



# Thoughts on Buying a Home in Ames, Iowa



# Introduction

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*"Harnessing the power of data science to help individuals make better decisions."*

# Problem Statement

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Buying a home is one of the most expensive and stressful purchases a person can make.

What can we learn from studying recent home sale prices that can help you make a better decision as you buy your first home in Ames, Iowa?

# Homes Currently for Sale in Ames, Iowa

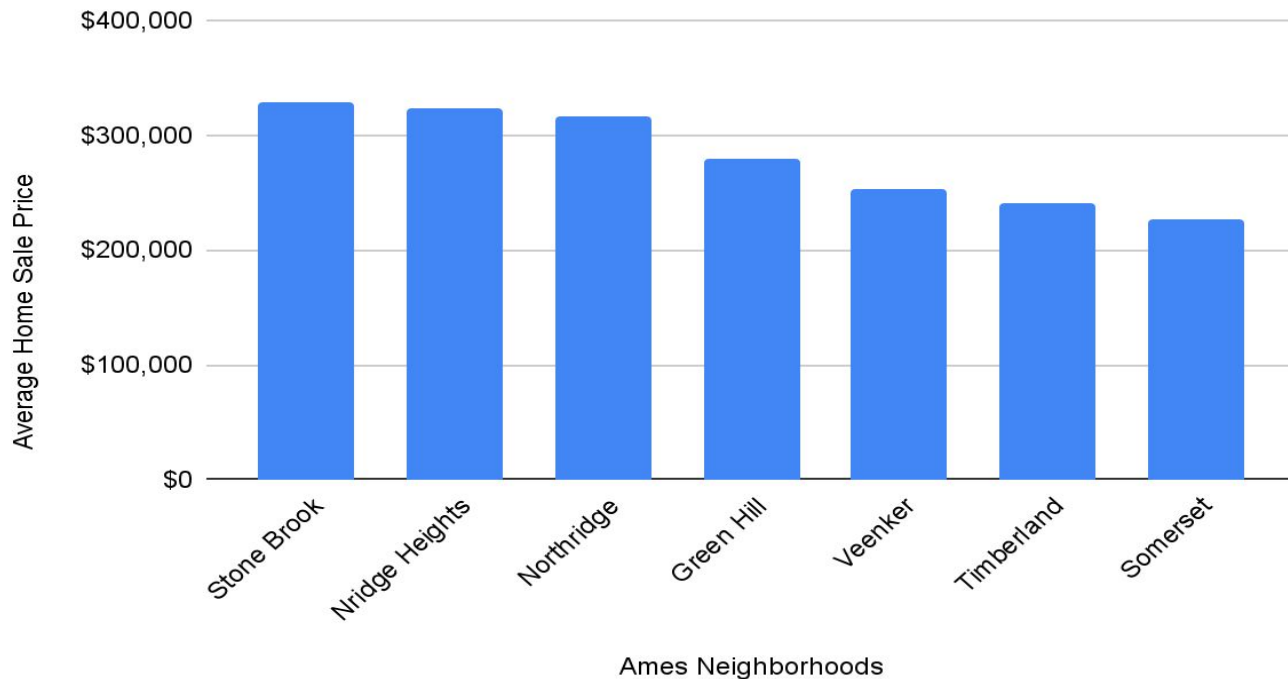


# Data Science Process

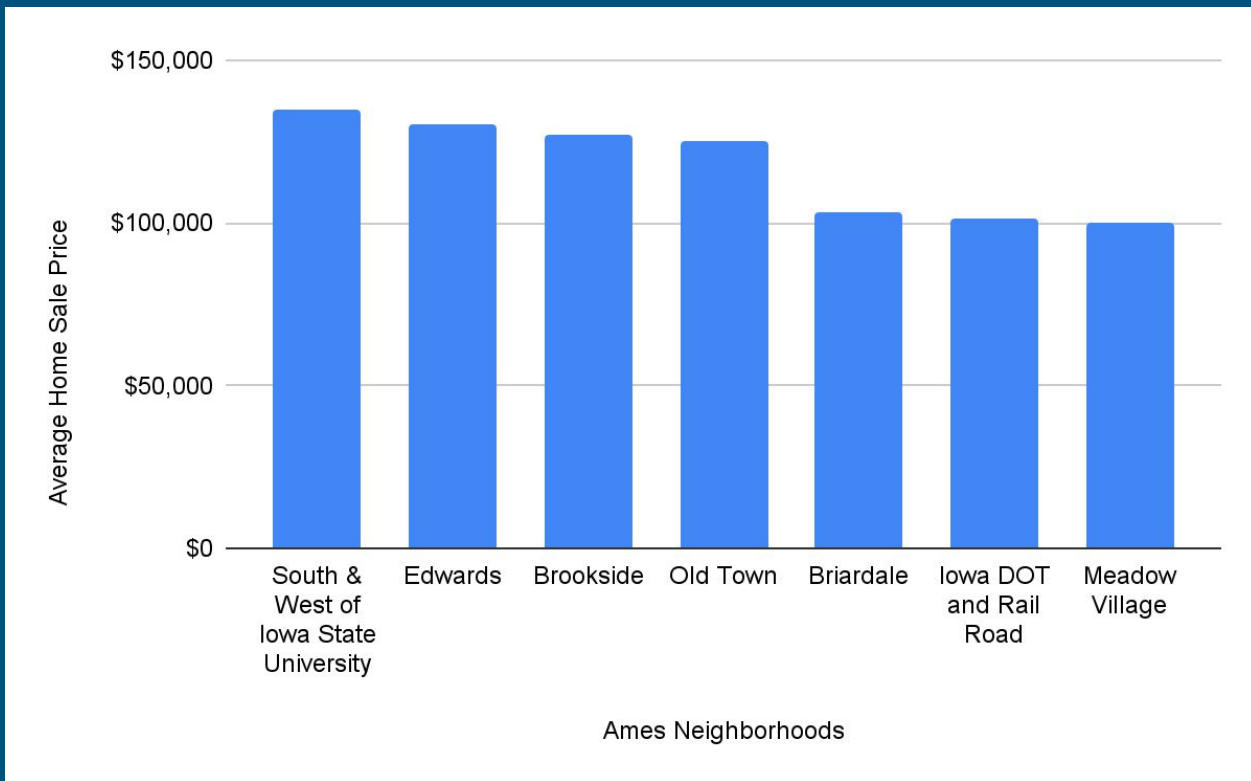
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- Considered over 70 measurable features related to a home
- Looked at how each feature changed at a constant rate with respect to home sales price (correlations)
- Created several machine learning models to predict the home sales price
- Chose a simplified linear regression model

# Top 7 Most Expensive Neighborhoods



# Least Expensive 7 Ames Neighborhoods



# What features point to higher home sale prices?

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- Above Grade (ground) living area square feet
- In Northridge Heights neighborhood
- Total Basement square feet
- Number of Cars Garage can Hold
- In Stone Brook neighborhood
- Year Remodeled/Addition Added
- Year Home was built
- In Northridge neighborhood
- First Floor Square Feet



# Simplified guide to higher home sale prices

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- Bigger is better
- Neighborhoods matter (Location, Location, Location!!)
- Newer construction is better
  - A remodel/addition can refresh the sales price!

# Looking at neighborhood impact

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## **Higher Home Sale Prices**

Northridge Heights

Stone Brook

Northridge

Crawford

Green Hill

Timberland

Veenker

Somerset

Clear Creek

Greens

# Looking at neighborhood impact

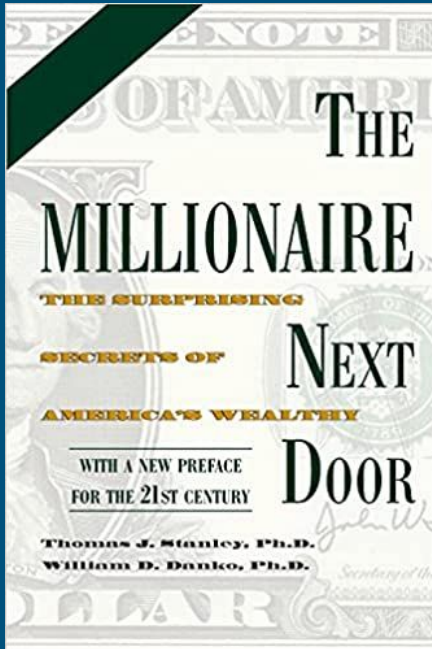
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## **Lower Home Sale Prices**

College Creek  
Landmark  
Bluestem  
Bloomington Heights  
Brookside  
Northpark Villa  
Briardale  
South & West of Iowa State  
University  
Northwest Ames  
Gilbert  
Meadow Village  
Sawyer West  
Mitchell  
Sawyer  
Iowa Dot and Rail Road  
North Ames  
Old Town  
Edwards

# More thoughts about neighborhoods

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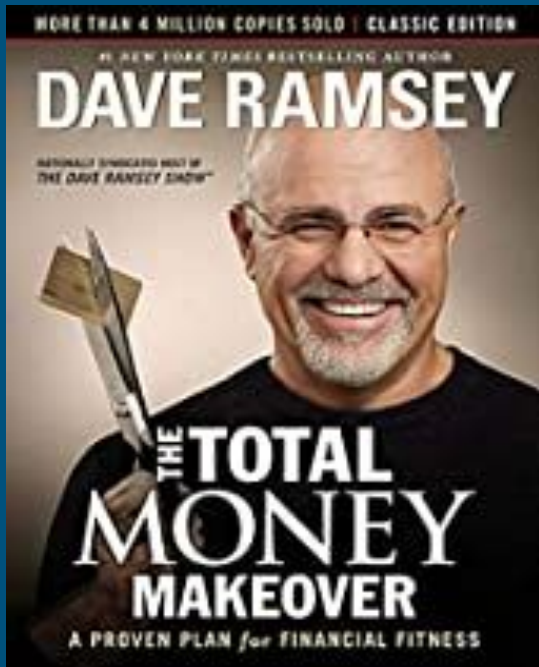
More expensive neighborhood

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more expensive lifestyle

# How much “house” should you buy?

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“This is the big one. Whether you’re renting or buying a house, it’ll be hard to balance other financial goals if your monthly housing costs (rent or mortgage) are more than 25% of your monthly take-home pay—including property taxes and insurance.”

Dave Ramsey

# What do you value?

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# Conclusion

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- In general, bigger and newer homes tend to have higher sales prices.
- Neighborhoods in Ames, Iowa have an important impact on sales prices
  - Northridge Heights = more expensive
  - Edwards = least expensive
- Buying a home in an expensive neighborhood leads to “lifestyle creep”
- Know what you value
- Focus on your income rather than the size of the mortgage loan you have been approved for
  - Spend no more than 25% of that on your housing costs (and don't forget insurance & property taxes)

# Sources

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## Data

The Ames Housing dataset was compiled by Dean De Cock in 2011, for use in data science education.

## Photos

<https://unsplash.com/s/photos/>

[www.amazon.com](https://www.amazon.com/)

[https://www.realtor.com/realestateandhomes-search/Ames\\_IA](https://www.realtor.com/realestateandhomes-search/Ames_IA)



# Questions?

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