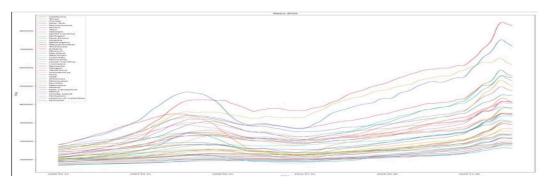
Housing Data Analysis, USA

Nachiket Kathoke Indian Institute of Technology, Kharagpur Dataset | GitHub

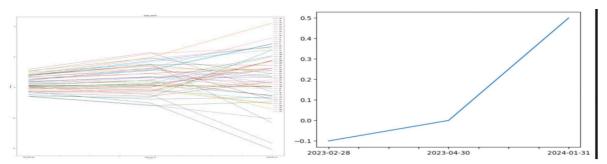
This report highlights the studies and analysis for housing prices based on individual and comparative studies of the different parameters for the states of the USA

Zillow Home Value Index (ZHVI): A measure of typical home value and market changes across a given region and housing type. It can be seen that ZHVI for all of the states dropped continuously for all states when the recession of 2008 hit the USA. In the time between 2021-2022



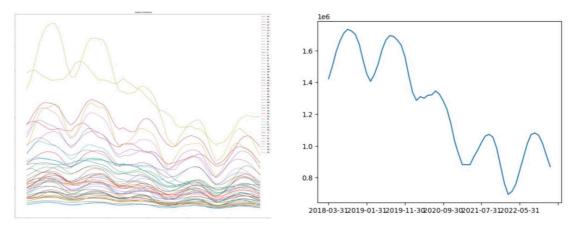
it increases to local maxima and decreases again as an economic after-effect of COVIDcrisis.

Zillow Home Value Forecast (ZHVF): A month-ahead, quarter-ahead and year-ahead forecast of the Zillow Home Value Index (ZHVI).

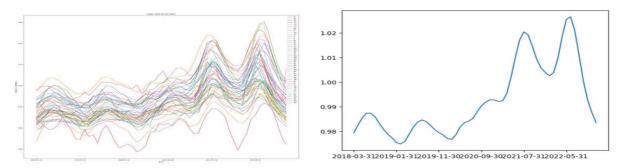


It can be seen that the ZHVF can behave differently for the individual states based on the demography, But for the USA, it seems to increase from -0.1 to 0.5 from 2023-01 to 2024-01

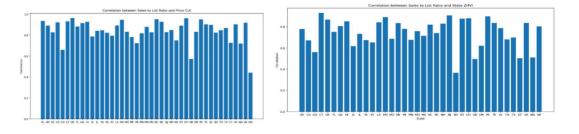
Inventory: The count of unique listings that were active at any time in a given month. It seems from the plots that inventory goes down near the end of the year for the USA and individual states.



Based on the data set from 2018 to 2023 shows a decreasing trend with seasonality. **Sale-to-List Ratio (mean)**: Ratio of sale vs. final list price.



Sales to listing prices have direct correspondence with the demand and supply. It shows an increasing trend, opposite to the inventory, with seasonality till mid-2022 and falling drastically after that. The price cut has a high correlation with the sales-to-list price ratio and ZHVI



^{*} Further detailed graphs can be found in the GitHub repo.