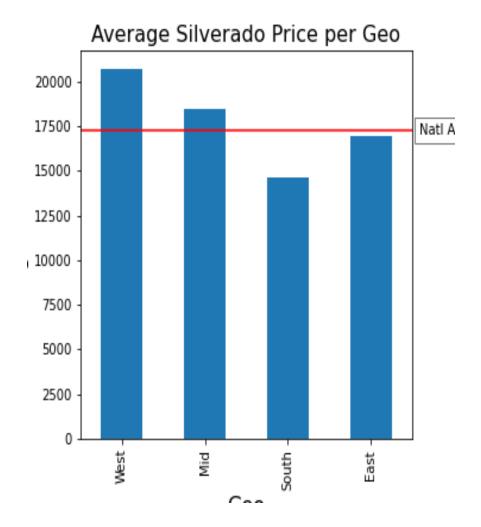
Be Willing to Travel!

There are significant differences in average prices across states. If you're in a high price state, it might be worthwhile to do a rideshare to pick up your car in a nearby state with lower prices.

The graphic below shows the positive correlations (bars pointing above the zero line) and negative correlations (bars dropping below the zero line) between average price and different states in the western region. For example, if you live in higher-price California, expand your search to lower-price states like next-door Oregon or further afield in Idaho or Washington. You might be very pleasantly surprised by the price differences on your dream car.

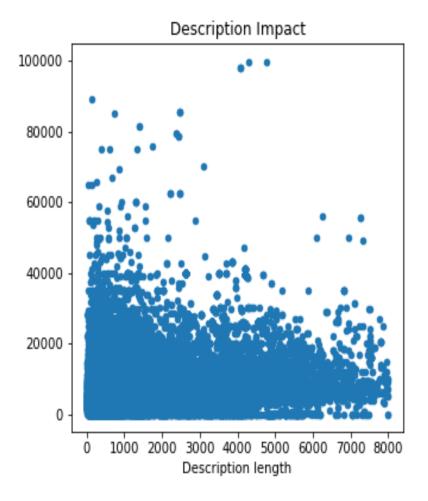


If your dream car is the most popular model on Craigslist, the Silverado 1500 pickup truck, it might even pay to grab a cheap flight to another state. In a western state your average listing price might be \$20k. If you search in a southern state, you'll find average listing prices more like \$14k. That would make a \$400-\$600 flight well worth it.



Don't Get Distracted by Wordy Descriptions!

You might think that a seller hoping for a higher price would invest more effort in crafting a lengthy description to entice buyers. Surprisingly, there is no relationship between the amount of effort a seller puts into the description text and the price they're asking for. I compared the length of the description and the price from multiple angles and could not find a single correlation. The graphic below shows the comparison of description lengths for older cars, where a seller might be induced to "talk" you into a higher price. However, no such pattern emerges from the data.



Don't spend much time on the description. Just scan them to pull out the attributes that matter to you such as the mileage, the condition, the color, the location, and, of course, the price.

Pricing is Unpredictable!

When you look at Kelly Bluebook, the prices are based on specific attributes and expert rules. When you look at Craigslist, prices are apparently based on sellers' hopes and dreams! Just kidding, but running several types of machine learning models shows large errors on price predictions, meaning that the models have a hard time finding accurate patterns in the data. Bottom line, that means you'll need to do your own comparisons to get a feel for what is reasonable.

Predictive Modeling			
Model Type	Mean Average Error	MAE as % AvgPrice	
Linear Regression	\$5697	14.2%	
Decision Tree	\$5540	13.8%	

Random Forest	\$2570	6.4%

Your Strategic Approach to Craigslist

Now that we've looked at the data to discover what it could tell us, you've got a strategy to get the best possible deal on your next used car.

- 1. Start your search on a Wednesday or earlier.
- 2. Look at uncommon colors for the best deals.
- 3. Check into other locations to see if the price difference makes traveling worthwhile.
- 4. Don't get distracted by wordier listings and stay focused on your priority attributes.
- 5. Don't assume the asking price is based on good data. Spend some time looking around at comparable models and be prepared to negotiate based on your own findings.

Good luck finding a car and a deal that'll make you smile!

Acknowledgement

This blogpost was created to meet the requirements of Udacity's Data Science Nanodegree, Project One.

The dataset was helpfully scraped from Craiglist in January 2020 by Austin Reese and posted to kaggle here: https://www.kaggle.com/austinreese/craigslist-carstrucks-data

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