## Time Series Project Zillow Research Page Database

by Luigi Fiori

#### Introduction

For this project, we will be forecasting real estate prices of various Zip Codes using data from the Zillow Research Page, an american online real estate database company.



# The Question! Which are the 5 best Zip Codes in Kansas City to invest in?

We evaluated a model that gave us useful informations about each Zip Code in the Kansas City Area.

Next step was to calculate the Return on Investment of each Zip Code and select the 5 with the highest value.

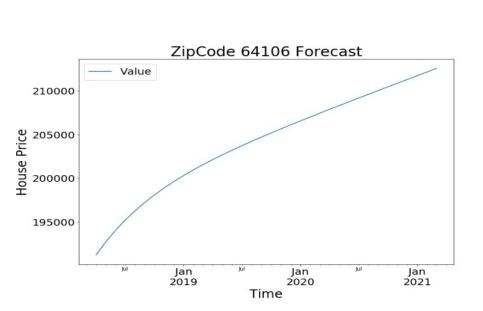
Let's see what we have found!

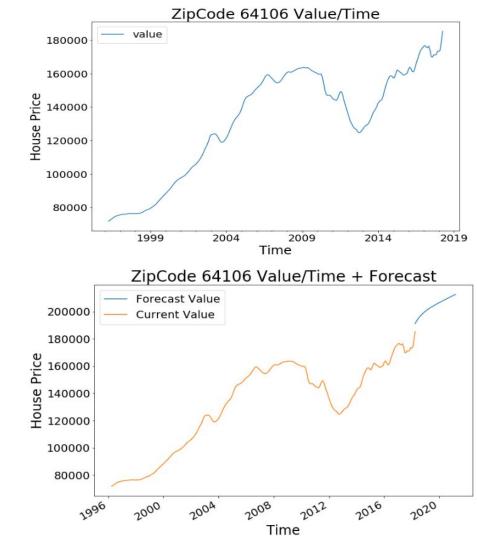


### **Top 5 Zip Codes**

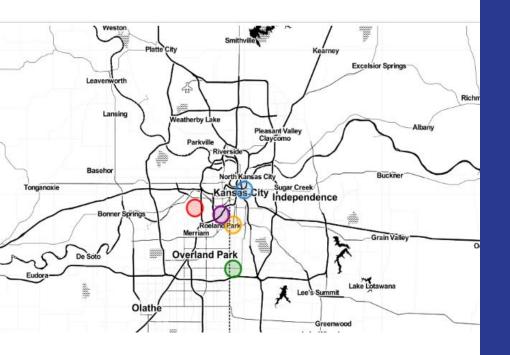
| Zip Code | ROI  | 1 Million<br>Investment |
|----------|------|-------------------------|
| 64106    | 0.15 | 1147370.9               |
| 66106    | 0.14 | 1137398.5               |
| 64114    | 0.12 | 1119297                 |
| 64112    | 0.11 | 1105926.9               |
| 66103    | 0.10 | 1101555                 |

For our Top Zip Code "64106", here we visualize the Actual Trend and our Forecast, separated and combined, for a 3 years period.





#### Map with Top 5 Zip Codes



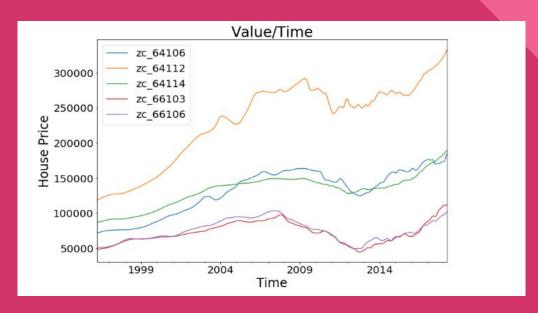


#### **Zip Codes Locations:**

Here we are showing our top 5 Zip Codes on a map in order to get an understanding of where are precisely situated.

It's interesting to notice that the various Zip Codes are located in different and relatively far locations giving us the opportunity differentiate our investment based on several categories of potential buyers.

#### FINAL RECOMMENDATION



As we can see all these zipcodes result pretty remunerative in a 3 years period and from the graph above we notice a linear upward trend for all of them.

The ROI is almost identical for these 5 Zip Codes so we advice to differentiate the investment not only as said before on the location of the Zip Code, it's interesting to notice in fact that we are in the condition of investing on different potential targets of people, young couples or single people for example, based on the property prices. Prices are ranging from \$100000 for the Zip Codes 66106, 66103 to over \$300000 for the Zip Code 64112 making our strategy potentially wide and effective.

#### Future work

The model could be further improved by including more variables.

Obtaining tax-rates, inflation, interest-rates and average household income for the area would be really interesting.

We could obtain so much more accurate and precise results for our analysis.

That's all for this project.

Thanks for watching!