King County Housing Analysis



by Jonathan Bardey

Data Science Process

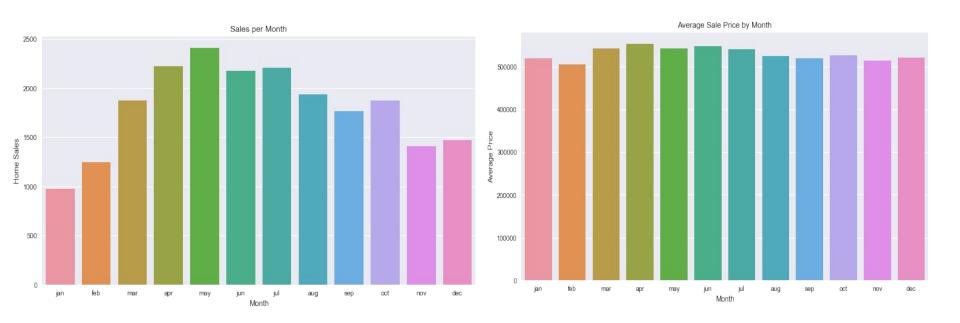
OSEMN model



Source: A Taxonomy of Data Science

- Data: Information about 21,597 houses sold in King County, Washington.
- Model: Multivariate Linear Regression

Effect of Date on House Sales



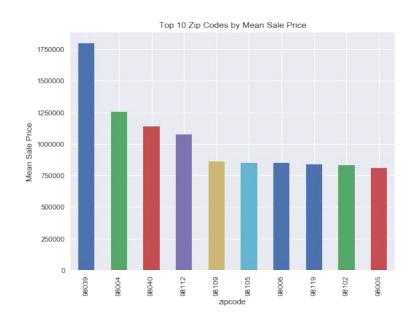
- Sales range from May 2, 2014 to May 27, 2015.
- Avoid the winter months

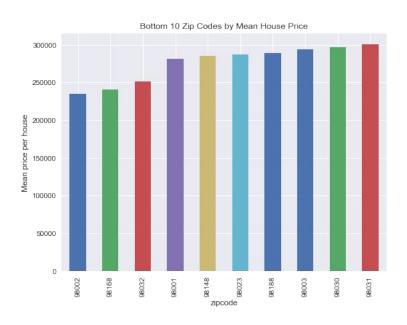
Bathrooms or Bedrooms?



Additional bathrooms provide greater increase to sale price than bedrooms.

Location: Mean Sale Price by Zip Code





- Big difference between top 10 (> \$750K) and bottom 10 (< \$300)
- Explore cost of land as well using sqft_lot

Most Importantly?



Square footage (sqft_living) is the most highly correlated feature to Price and one
of the strongest predictors in our model.

Wrap Up

 Our model explains 85% of the value of home price with variables of square footage, zip code, bedrooms, bathrooms, etc.

 Future work could include clustering houses by location (zip, long, lat) and modelling within those clusters instead of over the region as a whole.

Thank You!