



Ames, IA: A Favorable Market for Tech Expansion?

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Zillow's Factors That Could Suggest Tech Growth:

- Housing Affordability
- Market "Hotness"
- Demographics & Labor Market
- Tech Availability
- Livability

Focus: Housing Affordability

- Zillow needs help assessing whether or not Ames, IA would make a favorable market (in terms of housing affordability) for tech companies looking to expand.

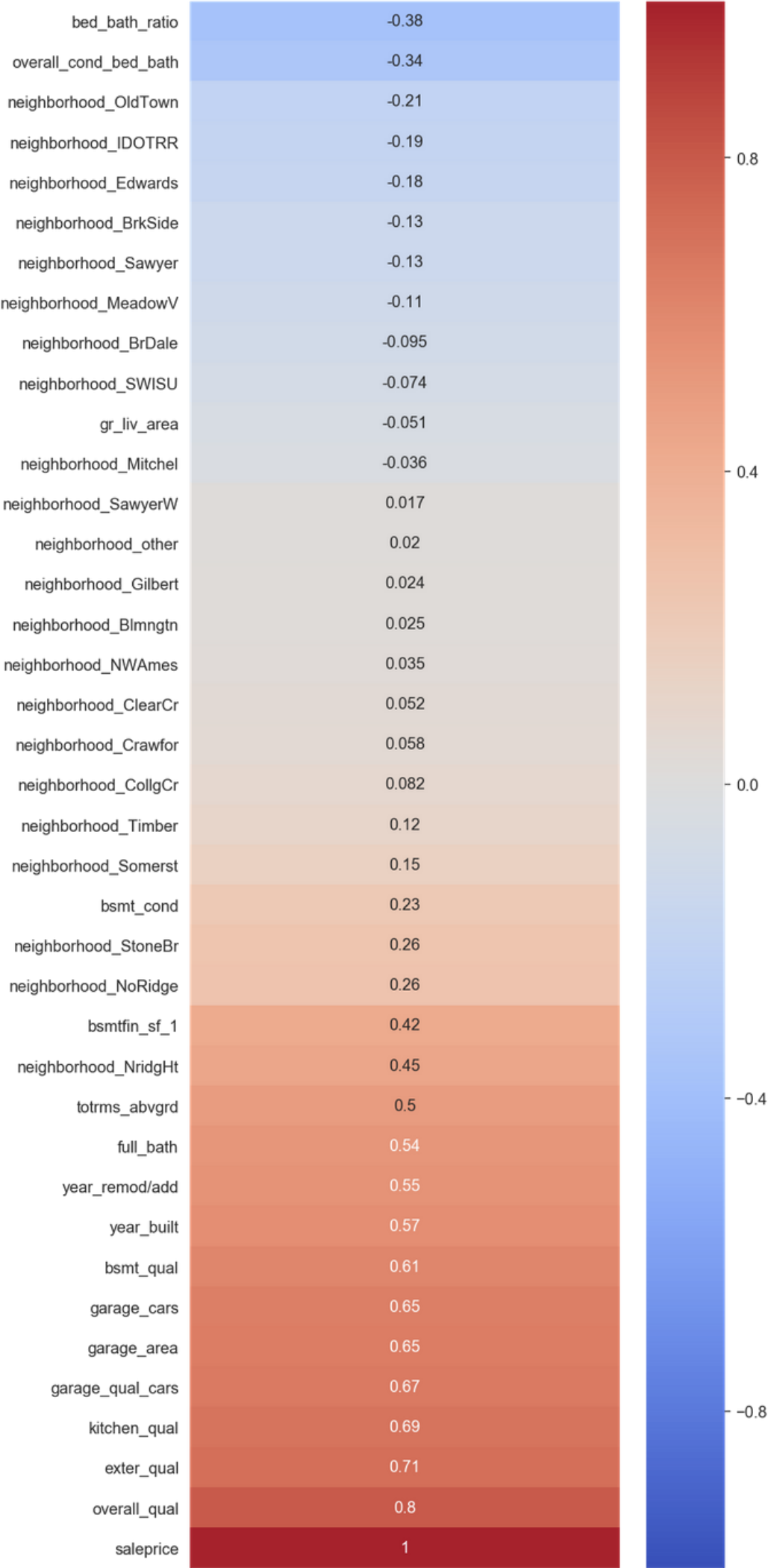
Approach

- Let's use Linear Regression, Ridge, and Lasso to find the best model that will predict housing prices and be implemented over the course of a few years (long-term goal).
- Compare R^2 scores for each model.

What's Happening to Housing in Current Tech-Dominant Markets (LA, SF)?

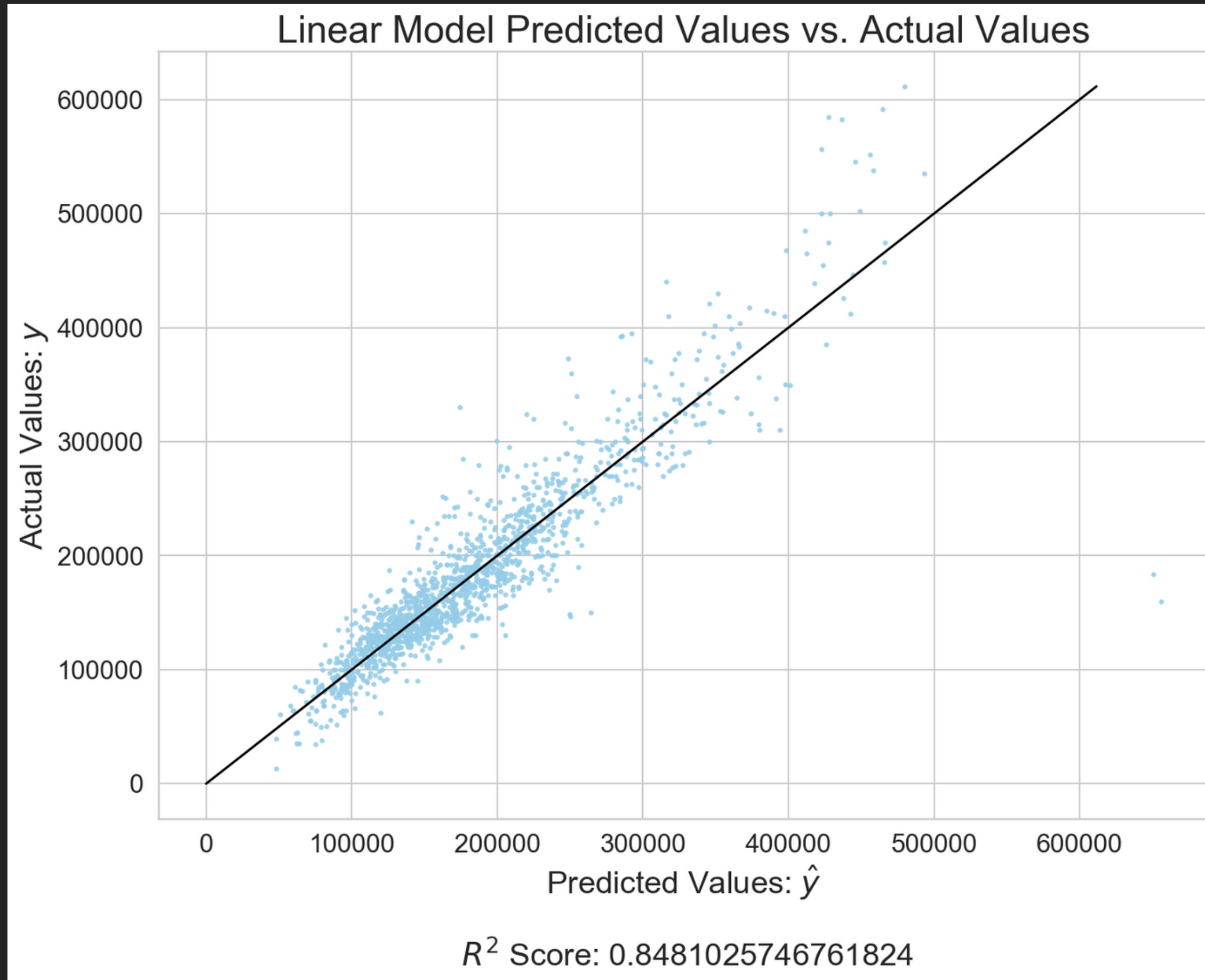
UNAFFORDABLE

Feature & Sale Price Correlation

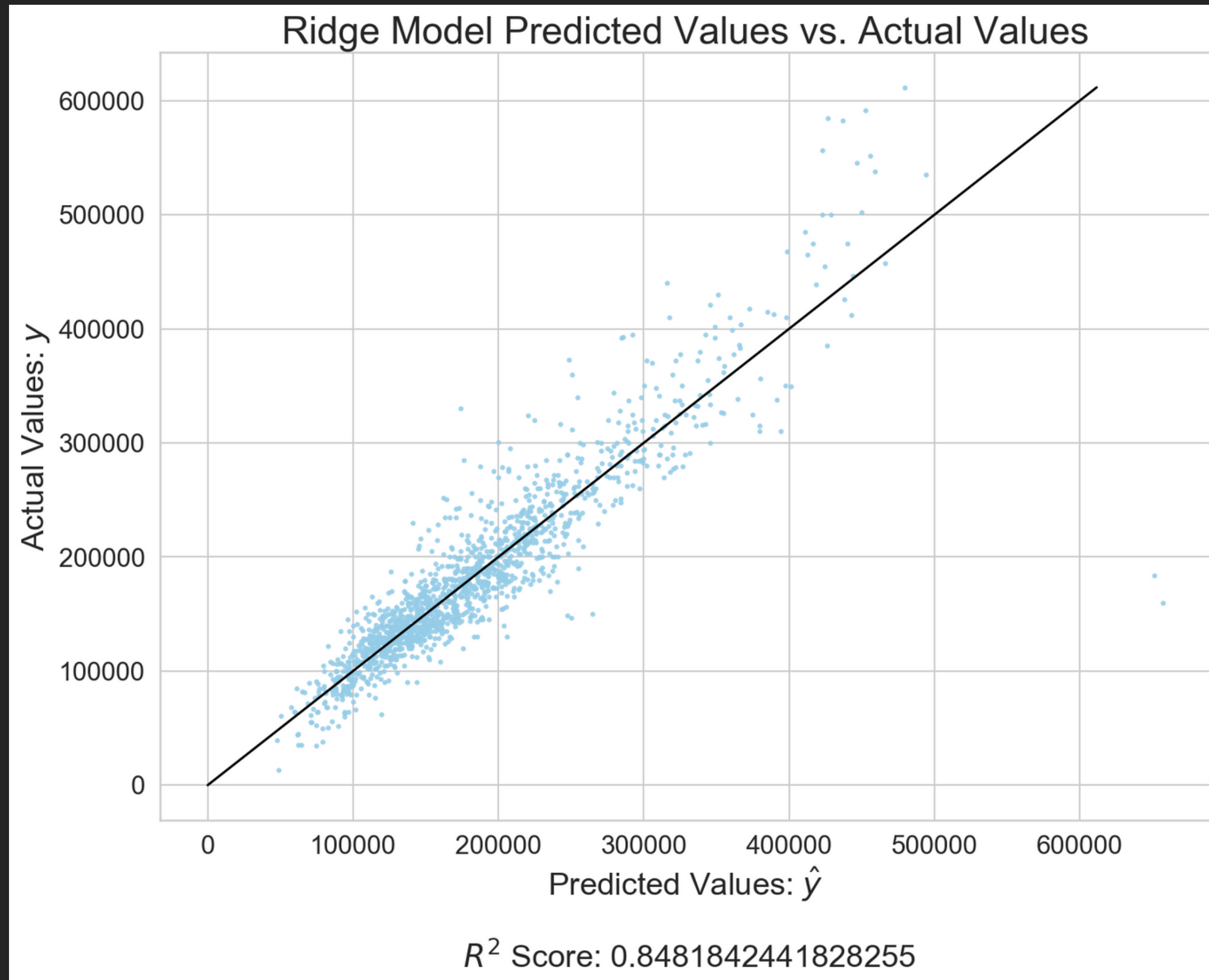


Selected model features and their correlation to sale price.

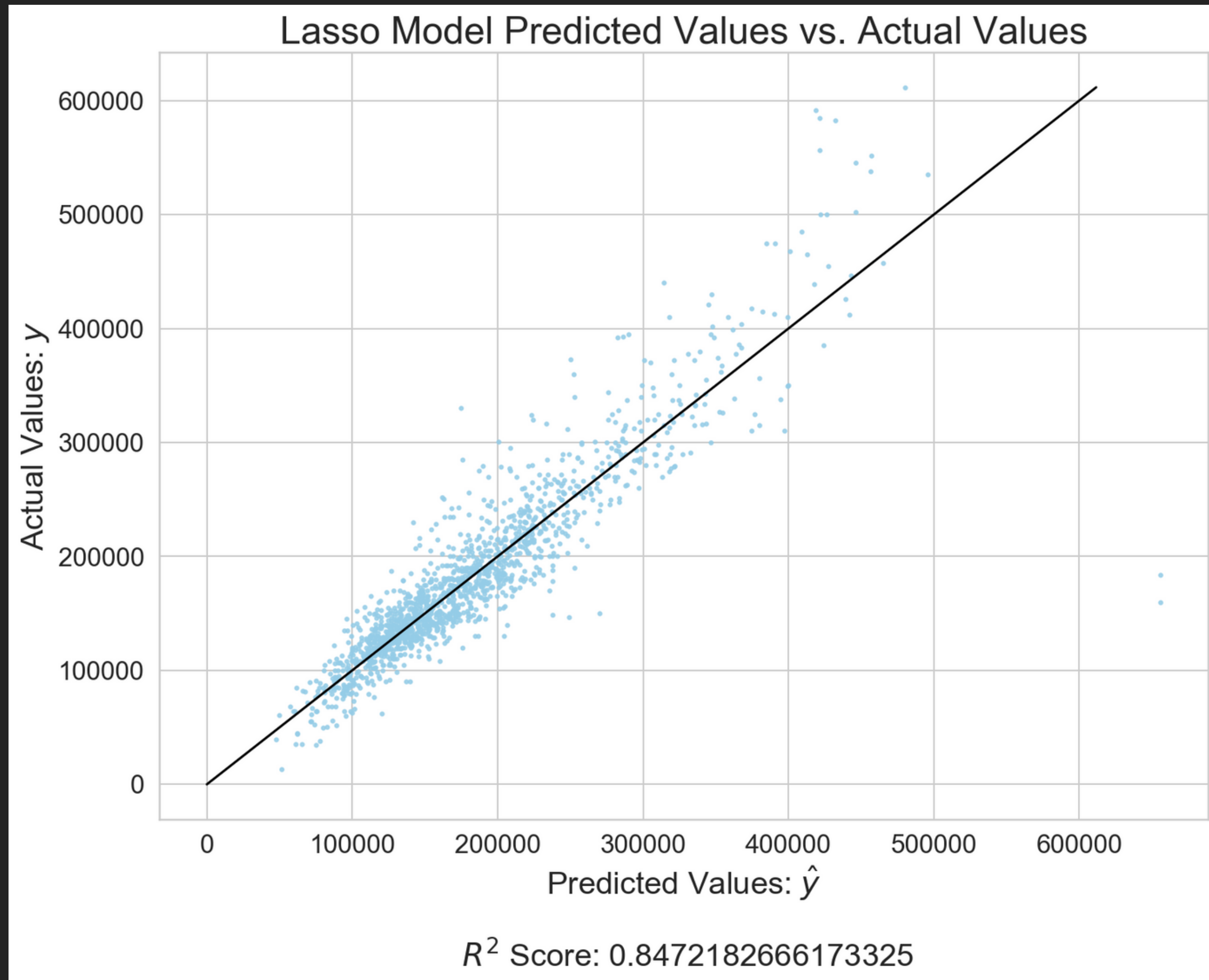
Linear Regression Model



Ridge Model



Lasso Model



Based on my Linear Regression, the model can predict the house's price is within ~\$32,000 on average.

RMSE: KAGGLE

\$30,116

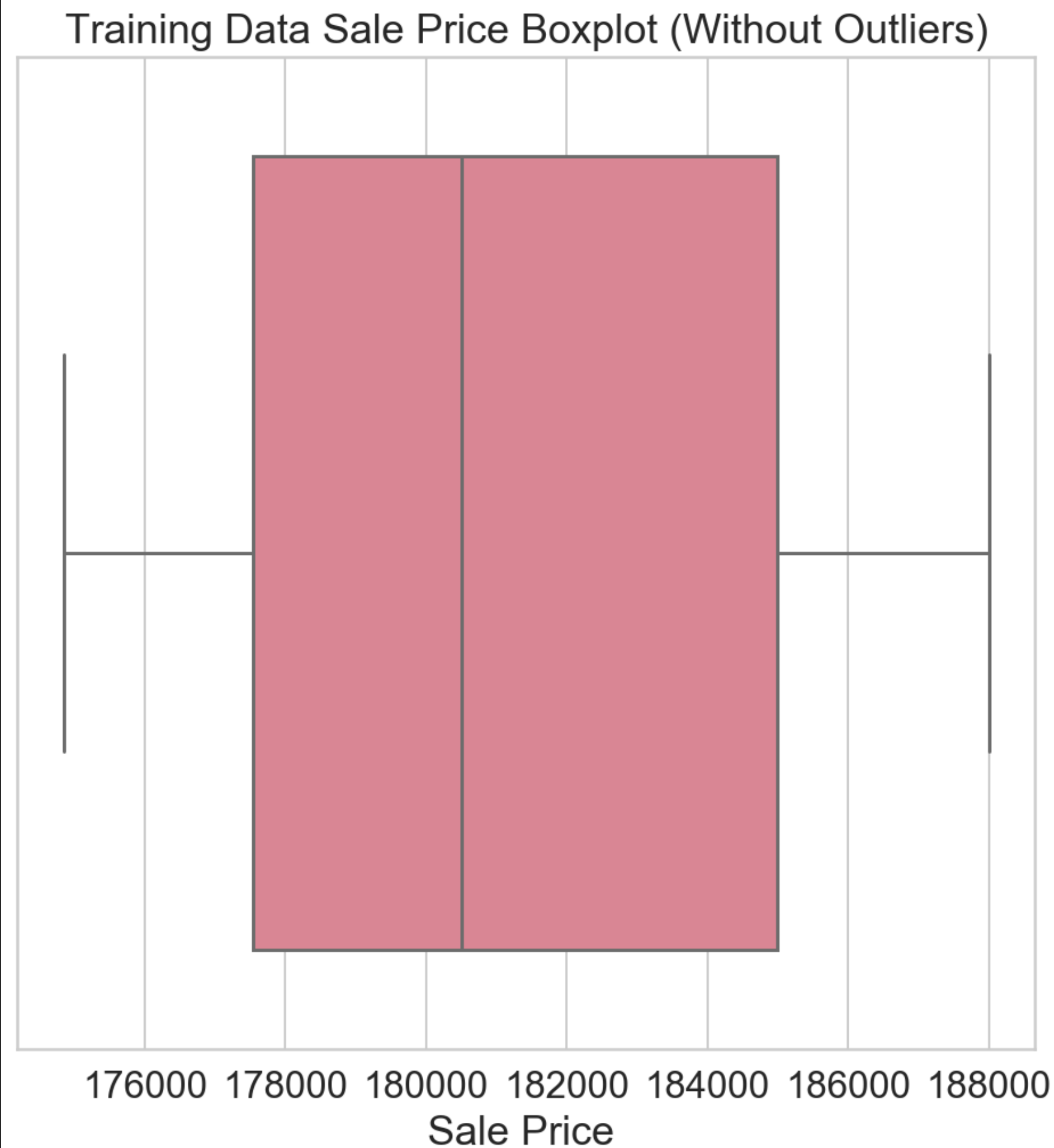
RMSE: MODEL

\$32,331

Ames Sale Price Distribution

- Ames (median): \$180,500
- LA (median): \$717,583
- SF (median): \$1,387,263

Source: <https://www.zillow.com/los-angeles-ca/home-values>
<https://www.zillow.com/san-francisco-ca/home-values/>



Median: 180500.0
Mean: 181175.2105263158

Suggestions

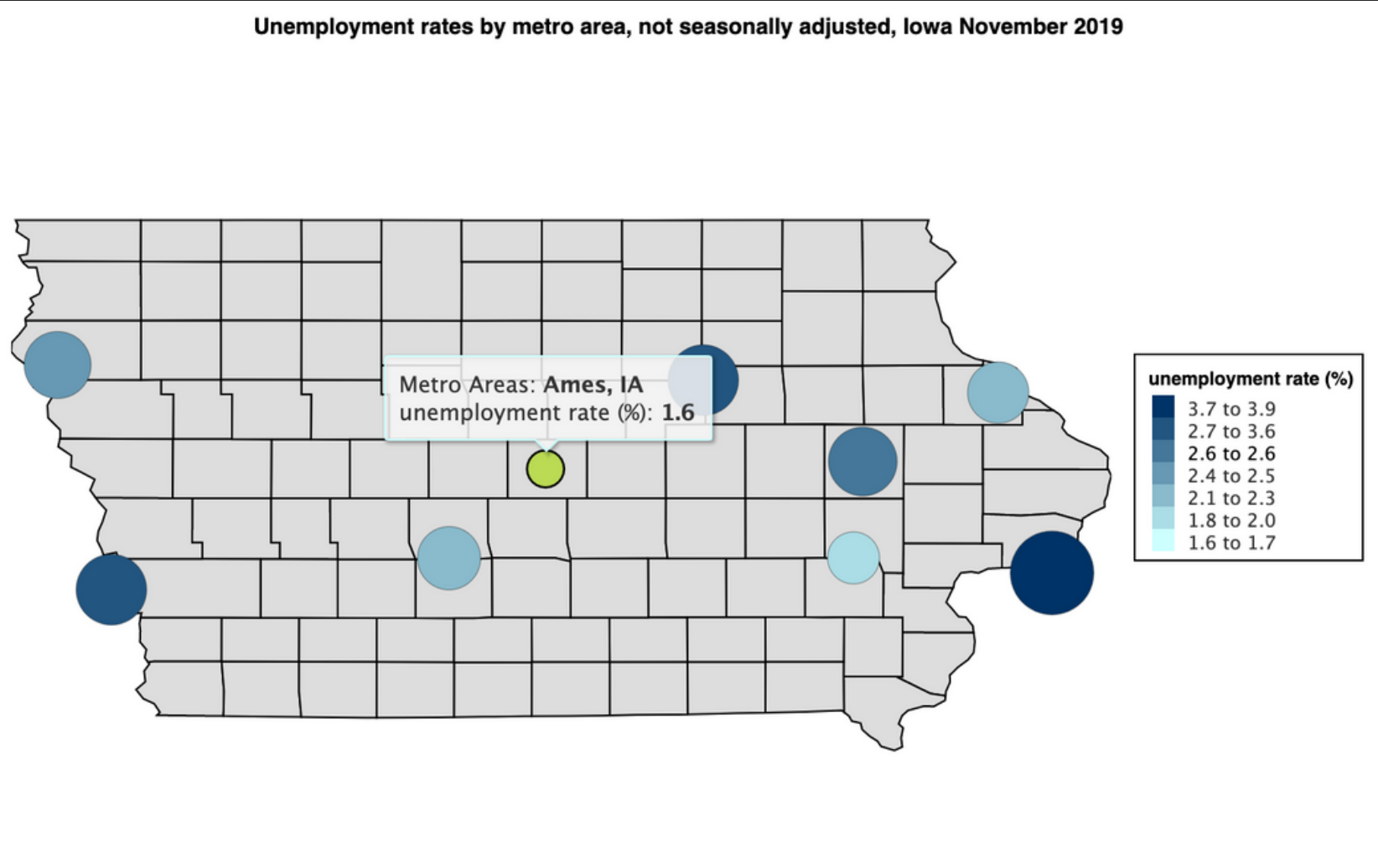
Other Factors to Analyze: Tech Skills

What is the measure of potential tech talent in residents over the age of 25 that have a bachelor's degree?

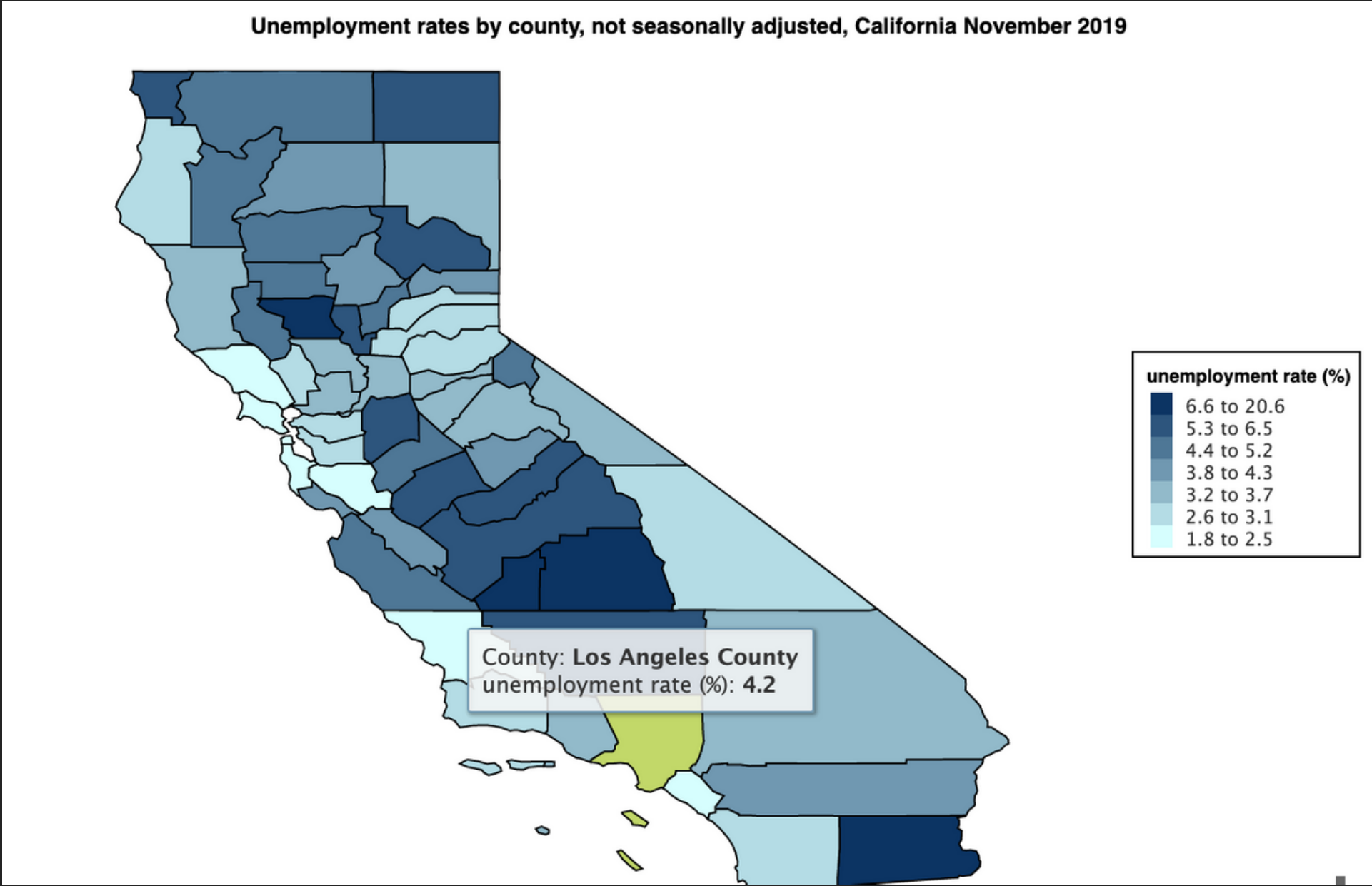
FIELD OF BACHELOR'S DEGREE FOR FIRST MAJOR		
Survey/Program: American Community Survey		Product: 201
TableID: S1502		
	Total	
	Estimate	Margin of Error
▼ Total population 25 year...	26,076	+/-2,025
Science and Engineeri...	10,992	+/-1,640
Science and Engineeri...	2,199	+/-750
Business	3,734	+/-1,030
Education	4,810	+/-991
Arts, Humanities and ...	4,341	+/-847

Source: U.S. Census, American Community Survey

Other Factors to Analyze: Unemployment Rates



- Ames: 1.6%
- LA: 4.2%



Source: U.S. Bureau of Labor Statistics