

HOME.LLC

# Understanding Factors Behind US Home Prices



Regression Model Results

# Executive Summery

## Overview

A comprehensive understanding of the factors influencing US home prices.

## Problem

Uncover insights from publicly available data to understand home prices trends in US

## Solution

A Multiple linear Regression Model, a data science model that explains how different factors impacted home prices.

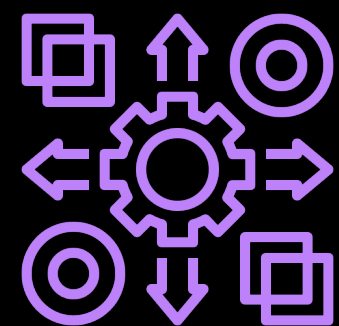


# Key Findings



## 0.98 R squared Value

The model explains 98% of the variability in home prices, providing a robust fit to the data.



## Top Influential factors

New One Family House for sale, Population and GDP emerged as the most influential factors. Employment and Mortgage Rate also play significant roles.

# Interpretation of Coefficient



## Features with positive impact

Employed, New House Supply Rate, Mortgage Rate, Unemployment Rate, Consumer Credit rate



## Features with negative impact

Population, Personal Income, GDP, Houseownership Rate, New One Family House, Inflation Rate, Floor Area West Census Region

# Top 5 Factors Influenced Home Prices

## **New One Family House (0.157518)**

An increase in the number of new one-family houses is associated with the most significant predicted increase in home prices.

## **GDP (0.120058)**

An increase in the Gross Domestic Product is associated with a significant predicted increase in home prices.

## **Population (0.115109)**

An increase in population is associated with a notable predicted increase in home prices



# Top 5 Factors Influenced Home Prices

## Employed (-0.116458)

A decrease in the number of employed individuals is associated with a significant predicted decrease in home prices

## Mortgage Rate (-0.024249)

Increase in mortgage rate is associated with a decrease in home prices



# Conclusion

The analysis unveils the intricate web of factors shaping home prices in US.  
Understanding these dynamics is crucial for informed decision-making in the housing market.