## **Predicting House Prices in CA Bay Area**

<u>Target:</u> Predict house prices using multiple Machine Learning Algorithms considering different sets of house and zip code features:

- (1) Main Dataset: Source <u>www.redfin.com</u>:
  - Obtained sold houses from Dec 2019-Dec 2020.
  - The sold houses located in North California distributed between 49 cities and 94 Zip Codes.
  - Data has 8,790 Observations and 27 Variables.
  - Data Wrangling is needed: Dataset has NANs, Wrong values, insignificant columns and Duplicates.

\*\*\*\*\* Adding more Datasets to enhance our prediction \*\*\*\*\*

(2) Adding Median Income per Zip code from:

Source: <a href="http://www.usa.com/rank/california-state--median-household-income--zip-code-rank.htm">http://www.usa.com/rank/california-state--median-household-income--zip-code-rank.htm</a> and since the data from 2010-2014, and according to <a href="https://www.statista.com/statistics">https://www.statista.com/statistics</a> --> the median Income in California has grown by 6.36% we'll use this % to adjust this Dataset YoY.

(3) Adding Public School per zip code:

Source: <a href="https://hifld-geoplatform.opendata.arcgis.com/datasets/87376bdb0cb3490cbda39935626f6604">https://hifld-geoplatform.opendata.arcgis.com/datasets/87376bdb0cb3490cbda39935626f6604</a> 0

(4) Adding Hotness score (0-100) to reflect demand and supply per zip code:

Source: <a href="https://www.realtor.com/research/data/">https://www.realtor.com/research/data/</a>