



Ames, Iowa Housing Project

Identifying Investment Opportunity



Objective

A real estate investor has consulted me as their data scientist to predict housing prices to determine which properties to invest in the Ames, Iowa area. They want to know what house features could affect the sale price the most and which features might be worth adding or renovating to flip for maximum profit based on their wheelhouse.



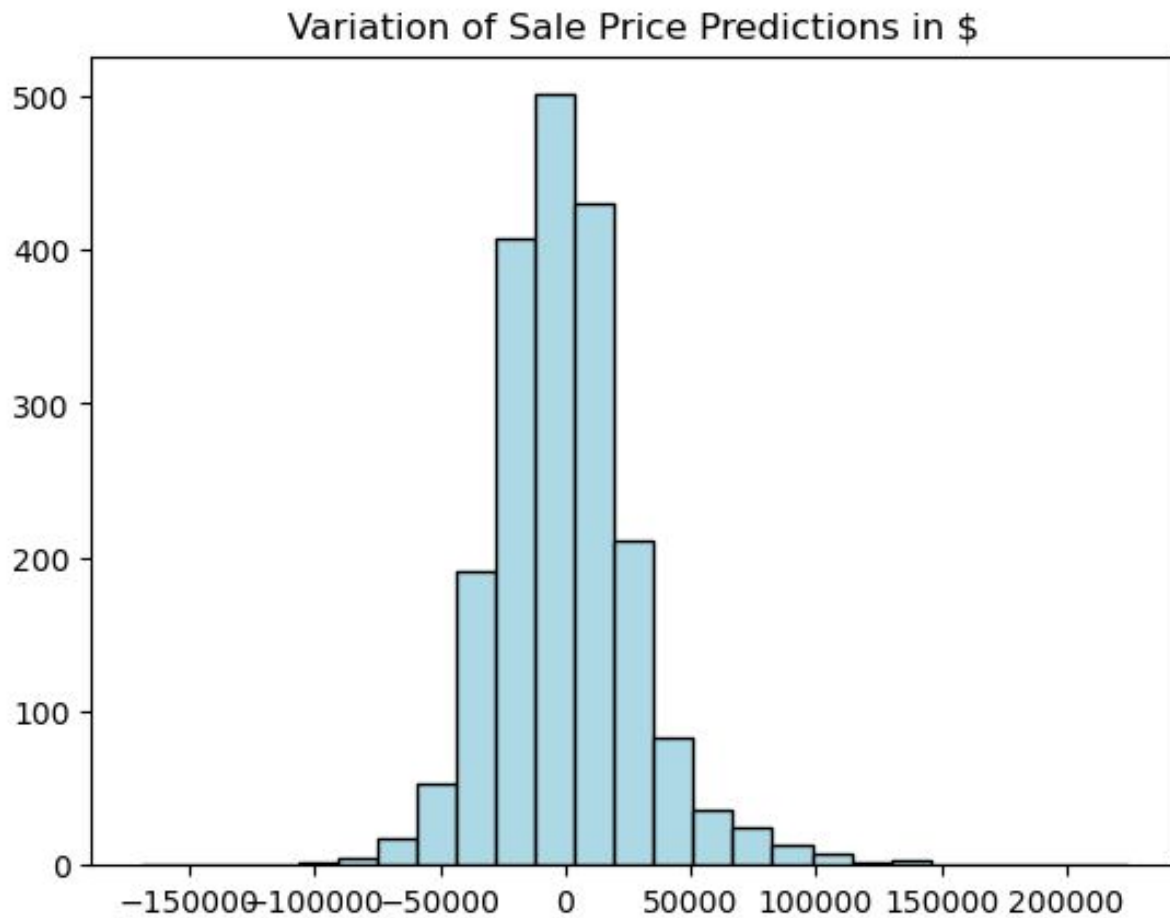
Dataset used

Train.csv From Ames Housing DSI-122

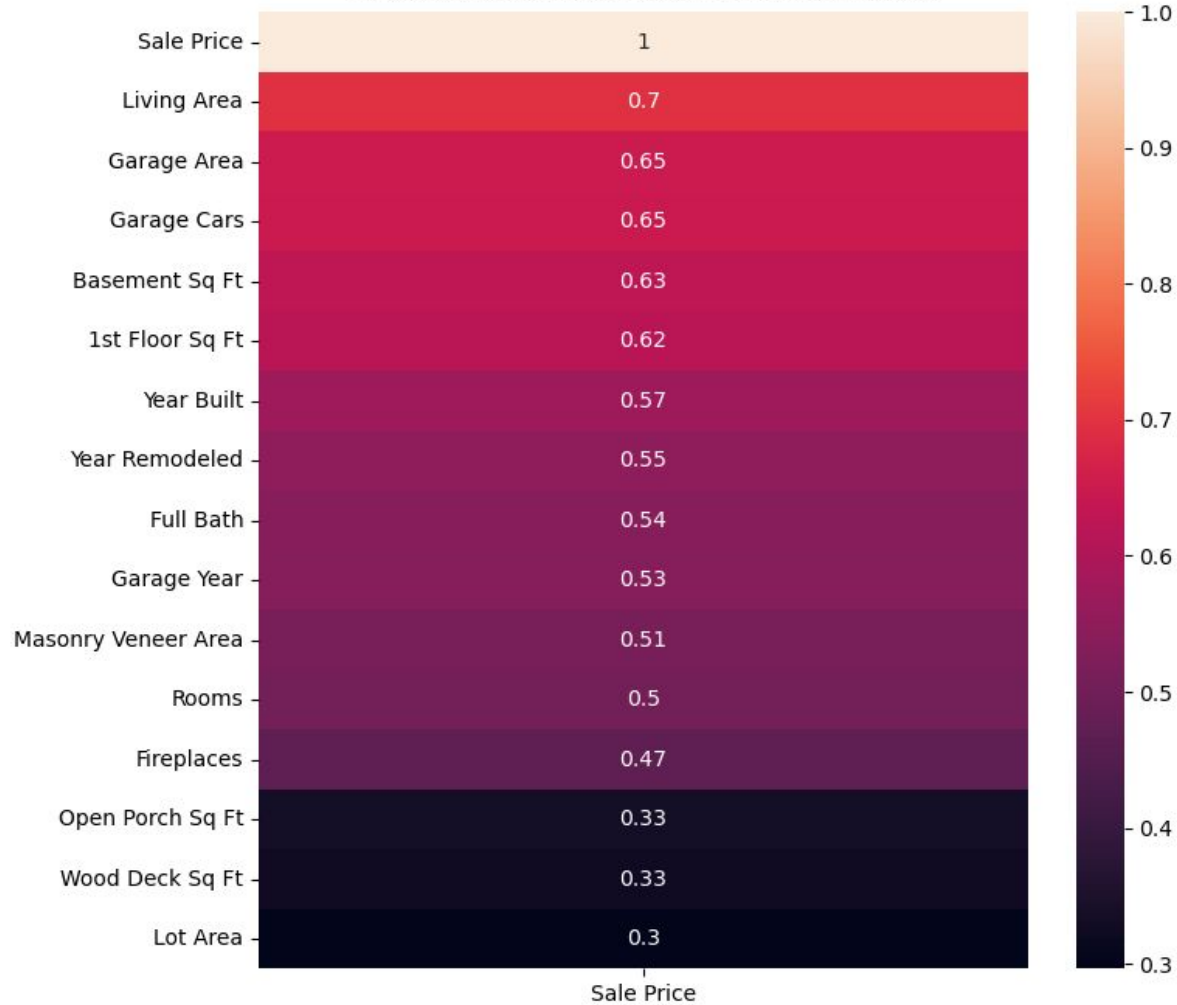


\$269,000

Median Housing price in Ames, Iowa
in Dec 2023



Home Features Most Correlated to Sale Price



Home Features Least Correlated to Sale Price



Investor's Contractor Wheel-house

Dry Wall

This can include remodeling drywall, masonry veneer, room extensions and everything in between.

Fireplaces

Installation and remodelling of fireplaces.

Garages

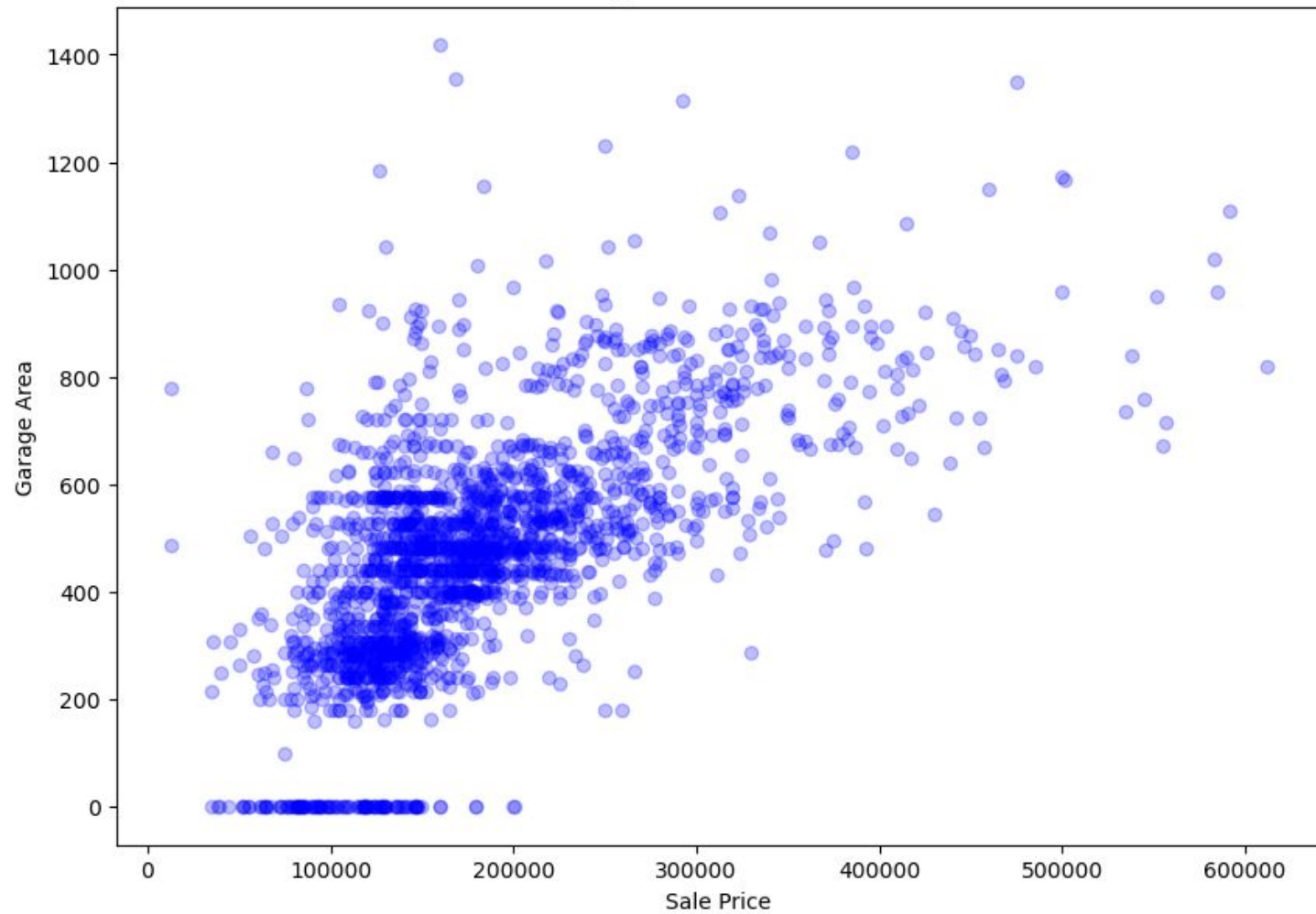
Investor has a team of contractors that can build or remodel garages from the ground up.



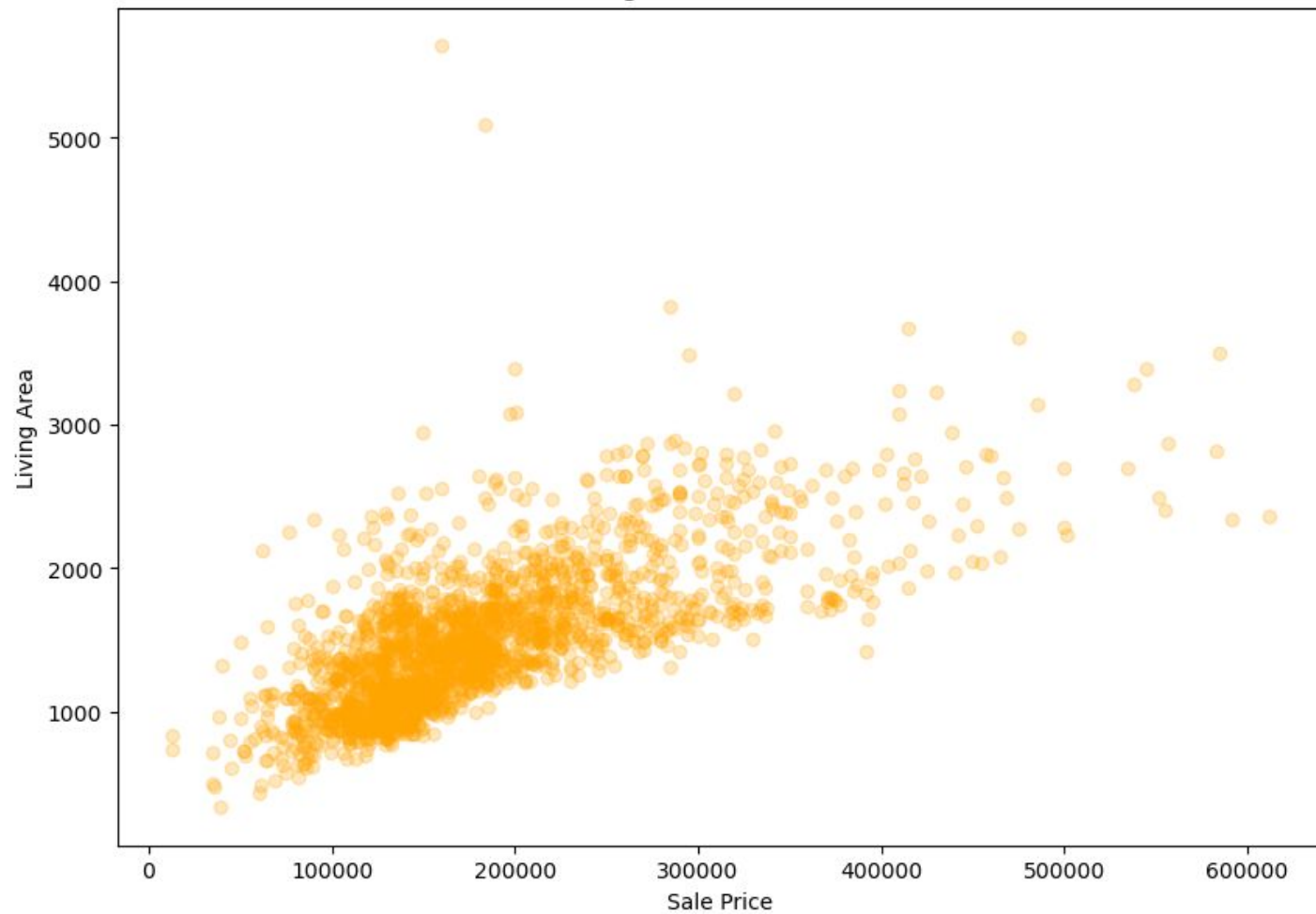
Analysis of Features

After analyzing each of these features, identifying the ones with most obvious correlation to sale price, we narrowed it down to the one's within the investor's wheelhouse.

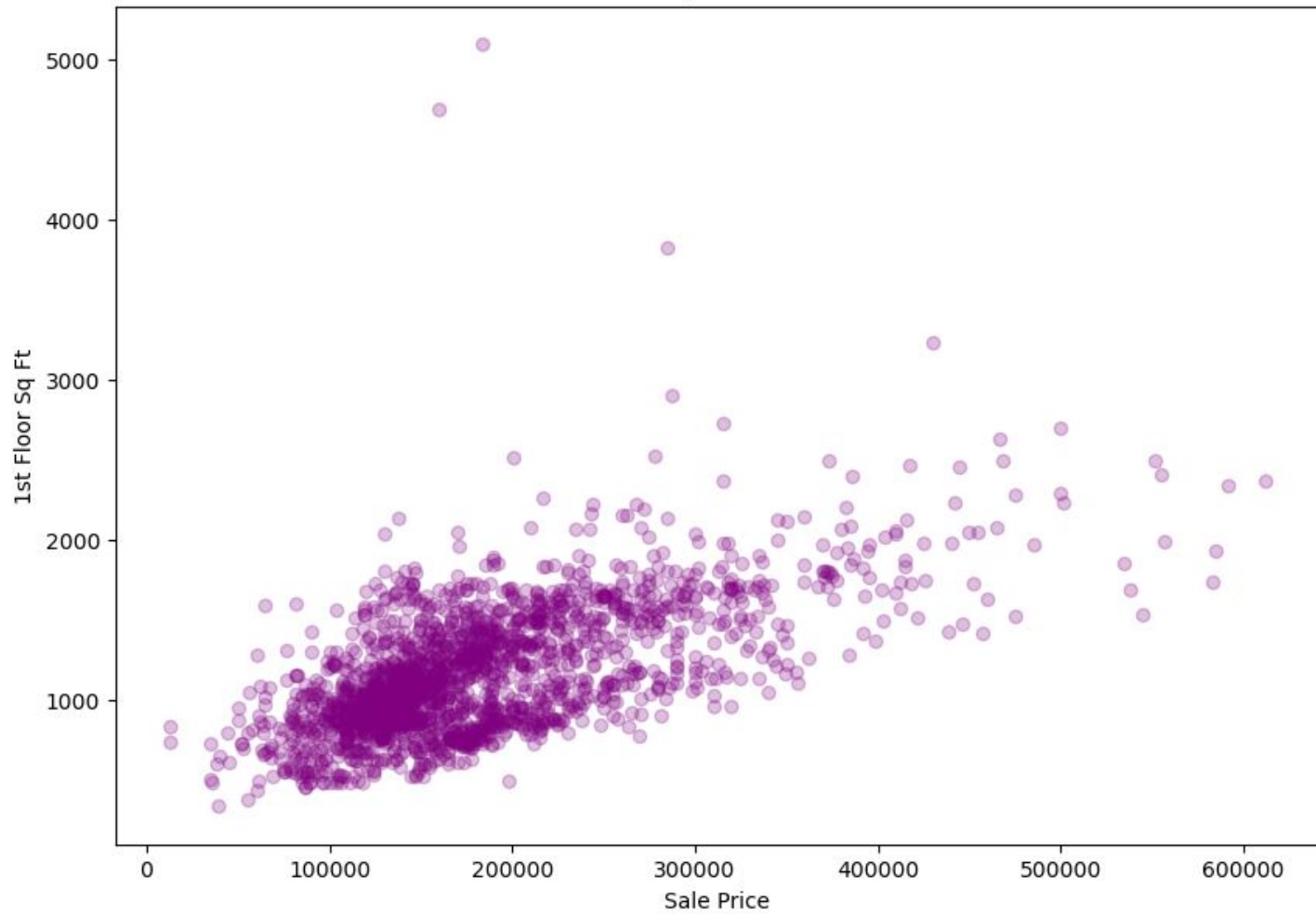
Garage Area vs Sale Price



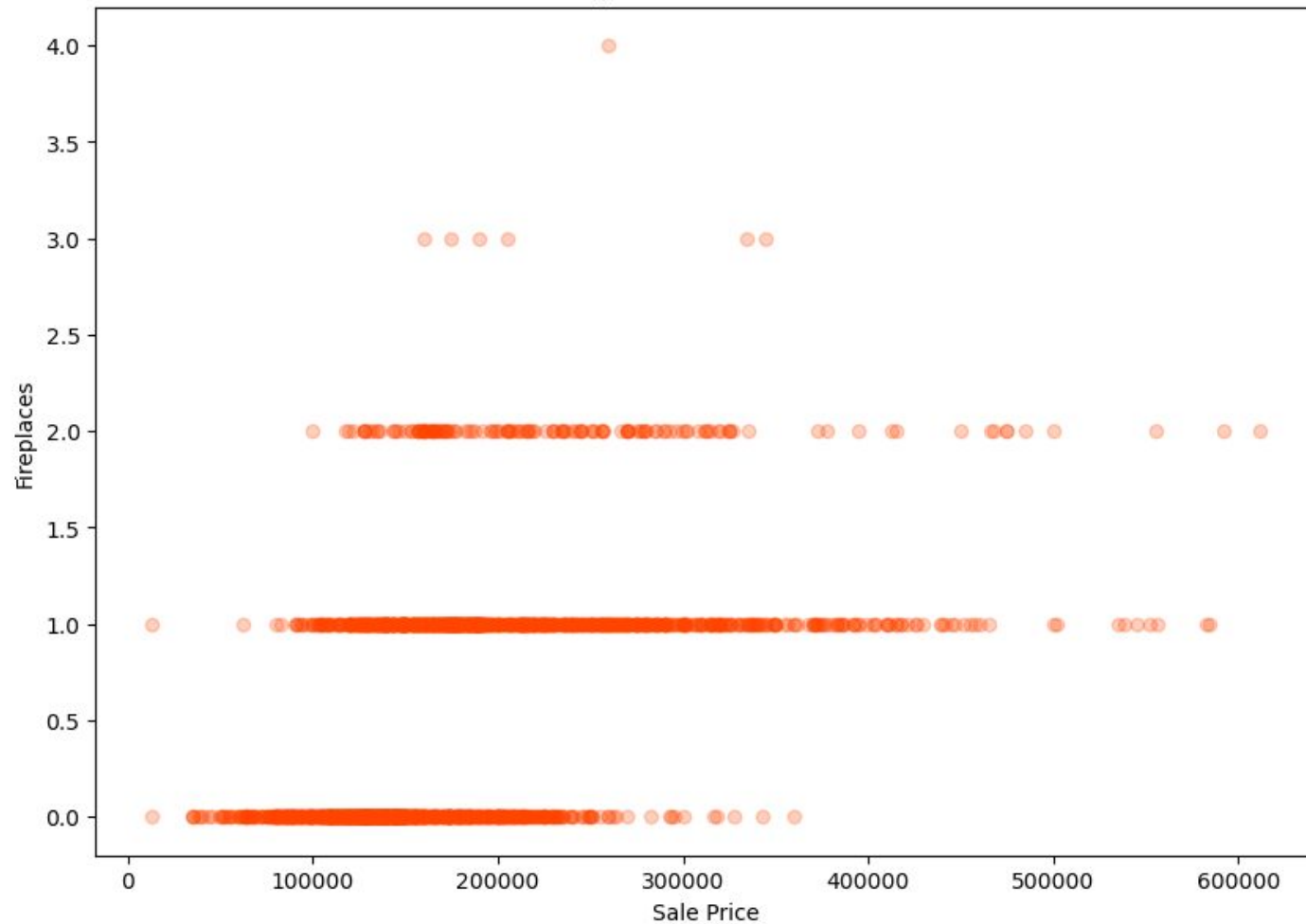
Living Area vs Sale Price



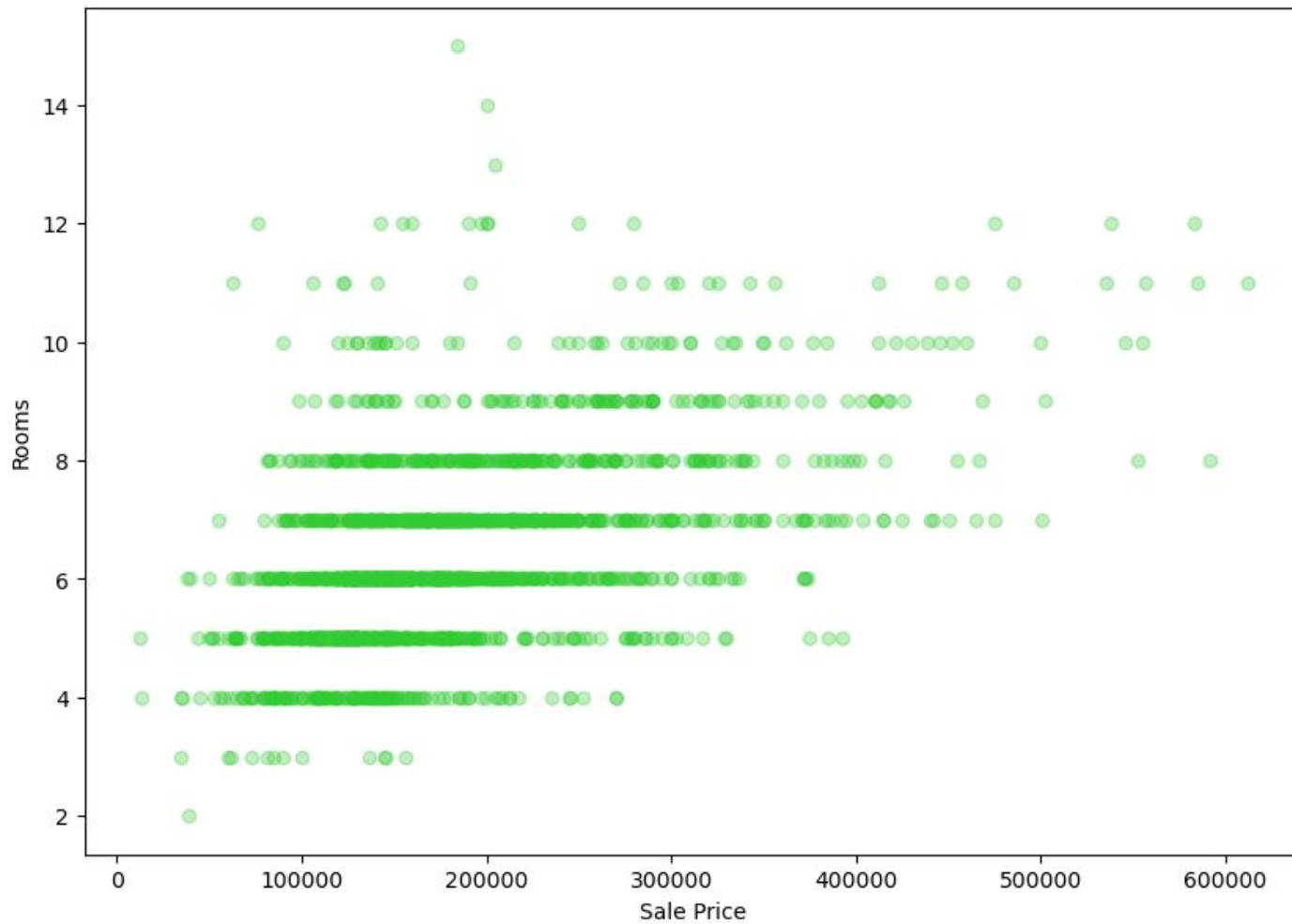
1st Floor Sq Ft vs Sale Price



Fireplaces vs Sale Price



Rooms vs Sale Price



Features

Examination

We began by narrowing in on the features that were most correlated to the Sale Price.

Business recommendations

The investments should be focused around the following:

- Homes that lack bathrooms per bedroom
- Homes with garages that require severe repairs or lack garages entirely
- Building up garage space to at least 400 sq ft.
- Homes lacking a fireplace
- Adding greater living space to homes that are under 1200 Sq Ft

Thanks

Does anyone have any questions?

